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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 40-F

o REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

OR

x ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2015 **Commission File Number 000-24876**

TELUS Corporation

(Exact Name of Registrant as specified in its charter)

British Columbia, Canada
(Province or other jurisdiction of incorporation or organization)

4812
(Primary Standard Industrial Classification Code Number (if applicable))

7h Floor – 510 West Georgia Street
Vancouver, British Columbia V6B 0M3, Canada
(604) 697-8044
(Address and telephone number of Registrant's principal executive offices)

CT Corporation System, 111 Eighth Avenue, 13th Floor
New York, New York 10011
(212) 590-9200
(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Securities registered pursuant to section 12(b) of the Act.

Title of each class	Name of each exchange on which registered
Common Shares	**New York Stock Exchange**

Securities registered or to be registered pursuant to Section 12(g) of the Act.

None
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None
(Title of Class)

For annual reports, indicate by check mark the information filed with this Form:

x Annual information form **x** Audited annual financial statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of December 31, 2015:

594,557,255 Common Shares

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes **x** No o

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files).

Yes o No o

The annual report on Form 40-F shall be incorporated by reference into or as an exhibit to, as applicable, each of the following of the Registrant's Registration Statements under the Act: Form S-8 (File No. 333-181463), Form F-3 (File No. 333-186874), and Form F-10 (File No. 333-199916).

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CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Based on the evaluation by TELUS Corporation ("TELUS" or the "Registrant") as of December 31, 2015 of the effectiveness of the design and operation of the Registrant's disclosure controls and procedures under the supervision of the Audit Committee, including the Registrant's Chief Executive Officer and Chief Financial Officer, the Chief Executive Officer and Chief Financial Officer have concluded that the Registrant's disclosure controls and procedures as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act") are effective to a reasonable level of assurance to ensure that information required to be disclosed by the Registrant in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the United States Securities and Exchange Commission's (the "SEC") rules and forms.

It should be noted that while TELUS' Chief Executive Officer and Chief Financial Officer believe that TELUS' disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that TELUS' disclosure controls and procedures or internal control over financial reporting will prevent all errors and fraud A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Management's Annual Report on Internal Control Over Financial Reporting

The report of management on our internal control over financial reporting is located under the heading "Report of Management on Internal Control Over Financial Reporting" in our audited consolidated financial statements, which are filed as Exhibit 99.4 to this annual report on Form 40-F, and is incorporated by reference herein.

Attestation Report of Independent Registered Public Accounting Firm

The attestation report on our internal control over financial reporting is located under the heading "Report of Independent Registered Public Accounting Firm" in our audited consolidated financial statements, which are filed as Exhibit 99.4 to this annual report on Form 40-F, and is incorporated by reference herein.

Changes in Internal Controls Over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the above evaluation that occurred during the period covered by this annual report on Form 40-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

IDENTIFICATION OF THE AUDIT COMMITTEE

TELUS has a separately designated standing Audit Committee The current members of the Audit Committee are Bill MacKinnon (Chair), Dick Auchinleck, Raymond Chan, Lisa de Wilde, Rusty Goepel, Mary Jo Haddad and Sabi Marwah All members of the Audit Committee are "independent" as such term is defined under applicable securities laws and applicable New York Stock Exchange ("NYSE") rules.

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AUDIT COMMITTEE FINANCIAL EXPERT

The Board of Directors (the "Board") of TELUS has determined that Bill MacKinnon, the Audit Committee Chair, is an "audit committee financial expert" as such term is defined by U.S. securities laws and "independent" as noted above The information contained under the heading "Audit Committee" on page 38 of TELUS' year-end 2015 Annual Information Form, filed as Exhibit 99.3 to this annual report on Form 40-F, is

incorporated by reference herein.

CODE OF ETHICS

The Registrant has adopted a Code of Ethics and Conduct that applies to all directors, officers, including the Chief Executive Officer and the Chief Financial Officer, and employees The Code of Ethics and Conduct has been posted on the Registrant's Internet website at about.telus.com The Code is also available to any person, upon request, without charge by contacting TELUS Investor Relations by telephone at 1-800-667-4871 or by mail at 768 Seymour Street, Vancouver, B.C. V6B 3K9**.**

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table is a summary of billing by Deloitte LLP, as external auditor of TELUS (the "External Auditor"), during the period from January 1, 2015 to December 31, 2015 (all amounts are in Canadian dollars):

Type of work	Deloitte LLP	%
Audit fees[1]	$ 3,844,128	88.6
Audit-related fees[2]	$ 140,463	3.2
Tax fees[3]	$ 102,562	2.4
All other fees[4]	$ 253,724	5.8
Total	**$ 4,340,877**	**100.0**

(1) Includes fees for services rendered by the External Auditor in relation to the audit and review of our financial statements and in connection with our statutory and regulatory filings.
(2) Includes fees for services rendered by the External Auditor in relation to the audit or review of our financial statements that were not part of audit fees.
(3) Relates to tax compliance, tax advice and tax planning.
(4) Includes fees for services rendered by the External Auditor that are not in relation to the audit or review of our financial statements, such as sustainability diagnostics procedures and the community investment impact measurement.

The following table is a summary of billing by the External Auditor, during the period from January 1, 2014 to December 31, 2014 (all amounts are in Canadian dollars):

Type of work	Deloitte LLP	%
Audit fees[1]	$ 4,039,975	87.1
Audit-related fees[2]	$ 135,067	2.9
Tax fees[3]	$ 385,499	8.3
All other fees[4]	$ 78,288	1.7
Total	**$ 4,638,829**	**100.0**

(1) Includes fees for services rendered by the External Auditor in relation to the audit and review of our financial statements and in connection with our statutory and regulatory filings.
(2) Includes fees for services rendered by the External Auditor in relation to the audit or review of our financial statements that were not part of audit fees.
(3) Relates to tax compliance, tax advice and tax planning.
(4) Includes fees for services rendered by the External Auditor that are not in relation to the audit or review of our financial statements, such as sustainability diagnostics procedures.

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All requests for non-prohibited audit, audit related and non-audit services provided by the External Auditor and its affiliates to TELUS are required to be pre-approved by the Audit Committee of the Board To enable this, TELUS has implemented a process by which all requests for services involving the External Auditor are routed for review by the VP Risk Management and Chief Internal Auditor to validate that the requested service is a non-prohibited service and to verify that there is a compelling business reason for the request If the request passes this review, it is then forwarded to the Chief Financial Officer for further review Pending the Chief Financial Officer's affirmation, the request is then presented to the Audit Committee for its review, evaluation and pre-approval or denial at its next scheduled quarterly meeting If the timing of the request is urgent, it is provided to the Audit Committee Chair for his review, evaluation and pre-approval or denial on behalf of the Audit Committee (with the Audit Committee's review at the next scheduled quarterly meeting) Throughout the year, the Audit Committee monitors the actual versus approved expenditure for each of the approved requests.

OFF-BALANCE SHEET ARRANGEMENTS

The Registrant has no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on the financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The information provided under the heading "Contractual obligations" set forth on page 49 of the Management's Discussion and Analysis filed as Exhibit 99.4 to this annual report on Form 40-F, is incorporated by reference herein.

INTERACTIVE DATA FILE

The Registrant is not currently required to submit to the SEC, or post to its corporate website, an Interactive Data File.

MINE SAFETY DISCLOSURE

Not applicable.

SUMMARY OF SIGNIFICANT DIFFERENCES FROM NYSE CORPORATE GOVERNANCE RULES

A summary of significant ways in which corporate governance practices followed by TELUS differ from the corporate governance practices required to be followed by U.S. domestic companies under the New York Stock Exchange's Listing Standards (disclosure required by section 303A.11 of the NYSE Listed Company Manual) is available on the Registrant's corporate governance website at http://about.telus.com/community/english/investor_relations/corporate_governance/corporate_governance_practices.

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UNDERTAKING AND CONSENT TO SERVICE OF PROCESS

A. Undertaking

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the SEC staff, and to furnish promptly, when requested to do so by the SEC staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

B. Consent to Service of Process

A Form F-X signed by the Registrant and its agent for service of process was previously filed with the SEC.

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SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

Registrant: TELUS Corporation

By: *"Monique Mercier"*
Monique Mercier
Executive Vice President, Corporate Affairs, Chief Legal Officer
and Corporate Secretary

Date: March 10, 2016

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EXHIBIT INDEX

The following documents are filed as exhibits to this annual report on Form 40-F:

Exhibit Number	Document
99.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act
99.2	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act
99.3	Annual Information Form for the year ended December 31, 2015, dated March 10, 2015
99.4	Audited Consolidated Financial Statements as at and for the year ended December 31, 2015 and Management's Discussion and Analysis
99.5	Consent of Independent Registered Public Accounting Firm

Exhibit 99.1:

Certification

I, Darren Entwistle, certify that:

1. I have reviewed this annual report on Form 40-F of TELUS Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, financial performance and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing equivalent function):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: March 10, 2016.

"Darren Entwistle"
Darren Entwistle
President and Chief Executive Officer

Certification

I, John Gossling, certify that:

1. I have reviewed this annual report on Form 40-F of TELUS Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, financial performance and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing equivalent function):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: March 10, 2016.

"John Gossling"
John Gossling
Executive Vice President and Chief Financial Officer

Exhibit 99.2:

Certifications

Pursuant to 18 U.S.C. §1350, each of the undersigned officers of TELUS Corporation ("TELUS") hereby certifies that to his knowledge, (a) the annual report for the period ended December 31, 2015 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and (b) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of TELUS.

Date: March 10, 2016.

"Darren Entwistle"
Darren Entwistle
President and Chief Executive Officer

Date: March 10, 2016.

"John Gossling"
John Gossling
Executive Vice President and Chief Financial Officer

Exhibit 99.3:

Annual Information Form for the year ended December 31, 2015, dated March 10, 2016

[previously filed on SEDAR]

TELUS Corporation
Annual Information Form
for the year ended December 31, 2015

March 10, 2016

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Each section of the Management's Discussion and Analysis for the fiscal year ended December 31, 2015 (2015 annual MD&A) as well as the Management's Discussion and Analysis for each of the years ended December 31, 2014 and 2013, that are referred to in this Annual Information Form (AIF) are incorporated by reference and filed on SEDAR at sedar.com. For greater certainty, notwithstanding references to TELUS' information circular, consolidated financial statements, sustainability report and the telus.com website, these documents and website are not incorporated into this AIF.

In this AIF, unless otherwise stated, references to "TELUS", "the Company", "we", "us" or "our" are to TELUS Corporation and all of its subsidiaries, except where it is clear that these terms mean only TELUS Corporation.

In this AIF, except where otherwise indicated, all references to dollars or $ are to Canadian dollars.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements about expected events and the financial and operating performance of TELUS Corporation. Forward-looking statements include statements relating to annual targets, outlook, guidance and updates, our multi-year dividend growth program, our multi-year share purchase program, and trends. Forward-looking statements are typically identified by the words *assumption, goal, guidance, objective, outlook, strategy, target* and other similar expressions, or future or conditional verbs such as *aim, anticipate, believe, predict, could, expect, intend, may, plan, seek, should, strive* and *will*. By their nature, forward-looking statements do not refer to historical facts, are subject to inherent risks and require us to make assumptions. There is significant risk that forward-looking statements will not prove to be

accurate. Accordingly, readers are cautioned not to place undue reliance on forward-looking statements. Except as required by law, we disclaim any intention or obligation to update or revise any forward-looking statements. Our general trends, outlook and assumptions for 2016 are described in *Section 9* of the 2015 annual MD&A.

Factors that could cause actual performance to differ materially from the forward-looking statements made herein and in other TELUS filings include, but are not limited to, the following:

- Competition including: continued intense rivalry across all services among wireless and wireline telecommunications companies, cable-TV providers, other communications companies and over-the-top (OTT) services, which, among other things, places pressures on average revenue per subscriber unit per month (ARPU) and churn for all services; mergers and acquisitions of industry competitors, including the integration of cable-TV and wireless companies; the potential entry of new competitors; competition from global players for international roaming services; our ability to continue to retain customers through an enhanced customer service experience; pressures on wireless ARPU and churn from market conditions and government actions, customer usage patterns, flat-rate pricing trends for voice and data, inclusive long distance plans for voice, moderating growth in postpaid market penetration and increasing availability of Wi-Fi networks for data; pressures on high-speed Internet and TV ARPU and churn resulting from market conditions, government actions and customer usage patterns; residential network access line (NAL) losses; subscriber additions and retention volumes and associated costs for wireless, TV and high-speed Internet services; competition for wireless spectrum; and our ability to obtain and offer content on a timely basis across multiple devices on wireless and TV platforms at a reasonable cost.

- Technological substitution including: reduced utilization and increased commoditization of traditional wireline voice, local and long distance services from impacts of OTT applications and wireless substitution, and overall slower subscriber growth in the wireline segment; the increasing number of households that have only wireless and/or Internet-based telephone services; continuation of wireless voice ARPU declines as a result of, among other factors, substitution to messaging and OTT applications; substitution to increasingly available Wi-Fi services from wireless services; and OTT Internet protocol (IP) services that may displace TV and entertainment services, and impact revenue.

- Technology including: subscriber demand for data that challenges wireless networks and spectrum capacity levels; our reliance on legacy systems and information technology; technology options, evolution paths and roll-out plans for wireline and wireless networks (including broadband initiatives, such as fibre-to-the-premises (FTTP) and wireless small-cell deployment); our reliance on wireless network access agreements; choice of suppliers and those suppliers' ability to maintain and service their product lines; supplier concentration and market power for network equipment, TELUS TV® and wireless handsets; the performance of long-term evolution (LTE) wireless technology; our expected long-term need to acquire additional spectrum capacity through future spectrum auctions and from third parties to address increasing demand for data; deployment and operation of new wireless networks and success of new products, new services and supporting systems, including the Internet of Things (IoT) services for Internet-connected devices; deployment and operation of new wireline broadband networks at a reasonable cost and availability, and success of new products and services to be rolled out on such networks; availability of resources and ability

to build out adequate broadband capacity; network reliability and change management (including migration risks related to technology and customer retention, to new, more efficient Internet data centres (IDCs) and realizing the expected benefits); timing of decommissioning of certain legacy wireline networks, systems and services to reduce operating costs; timing of decommissioning of CDMA and iDEN wireless networks to redeploy spectrum and reduce operating costs, and the associated subscriber migration costs and customer retention risks; and success of upgrades and evolution of TELUS TV technology, which depend on third-party suppliers.

- Regulatory decisions and developments including: potential of government intervention to further increase wireless competition; the Canadian Radio-television and Telecommunications Commission (CRTC) wireless wholesale services review, in which it was determined that the CRTC will regulate wholesale GSM-based domestic roaming rates and the setting of such rates; future spectrum auctions (including limitations on established wireless providers, spectrum set-aside favouring certain carriers and other advantages provided to new and foreign participants, and the amount and cost of spectrum acquired); restrictions on the purchase, sale and transfer of spectrum licences; the undetermined long-term impact of the CRTC's wireline wholesale services review, which concluded that wholesale competitors shall receive regulated access to FTTP facilities owned by incumbent Internet service providers; increased subsidy requirements for telecommunications facilities in Yukon, Nunavut and the Northwest Territories, and possible changes to the scope and nature of basic service obligations, including higher minimum Internet access speeds; the CRTC's new code of conduct for TV services; vertical integration by competitors moving into broadcast content ownership and timely and effective enforcement of related regulatory safeguards; ongoing monitoring and compliance with restrictions on non-Canadian ownership of TELUS Common Shares; modification, interpretation and application of tower sharing and roaming rules; and the non-harmonization of provincial consumer protection legislation, particularly in light of the CRTC's mandatory national Wireless Code (the Code) in effect since December 2, 2013, and pressures on retention costs and other operational challenges resulting from the retroactive application of the Code, which led to two-year and three-year customer contracts ending coterminously starting in June 2015.

- Economic growth and fluctuations including: the state of the economy in Canada, which may be influenced by economic developments outside of Canada; future interest rates; inflation; unemployment levels; effects of low oil prices; effects of low business spend (reducing investments and cost structure); pension investment returns, funding and discount rates; and Canada: U.S. dollar exchange rates.

- Capital expenditure levels and potential outlays for spectrum licences in spectrum auctions or from third parties, due to: our ongoing deployment of wireless LTE and future technologies; utilizing newly acquired spectrum; our wireline broadband initiatives, including connecting more homes and businesses directly to fibre; investments in network resiliency and reliability; subscriber demand for data; evolving systems and business processes; implementing efficiency initiatives; supporting large complex deals; and future wireless spectrum auctions held by the Department of Innovation, Science and Economic Development. Our capital expenditure levels could be impacted by the achievement of our targeted operational and financial results.

- Ability to successfully implement cost reduction initiatives and realize planned savings, net of restructuring and other costs, without losing

customer service focus or negatively affecting business operations. Initiatives include: our earnings enhancement program to drive improvements in earnings before interest, income taxes, depreciation and amortization (EBITDA), including the initiative announced in November 2015; business integrations; business process outsourcing; offshoring and reorganizations, including any full-time equivalent (FTE) employee reduction programs; procurement initiatives; and real estate rationalization. Additional cost reduction initiatives may be needed if we do not achieve our targeted operational and financial results.

- Financing and debt requirements including: our ability to carry out financing activities and our ability to maintain investment grade credit ratings in the range of BBB+ or the equivalent.

- Ability to sustain our dividend growth program of circa 10% per annum through 2016 and our ability to sustain and complete our multi-year share purchase program through 2016. These programs may be affected by factors such as regulatory decisions and developments, our earnings and free cash flow, our levels of capital expenditures and spectrum licence purchases, the competitive environment and economic performance in Canada. Quarterly dividend decisions are subject to assessment and determination by our Board of Directors (Board), based on the Company's financial position and outlook. The share purchase program may be affected by a change in our intention to purchase shares, and the assessment and determination of our Board from time to time. Consequently, there can be no assurance that these programs will be maintained through 2016 and/or renewed thereafter.

- Human resource matters including: recruitment, retention and appropriate training in a highly competitive industry; the future outcome of collective bargaining for an agreement with the Telecommunications Workers Union (TWU), United Steel Workers Local Union 1944, which expired at the end of 2015; and the level of employee engagement.

- Process risks including: our reliance on legacy systems and ability to implement and support new products and services and business operations; our ability to implement effective change management for system replacements and upgrades, process redesigns and business integrations; implementation of complex large enterprise deals that may be adversely impacted by available resources, system limitations and degree of co-operation from other service providers; our ability to successfully manage operations in foreign jurisdictions; information security and privacy breaches, including data loss or theft of data; intentional threats to our infrastructure and business operations; and real estate joint venture re-development risks.

- Tax matters including: complex tax laws that may be subject to interpretation by the tax authorities that may differ from our interpretations; changes in tax laws, including tax rates; elimination of income tax deferrals through the use of different tax year-ends for operating partnerships and corporate partners; and international tax complexity and compliance.

- Business continuity events including: our ability to maintain customer service and operate our networks in the event of human error or human-caused threats, such as electronic attacks and equipment failures that could cause various degrees of network outages; supply chain disruptions; natural disaster threats; epidemics and pandemics; and the completeness and effectiveness of business continuity and disaster recovery plans and responses.

- Litigation and legal matters including: our ability to defend successfully against investigations, claims and lawsuits, including class actions pending against us and possible class actions based on consumer claims, data or security breaches and secondary market liability; and the complexity of legal compliance in domestic and foreign jurisdictions.

- Acquisitions or divestitures including: our ability to successfully integrate acquisitions or complete divestitures in a timely manner, and realize expected strategic benefits.

- Health, safety and environmental developments and other risk factors discussed herein and listed from time to time in our reports and public disclosure documents, including our annual report, and other filings with securities commissions or similar regulatory authorities in Canada (on SEDAR at **sedar.com**) and in our filings with the Securities and Exchange Commission (SEC) in the United States, including Form 40-F (on EDGAR at **sec.gov**). *Section 10: Risks and risk management* in our 2015 annual MD&A is incorporated by reference in this cautionary statement.

CORPORATE STRUCTURE

Name, address and incorporation

TELUS was incorporated under the *Company Act* (British Columbia) (the B.C. Company Act) on October 26, 1998, under the name BCT.TELUS Communications Inc. (BCT). On January 31, 1999, pursuant to a court-approved plan of arrangement under the *Canada Business Corporations Act* among BCT, BC TELECOM Inc. (BC TELECOM) and the former Alberta-based TELUS Corporation (TC), BCT acquired all of the shares of BC TELECOM and TC in exchange for common shares and non-voting shares of BCT, and BC TELECOM was dissolved. On May 3, 2000, BCT changed its name to TELUS Corporation and in February 2005, the Company transitioned under the *Business Corporations Act* (British Columbia), successor to the B.C. Company Act. On February 4, 2013, in accordance with the terms of a court approved plan of arrangement under the *Business Corporations Act* (British Columbia), TELUS exchanged all of its issued and outstanding Non-Voting Shares into Common Shares on a one-for-one basis. On April 16, 2013, TELUS subdivided its Common Shares on a two-for-one basis.

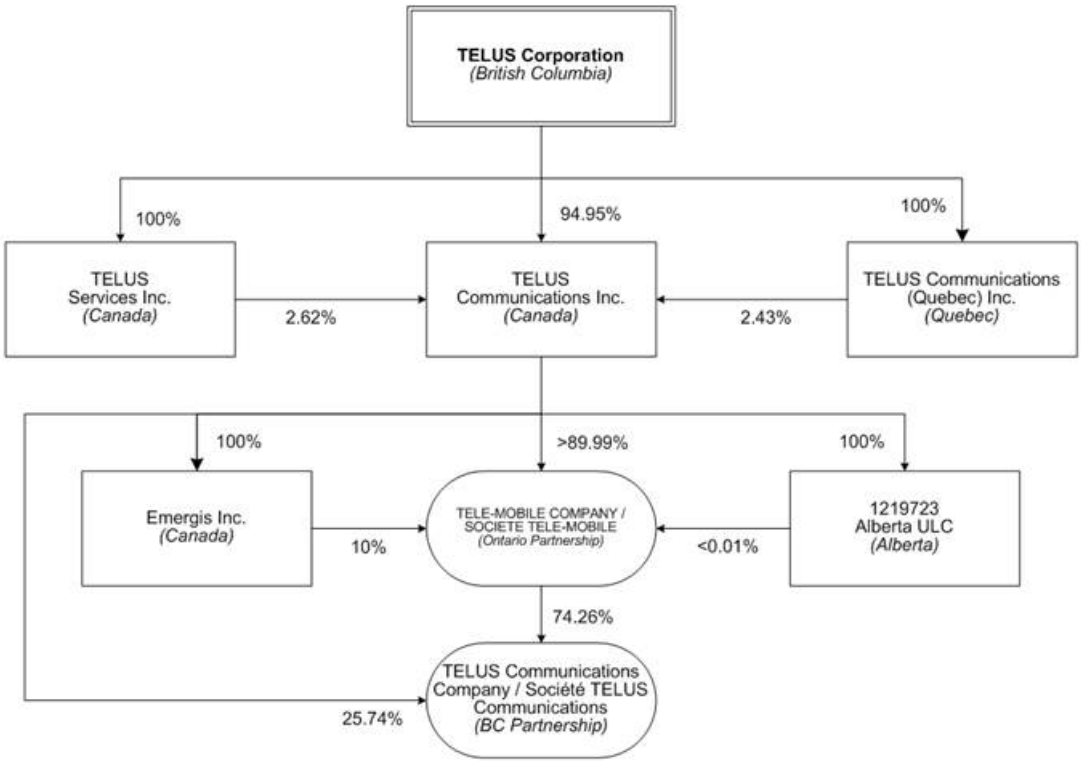
TELUS maintains its registered office at Floor 7, 510 West Georgia, Vancouver, British Columbia (B.C.) and its executive office at Floor 23, 510 West Georgia, Vancouver, B.C.

Intercorporate relationships and TELUS subsidiaries

TELUS' wireless and wireline businesses are primarily operated through TELUS Communications Company (TCC). TCC is a partnership organized under the laws of B.C. whose partners are TELUS Communications Inc. (TCI) and TELE-MOBILE Company (TELE-MOBILE).

TCI, which holds direct and indirect interests in TCC and TELE-MOBILE, is the only subsidiary which owned assets that constitute more than 10% of the consolidated assets of TELUS and that generated sales and operating revenues that exceed 10% of the consolidated sales and operating revenues of TELUS for the year ended December 31, 2015. In addition, all of the assets, sales and operating revenues of TELUS' other subsidiaries (other than TCI), together do not exceed 20% of TELUS' total consolidated assets and 20% of TELUS' total consolidated sales and operating revenues as at December 31, 2015.

The following organization chart sets forth the relationships between the major subsidiaries and partnerships, as well as their respective jurisdictions of incorporation or establishment and TELUS ownership as at December 31, 2015.



DESCRIPTION OF THE BUSINESS AND GENERAL DEVELOPMENTS

Who we are

TELUS is one of Canada's largest telecommunications companies, providing a wide range of telecommunications services and products, including wireless and wireline voice and data. Data services include: internet protocol (IP); television; hosting, managed information technology, security and cloud-based services; healthcare solutions; and business process outsourcing. In 2015, we generated $12.5 billion in revenue and had 12.5 million subscriber connections. This included 8.5 million wireless subscribers, 1.6 million Internet subscribers, 1.5 million wireline residential network access lines, and 1.0 million TV subscribers (excluding business NALs -see *Section 5 Discussion of operations* in the 2015 annual MD&A for a discussion of why business NALs are excluded).

Organization

Our wireless and wireline businesses are organized to leverage the convergence of technologies, to provide integrated solutions differentiating us from our competitors and to improve operating efficiency and effectiveness. The operating segments that are regularly reported to our Chief Executive Officer (our chief operating decision-maker) are wireless and wireline. Operating segments are components of an entity that engage in business activities from which they earn revenues and incur expenses (including revenues and expenses related to transactions with the other component(s)), the operating results of which are regularly reviewed by a chief operating decision-maker to make resource allocation decisions and to assess performance. As we do not currently aggregate operating segments, our reportable segments are also wireless and wireline. Segmentation is based on similarities in technology, the technical expertise required to deliver the services and products, customer characteristics, the distribution channels used and regulatory treatment. We offer our wireless and wireline services primarily through TCC.

A significant judgment we make is that our wireless and wireline operations and cash flows are sufficiently distinct to be considered both operating segments and reportable segments, notwithstanding the convergence our wireless and wireline telecommunications infrastructure technology and operations have experienced to date. If our wireless and wireline telecommunications infrastructure technology and operations continue to converge, it may become impractical, if not impossible, to objectively distinguish between our wireless and wireline operations and cash flows. If sufficient convergence were to occur, our wireless and wireline operations would no longer be individual components of the business or discrete operating segments; rather, they could each become a group of similar products and services.

Our strategy

Our strategic intent is to unleash the power of the Internet to deliver the best solutions to Canadians at home, in the workplace and on the move. Our focus is on our core telecommunications business in Canada supported by our international contact centres and outsourcing capabilities.

We developed six strategic imperatives in 2000 that remain relevant for future growth, despite changing regulatory, technological and competitive environments. The six strategic imperatives are:

- Focusing relentlessly on growth markets of data, IP and wireless;
- Providing integrated solutions that differentiate TELUS from our competitors;
- Building national capabilities across data, IP, voice and wireless;
- Partnering, acquiring and divesting to accelerate the implementation of TELUS' strategy and focus TELUS' resources on core business;
- Going to market as one team under a common brand, executing a single strategy; and
- Investing in internal capabilities to build a high-performance culture and efficient operation.

A consistent focus on the strategic imperatives guides our actions and contributes to the achievement of our financial goals. See our discussion in *Section 2.2 Strategic imperatives* in the 2015 annual MD&A. To advance our long-term strategic initiatives and address near-term opportunities and challenges, we set new corporate priorities each year. See *Section 3 Corporate priorities* in the 2015 annual MD&A for progress on our 2015 corporate priorities, as well as our 2016 corporate priorities.

Business overview

Our principal markets, services and products and competition overview are described in *Section 4.1 Principal markets addressed and competition* in the 2015 annual MD&A. Further details related to competition can be found in *Section 10.2 Competition* in the 2015 annual MD&A.

Our assets and resources, including employees, brand and distribution methods, tangible properties (such as our telecommunications networks and network facilities), intangible properties (such as brand and wireless spectrum licences) and an overview of foreign operations are discussed in *Section 4.2 Operational resources* in the 2015 annual MD&A. Further details on our employees are provided below under *Employee relations* and further details on our wireless spectrum licences are provided below under *Regulation - Radiocommunications authorizations and spectrum licences*.

Intellectual property, which we own or which we have been granted the right to use, is an essential asset for TELUS. Intellectual property enables us to be known and recognized in the marketplace through our brand style, trade dress, domain names and trademarks. It protects our know-how and software, systems, processes and method of doing business through copyrights, patents and information treated as confidential. It also helps us to increase our competitiveness by fostering an innovative work environment. Each form of intellectual property is important to our success. For instance, the TELUS brand plays a key role in product positioning and our Company's reputation. TELUS aims to maximize the value of TELUS' intangible assets in the areas of innovation and invention by ensuring that they are adequately used, protected and valued. To protect our intellectual property assets, we rely on a combination of legal protections afforded under copyright, trade-mark, patent and other intellectual property laws as well as contractual provisions under licensing arrangements. Further information on recognized tangible and intangible properties can be found in *Section 8.1 Critical accounting estimates* in the 2015 annual MD&A.

We depend on various key third-party suppliers and vendors to provide us with equipment and services, such as network equipment and handsets that we need in order to operate our business and provide products and services to our customers. If these suppliers or vendors fail to provide equipment or service on a timely basis or fail to meet our performance expectations, we may be unable to provide our products and services as and when requested by customers. We also may be unable to continue to maintain or upgrade our networks. Our dependence on suppliers and vendors is described in *Section 10.3 Technology - Supplier risks* in the 2015 annual MD&A.

For revenue and other financial information on the two most recently completed financial years with respect to our wireless and wireline businesses, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment* in the 2015 annual MD&A.

An overview of the Canadian economic environment and the telecommunications industry can be found in *Section 1.2 Who we are - The environment in which we operate* and *Section 9 General trends, outlook and assumptions* in the 2015 annual MD&A. Seasonal trends that have impacted us are described in *Section 5.2 Summary of consolidated quarterly results, trends and fourth quarter recap* in the 2015 annual MD&A.

Three-year history

During the three-year period ended on December 31, 2015, we continued to advance our national growth strategy, guided by our six strategic imperatives and our corporate priorities for those years.

Focusing relentlessly on growth markets of data, IP and wireless

External wireless revenues and wireline data revenues were $10.7 billion in 2015, up by $646 million or 6.4% from 2014. The results for 2014 had increased by $721 million or 7.7% from 2013. In total, 2015 external wireless revenues and wireline data revenues have grown by 15% since 2013. Wireless and wireline data revenues combined represented 86% of TELUS' consolidated revenues in 2015, up from 84% in 2014, and 82% in 2013.

The increase in wireless network revenues reflects moderating growth in the subscriber base due to the impacts of the economic slowdown, particularly in Alberta, slower growth in wireless postpaid market penetration, increased competitive intensity, higher handset prices and moderating growth in ARPU driven by a larger proportion of higher-rate two-year plans, a more favourable postpaid subscriber mix, and increases in data roaming and chargeable data usage, partly offset by a decline in voice revenue. Data revenue growth reflects increased data consumption driven by the higher adoption of smartphones, tablets and other wireless devices, expansion of networks, greater use of applications and other wireless data and an increased but moderating proportion of higher-rate two-year plans and postpaid subscribers in our customer base. Consequently, monthly blended ARPU has increased year over year for 21 consecutive quarters. The data revenue growth trend is impacted by competitive pressures driving larger allotments of data provided in rate plans, including data sharing and international data roaming features and plans, unlimited messaging rate plans, customer reactions to increased frequency of real-time data usage notifications and offloading of data traffic to increasingly available Wi-Fi hotspots. Wireless equipment revenue has generally increased due to sales of higher value smartphones and retention volumes.

Wireline data revenues increased due to revenue growth in Internet and enhanced data services, TELUS TV, business process outsourcing and TELUS Health services, offset by declines in managed services, video-conferencing revenues and data equipment sales, largely driven by an economic slowdown and lower business spending, particularly in Alberta. The trend of increasing wireline data revenue reflects growth in high-speed Internet and enhanced data services, including increases in usage and adoption of higher-speed services, growth in business process outsourcing, the continued but moderating expansion of the TELUS TV subscriber base, growth in TELUS Health solutions and certain rate increases.

Under an agreement with the Government of B.C., since 2011, we have been providing telecommunications and strategic services to the government and its public sector partners.

By December 2015, we have extended wireless coverage along 1,484 km of primary and secondary highways in B.C. and upgraded service at 1,141 of 1,650 B.C. public schools from legacy networks to the province's Next Generation Network.

In 2015, we continued to develop our position and expand our footprint in the healthcare sector, turning information into better health outcomes for Canadians. TELUS' health activities consist of three lines of health solutions:

- **Provider Solutions:** Our provider solutions include electronic medical records (EMR) for physicians and pharmacy management solutions for pharmacists, as well as a series of patient engagement solutions that drive collaboration between patients, pharmacists and physicians (e.g. Pharma Space®, a medication portal for consumers). TELUS currently reaches approximately 15,000 physicians as an EMR provider. In 2015, TELUS launched its EMR mobile application which allows physicians to access patient medical profiles, document patient visits by taking photos and uploading them and schedule appointments while on the go. We also provide pharmacy management solutions in the country servicing over 2,800 pharmacies. TELUS' Pharma Space platform enables patients to access their drug profiles and allows them to perform online refills via the web or mobile devices.

- **Health Benefits and Payment Solutions:** The health benefits and payment solutions include health claims management solutions for public and private insurers that transport, process and adjudicate claims directly at the point-of-service. TELUS processed close to 500 million health claim transactions in 2015.

- **Health Enterprise Solutions:** Our health enterprise solutions support health authorities, hospitals and government with solutions such as electronic health records, personal health records, eScheduling, eReferral and home health monitoring. These scalable solutions enable access to vital data, encourage collaboration and increase efficiency across the healthcare continuum. Our home health monitoring and personal health records solutions are active in five key provinces in Canada. In 2015, TELUS continued to increase the reach of its health enterprise solutions, which are currently being used by close to 92,000 healthcare professionals across Canada.

In 2015, growth continued in TELUS International, TELUS' global business process outsourcing (BPO) company. TELUS International now has more than 20,000 employees around the world, including in Canada, the United States, Europe, Central America and the Philippines and handles over 175 million BPO transactions annually via voice, email, chat, social media and back-office support across the telecommunications, utilities, high tech, gaming, finance, retail, e-commerce, travel and logistics and health care industries.

Providing integrated solutions that differentiate TELUS from its competitors

We are continuously looking for opportunities to expand on our long-standing clear and simple approach to wireless pricing and putting our

customers first. Some examples of these initiatives in the past 3 years include:

Effective July 30, 2013, we introduced our new two-year TELUS SharePlus plans. This was another step within our clear and simple approach to wireless pricing and putting

our customers first, in addition to our previous changes that removed activation and renewal fees. Research and customer feedback indicated that consumers wanted unlimited Canada-wide talk and text, and the capability to share data among family members and devices. As a result, we added unlimited nationwide talk and text to the new plans, as well as data plans that are shareable among multiple devices in the same household. Customers can simply select an unlimited talk and text plan for their device(s), and then add a data plan that is shareable across all devices on the account, including tablets. In 2014, we introduced Your Choice™ plans based on our customers' feedback and added new options to provide enhanced flexibility for voice and data usage. Your Choice plans maintain the option of sharing data with up to four additional devices.

In late 2014, we introduced two new solutions aimed at leveraging cloud-based technology to enable Canadian businesses to deploy a range of unified communication and collaboration tools and help their employees work more efficiently and effectively, no matter where they are. Our Cloud Collaboration services include voice mail, integrated messaging, and voice and video-conferencing. Our Cloud Contact Centre, a contact centre for customer service calls for marketers, salespeople and customer service representatives, is an end-to-end enterprise-grade solution that can support up to several thousand agents and allows those agents to connect from the office, home or almost any remote location. In late 2015, we announced the expansion of our cloud portfolio with the offer of a full suite of managed infrastructure as a service (IaaS) solutions that include public, private and hybrid cloud options. This expansion of our cloud portfolio, paired with our Internet data centres (IDCs) and expertise in managed services, allows us to meet the growing storage demands of Canadian businesses that are being driven by mobile, social, Internet of Things (IoT) and big data applications, as well as their growing IT security concerns.

Also in 2014, we launched the TELUS IoT Marketplace, an online space offering a suite of turnkey IoT solutions for Canadian businesses. The IoT refers to technologies designed to make it simpler for businesses to incorporate Internet-connected devices and deploy solutions that can help reduce costs and enhance efficiency, productivity and profitability. The IoT also comprises machine-to-machine communications as it usually involves one device connected with another, which is controlled through the Internet. Examples of IoT devices include connected cars and connected utility and security services. In 2015, we expanded our offerings to include 53 more solutions and 23 new partners. For example, we partnered with Jasper Technologies Inc. to implement the TELUS Control Centre, a self-service platform aimed at simplifying the deployment and management of IoT services by offering automated device provisioning, real-time diagnostics, integrated billing and cost-management features. Furthermore, in September 2015, we introduced the TELUS Global IoT Connectivity Platform, which enables businesses to scale their IoT operations globally. Through a network of more than 70 carriers, we can offer a global SIM card that delivers connectivity in nearly every country around the world.

In 2015, we further extended our leadership in our clear and simple approach, providing customers with improved visibility to their data usage, both with Your Choice and Share Plus plans. Customers can now access real-time rating information, receive notifications when they are at or approaching billing thresholds and control usage through our data manager, accessible through our website or app. This improves billing transparency, and

allows customers to add data top-ups when desired to have a set rate for additional usage.

In 2015, we launched improved roaming plans for US travel, both for businesses and consumers. Our consumer product, called Easy Roam™, allows our subscribers to access their domestic plan for a flat fee per 24 hours. For businesses, we have introduced Roam Ready™, a feature that offers competitive, flat-fee rates for voice, text and data; only when the service is used. These changes improve billing transparency and respond to our customers' desire to use their devices anywhere, any time.

In 2015, we stopped charging the incoming short messaging service (SMS) fee for our wireless customers roaming outside Canada. Our customers can now receive unlimited incoming text messages free of charge while travelling abroad.

In October 2013, we ceased marketing our Mike® service and in 2016 we started the staged decommissioning of our iDEN network that the Mike service operates on. Throughout 2016, we will continue to support our Mike private network customers and actively work with them to migrate their services onto our HSPA and LTE networks.

In early 2015, we redesigned our TV packaging to provide our customers with more choice and flexibility, allowing them to select from a wide variety of theme packs or customize their own, at competitive pricing. Furthermore, on March 1, 2016, we began offering our customers a basic, low-cost TV package and pick-and-pay options for additional channels.

In March 2015, we launched TELUS Business Connect™, an integrated business communications solution for small businesses across Canada. This cloud-based solution provides businesses with a full suite of communications tools for both office and mobile use, including an automated attendant, call routing, teleconferencing, video-conferencing, toll-free numbers and a wireless backup for office Internet access. Business Connect allows users to use a single number across their mobile phone, tablet, desk phone and computers through voice over IP (VoIP) technology.

In June 2015, we announced a free public Wi-Fi service available to both TELUS and non-TELUS customers at more than 8,000 hotspots across B.C. and Alberta. Since early 2014, we have been actively expanding our public Wi-Fi network by working with thousands of businesses and many major sports and entertainment venues. This public Wi-Fi service is part of our network strategy of deploying small cells that integrate seamlessly with our 4G wireless network, automatically shifting our smartphone customers to Wi-Fi and offloading data traffic from our wireless spectrum to increasingly available Wi-Fi hotspots.

As at December 31, 2015, Optik TV™ supported more than 700 channels, including more than 230 high-definition (HD) TV channels and 74 Stingray music channels, while Optik™ on the go provided access to thousands of on-demand shows and movies on smartphones, tablets and laptop computers, at home or on the move. Some examples of new features and capabilities we added to Optik TV in the past 3 years include:

- CraveTV, Canada's newest on-demand TV subscription service, which complements our extensive catalogue of TV and movie content available on the Optik TV digital box, as well as on smartphones and tablets through Optik on the go.

- The Stingray music app, announced by TELUS and Stingray Music, which is included with all Optik TV service and available free of charge on smartphones for Optik TV subscribers.

- The Optik Smart Remote app for Android devices, which complements the app already available on Apple devices. Optik Smart Remote enables customers to surf TV channels, set and manage recordings while on the go, and browse content on their device instead of using the traditional guide on the TV screen.

- The On Demand library has continued to expand, allowing access to over 20,000 titles including movies, free TV catchup (for the latest episodes of select TV shows) and past seasons of TV shows on premium channels.

- The wireless digital box for Optik TV subscribers, which allows customers to move their TV anywhere within the home, without the need to plug it into a digital box.

- Optik TV customers can access their Netflix account directly from their Optik TV set-top box, removing the inconvenience of having to switch hardware, source inputs or remotes.

Building national capabilities across data, IP, voice and wireless

During the past three years, we continued investing in broadband infrastructure, 4G LTE expansion and upgrades and network and systems resiliency and reliability in order to provide faster Internet speeds and greater capacity, connect more homes and businesses to high-speed Internet services, extend the reach of Optik TV and enhance our healthcare solutions. We continued our long-term strategy of investing in urban and rural communities with commitments to deliver broadband network capabilities to as many Canadians as possible. We expanded our fibre-optic footprint by connecting more homes and businesses directly to fibre-optic cable to deliver faster broadband Internet speeds. Highlights include:

- In 2013, we began offering LTE wireless products and services in Northern Canada with launches in Whitehorse, Yukon and Yellowknife, Northwest Territories.

- We opened our newest technologically and environmentally advanced IDC in Kamloops, B.C. in 2013 to enhance our ability to offer cloud-based services, and closed two older, less efficient data centres after migration of services to new facilities. The Kamloops facility and our Rimouski, Quebec facility, which opened in 2012, were designed to Uptime Institute Tier III standards for reliability and security, and to the leadership in energy and environmental design (LEED) gold standard for sustainability. A modular design approach facilitates scalable expansion in the future. These IDCs connect directly to our national IP network and interconnect with our existing data centres across the country, creating an advanced and regionally diverse computing infrastructure in Canada.

- In 2014, we acquired 30 wireless spectrum licences in Innovation, Science and Economic Development Canada's 700 MHz spectrum auction and commenced its deployment across our network. Spectrum in the 700 MHz range has superior propagation capabilities that make it effective and efficient in covering Canada's expansive rural geography, as well as improving the quality of in-building coverage in urban areas.

- In 2015, we acquired 21 AWS-3 wireless spectrum licences in the AWS-3 spectrum auction and the residual spectrum licences auction, as well as 122 wireless spectrum licences in the 2500 MHz spectrum auction. The AWS-3 spectrum is well suited for delivering both coverage and added capacity in urban and rural environments. The 2500 MHz spectrum is ideal for carrying large amounts of data, making it especially valuable in urban centres, and will complement TELUS' existing low band spectrum, which is able to penetrate farther into buildings and elevators and also travels farther in rural areas. We expect to incorporate the AWS-3 spectrum licences into our existing network within the next three years, once international standards for the spectrum frequencies are established and associated equipment is available, whereas the general deployment of the 2500 MHz spectrum licences into our network commenced in late 2015. We have invested more than $3.6 billion since mid-2013 to acquire wireless spectrum licences in Innovation, Science and Economic Development Canada's spectrum auctions and other transactions, which has more than doubled our national spectrum holdings in support of our top corporate priority of putting customers first. We have begun to operationalize this spectrum for the benefit of our customers.

- In June 2015, we announced a $1 billion investment in the city of Edmonton to connect more than 90% of homes and businesses directly to our fibre-optic network over the next six years. In October 2015, we announced a $1 billion investment in the city of Vancouver to connect the majority of homes and businesses directly to our fibre-optic network over the next five years. As the networks are launched (beginning in 2015 for some areas) local residents and businesses will have access to faster Internet speeds of up to 150 megabits per second. These investments are part of our broader fibre-optic strategy to bring our fiber network to communities across B.C., Alberta and Eastern Quebec.

- At the end of 2015, our 4G LTE network covered 96% of Canada's population, up from more than 89% of the population at the end of 2014. Outside of LTE coverage areas, the LTE devices we offer also operate on our HSPA+ network, which covered 99% of the population at December 31, 2015. Our broadband HD TV coverage reached more than 2.85 million households and businesses in B.C., Alberta and Eastern Quebec, including approximately 0.69 million homes and businesses covered by fibre-optic cable, which now provides those premises with immediate access to our gigabit-capable fibre-optic network.

Partnering, acquiring and divesting to accelerate the implementation of TELUS' strategy and focus TELUS' resources on core business

In July 2013, we announced that we were partnering as equals, with two arm's-length parties (one of which is also our TELUS Garden™ partner), in a residential, retail and commercial real estate redevelopment project called TELUS Sky™, in Calgary, Alberta. The 58-storey project will be constructed to LEED platinum standards and, when completed, will be one of the most technologically innovative and environmentally friendly buildings in North America. Demolition occurred in 2014 and excavation commenced in early 2015; construction is currently expected to be completed in 2018. A significant proportion of our investment will come from contributions of our existing real estate holdings, coupled with project debt. We plan to lease office space in the new jointly-owned mixed-use tower and vacate leased space in TELUS House Calgary upon completion of the new development. See *Section 7.11 Transactions between related*

parties — Transactions with real estate joint ventures in the 2015 annual MD&A for additional information.

On November 29, 2013, we acquired 100% of Public Mobile, a Canadian wireless communications operator focused on the Toronto and Montreal markets, which was amalgamated with TCI on January 1, 2014. This acquisition was made to enable further growth in our wireless segment operations, including the acquisition of additional spectrum licenses.

During the past three years, we continued to advance our position in healthcare information management with the following acquisitions:

- In 2013, we completed the acquisition of PS Suite EMR, the EMR business operated by MD Practice Software LP, a member of the MD Physician Services Group (a subsidiary of the Canadian Medical Association).

- In March 2014, we acquired Med Access Inc., a company based in Kelowna, B.C. providing EMR services to 2,000 specialty and general practice physicians in B.C., Alberta, Saskatchewan, Manitoba and Ontario.

- In September 2014, we acquired ZRx Prescriber from ZoomMed Inc., a web-based technology that allows physicians to write and deliver prescriptions while accessing a patient's insurance coverage information at the moment of prescription. With this technology, TELUS Health has become the first Canadian healthcare technology provider to offer online insurance coverage validation at the moment of prescribing to accelerate the reimbursement of insurance claims.

- In December 2014, we acquired XD[3] Solutions, a pharmacy management solution provider, which serves Quebec-based pharmacies. The company's software product is intended to enhance collaboration between pharmacists, physicians, other healthcare professionals and insurers to deliver a better patient care experience.

- In March 2015, we completed our acquisition of Medesync, a company whose certified EMR product will bring a bilingual web-based interface to our EMR portfolio in Quebec. Medesync uses cloud-based and mobile technologies to provide physicians with access to EMR from any computer or mobile device.

- Throughout 2015, we furthered our commitment to community engagement in Montreal by expanding the reach of a mobile health clinic powered by TELUS Health and Doctors of the World. Since its launch in June 2014, the clinic servicing Montreal's homeless population has enabled more than 3,000 medical acts such as vaccinations, screening tests and general health examinations; and has reintegrated more than 800 individuals of Montreal's disadvantaged community back into the public health system.

On April 1, 2014, we acquired the business assets of Groupe Enode Inc., a Quebec-based security IT firm that specializes in providing businesses and government agencies with technologies and services for security and risk management. In January 2015, we announced an acquisition of a 20% stake in Alithya, a Quebec-based information technology and consulting services provider, with offices in Canada and France. This strategic investment allows TELUS to offer suites of information and communication technology services to our business customers with a focus on managed infrastructure solutions.

In March 2015, we partnered with Alcatel-Lucent as a first customer for Enterprise Small Cell solution, a small cell technology capable of extending LTE and Wi-Fi connectivity

and coverage into offices and other densely populated buildings. We expect this technology will help relieve congestion and offload traffic from the macro wireless network to deliver seamless connectivity in public and enterprise indoor environments.

In June 2015, we announced the closure of the remaining 59 Black's Photography retail stores across Canada by August 2015. Technological innovations have changed the way Canadians take and share photographs, with fewer of them using retail photo outlets. As a result, we determined that Black's was not core to our future operations. We sold the Black's trademark and online and mobile businesses to Les Pros de la Photo (Les Pros), a Quebec-based photo imaging company, effective August 4, 2015. As a result, Les Pros will carry forward the Black's brand.

In July 2015, we announced that the TELUS Garden real estate joint venture, in which TELUS is a 50% partner and Westbank Projects Corp. is the other partner, had issued $225 million of 3.4% green bonds, secured by the office tower, due in 2025. This is the first time in North America that green mortgage bonds have been used to support real estate financing. Proceeds of the issuance were primarily used to retire short-term construction financing for the office tower. The TELUS Garden development in the heart of downtown Vancouver includes a 24-storey office tower that is LEED platinum certified, as well as a 53-storey residential condominium tower built to LEED gold standards which is scheduled to open in 2016.

In September 2015, we announced the opening of TELUS Garden's office tower. The one-million-square-foot development includes 450,000 square feet of office space and 65,000 square feet of retail space. The office tower houses our new global headquarters, as well as other tenants.

Going to market as one team under a common brand, executing a single strategy

Our top corporate priority is putting customers first as we strive to consistently deliver exceptional client experiences and become the most recommended company in the markets we serve.

By the end of November 2013, we adjusted our practices as necessary to achieve compliance with the requirements of the CRTC's Wireless Code, which came into effect on December 2, 2013. We support the Code, and have been the leader in adopting many of its customer-friendly provisions long before the Code was drafted. Some of the customer-friendly initiatives we introduced over the past few years include: notifications for data usage in Canada and while roaming abroad to increase awareness of costs (2010); easy and inexpensive device unlocking after 90 days (2011); the elimination of device activation fees for new and renewing customers (2012); the introduction of Share Plus plans (2013) and Your Choice plans (2014); increased frequency of real-time data usage notifications (2015); increased data allotments in Your Choice plans (2015) and the launch of the US Easy Roam service for customers travelling in the United States (2015).

To fully align with the Code, we made several modifications to policies and procedures. We implemented domestic and international data blocks and notifications at $50 and $100, respectively, to help customers control their data usage and complement our industry-leading notifications capability. In the summer of 2013, we introduced two-year pricing plans. These plans offer data sharing and unlimited nationwide talk and text and

enable customers to upgrade to a new device after two years instead of three. In addition, customers can upgrade at any time if they pay off their device balance.

To help reduce theft of wireless devices, we worked with the Canadian Wireless Telecommunications Association (CWTA) and its wireless carrier members to implement a blacklist of wireless devices that have been reported lost or stolen. Effective September 30, 2013, the authorization of any GSM (Global System for Mobile communications), HSPA, HSPA+ or LTE wireless device on any participating Canadian carrier's network includes the verification of the IMEI (international mobile equipment identity) number of the device to ensure it has not been reported as lost or stolen on that network or any other participating Canadian network. The blacklist also includes devices reported lost or stolen by U.S. carriers that are connected to the GSM Association IMEI database. In addition, Canadians who purchase a wireless device from a private source can use a convenient tool on ProtectYourData.ca to check if the IMEI number of the device has been reported lost or stolen.

Our customers first initiatives and our clear and simple approach have continued to generate a substantial decline in the number of complaints submitted to the Commissioner for Complaints for Telecommunications Services (CCTS) in 2015, continuing our trend of consistent improvement since 2011. TELUS was the subject of 4.7% of the total complaints submitted to the CCTS for all providers, an amount that was lower than complaints reported for other national carriers, according to the CCTS' annual report. Additionally, complaints related to TELUS decreased by 29% in 2015 from a year earlier, despite growth in our wireless and wireline subscriber base. Complaints related to Koodo Mobile® increased by 1.7% from a year earlier, while Public Mobile achieved a 57% reduction in complaints compared to the previous year. With only 1.8% and 0.6% of the total complaints, respectively, Koodo Mobile and Public Mobile continued to lead their peer group of national carrier flanker brands with the lowest number of complaints submitted to the CCTS.

Our customers first commitments underpin our internal goals and corporate priorities and help us deliver an elevated experience to our customers. These four commitments are:

- We take ownership of every customer experience
- We work as a team to deliver on our promises
- We learn from customer feedback and take action to get better, every day
- We are friendly, helpful and thoughtful.

Investing in internal capabilities to build a high-performance culture and efficient operation

On August 10, 2015, we announced leadership changes following an extensive review by our Board of Directors (Board), which included the resignation of Joe Natale as President and Chief Executive Officer (CEO) and as a member of the Board, with Darren Entwistle resuming the role of President and CEO and Dick Auchinleck being named independent Chair of the Board. Darren and Dick have both agreed to serve in these capacities on a long-term basis.

Annually, we conduct team member Pulsecheck engagement surveys, administered by Aon Hewitt, to gather confidential team member feedback about TELUS as a place to work and measure our progress in establishing a high performance culture. Following each survey, business units and departments use their Pulsecheck results to create and

review their current action plans and prioritize their ongoing actions. In 2015, our employee engagement score increased by two percentage points to 87%, elevating our high-performance culture and realizing world-leading engagement results for the third year in a row. Significant improvements in employee engagement have helped us focus on putting customers first.

In addition, we incur incremental, non-recurring restructuring and other costs with the objectives of improving our operating efficiency and effectiveness and addressing the ongoing decline in profitability in certain areas of our business. In 2015, our restructuring and other costs totalled $226 million, increasing from $75 million in 2014, mainly reflecting our initiative to reduce approximately 1,500 net full-time positions over several quarters beginning in the fourth quarter of 2015, as well as the closure of Black's Photography retail stores and real estate rationalization.

For additional details on 2015 developments and other events or conditions that influenced our general development, see *Section 2.2 Strategic imperatives*, as well as progress on our corporate priorities in *Section 3 Corporate priorities — 2016 corporate priorities* and *progress on 2015 corporate priorities* in the 2015 annual MD&A. For a discussion of changes in our business expected in 2016, see *Section 9 General trends, outlook and assumptions* in the 2015 annual MD&A.

For a review of the events and conditions that influenced our general development during 2013 and 2014, and how our business developed over those two years, see each of the 2013 and 2014 annual Management's Discussion and Analysis, *Section 1.2 The environment in which we operate*, *Section 2.2 Strategic imperatives*, as well as progress on our corporate priorities for the relevant year in *Section 3 Key performance drivers (2013)* and *Section 3 Corporate priorities for 2015* and *progress on 2014 corporate priorities (2014)*.

COMPETITION

In 2015, the wireless industry continued to adjust to the highly competitive and capital intensive landscape in Canada. The small independent new entrants have been or are in the process of being consolidated. Mobilicity was acquired by Rogers Communications in June. In January 2016, cable-TV provider Shaw Communications Inc. announced it will sell its wholly owned broadcasting subsidiary, Shaw Media Inc., to Corus Entertainment for $2.65 billion. Moreover, on March 1, 2016, Shaw Communications Inc. announced the completion of its acquisition of Wind Mobile Corp. for $1.6 billion, previously announced in December 2015. Videotron continues to operate as a wireless new entrant in Quebec, and Eastlink continues to operate as a wireless new entrant in Atlantic Canada. These cable-TV-based wireless providers, in addition to provincial carriers in Manitoba and Saskatchewan, represent a fourth carrier in all major markets. We expect continued strong competition in the wireline and wireless businesses in all principal markets and geographic areas.

See *Section 4.1 Principal markets addressed and competition* in the 2015 annual MD&A for a summary of the competitive environment in each of our principal markets and geographic areas. Also refer to *Section 10.2 Competition* for further details on the risks associated with our competitive environment and *Section 9 General trends, outlook and assumptions* in the 2015 annual MD&A for an assessment of our competitive position as it relates to the telecommunications industry generally and specifically as it relates to the wireless and wireline industries.

CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENT

We are committed to following sustainable and responsible business practices and to making decisions that balance economic growth with social and environmental benefits. More information about corporate social responsibility at TELUS can be found in our sustainability report (Sustainability Report) at **sustainability.telus.com.**

TELUS has an environmental policy which affirms our commitment to environmental stewardship and responsible corporate citizenship. We advance this responsibility through our triple bottom line approach to business, focusing on the social, economic and environmental impact of the communication and health solutions we provide to Canadians. TELUS values are reflected in our commitment to:

- Comply with applicable environmental legal requirements and meet voluntary requirements that are endorsed by our senior leaders.
- Strive to prevent pollution using standards, procedures or other controls and by minimizing: energy consumption and greenhouse gas emissions; waste generation; and spills and releases.
- Continually improve our environmental performance through: establishing environmental and sustainability objectives, targets, and programs; reviewing and updating the Environmental Management System; and disclosing our performance in the Sustainability Report.
- Build an environmentally future friendly culture through education and communications.

Our environmental objectives, targets and performance are monitored and reported yearly through our Sustainability Report. Compliance with applicable environmental legislation and regulations does not and is not expected to have, a material effect upon our capital expenditures, net income or competitive position. However, environmental legislation and regulation and its interpretation is constantly evolving, which we expect will continue in the future. The Company monitors changes closely and modifies its practices where necessary and appropriate. A detailed report of our environmental risk mitigation activities can be found in our Sustainability Report and concerns related to the environment can be found in *Section 10.10 Health, safety and environment* in the 2015 annual MD&A.

The Company's properties and neighbouring sites, particularly those in areas of long-term industrial use, may have had historic uses, or may have current uses, in the case of neighbouring sites, which may affect our properties and require further study or remedial measures. The Company allocates budget on a yearly basis to monitor and manage properties with known environmental impacts and utilizes a risk matrix

based on the Canadian Council of Ministers of the Environment methodology to prioritize funding. The Company cannot provide assurance that all environmental liabilities have been identified or that all remedial measures will be effective.

Our commitment to our communities is evidenced by our desire to give where we live, to help our fellow citizens in need to build stronger communities and create a stronger bond with our customers. We accomplish this through a range of initiatives, such as the TELUS Days of Giving®, Team TELUS Charitable Giving, Dollars for Doers and grants to local not-for-profit organizations through local community boards, both domestically

and internationally. Details about our community investment program can be found in our Annual Report available at **telus.com/annualreport.**

EMPLOYEE RELATIONS

As at December 31, 2015, we employed approximately 47,600 employees, including approximately 20,500 employees in TELUS International who are located outside of Canada. Approximately 12,100 of our employees are represented by a trade union and covered by a collective agreement.

We are signatories to five collective agreements. The largest agreement is with the Telecommunications Workers Union, United Steelworkers Union (TWU) Local 1944 covering approximately 10,560 clerical, operator services and technical employees in the wireless and wireline segments across Canada. The current collective agreement with the TWU expired on December 31, 2015, and negotiations to renew the contract began in early December. The current collective agreement continues in full force and effect until a new agreement is reached. In the province of Quebec, in addition to employees covered by the TWU agreement, there are approximately 1,470 employees in the wireline segment covered by two separate collective agreements. The agreement with the Syndicat Québécois des employés de TELUS (SQET) which covers approximately 820 trades, clerical and operator services employees expires on December 31, 2017. The second wireline agreement in Quebec is with the Syndicat des agents de maîtres de TELUS (SAMT) which covers approximately 650 professional and supervisory employees, and expires on March 31, 2017. The SAMT also represents a small number of employees in the wireless segment under a separate collective agreement.

Our subsidiary, TELUS Sourcing Solutions Inc., is a signatory to a collective agreement with the B.C. Government and Services Employees' Union which covers approximately 70 employees. That agreement came into effect on May 1, 2013, and expires on April 30, 2016.

See also *Section 4.2 Operational resources* and *Section 10.5 Human resources — Employee retention, recruitment and engagement* in the 2015 annual MD&A.

RISK FACTORS

The risk factors in *Section 10 Risks and risk management* in the 2015 annual MD&A are hereby incorporated by reference.

CANADIAN OWNERSHIP REQUIREMENTS

Certain subsidiaries of TELUS Corporation or partnerships in which TELUS Corporation has a controlling interest, are Canadian carriers, holders of radio authorizations and holders of broadcasting licences, and are required by the *Telecommunications Act* (Canada) (Telecommunications Act) and the Direction to the CRTC *(Ineligibility of Non-Canadians)* issued pursuant to the *Broadcasting Act* (Canada) (Broadcasting Act) to be Canadian-owned and controlled. Under the Telecommunications Act, a Canadian carrier, such as TCC is considered to be Canadian-owned and controlled if:

(i) not less than 80% of the members of its board of directors are individual Canadians;

(ii) Canadians beneficially own not less than 80% of its voting interests; and

(iii) it is not otherwise controlled in fact by persons who are not Canadians.

Substantially the same rules apply under the Broadcasting Act, but an additional requirement under the Broadcasting Act is that the chief executive officer of a company that is a licensed broadcasting undertaking must be a Canadian citizen or a permanent resident of Canada. TELUS Corporation has filed with the CRTC the requisite documentation affirming TCC's status as a Canadian carrier. We further intend that TCC will remain controlled by TELUS Corporation and that it will remain "Canadian" for the purposes of Canadian ownership requirements.

The *Canadian Telecommunications Common Carrier Ownership and Control Regulations* (Ownership and Control Regulations), made pursuant to the Telecommunications Act further provide that in order for a company that holds shares in a carrier (carrier holding corporation) to be considered Canadian, not less than 66-2/3% of the issued and outstanding voting shares of that company must be beneficially owned by Canadians and that such company must not otherwise be controlled in fact by non-Canadians. To the best of our knowledge, Canadians beneficially own and control in the aggregate not less than 66-2/3% of the issued and outstanding Common Shares of TELUS Corporation and TELUS Corporation is not otherwise controlled in fact by non-Canadians. For the purposes of these regulations, "Canadian" means among other things:

(i) a Canadian citizen who is ordinarily resident in Canada;

(ii) a permanent resident of Canada who is ordinarily resident in Canada and has been so for not more than one year after the date he or she was eligible to apply for Canadian citizenship;

(iii) a corporation with not less than 66-2/3% of the issued and outstanding voting shares of which are beneficially owned and controlled by Canadians and which is not otherwise controlled in fact by non-Canadians; or

(iv) a pension fund society the majority of whose members of its board of directors are individual Canadians, and that is established under applicable federal legislation or any provincial legislation relating to the establishment of pension fund societies.

The Ownership and Control Regulations provide Canadian carriers and carrier holding corporations, such as TELUS Corporation, with the time and ability to rectify ineligibility resulting from insufficient Canadian ownership of voting interests. Under the Ownership and Control Regulations, such corporations may refuse the subscription, issuance, transfer or purchase of voting interests, if necessary, to ensure that they and their subsidiaries remain eligible under such legislation. For such purposes, in particular but without limitation, a company may, in accordance with the provisions contained in the Ownership and Control Regulations:

(i) refuse to accept any subscription for voting shares;

(ii) refuse to allow any transfer of voting shares to be recorded in its share register;

(iii) suspend the rights of a holder of voting shares to vote at a meeting of its shareholders; and

(iv) sell, repurchase or redeem excess voting shares.

To ensure that TELUS Corporation remains Canadian and that any subsidiary of TELUS Corporation, including TCC, is and continues to be eligible to operate as a Canadian carrier under the Telecommunications Act, to be issued radio authorizations under the *Radiocommunication Act* (Canada) (Radiocommunication Act), or to be issued broadcasting licences under the Broadcasting Act, provisions substantially similar to the foregoing have been incorporated into the Articles of TELUS Corporation permitting its directors to make determinations to effect any of the foregoing actions.

In addition, TELUS has systems in place to monitor the level of Canadian ownership of its Common Shares. For registered shareholders and shares trading on the Toronto Stock Exchange, a reservation and declaration system requires non-Canadian purchasers of Common Shares to obtain a reservation number from our transfer agent and registrar, Computershare Trust Company and to declare whether or not the purchaser is a Canadian or non-Canadian. For Common Shares trading on the New York Stock Exchange, non-Canadian ownership is monitored by utilizing the Depository Trust & Clearing Corporation's SEG-100 Account program. All TELUS Common Shares held by non-Canadians must be transferred to this account (no reservation application is required).

The Telecommunications Act was amended in June 2012 to remove foreign ownership restrictions for telecommunications common carriers that hold less than a 10% share of the total Canadian telecommunications services revenues. This change was made to enable non-Canadian owned entities to start up or acquire Canadian carriers that hold less than a 10% share of total Canadian telecommunications services revenues. However, given that TELUS and its affiliates exceed this 10% threshold, we remain subject to the pre-existing Canadian ownership and control restrictions outlined above. Canadian ownership requirements for licensees under the Broadcasting Act remain unchanged.

See *Section 10.4 Regulatory matters* in the 2015 annual MD&A for further details related to regulation generally and specifically in relation to Canadian ownership requirements applicable to Canadian common carriers.

REGULATION

General

Telecommunications services, broadcasting services and radiocommunications services in Canada are regulated under federal legislation by the CRTC, the Minister of Canadian Heritage and the Minister of Innovation, Science and Economic Development pursuant to the Telecommunications Act, the Broadcasting Act and the Radiocommunication Act.

The Telecommunications Act gives the CRTC the power to regulate the provision of telecommunications services, and to forbear from regulating (e.g. not requiring carriers to file tariffs) certain services or classes of services if they are or will be subject to a degree of competition sufficient to protect the interests of customers. The CRTC may refrain, in whole or in part, and conditionally or unconditionally, from regulating a telecommunications service. For example, even when the CRTC forbears from rate regulation in respect of a service, it can continue to regulate the service in other respects, including with respect to the conditions under which it is offered, for example, to ensure network access and interconnection.

See *Section 10.4 Regulatory matters* in the 2015 annual MD&A for further details related to regulation generally.

Regulation of wireless services

Wireless telecommunications services depend on the use of radio frequencies. The use of radio spectrum and radio apparatus is subject to licensing by the Minister of Innovation, Science and Economic Development pursuant to the Radiocommunication Act. The CRTC has

jurisdiction over the rates, terms and conditions applicable to the provision of wireless service. The CRTC and the Minister of Innovation, Science and Economic Development exercise complementary, non-overlapping jurisdiction over wireless service — each regulating different aspects of the same service. The Minister of Innovation, Science and Economic Development has the authority to suspend or revoke radio authorizations (i) with the consent of the holder, (ii) where the holder has contravened the Radiocommunication Act, the regulations or terms and conditions of its radio authorization, or where the radio authorization was obtained through misrepresentation, and (iii) where the holder has failed to comply with a request to pay fees or interest due. Licence revocation is rare; licences are usually renewed upon expiration. Commercial mobile radio spectrum licenses are typically issued for a duration of 10 or 20 years with a high expectation of renewal where all conditions of license, including deployment, have been met.

See *Section 10.4 Regulatory matters* in the 2015 annual MD&A for further details related to regulation of wireless services generally and specifically in relation to compliance with license conditions and telecommunications regulations.

Radiocommunications authorizations and spectrum licences

TELUS subsidiaries hold radio authorizations for a variety of wireless services and applications, both mobile and fixed, including for 1.9 GHz personal communications services (PCS) spectrum throughout Canada, 800 MHz SMR/ESMR spectrum in all of the major Canadian markets, and 25 MHz of cellular 850 MHz spectrum in Alberta, B.C. and Eastern Québec. TELUS also was successful in obtaining AWS-1 spectrum licences for an average of approximately 16 MHz covering a national footprint in Innovation, Science and Economic Development Canada's spectrum auction in 2008. In addition, TELUS holds various radio spectrum licences in the 2.3 GHz, 3.5 GHz and 24/38 GHz bands throughout Canada, as well as other spectrum licences used for the provision of paging and other miscellaneous wireless services.

On March 14, 2011, Innovation, Science and Economic Development Canada released its decision concerning the *Renewal Process for Cellular and PCS Spectrum Licences*. This decision confirmed that where all conditions of licence for the current PCS/cellular licences have been met, licensees will be eligible to be issued a new licence for a 20-year term. This decision also determined that annual fees for these licences, including those spectrum licences from the 2001 PCS spectrum auction expiring in the 2011 timeframe, will be frozen at current rates.

In 2013, TELUS acquired Public Mobile, a Canadian wireless communications operator with 1.9 GHz personal communications services G block spectrum licenses in Ontario and Quebec, representing an equivalent of 5.9 MHz of spectrum nationally.

In 2014, TELUS purchased 2.3 GHz wireless communications services spectrum licences from Nextwave Canada, representing an equivalent of 4.5 MHz of spectrum nationally.

The Innovation, Science and Economic Development Canada auction for spectrum in the 700 MHz band was completed in February 2014, with TELUS acquiring a national average of 19.2 MHz (16.6 MHz net) of spectrum for $1.14 billion.

In March 2015, TELUS was successful in obtaining a national average of 15 MHz of 1.7 GHz/2.1 GHz spectrum in the AWS-3 auction. TELUS obtained spectrum in Ontario and Quebec, and all of British Columbia, Alberta, Saskatchewan and Manitoba for $1.51 billion.

The Innovation, Science and Economic Development Canada auction for spectrum in the 2500 MHz band was completed in May 2015, with TELUS acquiring a national average of 40 MHz of spectrum for $479 million.

See *Section 10.4 Regulatory matters* in the 2015 annual MD&A for further details related to regulation generally and specifically in relation to AWS-4 spectrum licensing framework, policy changes in the 3500 MHz band and the 600 MHz spectrum repurposing decision.

Broadcasting services

TCC holds Class 1 Regional broadcasting distribution licences to serve areas in each of B.C., Alberta and Quebec. TCC also holds a national licence to operate a video-on-

demand programming service and a broadcasting licence to operate a national terrestrial pay-per-view service.

See *Section 10.4 Regulatory matters* in the 2015 annual MD&A for further details related to regulation generally and specifically in relation to TELUS' broadcasting distribution undertakings and the CRTC's Wholesale Code announced in 2015 for ensuring content costs are in keeping with consumer demand.

DIVIDENDS DECLARED

The dividends per Common Share declared with respect to each quarter by TELUS, during the three-year period ended December 31, 2015, are shown below:

Quarter ended [1][2]	2015	2014	2013
March 31	$ 0.40	$ 0.36	$ 0.32
June 30	$ 0.42	$ 0.38	$ 0.34
September 30	$ 0.42	$ 0.38	$ 0.34
December 31	$ 0.44	$ 0.40	$ 0.36

Total	**$ 1.68**	**$ 1.52**	**$ 1.36**

(1) Paid on or about the first business day of the next month.
(2) Adjusted for two-for-one share split effective April 16, 2013.

Our shareholders received a total of $1.68 per share in declared dividends in 2015, an increase of 10.5% from 2014. Our Board reviews the dividend rate quarterly. Our quarterly dividend rate will depend on an ongoing assessment of free cash flow generation and financial indicators including leverage, dividend yield and payout ratio. On February 10, 2016, a first quarter dividend of 44 cents per share was declared, payable on April 1, 2016, to shareholders of record at the close of business on March 11, 2016. The first quarter dividend for 2016 reflects an increase of 10% from the 40 cent per share dividend paid in April 2015, consistent with our multi-year dividend growth program.

We first announced our dividend growth program in May 2011. In May 2013, we announced plans to extend our dividend growth program for another three years through 2016. Subject to the Board's assessment and determination based on the Company's financial situation and outlook, TELUS plans to continue with two dividend increases per year through 2016, normally announced in May and November, and is targeting the increase to be circa 10% from 2015. There can be no assurance that TELUS will maintain its dividend growth program beyond 2016, as this program may be affected by factors that impact our after-tax cash flow, such as: funding future spectrum licence purchases, funding of defined benefit pension plans, increases in corporate income tax rates and actual results differing from expectations. Further, the dividend increase target is not necessarily indicative of dividends beyond 2016. The Board has set a long-term dividend payout ratio guideline of 65% to 75% of sustainable earnings on a prospective basis.

CAPITAL STRUCTURE OF TELUS

The authorized capital of TELUS consists of 4,000,000,000 shares, divided into: (1) 2,000,000,000 Common Shares without par value; (2) 1,000,000,000 First Preferred shares without par value, issuable in series and; (3) 1,000,000,000 Second Preferred shares without par value, issuable in series. The Common Shares are listed for trading

on the Toronto Stock Exchange (TSX) and the New York Stock Exchange (NYSE). The replacement of our dual share class structure with a single class of issued and outstanding voting shares became effective February 4, 2013, pursuant to a plan of arrangement under the provision of Division 5 of Part 9 of the *Business Corporations Act* (British Columbia). Consistent with TELUS' move to a single class share structure, at the 2013 annual and special meeting, shareholders approved alterations to the Notice of Articles and the Articles of TELUS to eliminate the class of Non-Voting Shares and increase the maximum number of Common Shares that the Company is authorized to issue from 1,000,000,000 to 2,000,000,000, in order to keep the aggregate number of equity shares authorized for issuance the same. Shareholders also approved amendments at the same meeting to modernize the Articles, address statutory and regulatory changes and reflect best practice.

Also, a subdivision of the issued and outstanding Common Shares on a two-for-one basis was effected April 16, 2013.

Common Shares

Subject to the prior rights of the holders of First Preferred shares and Second Preferred shares, the Common Shares are entitled to participate with respect to the payment of dividends as declared by the Board and the distribution of assets of TELUS on the liquidation, dissolution or winding up of TELUS.

The holders of the Common Shares are entitled to receive notice of, attend, be heard and vote at any general meeting of the shareholders of TELUS on the basis of one vote per Common Share held. Holders of Common Shares are entitled to vote by a separate resolution for each director rather than a slate.

The Common Shares are subject to constraints on transfer to ensure our ongoing compliance with the foreign ownership provisions of the Telecommunications Act, the Radiocommunication Act and the Broadcasting Act as noted above on pages 22 and 23.

First Preferred shares

The First Preferred shares may be issued from time to time in one or more series, each series comprising the number of shares, and having attached thereto the designation, rights, privileges, restrictions and conditions which the Board determines by resolution and subject to filing an amendment to the Notice of Articles and Articles of TELUS. No series of First Preferred shares may have attached thereto the right to vote at any general meeting of TELUS or the right to be convertible into or exchangeable for Common Shares. Except as required by law, the TELUS holders of the First Preferred shares as a class are not entitled to receive notice of, attend or vote at any meeting of the shareholders of TELUS. The First Preferred shares rank prior to the Second Preferred shares and Common Shares with respect to priority in payment of dividends and in the distribution of assets in the event of liquidation, dissolution or winding up of TELUS.

Second Preferred shares

The Second Preferred shares may be issued from time to time in one or more series, each series comprising the number of shares, and having attached thereto the designation, rights, privileges, restrictions and conditions, which the Board determines

by resolution and subject to filing an amendment to the Notice of Articles and Articles of TELUS. No series of Second Preferred shares may have attached thereto the right to vote at any general meeting of TELUS or the right to be convertible into or exchangeable for Common Shares. Except as required by law, the holders of the Second Preferred shares as a class are not entitled to receive notice of, attend or vote at any meeting of the shareholders of TELUS. The Second Preferred shares rank, subject to the prior rights of the holders of the First Preferred shares, prior to the Common Shares with respect to priority in payment of dividends and in the distribution of assets in the event of liquidation, dissolution or winding up of TELUS.

Shareholder rights plan

We first adopted a shareholder rights plan in March 2000, which expired on March 20, 2010. The TELUS Board of Directors adopted a substantially similar shareholder rights plan (Rights Plan) on March 12, 2010 (Effective Date), which was ratified by shareholders of both share classes at the May 2010 annual and special meeting and re-confirmed at the May 2013 annual and special meeting. Under the terms of the current Rights Plan a shareholder reconfirmation process must occur at the Company's annual meeting of shareholders in 2016 in order for the plan to remain in effect. Accordingly, management and the Board will be asking shareholders at the 2016 annual general meeting to reconfirm and approve the continued existence of the Rights Plan.

Under the current Rights Plan, TELUS issued one right (Right) in respect of each Common Share outstanding as at the Effective Date. The Rights Plan has a term of just over nine years, subject to shareholder confirmation every three years. Each Right, other than those held by an Acquiring Person (as defined in the Rights Plan) and certain of its related parties, entitles the holder in certain circumstances following the acquisition by an Acquiring Person of 20% or more of the Common Shares of TELUS (otherwise than through the "Permitted Bid" requirements of the Rights Plan) to purchase from TELUS $320 worth of Common Shares for $160 (i.e. at a 50% discount) respectively.

At the May 2013 annual and special meeting, shareholders approved amendments to the Rights Plan to reflect the elimination of the Non-Voting Share class from TELUS' authorized share structure. Additionally, minor amendments were approved to reflect TELUS' use of the Direct Registration System Advice program since February 2013. References to share certificates now also include a reference to securities that have been issued and registered in uncertificated form that are evidenced by an advice or other statement and which are maintained electronically with our transfer agent, but for which no certificate has been issued (commonly referred to as the book entry form).

Normal course issuer bid and shelf prospectus

On September 14, 2015, we successfully completed our 2015 normal course issuer bid (NCIB), purchasing and cancelling approximately 12.1 million Common Shares and returning $500 million to shareholders. The average purchase price was $41.25. The purchased shares represent 2% of the Common Shares outstanding prior to commencement of the NCIB program. Since the commencement of our normal course issuer bid program in 2013 to December 31, 2015, we have purchased and cancelled a total of approximately 62.6 million Common Shares for $2.25 billion reflecting an average price of $35.91 per share. In addition, we received approval from the TSX for a new NCIB program (2016 NCIB) to purchase and cancel up to 16 million Common Shares with a value of up to $500 million over a 12-month period, commencing

September 15, 2015. Such purchases will be made through the facilities of the TSX, the NYSE and alternative trading platforms or otherwise as may be permitted by applicable securities laws and regulations. This represents up to 2.7% of outstanding TELUS Common Shares prior to the commencement of the 2016 NCIB. The Common Shares will be purchased only when and if we consider it advisable.

On November 19, 2014, we filed a shelf prospectus, in effect until December 2016, pursuant to which we may offer up to $3 billion of long-term debt or equity securities. As of March 10, 2016, we can offer up to $250 million of debt or equity securities under the existing shelf prospectus.

RATINGS

The following information relating to our credit ratings is provided as it relates to our financing costs, liquidity and operations. Additional information relating to credit ratings is contained in *Section 7.5 - Liquidity and capital resource measures* to *Section 7.8 - Credit ratings* in the 2015 annual MD&A.

Credit ratings are important to our borrowing costs and ability to obtain short-term and long-term financing and the cost of such financing. Credit ratings are intended to provide investors with an independent measure of the credit quality of an issue of securities and are indicators of the likelihood of payment and of the capacity of a company to meet its financial commitment on the rated obligation in accordance with the terms of the rated obligation. A reduction in the current rating on our debt by rating agencies, particularly a downgrade below investment grade ratings or a negative change in ratings outlook could adversely affect our cost of financing and our access to sources of liquidity and capital. We believe our investment grade credit ratings, coupled with our efforts to maintain constructive relationships with banks, investors and credit rating agencies, continue to provide TELUS with reasonable access to capital markets. In addition, credit ratings may be important to customers or counterparties when we compete in certain markets and when we seek to engage in certain transactions including transactions involving over-the-counter derivatives. As at December 31, 2015, TCI is a party to an agreement expiring in December 2016, with an arm's-length securitization trust associated with a major Schedule I bank, under which TCI is able to sell an interest in certain trade receivables up to a maximum of $500 million. TCI is required to maintain at least a BB credit rating by DBRS Ltd. (DBRS) or the securitization trust may require the sale program to be wound down.

The rating agencies regularly evaluate TELUS and TCI, and their ratings of our long-term and short-term debt are based on a number of factors, including our financial strength as well as factors not entirely within our control, including conditions affecting the telecommunications industry generally, and the wider state of the economy. In May 2015, DBRS announced a downgrade to its long-term rating of TELUS, but such revised rating is still consistent with our objective of maintaining investment grade credit ratings in the range of BBB+ or the equivalent. DBRS had also downgraded its short-term credit rating for TELUS, which limits our ability to access the commercial paper markets in Canada. We expect to be able to continue to access short-term funding from other available sources, including the U.S. commercial paper market. On November 30, 2015, Moody's Investors Service Inc. (Moody's) affirmed the Company's senior unsecured ratings, but changed the outlook to negative from stable.

The Company's credit ratings are outlined in the chart below. Credit ratings are not recommendations to purchase, hold or sell securities and do not address the market price or suitability of a specific security for a particular investor. In addition, real or anticipated changes in the rating assigned to a security will generally affect the market value of that security. There can be no assurance that a rating will remain in effect for any given period of time or that a rating will not be revised or withdrawn entirely by a rating agency in the future.

Credit rating summary	DBRS Ltd.	Standard & Poor's Rating Services	Moody's Investor Services	FitchRatings
TELUS Corporation				
Notes	BBB (high)	BBB+	Baa1	BBB+
Commercial paper	R-2 (high)	A-2	P-2	—
TELUS Communications Inc.				
Debentures	BBB (high)	BBB+	—	BBB+

The following descriptions of the rating categories prepared by the respective rating agencies (obtained from their public websites) are provided solely to satisfy requirements of Canadian law and do not constitute an endorsement by TELUS of the categories or of the application of the respective rating agencies.

Institution	Rating
DBRS	The DBRS® long-term rating scale provides an opinion on the risk of default. That is, the risk that an issuer will fail to satisfy its financial obligations in accordance with the terms under which an obligation has been issued. Ratings are based on quantitative and qualitative considerations relevant to the issuer, and the relative ranking of claims. All rating categories, other than AAA and D, also contain subcategories "(high)" and "(low)". The absence of either a "(high)" or "(low)"designation indicates the rating is in the middle of the category. An "A" rating denotes good credit quality. The capacity for the payment of financial obligations is substantial, but of lesser credit quality than AA. May be vulnerable to future events, but qualifying negative factors are considered manageable. Long-term debt rated "BBB" is of adequate credit quality. The capacity for the payment of financial obligations is considered acceptable. May be vulnerable to future events. The DBRS short-term debt rating scale provides an opinion on the risk that an issuer will not meet its short-term financial obligations in a timely manner. Ratings are based on quantitative and qualitative considerations relevant to the issuer and the relative ranking of claims. The R-1 and R-2 rating categories are further denoted by the subcategories "(high)", "(middle)" and "(low)". The R-1 (low) rating category denotes good credit quality. The capacity for the payment of short-term financial obligations as they fall due is substantial. Overall strength is not as favourable as higher rating categories. May be vulnerable to future events, but qualifying negative factors are considered manageable.

Institution	Rating
S&P	A Standard & Poor's issue credit rating is a forward-looking opinion about the creditworthiness of an obligor with respect to a specific financial obligation, a specific class of financial obligations, or a specific financial program (including ratings on medium-term note programs and commercial paper programs). An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation. The ratings from 'AA' to 'CCC' may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.
Moody's	Moody's long-term obligation ratings are opinions of the relative credit risk of fixed-income obligations with an original maturity of one year or more. They address the possibility that a financial obligation will not be honored as promised. Such ratings use Moody's Global Scale and reflect both the likelihood of default and any financial loss suffered in the event of default. Obligations rated Baa are subject to moderate credit risk. They are considered medium grade and as such may possess certain speculative characteristics. Moody's appends numerical modifiers 1, 2 and 3 to each generic rating classification from 'Aa' through 'Caa'. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.
Fitch	'BBB' ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity. The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the 'AAA' Long-Term rating or to Long-Term rating below 'B'.

As is common practice, during the last two years, each of the above-noted credit rating agencies charged TELUS for their rating services which include annual surveillance fees covering our outstanding long-term and short-term debt securities, in addition to one-time rating fees for certain agencies when debt is initially issued. We reasonably expect that such payments will continue to be made for rating services in the future.

MARKET FOR SECURITIES

Trading Price and Volume

TELUS' Common Shares are listed on the TSX under the symbol "T" and on the NYSE under the symbol "TU". Monthly share prices and volumes for 2015 are listed below:

TSX — Common Shares

Month	High($)	Low($)	Volume
January	44.5	41.08	20,779,410
February	45.15	42.01	19,379,359
March	44.53	41.27	29,075,660
April	43.705	41.7	19,751,758
May	42.975	40.61	19,399,953
June	43.23	40.64	28,508,988
July	45.1	42.98	21,578,466
August	45.185	41.71	21,688,175
September	43.39	41.09	24,602,786
October	44.51	41.31	25,592,783
November	44.01	40.09	25,072,839
December	42.82	36.73	40,130,989

NYSE — Common Shares

Month	High ($U.S.)	Low ($U.S.)	Volume
January	35.95	33.98	5,789,767
February	36.18	33.72	5,869,384
March	35.54	32.53	5,806,167
April	35.54	33.06	5,806,167
May	35.36	33.61	8,402,154
June	34.97	32.97	5,195,596
July	34.9	33.2	5,803,687
August	34.41	31.28	6,127,728
September	32.82	31.05	5,848,204
October	33.85	31.23	4,866,726
November	33.81	30.05	4,454,595
December	32.04	26.375	8,341,179

Prior Sales

On March 24, 2015, under a short form base shelf prospectus filed on November 19, 2014, with securities regulatory authorities in Canada and the United States, TELUS completed three debt offerings: 1) a $250,000,000 debt offering consisting of 1.50% Notes, Series CS, due March 27, 2018, 2) a $1,000,000,000 debt offering consisting of 2.35% Notes, Series CT, due March 28, 2022, and 3) a $500,000,000 4.40% Notes, Series CU, due January 29, 2046.

On December 8, 2015, under the same short form base shelf prospectus filed on November 19, 2014, with securities regulatory authorities in Canada and the United States, TELUS completed two additional debt offerings: 4) $400,000,000 debt offering consisting of 4.85% Notes, through the re-opening of Series CP notes, due April 5, 2044, and 5) a $600,000,000 debt offering of 3.75% Notes, Series CV, due March 10, 2026.

Certain terms of the offerings above are detailed in the following table:

Security	Notes due 2018	Notes due 2022	Notes due 2046	Notes due 2044	Notes due 2026
Size of Offering	$250,000,000	$1,000,000,000	$500,000,000	$400,000,000	$600,000,000
Maturity Date	March 27, 2018	March 28, 2022	January 29, 2046	April 5, 2044	March 10, 2026
Net Proceeds of Issue	$249,280,000	$993,610,000	$497,360,000	$387,752,000	$592,884,000
Public Offering Price	$999.62	$997.31	$999.72	$974.38	$992.14

Application of Proceeds	The net proceeds used to (a) fund a portion of the remaining $1.2 billion required to acquire the AWS-3 Spectrum Licences, (b) repay a portion of approximately $110 million of indebtedness drawn from the 2014 Credit Facility and approximately $135 million of outstanding commercial paper, and (c) any remaining balance used	The net proceeds used to (a) fund a portion of the remaining $1.2 billion required to acquire the AWS-3 Spectrum Licences, (b) repay a portion of approximately $110 million of indebtedness drawn from the 2014 Credit Facility and approximately $135 million of outstanding commercial paper, and (c) any remaining balance used for other general corporate	The net proceeds used to (a) fund a portion of the remaining $1.2 billion required to acquire the AWS-3 Spectrum Licences, (b) repay a portion of approximately $110 million of indebtedness drawn from the 2014 Credit Facility and approximately $135 million of outstanding commercial paper, and (c) any remaining balance used	The net proceeds used to (a) repay approximately $956 million of outstanding commercial paper, (b) to fund the repayment, on maturity, of a portion of the $600 million principal amount outstanding on TELUS' Series CI Notes due May 2016, and (c) any remaining balance used for other general corporate purposes.	The net proceeds used to (a) repay approximately $956 million of outstanding commercial paper, (b) to fund the repayment, on maturity, of a portion of the $600 million principal amount outstanding on TELUS' Series CI Notes due May 2016, and (c) any remaining balance used for other general corporate purposes.

	for other general corporate purposes.	purposes.	for other general corporate purposes.

Please refer to TELUS Corporation 2015 year-end audited consolidated financial statements - *Note 21(b) TELUS Corporation Notes* for details on our past debt offerings.

In addition, in the ordinary course of business, the Company has the capability to issue commercial paper with maturities of less than 12 months. As at December 31, 2015, the Company had $256 million of commercial paper outstanding, all of which was denominated in U.S. dollars (U.S. $185 million).

DIRECTORS AND OFFICERS

Directors

The names, municipalities of residence and principal occupations of the directors of TELUS as at March 10, 2016, the date each such person became a director of TELUS and committee membership are as set out below. Currently, there are 14 directors on the Board. Each was elected at TELUS' annual general meeting on May 7, 2015. Each director's term of office will expire immediately before the election of directors at the upcoming annual general meeting on May 5, 2016. They have, however, all been nominated for re-election at the upcoming meeting except for John Butler, Rusty Goepel and Don Woodley who have decided to retire and will not be seeking re-election at the 2016 annual general meeting. There will be 12 directors nominated for election to the Board at the 2016 annual general meeting, including one new nominee.

Directors of TELUS (Name and municipality of residence)	Director since	Principal occupation
R.H. (Dick) Auchinleck [2] Victoria, B.C.	2003	Chair, TELUS Corporation
Micheline Bouchard [3], [5] Montréal, Québec	2004	Corporate Director
R. John Butler, Q.C. [3 - Chair] Edmonton, Alberta	1999[1]	Counsel, Bryan & Company (law firm)
Raymond T. Chan [2], [3] Calgary, Alberta	2013	Chair, Baytex Energy Corp. (oil and natural gas corporation)
Stockwell Day [3], [5 - Chair] Vancouver, B.C.	2011	Advisor and Consultant

Directors of TELUS (Name and municipality of residence)	Director since	Principal occupation
Lisa de Wilde [2] Toronto, Ontario	2015	CEO, Ontario Educational Communications Authority (TVO)
Darren Entwistle Vancouver, B.C.	2000	President and Chief Executive Officer, TELUS Corporation

Ruston E.T. (Rusty) Goepel [2], [4] Vancouver, B.C.	2004	Senior Vice President, Raymond James Financial Ltd. (investment firm)
Mary Jo Haddad [2], [4] Oakville, Ontario	2014	Corporate Director
John S. Lacey [3], [4] Thornhill, Ontario	2000	Corporate Director
William (Bill) MacKinnon [2 - Chair] Toronto, Ontario	2009	Corporate Director
John Manley [4 - Chair], [5] Ottawa, Ontario	2012	President & Chief Executive Officer, Business Council of Canada (previously the Canadian Council of Chief Executives)
Sabi Marwah [2] Toronto, Ontario	2015	Corporate Director
Donald (Don) Woodley [4], [5] Mono Township, Ontario	1999[1]	Corporate Director

(1) John was a director of one of the Company's predecessors from 1995 to 1999, and Don was a director of one of the Company's predecessors from 1998 to 1999
(2) Member of Audit Committee
(3) Member of Human Resources and Compensation Committee
(4) Member of Corporate Governance Committee
(5) Member of Pension Committee

All of the directors of TELUS have held the principal occupations set forth above or executive positions with the same companies or firms referred to, or with affiliates or predecessors thereof, for the past five years except as follows: Stockwell Day was a member of the Federal Parliament and was appointed Minister of International Trade and Minister for the Asia-Pacific Gateway, Senior Minister Responsible for British Columbia and Chair of the Cabinet Committee on Afghanistan from 2008 to 2010 and from 2010 to May 2011, Stockwell Day was appointed President of the Treasury Board; Mary Jo Haddad was President and CEO of The Hospital for Sick Children (SickKids) in

Toronto from 2004 until 2013; Sabi Marwah was Vice Chairman and Chief Operating Officer of the Bank of Nova Scotia from 2008 until 2014.

Executive officers

The name, municipality of residence and principal occupations of each of the executive officers of TELUS, as of March 10, 2016, are as follows:

Executive Officers of TELUS (Name and municipality of residence)	**Position held with TELUS**
Darren Entwistle Vancouver, B.C.	President and Chief Executive Officer
John Gossling Victoria, B.C.	Executive Vice President and Chief Financial Officer
Phil Bates Vancouver, B.C.	Executive Vice President, Operations and Application Development
Josh Blair Vancouver, B.C.	Chief Corporate Officer and Executive Vice President, TELUS Health and TELUS International and President, Business Solutions West
David Fuller Toronto, Ontario	Executive Vice President and President, TELUS Consumer and Small Business Solutions
Tony Geheran Vancouver, B.C.	Executive Vice President and President, Broadband Networks
Francois Gratton Montreal, Quebec	Executive Vice President and President, Business Solutions East and TELUS Québec
Stephen Lewis Vancouver, B.C.	Senior Vice President and Treasurer
Sandy McIntosh Toronto, Ontario	Executive Vice President, People and Culture and Chief Human Resources Officer

Monique Mercier Vancouver, B.C.	Executive Vice President, Corporate Affairs, Chief Legal Officer and Corporate Secretary
Eros Spadotto Oakville, Ontario	Executive Vice President, Technology Strategy

All of the executive officers of TELUS have held their present positions or other executive positions with the Company during the past five years or more, except as follows: John Gossling was Chief Financial Officer of CTVglobemedia from April 2008, to April 2011.

TELUS shares held by directors and executive officers

As at March 7, 2016, the directors and executive officers of TELUS, as a group, beneficially owned, directly or indirectly, or exercised control or direction over 810,108 Common Shares, which represented approximately 0.14% of the outstanding Common Shares.

Cease trade orders, bankruptcies, penalties or sanctions

Other than as disclosed below, for the 10 years ended March 10, 2016, we are not aware that any current director or executive officer of TELUS had been a director or executive officer of any issuer which, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt or made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

- John Lacey was appointed to the board of directors of Stelco Inc. (Stelco) as a nominee of Tricap Management Limited (Tricap) in March 2006. Stelco had filed for bankruptcy protection under the *Companies' Creditors Arrangement Act* (CCAA) in January 2004. Mr. Lacey's appointment as a director was part of a court supervised restructuring, from which Stelco emerged on March 31, 2006 and pursuant to which Tricap had the right to appoint four of Stelco's nine directors.

- John Manley was a director of Nortel Networks Corporation and Nortel Networks Limited (together, the Nortel Companies) when the Nortel Companies and certain other Canadian subsidiaries initiated creditor protection proceedings under the CCAA in Canada on January 14, 2009. Certain U.S. subsidiaries filed voluntary petitions in the United States under Chapter 11 of the U.S. Bankruptcy Code, and certain European, Middle Eastern and African subsidiaries made consequential filings in Europe and the Middle East. These proceedings are ongoing. Mr. Manley resigned as a director of the Nortel Companies on August 10, 2009.

Other than as disclosed below, for the 10 years ended March 10, 2016, we are not aware that any current director or executive officer of TELUS had been a director, chief executive officer or chief financial officer of any issuer which was the subject of a cease trade or similar order while that person was acting in that capacity, or was subject to such an order issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and resulted from an event that occurred while that person was acting in that capacity, or any order which denied such company access to any exemption under securities legislation for a period of more than 30 consecutive days.

- John Manley was a director of the Nortel Companies when the Nortel Companies announced on March 10, 2006, the need to restate certain of their previously reported financial results and the resulting delay in the filing of certain 2005 financial statements by the required filing dates. The Ontario Securities Commission (OSC) issued a final management cease trade order on April 10, 2006, prohibiting all of the directors, officers and certain current and former employees, including Mr. Manley, from trading in securities of the Nortel Companies until two business days following the receipt by the OSC of all of the filings the Nortel Companies were required to make under Ontario securities laws. The British Columbia Securities Commission (BCSC) and the Autorité des

marchés financiers (AMF) issued similar orders. The OSC lifted the cease trade order effective June 8, 2006. The BCSC and AMF lifted their cease trade orders shortly thereafter. Mr. Manley was not subject to the BCSC or AMF orders.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Legal proceedings are described in *Section 10.9 Litigation and legal matters* in the 2015 annual MD&A and Note 23(c) to the Company's consolidated financial statements for the year ended December 31, 2015.

From time to time, in the ordinary course of business, the Company and its subsidiaries are assessed fees or fines by securities regulatory authorities in relation to administrative matters, including late filing fees or reporting, which may be considered penalties or sanctions pursuant to Canadian securities regulations but which are not, individually or in the aggregate, material to the Company. In addition, the Company and its subsidiaries are subject to numerous regulatory authorities around the world, and fees, administrative penalties, settlement agreements and sanctions may be categorized differently by each regulator. However, during the most recently completed financial year, the Company is not aware of any material (i) penalties or sanctions imposed against us by a court relating to securities legislation or by a securities regulatory authority; (ii) penalties or sanctions imposed by a court or regulatory body against us that would likely be considered important to a reasonable investor in making an investment decision; or (iii) settlement agreements entered into by us before a court relating to securities legislation or with a securities regulatory authority.

AUDIT COMMITTEE

The Audit Committee of the Company supports the Board in fulfilling its oversight responsibilities regarding the integrity of our accounting and financial reporting, internal controls and disclosure controls, legal and regulatory compliance, ethics policy and timeliness of filings with regulatory authorities, the independence and performance of our external and internal auditors, the management of our risk, credit worthiness, treasury plans and financial policy and whistleblower and complaint procedures. A copy of the Audit Committee's Terms of Reference is attached as Appendix A to this AIF.

The current members of the Audit Committee are Bill MacKinnon (Chair), Dick Auchinleck, Ray Chan, Lisa de Wilde, Rusty Goepel, Mary Jo Haddad and Sabi Marwah. Each member of the Audit Committee is independent and financially literate within the meaning of Multilateral Instrument 52-110 "Audit Committees" and the Board has determined that Bill MacKinnon is an audit committee financial expert and has accounting or related financial management expertise. The following lists the relevant education and experience of the members of TELUS' Audit Committee that is relevant to their role on the committee.

Bill MacKinnon chairs the Audit Committee. He is the former Chief Executive Officer of KPMG Canada, serving from April 1999, to December 31, 2008. He first joined KPMG Canada in 1971, serving the company in numerous roles of increasing leadership for 37 years, including his membership on the board of directors of each of KPMG Canada, KPMG International and KPMG Americas. Mr. MacKinnon obtained a Bachelor of Commerce with Honours from the University of Manitoba in 1967. He is a Chartered Professional Accountant and holds his FCPA designation from the Institute of Chartered Professional Accountants of Ontario.

Dick Auchinleck is a corporate director and Chair of the Board of TELUS Corporation. He was Lead Director of TELUS from May 2014, to August 2015. He is also currently the lead director of ConocoPhillips, an oil and gas company. Dick was employed by Gulf Canada Resources Limited for 25 years, retiring in 2001 as President and Chief Executive Officer after the sale of the company to Conoco Inc. Dick has a Bachelor of Applied Science (Chemical Engineering) from the University of British Columbia.

Ray Chan is Chair of Baytex Energy Corp. (formerly Baytex Energy Trust). He was Chief Financial Officer of Baytex from 1998 to 2003 and Chief Executive Officer until 2008, when he assumed the role of Executive Chair. In 2014, he became Chair of Baytex in a non-executive capacity. Mr. Chan obtained a Bachelor of Commerce degree (with a major in accounting) from the University of Saskatchewan in 1977 and he became a Chartered Accountant in 1980. Mr. Chan has served as CEO and CFO of public companies for over 25 years and has served on public company boards, in most instances chairing the audit committee, for over 15 years.

Lisa de Wilde is Chief Executive Officer of the Ontario Educational Communications Authority (TVO), a position she has held since 2005. Prior to joining TVO, Lisa was President and CEO of Astral Television Networks. She holds a Bachelor of Arts (Honours) and a Bachelor of Laws from McGill University. In 2015, Lisa was awarded an Honorary Doctorate of Laws from Brandon University.

Rusty Goepel is Senior Vice-President of Raymond James Financial Ltd., an investment firm, and brings with him many years of valuable experience in financial markets. He holds a Bachelor of Commerce from the University of British Columbia and has 45 years of experience in the investment industry.

Mary Jo Haddad was the former President and CEO of The Hospital for Sick Children (SickKids) in Toronto from 2004 to 2013. Prior to that, she held several leadership positions at SickKids, including Executive Vice-President and Chief Operating Officer, and Chief Nurse Executive. Mary Jo has a Bachelor of Science (Honours) from the University of Windsor, holds a Master of Health Science from the University of Toronto and honorary doctorates from the University of Windsor, Ryerson University and University of Ontario Institute of Technology.

Sabi Marwah retired as the Vice Chairman and Chief Operating Officer of the Bank of Nova Scotia (Scotiabank) in 2014, a position he held since 2008. As Vice Chairman, Sabi was responsible for Scotiabank's corporate financial and administrative functions and was actively involved in developing the bank's strategic plans and priorities. Sabi joined Scotiabank as a Financial Analyst in 1979 and, during his career, held successively more senior positions within the finance department, including Deputy Comptroller, Senior Vice-President and Comptroller, and Executive Vice-President. He was appointed Chief Financial Officer (CFO) in 1998 and Senior Executive Vice-President and CFO in 2002. Sabi holds a Bachelor of Economics (Honours) from the University of Calcutta, a Master of Economics from the University of Delhi and an MBA (Finance) from the University of California, Los Angeles (UCLA).

Audit, audit-related and non-audit services

All requests for non-prohibited audit, audit-related and non-audit services provided by TELUS' external auditor and its affiliates to TELUS are required to be pre-approved by TELUS' Audit Committee. To enable this, we have implemented a process by which all

requests for services involving the external auditor are routed for review by the VP Risk Management and Chief Internal Auditor to validate that the requested service is a non-prohibited service and to verify that there is a compelling business reason for the request. If the request passes this review, it is then forwarded to the Chief Financial Officer for further review. Pending the Chief Financial Officer's affirmation, the request is then presented to the Audit Committee for its review, evaluation and pre-approval or denial at its next scheduled quarterly meeting. If the timing of the request is urgent, it is provided to the Audit Committee Chair for his or her review, evaluation and pre-approval or denial on behalf of the Audit Committee (with the full committee's review at the next scheduled quarterly meeting). Throughout the year, the Audit Committee monitors the actual versus approved expenditure for each of the approved requests.

The following table is a summary of billings by Deloitte LLP (Deloitte), as external auditor of TELUS, during the period from January 1, 2015, to December 31, 2015:

Type of work	Deloitte LLP	%
Audit fees[1]	$ 3,844,128	88.6
Audit-related fees[2]	$ 140,463	3.2
Tax fees[3]	$ 102,562	2.4
All other fees[4]	$ 253,724	5.8
Total	**$ 4,340,877**	**100.0**

(1) Includes fees for services rendered by Deloitte in relation to the audit and review of our financial statements and in connection with our statutory and regulatory filings.
(2) Includes fees for services rendered by Deloitte in relation to the audit or review of our financial statements that were not part of audit fees.
(3) Relates to tax compliance, tax advice and tax planning.
(4) Includes fees for services rendered by Deloitte that are not in relation to the audit or review of our financial statements, such as sustainability diagnostics procedures and the community investment impact measurement.

The following table is a summary of billings by Deloitte LLP, as external auditor of TELUS, during the period from January 1, 2014, to December 31, 2014:

Type of work	Deloitte LLP	%
Audit fees[1]	$ 4,039,975	87.1
Audit-related fees[2]	$ 135,067	2.9
Tax fees[3]	$ 385,499	8.3
All other fees[4]	$ 78,288	1.7
Total	**$ 4,638,829**	**100.0**

(1) Includes fees for services rendered by Deloitte in relation to the audit and review of our financial statements and in connection with our statutory and regulatory filings.
(2) Includes fees for services rendered by Deloitte in relation to the audit or review of our financial statements that were not part of audit fees.
(3) Relates to tax compliance, tax advice and tax planning.
(4) Includes fees for services rendered by Deloitte that are not in relation to the audit or review of our financial statements, such as sustainability diagnostics procedures.

MATERIAL CONTRACTS

As at December 31, 2015, TCI is a party to a three-year agreement (expiry December 31, 2016) with an arm's-length securitization trust associated with a major Schedule I bank, under which TCI is able to sell an interest in certain of its trade receivables up to a maximum of $500 million. TCI is required to maintain at least a BB credit rating by DBRS Ltd. or the securitization trust may require the sale program to be wound down. The necessary credit rating was exceeded throughout its term.

On May 7, 2014, TELUS entered into a replacement five-year $2.25 billion unsecured credit facility (2014 Credit Facility) with a syndicate of 15 financial institutions. The 2014 Credit Facility replaces TELUS' previous $2 billion facility which would have matured in the 4th quarter of 2016. The 2014 Credit Facility may be used for general corporate purposes including the backstop of commercial paper. The material terms of the 2014 Credit Facility are substantively the same as TELUS' previous credit facility other than pricing, size of the facility and an extension of the term to May 2019.

INTERESTS OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the best of our knowledge, there were no directors or executive officers, or any associate or affiliate of a director or executive officer with a material interest in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect us.

TRANSFER AGENT AND REGISTRAR

Our transfer agent and registrar is Computershare Trust Company of Canada. Computershare maintains the Company's registers at 600, 530 - 8th Avenue SW, Calgary, Alberta T2P 3S8.

INTERESTS OF EXPERT

Deloitte LLP, Chartered Professional Accountants, is the auditor of the Company and is independent within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of British Columbia.

ADDITIONAL INFORMATION

Additional information relating to TELUS may be found on SEDAR at sedar.com and EDGAR at sec.gov. Additional information regarding directors' and officers' remuneration, and securities authorized for issuance under equity compensation plans, will be contained in TELUS' information circular for the annual meeting to be held on May 5, 2016. Additional financial information is provided in the Company's consolidated financial statements and MD&A for the year ended December 31, 2015. All of the above information can also be found at telus.com.

APPENDIX A: TERMS OF REFERENCE FOR THE AUDIT COMMITTEE

The Board has established an Audit Committee (the "Committee") to assist the Board in fulfilling its oversight responsibilities regarding the integrity of the Company's accounting and financial reporting, the Company's internal controls and disclosure controls, the Company's legal and regulatory compliance, the Company's ethics policy and timeliness of filings with regulatory authorities, the independence and performance of the Company's external and internal auditors, the identification and management of the Company's risks, the Company's credit worthiness, treasury plans and financial policy and the Company's whistleblower and complaint procedures.

1. MEMBERSHIP

1.1 The Committee will have a minimum of three members, including the chair of the Committee. The Board, upon the recommendation of the Corporate Governance Committee, will appoint and remove the members of the Committee by a majority vote. The members will sit on the Committee at the pleasure of the Board.

1.2 The Board, upon the recommendation of the Corporate Governance Committee, will appoint the chair of the Committee from the Committee's members by a majority vote. The chair of the Committee will hold such position at the pleasure of the Board.

1.3 All members of the Committee will be Independent Directors.

1.4 All members of the Committee will be financially literate, as defined in accordance with applicable securities laws and standards of the stock exchanges on which the Company's securities are listed.

1.5 At least one member of the Committee will be an audit committee financial expert, as defined in accordance with applicable securities laws, and at least one member of the Committee will have accounting or related financial management expertise, as defined in accordance with applicable securities laws.

2. MEETINGS

2.1 The Committee will meet at least once each quarter and otherwise as necessary. Any member of the Committee may call meetings of the Committee.

2.2 All directors of the Company, including management directors, may attend meetings of the Committee provided, however, that no director is entitled to vote at such meetings and is not counted as part of the quorum for the Committee if he or she is not a member of the Committee.

2.3 Notwithstanding section 2.2 above, the Committee will, as a regular feature of each regularly scheduled meeting, hold an in-camera session with the external auditors and separately with the internal auditors, and an in-camera session without management or management directors present at each meeting. The Committee may, however, hold other in-camera sessions with such members of management present as the Committee deems appropriate.

2.4 The Corporate Secretary or his or her nominee will act as Secretary to the Committee.

2.5 The Committee will report to the Board on its meetings and each member of the Board will have access to the minutes of the Committee's meetings, regardless of whether the director is a member of the Committee.

2.6 The external auditors of the Company will receive notice of every meeting of the Committee and may request a meeting of the Committee be called by notifying the chair of the Committee of such request.

3. QUORUM

The quorum necessary for the transaction of business at Committee meetings will be a majority of the members of the Committee. A quorum once established is maintained even if members of the Committee leave the meeting prior to conclusion.

4. DUTIES

The Board hereby delegates to the Committee the following duties to be performed by the Committee on behalf of and for the Board:

4.1 Financial Reporting

Prior to public disclosure, the Committee will review and recommend to the Board, and where applicable, to the boards of the

Company's subsidiaries which are reporting issuers, for approval:

a) the annual audited consolidated financial statements and interim unaudited consolidated financial statements of the Company and those of its subsidiaries that are reporting issuers, as defined in accordance with applicable securities laws;

b) the interim and annual management's discussion and analysis of financial condition and results of operations (MD&A) of the Company and those of its subsidiaries that are reporting issuers, as defined in accordance with applicable securities laws;

c) earnings press releases and earnings guidance, if any; and

d) all other material financial public disclosure documents of the Company and those of its subsidiaries that are reporting issuers, including prospectuses, press releases with financial results and the Annual Information Form.

4.2 External Auditors

The external auditors will report directly to the Committee and the Committee will:

(a) appoint the external auditors, subject to the approval of the shareholders, and determine the compensation of the external auditors;

(b) conduct an annual review of the external auditors;

(c) oversee the work of the external auditors and review and approve the annual audit plan of the external auditors, including the scope of the audit to be performed and the degree of co-ordination between the plans of the external and internal auditors. The Committee will discuss with the internal auditors, the external auditors and management, the adequacy and effectiveness of the disclosure controls and internal controls of the Company and elicit recommendations for the improvement of such controls or particular areas where new or more detailed controls or procedures are desirable. Particular emphasis will be given to the adequacy of internal controls to prevent or detect any payments, transactions or procedures that might be deemed illegal or otherwise improper;

(d) meet regularly with the external auditors without management present and ask the external auditors to report any significant disagreements with management regarding financial reporting, the resolution of such disagreements and any restrictions imposed by management on the scope and extent of the audit examinations conducted by the external auditors;

(e) pre-approve all audit, audit-related and non-audit services to be provided to the Company or any of its subsidiaries, by the external auditors (and its affiliates), in accordance with applicable securities laws;

(f) annually review the qualifications, expertise and resources and the overall performance of the external audit team and, if necessary, recommend to the Board the termination of the external auditors or the rotation of the audit partner in charge;

(g) at least annually, obtain and review a report by the external auditors describing: the firm's internal quality-control procedures; any material issues raised by the most recent internal quality control review, or peer review of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with such issues; and all relationships between the external auditors and the Company;

(h) annually assess and confirm the independence of the external auditors and require the external auditors to deliver an annual report to the Committee regarding its independence, such report to include disclosure regarding all engagements (and fees related thereto) by the Company and relationships which may impact the objectivity and independence of the external auditors;

(i) require the external auditors to deliver an annual acknowledgement in writing to the Committee that the shareholders, as represented by the Board and the Committee, are its primary client;

(j) review post-audit or management letters, containing recommendations of the external auditors and management's response;

(k) review reports of the external auditors; and

(l) pre-approve the hiring of employees and former employees of current and former auditors in accordance with applicable securities laws and TELUS policies.

Notwithstanding section 4.2(d) above, the Committee may delegate the pre-approval of audit, audit-related and non-audit services to any one member of the Committee, provided, however, a report is made to the Committee on any pre-approval of such services at the Committee's first scheduled meeting following the pre-approval.

4.3 Internal Auditors

The internal auditors will report functionally to the Committee and administratively to the Chief Financial Officer and the Committee will:

(a) review and approve management's appointment, termination or replacement of the Chief Internal Auditor;

(b) review and consider the annual performance objectives, performance evaluation and compensation treatment of the Chief Internal Auditor;

(c) oversee the work of the internal auditors including reviewing and approving the annual internal audit plan and updates thereto;

(d) review the report of the internal auditors on the status of significant internal audit findings, recommendations and management's responses and review any other reports of the internal auditors;

(e) review the scope of responsibilities and effectiveness of the internal audit team, its reporting relationships, activities, organizational structure and resources, its independence from management, its credentials and its working relationship with the external auditors; and

(f) review and approve the internal audit charter and updates thereto on an annual basis.

The internal auditors will report quarterly to the Committee on the results of internal audit activities and will also have direct access to the chair of the Committee when the internal auditors determine it is necessary.

4.4 Whistleblower, Ethics and Internal Controls Processes

The Committee will ensure that the Company has in place adequate procedures for:

(a) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal controls or auditing matters; and

(b) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

The CEO or CFO will report to the Committee, and the Committee will review such reports, on any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls. Where the CEO, CFO and/or the Chief Internal Auditor are named in a complaint, the Director of Ethics will speak directly with the Chair of the Committee.

The Committee will review:

(a) annually and recommend to the Board for approval, together with the Human Resources and Compensation Committee, the ethics policy and material changes thereto;

(b) quarterly reports on ethics breaches pertaining to internal controls over financial reporting, including fraud involving management or other employees who have a role in the Company's internal controls over financial reporting;

The Chief Internal Auditor will report to the Committee, and the Committee will consider such reports, on the results of the investigation of whistleblower, ethics and internal controls complaints.

4.5 Accounting and Financial Management

The Committee will review:

(a) with management and the external auditors, the Company's major accounting policies, including the impact of alternative accounting policies and key management estimates, risks and judgments that could materially affect the financial results and whether they should be disclosed in the MD&A;

(b) emerging accounting issues and their potential impact on the Company's financial reporting;

(c) significant judgments, assumptions and estimates made by management in preparing financial statements;

(d) the evaluation by either the internal or external auditors of management's internal control systems, and management's responses to any identified weaknesses;

(e) the evaluation by management of the adequacy and effectiveness in the design and operation of the Company's disclosure controls and internal controls for financial reporting;

(f) audits designed to report on management's representations on the effectiveness and efficiency of selected projects, processes, programs or departments;

(g) management's approach for safeguarding corporate assets, data and information systems, the adequacy of staffing of key

financial functions and their plans for improvements; and

(h) internal interim and post implementation reviews of major capital projects.

4.6 Credit Worthiness, Treasury Plans and Financial Policy

The Committee will review with management:

(a) the Company's financial policies and compliance with such policies;

(b) the credit worthiness of the Company;

(c) the liquidity of the Company; and

(d) important treasury matters including financing plans.

4.7 Legal/Regulatory Matters and Ethics

The Committee will review:

(a) with management, the external auditors and legal counsel, any litigation, claim or other contingency, including any tax assessment, that could have a material effect upon the financial position or operating results of the Company;

(b) annually, management's relationships with regulators, and the accuracy and timeliness of filings with regulatory authorities;

(c) quarterly reports from the Chief Legal Officer on compliance with laws and regulations; and

(d) quarterly reports from the Chief Compliance Officer on legal and regulatory compliance activities.

4.8 Risk Management

The Committee will:

(a) consider reports on the annual enterprise business risk assessment and updates thereto;

(b) except to the extent that responsibility is reserved to the Board or delegated to another Board committee, review management's implementation of risk policies and procedures, and assess the appropriateness and comprehensiveness of those policies and procedures;

(c) consider reports on security;

(d) consider reports on financial risk management including derivative exposure and policies;

(e) consider reports on tax risk management and governance; and

(f) review other risk management matters from time to time as the Committee may consider suitable or the Board may specifically direct.

4.9 Other

The Committee will review:

(a) the expenses of the Chair of the Board;

(b) the proposed disclosure concerning the Committee to be included in the Company's Annual Information Form to verify, among other things, that it is in compliance with applicable securities law requirements;

(c) significant related party transactions and actual and potential conflicts of interest relating thereto to verify their propriety and that disclosure is appropriate;

(d) the disclosure policy of the Company;

(e) and evaluate, at least once annually, the adequacy of these Terms of Reference and the Committee's performance, and report its evaluation and any recommendations for change to the Corporate Governance Committee.

The Committee will also have such other duties and responsibilities as are delegated to it and review such other matters as, from time to time, are referred to it by the Board.

5. AUTHORITY

The Committee, in fulfilling its mandate, will have the authority to:

(a) engage and set compensation for independent counsel and other advisors;

(b) communicate directly with the Chief Financial Officer, internal and external auditors, Chief Compliance Officer and Chief General Counsel;

(c) delegate tasks to Committee members or subcommittees of the Committee; and

(d) access appropriate funding as determined by the Committee to carry out its duties.

Exhibit 99.4:

Audited Consolidated Financial Statements as at and for the year ended December 31, 2015 and Management's Discussion and Analysis

[previously filed on SEDAR]

TELUS CORPORATION

CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

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report of management on internal control over financial reporting

Management of TELUS Corporation (TELUS, or the Company) is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting.

TELUS' President and Chief Executive Officer and Executive Vice-President and Chief Financial Officer have assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2015, in accordance with the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Internal control over financial reporting is a process designed by, or under the supervision of, the President and Chief Executive Officer and the Executive Vice-President and Chief Financial Officer and effected by the Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements on a timely basis. Also, projections of any evaluation of the effectiveness of internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Based on this assessment, management has determined that the Company's internal control over financial reporting is effective as of December 31, 2015. In connection with this assessment, no material weaknesses in the Company's internal control over financial reporting were identified by management as of December 31, 2015.

Deloitte LLP, an Independent Registered Public Accounting Firm, audited the Company's Consolidated financial statements for the year ended December 31, 2015, and as stated in the Report of Independent Registered Public Accounting Firm, they have expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2015.

/s/ John R. Gossling

John R. Gossling
Executive Vice-President
and Chief Financial Officer
February 11, 2016

/s/ Darren Entwistle

Darren Entwistle
President
and Chief Executive Officer
February 11, 2016



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report of independent registered public accounting firm

To the Board of Directors and Shareholders of TELUS Corporation

We have audited the accompanying consolidated financial statements of TELUS Corporation and subsidiaries (the Company), which comprise the consolidated statements of financial position as at December 31, 2015 and 2014, and the consolidated statements of income and other comprehensive income, consolidated statements of changes in owners' equity and consolidated statements of cash flows for each of the years in the two-year period ended December 31, 2015, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of TELUS Corporation and subsidiaries as at December 31, 2015 and 2014, and their financial performance and their cash flows for each of the years in the two-year period ended December 31, 2015, in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Other Matter

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as at December 31, 2015, based on the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 11, 2016, expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ Deloitte LLP

Deloitte LLP
Chartered Professional Accountants
Vancouver, Canada
February 11, 2016

report of independent registered public accounting firm

To the Board of Directors and Shareholders of TELUS Corporation

We have audited the internal control over financial reporting of TELUS Corporation and subsidiaries (the Company) as of December 31, 2015, based on the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any

evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, based on the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with Canadian generally accepted auditing standards and the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as at and for the year ended December 31, 2015, of the Company and our report dated February 11, 2016, expressed an unmodified/unqualified opinion on those financial statements.

/s/ Deloitte LLP

Deloitte LLP
Chartered Professional Accountants
Vancouver, Canada
February 11, 2016

consolidated statements of income and other comprehensive income

Years ended December 31 (millions except per share amounts)	Note	2015	2014
OPERATING REVENUES			
Service		**$ 11,590**	$ 11,108
Equipment		**840**	819
Revenues arising from contracts with customers		**12,430**	11,927
Other operating income	*6*	**72**	75
		12,502	12,002
OPERATING EXPENSES			
Goods and services purchased		**5,532**	5,299
Employee benefits expense	*7*	**2,708**	2,487
Depreciation	*16*	**1,475**	1,423
Amortization of intangible assets	*17*	**434**	411
		10,149	9,620
OPERATING INCOME		**2,353**	2,382
Financing costs	*8*	**447**	456
INCOME BEFORE INCOME TAXES		**1,906**	1,926
Income taxes	*9*	**524**	501
NET INCOME		**1,382**	1,425
OTHER COMPREHENSIVE INCOME	*10*		
Items that may subsequently be reclassified to income			
Change in unrealized fair value of derivatives designated as cash flow hedges		**(4)**	1
Foreign currency translation adjustment arising from translating financial statements of foreign operations		**25**	10
Change in unrealized fair value of available-for-sale financial assets		**—**	(4)
		21	7
Item never subsequently reclassified to income			
Employee defined benefit plan re-measurements		**445**	(445)
		466	(438)
COMPREHENSIVE INCOME		**$ 1,848**	$ 987
NET INCOME PER COMMON SHARE	*11*		
Basic		**$ 2.29**	$ 2.31
Diluted		**$ 2.29**	$ 2.31
TOTAL WEIGHTED AVERAGE COMMON SHARES OUTSTANDING			
Basic		**603**	616
Diluted		**604**	618

The accompanying notes are an integral part of these consolidated financial statements.

consolidated statements of financial position

As at December 31 (millions)	Note	2015	2014
ASSETS			
Current assets			
Cash and temporary investments, net		**$ 223**	$ 60
Accounts receivable	*25(a)*	**1,428**	1,483
Income and other taxes receivable		**1**	97
Inventories	*25(a)*	**360**	320
Prepaid expenses		**213**	199
Real estate joint venture advances	*18(c)*	**66**	—
Current derivative assets	*4(h)*	**40**	27
		2,331	2,186
Non-current assets			
Property, plant and equipment, net	*16*	**9,736**	9,123
Intangible assets, net	*17*	**9,985**	7,797
Goodwill, net	*17*	**3,761**	3,757
Other long-term assets	*25(a)*	**593**	354
		24,075	21,031
		$ 26,406	$ 23,217
LIABILITIES AND OWNERS' EQUITY			
Current liabilities			
Short-term borrowings	*19*	**$ 100**	$ 100
Accounts payable and accrued liabilities	*25(a)*	**1,990**	2,019
Income and other taxes payable		**108**	2
Dividends payable	*12*	**263**	244
Advance billings and customer deposits	*25(a)*	**760**	753
Provisions	*20*	**197**	126
Current maturities of long-term debt	*21*	**856**	255
Current derivative liabilities	*4(h)*	**2**	—
		4,276	3,499
Non-current liabilities			
Provisions	*20*	**433**	342
Long-term debt	*21*	**11,182**	9,055
Other long-term liabilities	*25(a)*	**688**	931
Deferred income taxes	*9(b)*	**2,155**	1,936
		14,458	12,264
Liabilities		**18,734**	15,763
Owners' equity			
Common equity	*22*	**7,672**	7,454
		$ 26,406	$ 23,217
Commitments and Contingent Liabilities	*23*		

The accompanying notes are an integral part of these consolidated financial statements.

Approved by the Directors:

/s/ William A. MacKinnon

William A. MacKinnon
Director

/s/ R.H. Auchinleck

R.H. Auchinleck
Director

consolidated statements of changes in owners' equity

		Common equity					
		Equity contributed					
		Common Shares (Note 22)				Accumulated other	
(millions except number of Common Shares)	Note	Number of shares	Share capital	Contributed surplus	Retained earnings	comprehensive income	Total
Balance as at January 1, 2014		623,432,398	$ 5,296	$ 149	$ 2,539	$ 31	$ 8,015
Net income		—	—	—	1,425	—	1,425
Other comprehensive income	*10*	—	—	—	(445)	7	(438)
Dividends	*12*	—	—	—	(935)	—	(935)
Share option award expense	*13(a)*	—	—	3	—	—	3

Common Shares issued pursuant to share option award net-equity settlement feature	*13(b)*	1,447,207	11	(11)	—	—	—
Normal course issuer bid purchase of Common Shares		(15,855,171)	(135)	—	(480)	—	(615)
Liability for automatic share purchase plan commitment pursuant to normal course issuer bids for Common Shares	*22(b)*						
Reversal of opening liability		—	18	—	57	—	75
Recognition of closing liability		—	(15)	—	(60)	—	(75)
Other		—	—	—	(1)	—	(1)
Balance as at December 31, 2014		609,024,434	$ 5,175	$ 141	$ 2,100	$ 38	$ 7,454
Balance as at January 1, 2015		**609,024,434**	**$ 5,175**	**$ 141**	**$ 2,100**	**$ 38**	**$ 7,454**
Net income		**—**	**—**	**—**	**1,382**	**—**	**1,382**
Other comprehensive income	*10*	**—**	**—**	**—**	**445**	**21**	**466**
Dividends	*12*	**—**	**—**	**—**	**(1,011)**	**—**	**(1,011)**
Share option award expense	*13(a)*	**—**	**—**	**1**	**—**	**—**	**1**
Common Shares issued pursuant to share option award net-equity settlement feature	*13(b)*	**885,783**	**7**	**(7)**	**—**	**—**	**—**
Normal course issuer bid purchase of Common Shares		**(15,610,462)**	**(133)**	**—**	**(502)**	**—**	**(635)**
Liability for automatic share purchase plan commitment pursuant to normal course issuer bids for Common Shares	*22(b)*						
Reversal of opening liability		**—**	**15**	**—**	**60**	**—**	**75**
Recognition of closing liability		**—**	**(14)**	**—**	**(46)**	**—**	**(60)**
Balance as at December 31, 2015		**594,299,755**	**$ 5,050**	**$ 135**	**$ 2,428**	**$ 59**	**$ 7,672**

The accompanying notes are an integral part of these consolidated financial statements.

consolidated statements of cash flows

Years ended December 31 (millions)	**Note**	**2015**	**2014**
OPERATING ACTIVITIES			
Net income		**$ 1,382**	$ 1,425
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation and amortization		**1,909**	1,834
Deferred income taxes	*9*	**68**	188
Share-based compensation expense, net	*13(a)*	**(38)**	74
Net employee defined benefit plans expense	*14(b),(g)*	**118**	87
Employer contributions to employee defined benefit plans		**(94)**	(88)
Other		**(17)**	(49)
Net change in non-cash operating working capital	*25(b)*	**214**	(64)
Cash provided by operating activities		**3,542**	3,407
INVESTING ACTIVITIES			
Cash payments for capital assets, excluding spectrum licences	*25(b)*	**(2,522)**	(2,373)
Cash payments for spectrum licences		**(2,048)**	(1,171)
Cash payments for acquisitions and related investments	*25(b)*	**(10)**	(49)
Real estate joint ventures advances and contributions	*18(c)*	**(50)**	(57)
Real estate joint venture receipts	*18(c)*	**98**	4
Proceeds on dispositions		**52**	7
Other		**3**	(29)
Cash used by investing activities		**(4,477)**	(3,668)
FINANCING ACTIVITIES			
Dividends paid to holders of Common Shares	*25(b)*	**(992)**	(913)
Purchase of Common Shares for cancellation	*22(b), 25(b)*	**(628)**	(612)
Issuance and repayment of short-term borrowings	*19*	**—**	(300)
Long-term debt issued	*21, 25(b)*	**9,219**	7,273
Redemptions and repayment of long-term debt	*21, 25(b)*	**(6,486)**	(5,450)
Other		**(15)**	(13)
Cash provided (used) by financing activities		**1,098**	(15)
CASH POSITION			
Increase (decrease) in cash and temporary investments, net		**163**	(276)
Cash and temporary investments, net, beginning of period		**60**	336

Cash and temporary investments, net, end of period		**$ 223**	$ 60
SUPPLEMENTAL DISCLOSURE OF OPERATING CASH FLOWS			
Interest paid	*25(b)*	**$ (458)**	$ (412)
Interest received		**$ 24**	$ 2
Income taxes paid, net		**$ (256)**	$ (464)

The accompanying notes are an integral part of these consolidated financial statements.

DECEMBER 31, 2015

TELUS Corporation is one of Canada's largest telecommunications companies, providing a wide range of telecommunications services and products, including wireless and wireline voice and data. Data services include: Internet protocol; television; hosting, managed information technology and cloud-based services; healthcare solutions; and business process outsourcing.

TELUS Corporation was incorporated under the *Company Act* (British Columbia) on October 26, 1998, under the name BCT.TELUS Communications Inc. (BCT). On January 31, 1999, pursuant to a court-approved plan of arrangement under the *Canada Business Corporations Act* among BCT, BC TELECOM Inc. and the former Alberta-based TELUS Corporation (TC), BCT acquired all of the shares of BC TELECOM Inc. and TC in exchange for Common Shares and Non-Voting Shares of BCT, and BC TELECOM Inc. was dissolved. On May 3, 2000, BCT changed its name to TELUS Corporation and in February 2005, TELUS Corporation transitioned under the *Business Corporations Act* (British Columbia), successor to the *Company Act* (British Columbia). TELUS Corporation maintains its registered office at Floor 7, 510 West Georgia Street, Vancouver, British Columbia, V6B 0M3.

The terms "TELUS", "we", "us", "our" or "ourselves" are used to refer to TELUS Corporation and, where the context of the narrative permits or requires, its subsidiaries.

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1 summary of significant accounting policies

Our consolidated financial statements are expressed in Canadian dollars. The generally accepted accounting principles that we use are International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS-IASB) and Canadian generally accepted accounting principles. The date of our transition to IFRS-IASB was January 1, 2010, and the date of our adoption was January 1, 2011.

Generally accepted accounting principles require that we disclose the accounting policies we have selected in those instances where we have been obligated to choose from among various generally accepted accounting principle-compliant accounting policies. In certain other instances, including where no selection among policies is allowed, we are also required to disclose how we have applied certain accounting policies. In our assessment, all of our required accounting policy disclosures are not equally significant for us, as set out in the accompanying table; their relative significance to us will evolve over time as we do.

These consolidated financial statements for each of the years ended December 31, 2015 and 2014, were authorized by our Board of Directors for issue on February 11, 2016.

Accounting policy	Accounting policy requiring a more significant choice among policies and/or a more significant application of judgment	
	Yes	No
General application		
(a) Consolidation		X
(b) Use of estimates and judgments	X	
(c) Financial instruments — recognition and measurement		X
(d) Hedge accounting		X
Results of operations focused		
(e) Revenue recognition	X	
(f) Government assistance		X
(g) Cost of acquisition and advertising costs		X
(h) Research and development		X
(i) Leases		X
(j) Depreciation, amortization and impairment	X	
(k) Translation of foreign currencies		X
(l) Income and other taxes	X	
(m) Share-based compensation		X
(n) Employee future benefit plans	X	
Financial position focused		
(o) Cash and temporary investments, net		X
(p) Sales of trade receivables		X
(q) Inventories		X
(r) Property, plant and equipment; intangible assets	X	
(s) Investments		X

(a) Consolidation

Our consolidated financial statements include our accounts and the accounts of all of our subsidiaries, the principal one of which is TELUS Communications Inc., in which we have a 100% equity interest. Currently, through a 100% equity interest in each of the TELUS Communications Company partnership and the TELE-MOBILE COMPANY partnership, TELUS Communications Inc. includes substantially all of our wireless and wireline segments' operations.

Our financing arrangements and those of our subsidiaries do not impose restrictions on inter-corporate dividends.

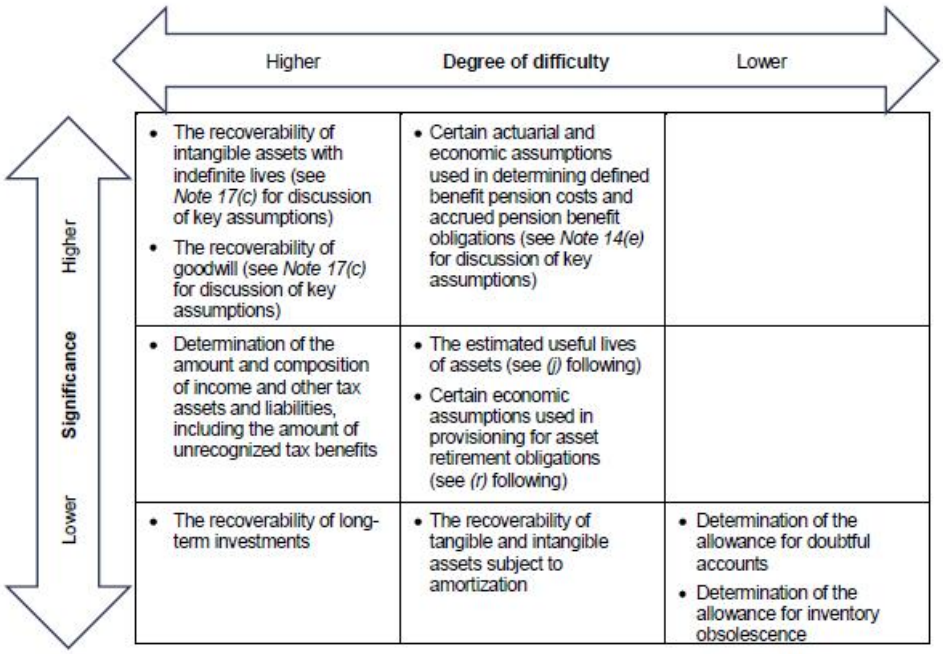
On a continuing basis, we review our corporate organization and effect changes as appropriate so as to enhance the value of TELUS Corporation. This process can, and does, affect which of our subsidiaries are considered principal subsidiaries at any particular point in time.

(b) Use of estimates and judgments

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates, assumptions and judgments that affect: the reported amounts of assets and liabilities at the date of the financial statements; the disclosure of contingent assets and liabilities at the date of the financial statements; and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Estimates

Examples of the significant estimates and assumptions that we make and their relative significance and degree of difficulty are as follows:



Judgments

Examples of our significant judgments, apart from those involving estimation, include the following:

- Assessments about whether line items are sufficiently material to warrant separate presentation in the primary financial statements and, if not, whether they are sufficiently material to warrant separate presentation in the financial statement notes. In the normal course, we make changes to our assessments regarding presentation materiality so that they reflect current economic conditions. Due consideration is given to the view that it is reasonable to expect differing opinions of what is, and is not, material.

- In respect of revenue-generating transactions, generally we must make judgments that affect the timing of the recognition of revenue. See *Note 2* for significant changes to IFRS-IASB that are not yet effective and have not yet been applied, but which will significantly affect the timing of the recognition of revenue and the classification of our revenues presented as either service or equipment.

    - We must make judgments about when we have satisfied our performance obligations to our customers, satisfied either over a period of time or at a point in time. Service revenues are recognized based upon customers' access to, or usage of, our telecommunications infrastructure; we believe this method faithfully depicts the transfer of the services and thus the revenues are recognized as the services are made available and/or rendered. We consider our performance obligations arising from the sale of equipment to have been satisfied when the equipment has been delivered and accepted by the end-user customers (see *(e)* following).

    - Principally in the context of revenue-generating transactions involving wireless handsets, we must make judgments about whether third-party re-sellers delivering equipment to our customers are acting in the transaction as principals or as our agents. Upon due consideration of the relevant indicators, we believe the decision to consider the re-sellers to be acting, solely for accounting purposes, as our agents is more representative of the economic substance of the transactions as we are the primary obligor to the end-user customers.

- The decision to depreciate and amortize any property, plant, equipment and intangible assets that are subject to amortization on a straight-line basis, as we believe that this method reflects the consumption of resources related to the economic lifespan of those assets better than an accelerated method and is more representative of the economic substance of the underlying use of those assets.

- The preparation of financial statements in accordance with generally accepted accounting principles requires management to make judgments that affect the financial statement disclosure of information regularly reviewed by our chief operating decision-maker used to make resource allocation decisions and to assess performance (segmented information, *Note 5*). A significant judgment we make is that our wireless and wireline operations and cash flows are sufficiently distinct to be considered both operating segments and reportable segments, notwithstanding the convergence our wireless and wireline telecommunications infrastructure technology and operations have experienced to date. If our wireless and wireline telecommunications infrastructure technology and operations continue to converge, it may become impractical, if not impossible, to objectively distinguish between our wireless and wireline operations and cash flows; if sufficient convergence were to occur, our wireless and wireline operations would no longer be individual components of the business or discrete operating segments; rather, they could each become a group of similar products and services.

As well, if it were to become impractical to distinguish between our wireless and wireline cash flows, which would be evidence of their interdependence, this could result in the unification of the current wireless cash-generating unit and the current wireline cash-generating unit as a single cash-generating unit for impairment testing purposes.

- The view that our spectrum licences granted by the Canadian Department of Innovation, Science and Economic Development (formerly Industry Canada) will likely be renewed by the Canadian Department of Innovation, Science and Economic Development; that we intend to renew them; that we believe we have the financial and operational ability to renew them; and thus, they have an indefinite life, as discussed further in *Note 17(b)*.

- In connection with the annual impairment testing of intangible assets with indefinite lives and goodwill, there are instances where we must exercise judgment in allocating our net assets, including shared corporate and administrative assets, to our cash-generating units when determining their carrying amounts. These judgments are necessary because of the convergence our wireless and wireline telecommunications infrastructure technology and operations have experienced to date, and our continuous development. There are instances where similar judgments must also be made in respect of future capital expenditures in support of both wireless and wireline operations, which are a component of the discounted cash flow projections that are used in the annual impairment testing, as discussed further in *Note 17(c)*.

- In respect of claims and lawsuits, as discussed further in *Note 23(c)*, the determination of whether an item is a contingent liability or whether an outflow of resources is probable and thus needs to be accounted for as a provision.

(c) Financial instruments — recognition and measurement

In respect of the recognition and measurement of financial instruments, we have adopted the following policies:

	Accounting classification				
Financial instrument	**Fair value through net income [1, 2]**	**Loans and receivables**	**Available-for-sale [3]**	**Amortized cost**	**Part of a cash flow hedging relationship [3]**
Measured at amortized cost					
Accounts receivable		X			
Construction credit facilities advances to real estate joint ventures		X			
Short-term obligations				X	
Accounts payable				X	
Provisions				X	
Long-term debt				X	
Measured at fair value					
Cash and temporary investments	X				
Long-term investments (not subject to significant influence) [4]			X		
Foreign exchange derivatives	X				X
Share-based compensation derivatives	X				X

(1) Classification includes financial instruments held for trading. Certain qualifying financial instruments that are not required to be classified as held for trading may be classified as held for trading if we so choose.

(2) *Unrealized* changes in the fair values of financial instruments are included in net income.

(3) *Unrealized* changes in the fair values of financial instruments classified as available-for-sale, or the effective portion of *unrealized* changes in the fair values of financial instruments held for hedging, are included in other comprehensive income.

(4) Long-term investments over which we do not have significant influence are classified as available-for-sale. In respect of investments in securities for which the fair values can be reliably measured, we determine the classification on an instrument-by-instrument basis at the time of initial recognition.

- Trade receivables that may be sold to an arm's-length securitization trust are accounted for as loans and receivables. We have selected this classification as the benefits of selecting the available-for-sale classification were not expected to exceed the costs of selecting and implementing that classification.

- Long-term investments over which we do not have significant influence are accounted for as available-for-sale. We have selected this classification as we believe that it better reflects management's investment intentions.

- Derivatives that are part of an established and documented cash flow hedging relationship are accounted for as held for hedging. We believe that classification as held for hedging results in a better matching of the change in the fair value of the derivative financial instrument with the risk exposure being hedged.

In respect of hedges of anticipated transactions, which in our specific instance may include those related to inventory purchase commitments, hedge gains/losses will be included in the cost of the inventory and will be expensed when the inventory is sold. We have

selected this method as we believe that it results in a better matching with the risk exposure being hedged.

Derivatives that are not part of a documented cash flow hedging relationship are accounted for as held for trading and thus are measured at fair value through net income.

- Regular-way purchases or sales of financial assets or financial liabilities (purchases or sales that require actual delivery of financial assets or financial liabilities) are recognized on the settlement date. We have selected this method as the benefits of using the trade date method were not expected to exceed the costs of selecting and implementing that method.

- Transaction costs, other than in respect of items held for trading, are added to the initial fair value of the acquired financial asset or financial liability. We have selected this method as we believe that it results in a better matching of the transaction costs with the periods benefiting from the transaction costs.

(d) Hedge accounting

General

We apply hedge accounting to the financial instruments used to: establish designated currency hedging relationships for certain U.S. dollar denominated future purchase commitments and debt repayments, as set out in *Note 4(d)*; and fix the compensation cost arising from specific grants of restricted stock units, as set out in *Note 4(f)* and further discussed in *Note 13(c)*.

Hedge accounting

The purpose of hedge accounting, in respect of our designated hedging relationships, is to ensure that counterbalancing gains and losses are recognized in the same periods. We have chosen to apply hedge accounting as we believe this is more representative of the economic substance of the underlying transactions.

In order to apply hedge accounting, a high correlation (which indicates effectiveness) is required in the offsetting changes in the values of the financial instruments (the hedging items) used to establish the designated hedging relationships and all, or a part, of the asset, liability or transaction having an identified risk exposure that we have taken steps to modify (the hedged items). We assess the anticipated effectiveness of designated hedging relationships at inception and their actual effectiveness for each reporting period thereafter. We consider a designated hedging relationship to be effective if the following critical terms match between the hedging item and the hedged item: the notional amount of the hedging item and the principal amount of the hedged item; maturity dates; payment dates; and interest rate index (if, and as, applicable). As set out in *Note 4(i)*, any ineffectiveness, such as would result from a difference between the notional amount of the hedging item and the principal amount of the hedged item, or from a previously effective designated hedging relationship becoming ineffective, is reflected in the Consolidated statements of income and other comprehensive income as Financing costs if in respect of long-term debt, as Goods and services purchased if in respect of U.S. dollar denominated future purchase commitments or as Employee benefits expense if in respect of share-based compensation.

Hedging assets and liabilities

In the application of hedge accounting, an amount (the hedge value) is recorded in the Consolidated statements of financial position in respect of the fair value of the hedging items. The net difference, if any, between the amounts recognized in the determination of net income and the amounts necessary to reflect the fair value of the designated cash flow hedging items recorded in the Consolidated statements of financial position is recognized as a component of Other comprehensive income, as set out in *Note 10*.

In the application of hedge accounting to the compensation cost arising from share-based compensation, the amount recognized in the determination of net income is the amount that counterbalances the difference between the quoted market price of our Common Shares at the statement of financial position date and the price of our Common Shares in the hedging items.

(e) Revenue recognition

General

We earn the majority of our revenues (wireless: network revenues (voice and data); wireline: data revenues (which include: Internet protocol; television; hosting, managed information technology and cloud-based services; business process outsourcing; and certain healthcare solutions) and voice revenues) from access to, and usage of, our telecommunications infrastructure. The majority of the balance of our revenues (wireless equipment and other) arises from providing services and products facilitating access to, and usage of, our telecommunications infrastructure.

We offer complete and integrated solutions to meet our customers' needs. These solutions may involve deliveries of multiple services and products that occur at different points in time and/or over different periods of time; as referred to in *(b)*, this is a significant judgment for us. As appropriate, these multiple element arrangements are separated into their component accounting units, consideration is measured and allocated among the accounting units based upon their relative fair values (derived using Company-specific objective evidence) and then our relevant revenue recognition policies are applied to the accounting units. (We estimate that more than two-thirds of our revenues arise from multiple element arrangements.) A limitation cap restricts the consideration allocated to services or products currently transferred in multiple element

arrangements to an amount that is not contingent upon either delivering additional items or meeting other specified performance conditions. Our view is that the limitation cap results in a faithful depiction of the transfer of services and products, as it reflects the telecommunications industry's generally accepted understanding of the transfer of services and products, while also reflecting the related cash flows; however, a new revenue accounting standard, which has not yet been applied and must be adopted by January 1, 2018, prohibits the use of a limitation cap, as discussed further in *Note 2*.

Multiple contracts with a single customer are normally accounted for as separate arrangements. In instances where multiple contracts are entered into with a customer in a short period of time, the contracts are reviewed as a group to ensure that, as with multiple element arrangements, their relative fair values are appropriate.

Lease accounting is applied to an accounting unit if it conveys to a customer the right to use a specific asset but does not convey the risks and/or benefits of ownership.

Our revenues are recorded net of any value-added, sales and/or use taxes billed to the customer concurrent with a revenue-generating transaction.

When we receive no identifiable, separable benefit for consideration given to a customer (*e.g.* discounts and rebates), the consideration is recorded as a reduction of revenue rather than as an expense.

Voice and data

We recognize revenues on an accrual basis and include an estimate of revenues earned but unbilled. Wireless and wireline service revenues are recognized based upon access to, and usage of, our telecommunications infrastructure and upon contract fees.

Advance billings are recorded when billing occurs prior to provision of the associated services; such advance billings are recognized as revenue in the period in which the services are provided. Similarly, and as appropriate, upfront customer activation and connection fees are deferred and recognized over the average expected term of the customer relationship.

We use the liability method of accounting for the amounts of our quality of service rate rebates that arise from the jurisdiction of the Canadian Radio-television and Telecommunications Commission (CRTC).

The CRTC has established a mechanism to subsidize local exchange carriers, such as ourselves, that provide residential basic telephone service to high cost serving areas. The CRTC has determined the per network access line/per band subsidy rate for all local exchange carriers. We recognize the subsidy on an accrual basis by applying the subsidy rate to the number of residential network access lines we provide in high cost serving areas, as further discussed in *Note 6*. Differences, if any, between interim and final subsidy rates set by the CRTC are accounted for as a change in estimate in the period in which the CRTC finalizes the subsidy rate.

Other and wireless equipment

We recognize product revenues, including amounts related to wireless handsets sold to re-sellers and customer premises equipment, when the products are delivered and accepted by the end-user customers. With respect to wireless handsets sold to re-sellers, we consider ourselves to be the principal and primary obligor to the end-user customer. Revenues from operating leases of equipment are recognized on a systematic and rational basis (normally a straight-line basis) over the term of the lease.

Non-high cost serving area deferral account

In an effort to foster competition for residential basic service in non-high cost serving areas, the concept of a deferral account mechanism was introduced by the CRTC in 2002 as an alternative to mandating price reductions. We use the

liability method of accounting for the deferral account. We discharge the deferral account liability by undertaking qualifying actions. We recognize the amortization (over a period no longer than three years) of a proportionate share of the deferral account as qualifying actions are completed. Such amortization is included as a component of government assistance in Other operating income, as set out in *Note 6*.

(f) Government assistance

We recognize government assistance amounts on an accrual basis as the subsidized services are provided or as the subsidized costs are incurred. As set out in *Note 6*, government assistance amounts are included in the Consolidated statements of income and other comprehensive income as Other operating income.

(g) Cost of acquisition and advertising costs

The total cost of wireless hardware sold to customers and any commissions and advertising and promotion costs related to the initial customer acquisition are expensed as incurred; the cost of hardware we own that is situated at customers' premises and associated installation costs are capitalized as incurred. Costs of acquiring customers that are expensed are included in the Consolidated statements of income and other comprehensive income as a component of Goods and services purchased, with the exception of amounts paid to our employees, which are

included as Employee benefits expense. Costs of advertising production, advertising airtime and advertising space are expensed as incurred.

(h) Research and development

Research and development costs are expensed except in cases where development costs meet certain identifiable criteria for capitalization. Capitalized development costs are amortized over the life of the related commercial production, or in the case of serviceable property, plant and equipment, are included in the appropriate property group and are depreciated over its estimated useful life.

(i) Leases

Leases are classified as finance or operating depending upon the terms and conditions of the contracts. See *Note 2* for significant changes to IFRS-IASB that are not yet effective and have not yet been applied, but will significantly affect the timing of the recognition of operating lease expenses, their recognition on the Consolidated statement of financial position, as well as their classification in both the Consolidated statement of income and other comprehensive income and the Consolidated statement of cash flows.

Where we are the lessee, asset values recorded under finance leases are amortized on a straight-line basis over the period of expected use. Obligations recorded under finance leases are reduced by lease payments net of imputed interest.

For the year ended December 31, 2015, real estate and vehicle operating lease expenses, which are net of the amortization of deferred gains on the sale-leaseback of buildings and the occupancy costs associated with leased real estate, were $227 million (2014 — $222 million); occupancy costs associated with leased real estate totalled $88 million (2014 — $85 million).

(j) Depreciation, amortization and impairment

Depreciation and amortization

Assets are depreciated on a straight-line basis over their estimated useful lives as determined by a continuing program of asset life studies. Depreciation includes amortization of assets under finance leases and amortization of leasehold improvements. Leasehold improvements are normally amortized over the lesser of their expected average service life or the term of the lease. Intangible assets with finite lives (intangible assets subject to amortization) are amortized on a straight-line basis over their estimated useful lives, which are reviewed at least annually and adjusted as appropriate. As referred to in *(b)*, the use of a straight-line basis of depreciation and amortization is a significant judgment for us.

Estimated useful lives for the majority of our property, plant and equipment subject to depreciation are as follows:

	Estimated useful lives [1]
Network assets	
Outside plant	17 to 40 years
Inside plant	4 to 17 years
Wireless site equipment	5 to 10 years
Balance of depreciable property, plant and equipment	3 to 40 years

(1) The composite depreciation rate for the year ended December 31, 2015, was 4.8% (2014 — 4.8%). The rate is calculated by dividing depreciation expense by an average of the gross book value of depreciable assets over the reporting period.

Estimated useful lives for the majority of our intangible assets subject to amortization are as follows:

	Estimated useful lives
Wireline subscriber base	25 years
Customer contracts, related customer relationships and leasehold interests	6 to 10 years
Software	2 to 7 years
Access to rights-of-way and other	5 to 30 years

Impairment — general

Impairment testing compares the carrying values of the assets or cash-generating units being tested with their recoverable amounts (the recoverable amount being the greater of an asset's or a cash-generating unit's value in use or its fair value less costs to sell); as referred to in *(b)*, this is a significant estimate for us. Impairment losses are immediately recognized to the extent that the carrying value of an asset or cash-generating unit exceeds its recoverable amount. Should the recoverable amounts for impaired assets or cash-generating units subsequently increase, the impairment losses previously recognized (other than in respect of goodwill) may be reversed to the extent that the reversal is not a result of "unwinding of the discount" and that the resulting carrying values do not exceed the carrying values that would have been the result if no impairment losses had been previously recognized.

Impairment — property, plant and equipment; intangible assets subject to amortization

The continuing program of asset life studies considers such items as the timing of technological obsolescence, competitive pressures and future

infrastructure utilization plans; these considerations could also indicate that the carrying value of an asset may not be recoverable. If the carrying value of an asset were not considered recoverable, an impairment loss would be recorded.

Impairment — intangible assets with indefinite lives; goodwill

The carrying values of intangible assets with indefinite lives and goodwill are periodically tested for impairment. The frequency of the impairment testing is generally the reciprocal of the stability of the relevant events and circumstances, but intangible assets with indefinite lives and goodwill must, at a minimum, be tested annually; we have selected December as our annual test date.

We assess our intangible assets with indefinite lives by comparing the recoverable amounts of our cash-generating units to the carrying values of our cash-generating units (including the intangible assets with indefinite lives allocated to a cash-generating unit, but excluding any goodwill allocated to a cash-generating unit). To the extent that the carrying value of a cash-generating unit (including the intangible assets with indefinite lives allocated to the cash-generating unit, but excluding any goodwill allocated to the cash-generating unit) exceeds its recoverable amount, the excess amount would be recorded as a reduction in the carrying value of intangible assets with indefinite lives.

Subsequent to assessing our intangible assets with indefinite lives, we then assess our goodwill by comparing the recoverable amounts of our cash-generating units to the carrying values of our cash-generating units (including the intangible assets with indefinite lives and the goodwill allocated to a cash-generating unit). To the extent that the carrying value of the cash-generating unit (including the intangible assets with indefinite lives and the goodwill allocated to the cash-generating unit) exceeds its recoverable amount, the excess amount would first be recorded as a reduction in the carrying value of goodwill and any remainder would be recorded as a reduction in the carrying values of the assets of the cash-generating unit on a pro-rated basis.

We have determined that our current cash-generating units are our currently reportable segments, wireless and wireline, as the reportable segments, which are also our operating segments (see *Note 5*), are the smallest identifiable groups of assets that generate net cash inflows which are largely independent of each other.

(k) Translation of foreign currencies

Trade transactions completed in foreign currencies are translated into Canadian dollars at the rates of exchange prevailing at the time of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the rate of exchange in effect at the statement of financial position date, with any resulting gain or loss recorded in the Consolidated statements of income and other comprehensive income as a component of Financing costs, as set out in *Note 8*. Hedge accounting is applied in specific instances, as further discussed in *(d)* preceding.

We have foreign subsidiaries that do not have the Canadian dollar as their functional currency. Foreign exchange gains and losses arising from the translation of these foreign subsidiaries' accounts into Canadian dollars subsequent to January 1, 2010, are reported as a component of other comprehensive income, as set out in *Note 10*.

(l) Income and other taxes

We follow the liability method of accounting for income taxes; as referred to in *(b)*, this is a significant estimate for us. Under this method, current income taxes are recognized for the estimated income taxes payable for the current year.

Deferred income tax assets and liabilities are recognized for temporary differences between the tax and accounting bases of assets and liabilities, and also for the benefit of losses and Investment Tax Credits available to be carried forward to future years for tax purposes that are more likely than not to be realized. The amounts recognized in respect of deferred income tax assets and liabilities are based upon the expected timing of the reversal of temporary differences or usage of tax losses and application of the substantively enacted tax rates at the time of reversal or usage.

We account for any changes in substantively enacted income tax rates affecting deferred income tax assets and liabilities in full in the period in which the changes are substantively enacted. We account for changes in the estimates of prior year(s) tax balances as estimate revisions in the period in which the changes in estimates arise; we have selected this approach as its emphasis on the statement of financial position is more consistent with the liability method of accounting for income taxes.

Our operations are complex and the related tax interpretations, regulations and legislation are continually changing. As a result, there are usually some tax matters in question that result in uncertain tax positions. We only recognize the income tax benefit of an uncertain tax position when it is more likely than not that the ultimate determination of the tax treatment of the position will result in that benefit being realized. We accrue an amount for interest charges on current tax liabilities that have not been funded, which would include interest and penalties arising from uncertain tax positions. We include such charges in the Consolidated statements of income and other comprehensive income as a component of Financing costs.

Our research and development activities may be eligible to earn Investment Tax Credits, for which the determination of eligibility is a complex matter. We only recognize Investment Tax Credits when there is reasonable assurance that the ultimate determination of the eligibility of our research and development activities will result in the Investment Tax Credits being received, at which time they are accounted for using the cost reduction method, whereby such credits are deducted from the expenditures or assets to which they relate, as set out in *Note 9(c)*.

(m) Share-based compensation

General

When share-based compensation vests in its entirety at one future point in time (cliff vesting), we recognize the expense on a straight-line basis over the vesting period. When share-based compensation vests in tranches (graded vesting), we recognize the expense using the accelerated expense attribution method. An estimate of forfeitures during the vesting period is made at the date of grant; this estimate is adjusted to reflect actual experience.

Share option awards

For share option awards granted after 2001, a fair value is determined at the date of grant and that fair value is recognized in the financial statements. Proceeds arising from the exercise of share option awards are credited to share capital, as are the recognized grant-date fair values of the exercised share option awards.

Share option awards that have a net-equity settlement feature, as set out in *Note 13(b)*, are accounted for as equity instruments. We have selected the equity instrument fair value method of accounting for the net-equity settlement feature as it is consistent with the accounting treatment afforded to the associated share option awards.

Restricted stock units

In respect of restricted stock units without market performance conditions, as set out in *Note 13(c)*, we accrue a liability equal to the product of the number of vesting restricted stock units multiplied by the fair market value of the corresponding Common Shares at the end of the reporting period (unless hedge accounting is applied, as set out in *(d)* preceding). Similarly, we accrue a liability for the notional subset of our restricted stock units with market performance conditions using a fair value determined using a Monte Carlo simulation. The expense for restricted stock units that do not ultimately vest is reversed against the expense that was previously recorded in their respect.

(n) Employee future benefit plans

Defined benefit plans

We accrue amounts for our obligations under employee defined benefit plans, and the related costs, net of plan assets. The cost of pensions and other retirement benefits earned by employees is actuarially determined using the accrued benefit method pro-rated on service and management's best estimates of salary escalation and the retirement ages of employees. In the determination of net income, net interest for each plan, which is the product of the plan's surplus (deficit) multiplied by the discount rate, is included as a component of Financing costs, as set out in *Note 8*.

An amount reflecting the effect of differences between the discount rate and the actual rate of return on plan assets is included as a component of employee defined benefit plan re-measurements within Other comprehensive income, as set out in *Note 10* and *Note 14*. We determine the maximum economic benefit available from the plans' assets on the basis of reductions in future contributions to the plans.

On an annual basis, at a minimum, the defined benefit plan key assumptions are assessed and revised as appropriate; as referred to in *(b)*, these are significant estimates for us. When the defined benefit plan key assumptions fluctuate significantly relative to their immediately preceding year-end values, actuarial gains (losses) arising from such significant fluctuations are recognized on an interim basis.

Defined contribution plans

We use defined contribution accounting for the Telecommunication Workers Pension Plan and the British Columbia Public Service Pension Plan, which cover certain of our employees and provide defined benefits to their members. In the absence of any regulations governing the calculation of the share of the underlying financial position and plan performance attributable to each employer-participant, and in the absence of contractual agreements between the plans and the employer-participants related to the financing of any shortfall (or distribution of any surplus), we account for these plans as defined contribution plans in accordance with International Accounting Standard 19, *Employee Benefits*.

(o) Cash and temporary investments, net

Cash and temporary investments, which may include investments in money market instruments that are purchased three months or less from maturity, are presented net of outstanding items, including cheques written but not cleared by the related banks as at the statement of financial position date. Cash and temporary investments, net, are classified as a liability in the statement of financial position when the amount of the cheques written but not cleared by the related banks exceeds the amount of cash and temporary investments. When cash and temporary investments, net, are classified as a liability, they may also include overdraft amounts drawn on our bilateral bank facilities, which revolve daily and are discussed further in *Note 19*.

(p) Sales of trade receivables

Sales of trade receivables in securitization transactions are recognized as collateralized short-term borrowings and thus do not result in our de-

recognition of the trade receivables sold.

(q) Inventories

Our inventories consist primarily of wireless handsets, parts and accessories and communications equipment held for resale. Inventories are valued at the lower of cost and net realizable value, with cost being determined on an average cost basis. Previous write-downs to net realizable value are reversed if there is a subsequent increase in the value of the related inventories.

(r) Property, plant and equipment; intangible assets

General

Property, plant and equipment and intangible assets are recorded at historical cost, which for self-constructed property, plant and equipment includes materials, direct labour and applicable overhead costs. For internally developed, internal-use software, recorded historical cost includes materials, direct labour and direct labour-related costs. Where property, plant and equipment construction projects are of a sufficient size and duration, an amount is capitalized for the cost of funds used to finance construction, as set out in *Note 8*. The rate for calculating the capitalized financing cost is based on our weighted average cost of borrowing experienced during the reporting period.

When we sell property, plant and/or equipment, the net book value is netted against the sale proceeds and the difference, as set out in *Note 6*, is included in the Consolidated statements of income and other comprehensive income as Other operating income.

Asset retirement obligations

Provisions for liabilities, as set out in *Note 20*, are recognized for statutory, contractual or legal obligations, normally when incurred, associated with the retirement of property, plant and equipment (primarily certain items of outside plant and wireless site equipment) when those obligations result from the acquisition, construction, development and/or normal operation of the assets; as referred to in *(b)*, this is a significant estimate for us. The obligations are measured initially at fair value, determined using present value methodology, and the resulting costs are capitalized as a part of the carrying value of the related asset. In subsequent periods, the liability is adjusted for the accretion of discount, for any changes in the market-based discount rate and for any changes in the amount or timing of the underlying future cash flows. The capitalized asset retirement cost is depreciated on the same basis as the related asset and the discount accretion, as set out in *Note 8*, is included in the Consolidated statements of income and other comprehensive income as a component of Financing costs.

(s) Investments

We account for our investments in companies over which we have significant influence using the equity method of accounting, whereby the investments are initially recorded at cost and subsequently adjusted to recognize our share of earnings or losses of the investee companies and any earnings distributions received. The excess of the cost of an equity investment over its underlying book value at the date of acquisition, except for goodwill, is amortized over the estimated useful lives of the underlying assets to which the excess cost is attributed.

Similarly, we account for our interests in the real estate joint ventures, discussed further in *Note 18*, using the equity method of accounting. Unrealized gains and losses from transactions with (including contributions to) the real estate joint ventures are deferred in proportion to our remaining interest in the real estate joint ventures.

We account for our other investments as available-for-sale at their fair values unless they are investment securities that do not have quoted market prices in an active market or do not have other clear and objective evidence of fair value. When we do not account for our available-for-sale investments at their fair values, we use the cost basis of accounting whereby the investments are initially recorded at cost and earnings from those investments are recognized only to the extent received or receivable. The costs of investments sold or the amounts reclassified from other comprehensive income to earnings are determined on a specific-identification basis.

Unless there is a significant or prolonged decline in the value of an available-for-sale investment, the carrying values of available-for-sale investments are adjusted to their estimated fair values, and the amount of any such adjustment would be included in the Consolidated statements of income and other comprehensive income as a component of other comprehensive income. When there is a significant or prolonged decline in the value of an investment, the carrying value of any such investment accounted for using the equity, available-for-sale or cost method is reduced to its estimated fair value, and the amount of any such reduction would be included in the Consolidated statements of income and other comprehensive income as Other operating income.

2 accounting policy developments

Standards, interpretations and amendments to standards not yet effective and not yet applied

Based upon current facts and circumstances, we do not expect to be materially affected by the application of the following standards, unless otherwise indicated, and we are currently determining which date(s) we will select for initial compliance if earlier than the required compliance dates.

- *Annual Improvements to IFRSs 2012-2014 Cycle* are required to be applied for years beginning on or after January 1, 2016.

- IFRS 9, *Financial Instruments*, is required to be applied for years beginning on or after January 1, 2018.

- IFRS 15, *Revenue from Contracts with Customers*, is required to be applied for years beginning on or after January 1, 2018, such date reflecting the one-year deferral approved by the International Accounting Standards Board on July 22, 2015. The International Accounting Standards Board and the Financial Accounting Standards Board of the United States worked on this joint project to clarify the principles for the recognition of revenue and to develop the common revenue standard. The new standard was released in May 2014 and supersedes existing standards and interpretations including IAS 18, *Revenue*. We are currently assessing the impacts and transition provisions of the new standard.

  The effects of the new standard and the materiality of those effects will vary by industry and entity. Like many other telecommunications companies, we currently expect to be materially affected by its application, primarily in respect of the timing of revenue recognition, the classification of revenue, the capitalization of costs of obtaining a contract with a customer and possibly the capitalization of the costs of contract fulfilment (as defined by the new standard). The timing of revenue recognition and the classification of our revenues as either service revenues or equipment revenues will be affected, since the allocation of consideration in multiple element arrangements (solutions for our customers that may involve deliveries of multiple services and products that occur at different points in time and/or over different periods of time) will no longer be affected by the current limitation cap methodology.

  The effects of the timing of revenue recognition and the classification of revenue are expected to be most pronounced in our wireless segment. Although the measurement of the total revenue recognized over the life of a contract will be largely unaffected by the new standard, the prohibition of the use of the limitation cap methodology will accelerate the recognition of total contract revenue, relative to both the associated cash inflows from customers and our current practice (using the limitation cap methodology). The acceleration of the recognition of contract revenue relative to the associated cash inflows will also result in the recognition of an amount reflecting the resulting difference as an asset. Although the underlying transaction economics would not differ, during periods of sustained

growth in the number of wireless subscriber connection additions, assuming comparable contract-lifetime per unit cash inflows, revenues would appear to be greater than under current practice (using the limitation cap methodology). Wireline segment results arising from transactions that include the initial provision of subsidized hardware or promotional pricing plans will be similarly affected.

Similarly, the measurement of the total costs of contract acquisition and contract fulfilment over the life of a contract will be unaffected by the new standard. The new standard will result in our wireless and wireline segments' costs of contract acquisition and contract fulfilment, to the extent that they are material, being capitalized and subsequently recognized as an expense over the life of a contract on a rational, systematic basis consistent with the pattern of the transfer of goods or services to which the asset relates. Although the underlying transaction economics would not differ, during periods of sustained growth in the number of customer connection additions, assuming comparable per unit costs of contract acquisition and contract fulfilment, absolute profitability measures would appear to be greater than under the current practice of immediately expensing such costs.

Our operations and associated systems are complex and our accounting for millions of multi-year contracts with our customers will be affected. Significantly, in order to effect the associated accounting, incremental compilation of historical data will be necessary for the millions of already existing multi-year contracts with our customers that are expected to be in-scope for purposes of transitioning to the new standard. Our current estimate of the time and effort necessary to develop and implement the accounting policies, estimates, judgments and processes (including incremental requirements of our information technology systems) we will need to have in place in order to comply with the new standard extends into mid-2017. As a result, at this time, it is not possible to make reasonable quantitative estimates of the effects of the new standard.

- In January 2016 the International Accounting Standards Board released IFRS 16, *Leases*, which is required to be applied for years beginning on or after January 1, 2019, and which supersedes IAS 17, *Leases*. The International Accounting Standards Board and the Financial Accounting Standards Board of the United States worked together to improve the accounting for leases, generally by eliminating lessees' classification of leases as either operating leases or finance leases and, for IFRS-IASB, introducing a single lessee accounting model.

  The most significant effect of the new standard will be the lessee's recognition of the initial present value of unavoidable future lease payments as lease assets and lease liabilities on the statement of financial position, including for most leases which would be currently accounted for as operating leases. Leases with durations of 12 months or less and leases for low-value assets are both exempted. As set out in *Note 23(a)*, we currently have significant operating lease commitments.

  The measurement of the total lease expense over the term of a lease will be unaffected by the new standard. However, the new standard will result in the timing of lease expense recognition being accelerated for leases which would be currently accounted for as operating leases; the International Accounting Standards Board expects that this effect may be muted by a lessee having a portfolio of leases with varying maturities and lengths of term. The presentation on the statement of income and other comprehensive income required by the new standard will result in most lease expenses being presented as amortization of lease assets and financing costs arising from lease liabilities rather than as being a part of goods and services purchased.

  Relative to the results of applying the current standard, the lessee's statement of cash flows will reflect increased operating activity cash flows equally offset by decreased financing activity cash flows due to the payment of the "principal" component of leases, which would be currently accounted for as operating leases, being presented as a cash flow use within financing activities under the new standard.

We are currently assessing the impacts and transition provisions of the new standard, but we expect that our Consolidated statement of financial position will be materially affected, as will be debt-related and operation-related financial metrics. At this time it is not possible to make reasonable quantitative estimates of the effects of the new standard.

3 capital structure financial policies

Our objective when managing capital is to maintain a flexible capital structure that optimizes the cost and availability of capital at acceptable risk.

In the management of capital and in its definition, we include common equity (excluding accumulated other comprehensive income), long-term debt (including long-term credit facilities, commercial paper backstopped by long-term credit facilities and any hedging assets or liabilities associated with long-term debt items, net of amounts recognized in accumulated other comprehensive income), cash and temporary investments, and short-term borrowings arising from securitized trade receivables.

We manage our capital structure and make adjustments to it in light of changes in economic conditions and the risk characteristics of our telecommunications infrastructure. In order to maintain or adjust our capital structure, we may adjust the amount of dividends paid to holders of Common Shares, purchase Common Shares for cancellation pursuant to normal course issuer bids, issue new shares, issue new debt, issue new debt to replace existing debt with different characteristics and/or increase or decrease the amount of trade receivables sold to an arm's-length securitization trust.

We monitor capital utilizing a number of measures, including: net debt to earnings before interest, income taxes, depreciation and amortization (EBITDA*) — excluding restructuring and other costs; and dividend payout ratios.

Net debt to EBITDA — excluding restructuring and other costs is calculated as net debt at the end of the period divided by 12-month trailing EBITDA — excluding restructuring and other costs. This measure, historically, is substantially similar to the leverage ratio covenant in our credit facilities. Net debt, EBITDA — excluding restructuring and other costs and adjusted net earnings are measures that do not have any standardized meanings prescribed by IFRS-IASB and are therefore unlikely to be comparable to similar measures presented by other companies. The calculation of these measures is as set out in the following table. Net debt is one component of a ratio used to determine compliance with debt covenants.

The dividend payout ratio presented is a historical measure calculated as the sum of the last four quarterly dividends declared per Common Share, as recorded in the financial statements, divided by the sum of basic earnings per share for the most recent four quarters for interim reporting periods (divided by annual basic earnings per share if the reported amount is in respect of a fiscal year). The dividend payout ratio of adjusted net earnings presented, also a historical measure, differs in that it excludes long-term debt prepayment premium and income tax-related adjustments.

During 2015, our financial objectives, which are reviewed annually and which were unchanged from 2014 other than for a revision to our debt ratio long-term objective, included maintaining the financial objectives set out in the following table. We believe that our financial objectives are supportive of our long-term strategy.

As at, or 12-month periods ended, December 31 ($ in millions)	Objective	2015	2014
Components of debt and coverage ratios			
Net debt [1]		**$ 11,953**	$ 9,393
EBITDA — excluding restructuring and other costs [2]		**$ 4,488**	$ 4,291
Net interest cost [3]		**$ 465**	$ 453
Debt ratio			
Net debt to EBITDA — excluding restructuring and other costs	2.00 – 2.50 [4]	**2.66**	2.19
Coverage ratios			
Earnings coverage [5]		**4.8**	5.3
EBITDA — excluding restructuring and other costs interest coverage [6]		**9.7**	9.5
Other measures			
Dividend payout ratio of adjusted net earnings [7]		**73%**	66%
Dividend payout ratio	65%–75% [8]	**73%**	66%

(1) Net debt is calculated as follows:

As at December 31	Note	2015	2014
Long-term debt	*21*	**$ 12,038**	$ 9,310
Debt issuance costs netted against long-term debt		**52**	43
Derivative assets, net		**(14)**	—
Cash and temporary investments, net		**(223)**	(60)
Short-term borrowings	*19*	**100**	100
Net debt		**$ 11,953**	$ 9,393

(2) EBITDA — excluding restructuring and other costs is calculated as follows:

Years ended December 31	Note	2015	2014

EBITDA	*5*	**$ 4,262**	$ 4,216
Restructuring and other costs	*15*	**226**	75
EBITDA — excluding restructuring and other costs		**$ 4,488**	$ 4,291

(3) Net interest cost is defined as financing costs, excluding employee defined benefit plans net interest and recoveries on long-term debt prepayment premium and repayment of debt, calculated on a 12-month trailing basis (expenses recorded for long-term debt prepayment premium, if any, are included in net interest cost).

(4) Our long-term objective range for this ratio is 2.00 — 2.50 times. The ratio as at December 31, 2015, is outside the long-term objective range. In the short term, we may permit this ratio to go outside the objective range (for long-term investment opportunities), but will endeavor to return this ratio to within the objective range in the medium term, as we believe that this range is supportive of our long-term strategy. We are well in compliance with our credit facilities leverage ratio covenant which states that we may not permit our net debt to operating cash flow ratio to exceed 4.00:1.00 (see *Note 21(d)*); the calculation of the debt ratio is substantially similar to the calculation of the leverage ratio covenant in our credit facilities.

* EBITDA does not have any standardized meaning prescribed by IFRS-IASB and is therefore unlikely to be comparable to similar measures presented by other issuers; we define EBITDA as operating revenues less goods and services purchased and employee benefits expense. We have issued guidance on, and report, EBITDA because it is a key measure that management uses to evaluate the performance of our business, and it is also utilized in measuring compliance with certain debt covenants.

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(5) Earnings coverage is defined as net income before borrowing costs and income tax expense, divided by borrowing costs (interest on long-term debt; interest on short-term borrowings and other; long-term debt prepayment premium); and adding back capitalized interest.

(6) EBITDA — excluding restructuring and other costs interest coverage is defined as EBITDA — excluding restructuring and other costs divided by net interest cost. This measure is substantially similar to the coverage ratio covenant in our credit facilities.

(7) Adjusted net earnings attributable to Common Shares is calculated as follows:

12-month periods ended December 31	2015	2014
Net income	**$ 1,382**	$ 1,425
Long-term debt prepayment premium, after income tax	**—**	10
Income tax-related adjustments	**1**	(6)
Adjusted net earnings attributable to Common Shares	**$ 1,383**	$ 1,429

(8) Our target guideline for the dividend payout ratio is 65%—75% of sustainable earnings on a prospective basis.

Net debt to EBITDA — excluding restructuring and other costs was 2.66 times at December 31, 2015, up from 2.19 times one year earlier. The increase in net debt, primarily due to the purchase of spectrum licences (see *Note 17(a)*), was partly offset by growth in EBITDA — excluding restructuring and other costs. The earnings coverage ratio for the twelve-month period ended December 31, 2015, was 4.8 times, down from 5.3 times one year earlier. Higher borrowing costs reduced the ratio by 0.4, while a decline in income before borrowing costs and income taxes reduced the ratio by 0.1. The EBITDA — excluding restructuring and other costs interest coverage ratio for the twelve-month period ended December 31, 2015, was 9.7 times, up from 9.5 times one year earlier. Growth in EBITDA — excluding restructuring and other costs increased the ratio by 0.4, while an increase in net interest costs reduced the ratio by 0.2.

4 financial instruments

(a) Risks — overview

Our financial instruments, and the nature of certain risks to which they may be subject are as set out in the following table.

	Risks				
				Market risks	
Financial instrument	**Credit**	**Liquidity**	**Currency**	**Interest rate**	**Other price**
Measured at amortized cost					
Accounts receivable	X		X		
Construction credit facilities advances to real estate joint venture				X	
Short-term obligations		X	X	X	
Accounts payable		X	X		
Provisions (including restructuring accounts payable)		X	X		X
Long-term debt		X	X	X	
Measured at fair value					
Cash and temporary investments	X		X	X	
Long-term investments (not subject to significant influence) [1]			X		X
Foreign exchange derivatives [2]	X	X	X		
Share-based compensation derivatives [2]	X	X			X

(1) Long-term investments over which we do not have significant influence are measured at fair value if those fair values can be reliably measured.
(2) Use of derivative financial instruments is subject to a policy which requires that no derivative transaction is to be entered into for the purpose of establishing a speculative or leveraged position (the corollary being that all derivative transactions are to be entered into for risk management purposes only) and sets criteria for the creditworthiness of the transaction counterparties.

(b) Credit risk

Excluding credit risk, if any, arising from currency swaps settled on a gross basis (see *(d)*), the best representation of our maximum exposure (excluding income tax effects) to credit risk, which is a worst-case scenario and does not reflect results we expect, is as set out in the following table:

As at December 31 (millions)	2015	2014
Cash and temporary investments, net	**$ 223**	$ 60
Accounts receivable	**1,428**	1,483
Derivative assets	**40**	31
	$ 1,691	$ 1,574

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Cash and temporary investments

Credit risk associated with cash and temporary investments is managed by ensuring that these financial assets are placed with: governments; major financial institutions that have been accorded strong investment grade ratings by a primary rating agency; and/or other creditworthy counterparties. An ongoing review is performed to evaluate changes in the status of counterparties.

Accounts receivable

Credit risk associated with accounts receivable is inherently managed by our large and diverse customer base, which includes substantially all consumer and business sectors in Canada. We follow a program of credit evaluations of customers and limit the amount of credit extended when deemed necessary.

The following table presents an analysis of the age of customer accounts receivable for which an allowance has not been made as at the dates of the Consolidated statements of financial position. As at December 31, 2015, the weighted average age of customer accounts receivable was 28 days (2014 — 29 days) and the weighted average age of past-due customer accounts receivable was 62 days (2014 — 62 days). Any late payment charges are levied, at an industry-based market or negotiated rate, on outstanding non-current customer account balances.

As at December 31 (millions)	Note	2015	2014
Customer accounts receivable, net of allowance for doubtful accounts			
Less than 30 days past billing date		**$ 823**	$ 833
30-60 days past billing date		**208**	214
61-90 days past billing date		**52**	55
More than 90 days past billing date		**64**	68
		$ 1,147	$ 1,170
Customer accounts receivable	*25(a)*	**$ 1,199**	$ 1,214
Allowance for doubtful accounts		**(52)**	(44)
		$ 1,147	$ 1,170

We maintain allowances for potential credit losses related to doubtful accounts. Current economic conditions, historical information, reasons for the accounts being past due and line of business from which the customer accounts receivable arose are all considered when determining whether to make allowances for past-due accounts. The same factors are considered when determining whether to write off amounts charged to the allowance for doubtful accounts against the customer accounts receivable. The doubtful accounts expense is calculated on a specific-identification basis for customer accounts receivable over a specific balance threshold and on a statistically derived allowance basis for the remainder. No customer accounts receivable are written off directly to the doubtful accounts expense.

The following table presents a summary of the activity related to our allowance for doubtful accounts.

Years ended December 31 (millions)	2015	2014
Balance, beginning of period	**$ 44**	$ 40
Additions (doubtful accounts expense)	**55**	44
Net use	**(47)**	(40)
Balance, end of period	**$ 52**	$ 44

Derivative assets (and derivative liabilities)

Counterparties to our share-based compensation cash-settled equity forward agreements and foreign exchange derivatives are major financial institutions that have been accorded investment grade ratings by a primary rating agency. The dollar amount of credit exposure under contracts with any one financial institution is limited and counterparties' credit ratings are monitored. We do not give or receive collateral on swap

agreements and hedging items due to our credit rating and those of our counterparties. While we are exposed to potential credit losses due to the possible non-performance of our counterparties, we consider this risk remote. Our derivative liabilities do not have credit risk-related contingent features.

(c) Liquidity risk

As a component of our capital structure financial policies, discussed further in *Note 3*, we manage liquidity risk by:

- maintaining a daily cash pooling process that enables us to manage our available liquidity and our liquidity requirements according to our actual needs;
- maintaining bilateral bank facilities (*Note 19*) and a syndicated credit facility (*Note 21(d)*);
- maintaining an agreement to sell trade receivables to an arm's-length securitization trust (*Note 19*);
- maintaining a commercial paper program (*Note 21(c)*);
- maintaining an in-effect shelf prospectus;
- continuously monitoring forecast and actual cash flows; and

- managing maturity profiles of financial assets and financial liabilities.

Our debt maturities in future years are as disclosed in *Note 21(f)*. As at December 31, 2015, we could offer $250 million (2014 — $3.0 billion) of debt or equity securities pursuant to a shelf prospectus that is in effect until December 2016. We believe that our investment grade credit ratings contribute to reasonable access to capital markets.

We closely match the contractual maturities of our derivative financial liabilities with those of the risk exposures they are being used to manage.

The expected maturities of our undiscounted financial liabilities do not differ significantly from the contractual maturities, other than as noted below. The contractual maturities of our undiscounted financial liabilities, including interest thereon (where applicable), are as set out in the following tables:

	Non-derivative						Derivative			
As at December 31, 2015 (millions)	Non-interest bearing financial liabilities	Short-term borrowings [1]	Construction credit facilities commitment (Note 18) [2]	Composite long-term debt: Long-term debt [1] (Note 21)	Composite long-term debt: Currency swap agreement amounts to be exchanged [3] (Receive)	Composite long-term debt: Currency swap agreement amounts to be exchanged [3] Pay	Other	Currency swap agreement amounts to be exchanged (Receive)	Currency swap agreement amounts to be exchanged Pay	Total
2016										
First quarter	$ 1,239	$ —	$ 131	$ 378	$ (256)	$ 242	$ —	$ (109)	$ 100	$ 1,725
Balance of year	656	101	—	975	—	—	4	(306)	290	1,720
2017	28	—	—	1,174	—	—	9	—	—	1,211
2018	8	—	—	705	—	—	—	—	—	713
2019	6	—	—	1,453	—	—	—	—	—	1,459
2020	6	—	—	1,402	—	—	—	—	—	1,408
Thereafter	6	—	—	12,057	—	—	—	—	—	12,063
Total	$ 1,949	$ 101	$ 131	$ 18,144	$ (256)	$ 242	$ 13	$ (415)	$ 390	$ 20,299
				Total(*Note 21(f)*)		$ 18,130				

(1) Cash outflows in respect of interest payments on our short-term borrowings, commercial paper and amounts drawn under our credit facilities (if any) have been calculated based upon the interest rates in effect as at December 31, 2015.
(2) The drawdowns on the construction credit facilities are expected to occur as construction progresses through 2018.
(3) The amounts included in undiscounted non-derivative long-term debt in respect of U.S. dollar denominated long-term debt, and the corresponding amounts in the long-term debt currency swaps receive column, have been determined based upon the currency exchange rates in effect as at December 31, 2015. The U.S. dollar denominated long-term debt contractual amounts at maturity, in effect, are reflected in the long-term debt currency swaps pay column as gross cash flows are exchanged pursuant to the currency swap agreements.

	Non-derivative				Derivative		
As at December 31, 2014 (millions)	Non-interest bearing financial liabilities	Short-term borrowings [1]	Construction credit facilities commitment (Note 18) [2]	Long-term debt [1] (Note 21)	Currency swap agreement amounts to be exchanged (Receive)	Currency swap agreement amounts to be exchanged Pay	Total
2015							
First quarter	$ 1,195	$ —	$ 85	$ 214	$ (49)	$ 47	$ 1,492
Balance of year	604	1	—	471	(114)	111	1,073
2016	6	102	—	1,011	—	—	1,119
2017	9	—	—	1,083	—	—	1,092
2018	4	—	—	365	—	—	369
2019	3	—	—	1,365	—	—	1,368
Thereafter	7	—	—	9,696	—	—	9,703
Total	$ 1,828	$ 103	$ 85	$ 14,205	$ (163)	$ 158	$ 16,216

(1) Cash outflows in respect of interest payments on our short-term borrowings, commercial paper and amounts drawn under our credit facilities (if any) have been calculated based upon the interest rates in effect as at December 31, 2014.
(2) The drawdowns on the construction credit facilities were expected to occur as construction progresses through 2016.

(d) Currency risk

Our functional currency is the Canadian dollar, but certain routine revenues and operating costs are denominated in U.S. dollars and some inventory purchases and capital asset acquisitions are sourced internationally. The U.S. dollar is the only foreign currency to which we have a significant exposure.

Our foreign exchange risk management includes the use of foreign currency forward contracts and currency options to fix the exchange rates on short-term U.S. dollar denominated transactions, commitments and commercial paper.

(e) Interest rate risk

Changes in market interest rates will cause fluctuations in the fair value or future cash flows of temporary investments, construction credit facility advances made to the real estate joint ventures, short-term obligations, long-term debt and interest rate swap derivatives.

When we have temporary investments, they have short maturities and fixed interest rates and as a result, their fair value will fluctuate with changes in market interest rates; absent monetization prior to maturity, the related future cash flows will not change due to changes in market interest rates.

If the balance of short-term investments includes dividend-paying equity instruments, we could be exposed to interest rate risk.

Due to the short-term nature of the applicable rates of interest charged, the fair value of the construction credit facilities advances made to the real estate joint ventures is not materially affected by changes in market interest rates; associated cash flows representing interest payments will be affected until such advances are repaid.

As short-term obligations arising from bilateral bank facilities, which typically have variable interest rates, are rarely outstanding for periods that exceed one calendar week, interest rate risk associated with this item is not material.

Short-term borrowings arising from the sales of trade receivables to an arm's-length securitization trust are fixed-rate debt. Due to the short maturities of these borrowings, interest rate risk associated with this item is not material.

All of our currently outstanding long-term debt, other than for commercial paper and amounts drawn on our credit facilities (*Note 21(d)*), is fixed-rate debt. The fair value of fixed-rate debt fluctuates with changes in market interest rates; absent early redemption, the related future cash flows will not change. Due to the short maturities of commercial paper, its fair value is not materially affected by changes in market interest rates, but the associated cash flows representing interest payments may be if the commercial paper is rolled over.

Amounts drawn on our short-term and long-term credit facilities will be affected by changes in market interest rates in a manner similar to commercial paper.

(f) Other price risk

Provisions

We are exposed to other price risk arising from written put options provided for non-controlling interests.

Long-term investments

We are exposed to equity price risk arising from investments classified as available-for-sale. Such investments are held for strategic rather than trading purposes.

Share-based compensation derivatives

We are exposed to other price risk arising from cash-settled share-based compensation (appreciating Common Share prices increase both the expense and the potential cash outflow). Certain cash-settled equity swap agreements have been entered into that fix the cost associated with our restricted stock units (*Note 13(c)*).

(g) Market risk

Net income and other comprehensive income for the years ended December 31, 2015 and 2014, could have varied if the Canadian dollar: U.S. dollar exchange rate and our Common Share price varied by reasonably possible amounts from their actual statement of financial position date amounts.

The sensitivity analysis of our exposure to currency risk at the reporting date has been determined based upon a hypothetical change taking place at the relevant statement of financial position date. The U.S. dollar denominated balances and derivative financial instrument notional amounts as at the statement of financial position dates have been used in the calculations.

The sensitivity analysis of our exposure to other price risk arising from share-based compensation at the reporting date has been determined based upon a hypothetical change taking place at the relevant statement of financial position date. The relevant notional number of Common Shares at the statement of financial position date, which includes those in the cash-settled equity swap agreements, has been used in the

calculations.

Income tax expense, which is reflected net in the sensitivity analysis, reflects the applicable statutory income tax rates for the reporting periods.

Years ended December 31	Net income		Other comprehensive income		Comprehensive income	
(increase (decrease) in millions)	2015	2014	2015	2014	2015	2014
Reasonably possible changes in market risks [1]						
10% change in Cdn.$: U.S.$ exchange rate						
Canadian dollar appreciates	**$ (25)**	$ (12)	**$ (8)**	$ —	**$ (33)**	$ (12)
Canadian dollar depreciates	**$ 25**	$ 11	**$ 8**	$ —	**$ 33**	$ 11
25% [2] change in Common Share price [3]						
Price increases	**$ (9)**	$ (10)	**$ 12**	$ 14	**$ 3**	$ 4
Price decreases	**$ 5**	$ 8	**$ (12)**	$ (14)	**$ (7)**	$ (6)

(1) These sensitivities are hypothetical and should be used with caution. Changes in net income and/or other comprehensive income generally cannot be extrapolated because the relationship of the change in assumption to the change in net income and/or other comprehensive income may not be linear. In this table, the effect of a variation in a particular assumption on the amount of net income and/or other comprehensive income is calculated without changing any other factors; in reality, changes in one factor may result in changes in another, which might magnify or counteract the sensitivities.

The sensitivity analysis assumes that we would realize the changes in exchange rates; in reality, the competitive marketplace in which we operate would have an effect on this assumption.

No consideration has been made for a difference in the notional number of Common Shares associated with share-based compensation awards made during the reporting period that may have arisen due to a difference in the Common Share price.

(2) To facilitate ongoing comparison of sensitivities, a constant variance of approximate magnitude has been used. Reflecting a twelve-month data period and calculated on a monthly basis, the volatility of our Common Share price as at December 31, 2015, was 14.1% (2014 — 14.4%).

(3) The hypothetical effects of changes in the price of our Common Shares are restricted to those which would arise from our share-based compensation awards that are accounted for as liability instruments and the associated cash-settled equity swap agreements.

(h) Fair values

General

The carrying values of cash and temporary investments, accounts receivable, short-term obligations, short-term borrowings, accounts payable and certain provisions (including restructuring accounts payable) approximate their fair values due to the immediate or short-term maturity of these financial instruments. The fair values are determined directly by reference to quoted market prices in active markets.

The carrying values of our investments accounted for using the cost method do not exceed their fair values. The fair values of our investments accounted for as available-for-sale are based on quoted market prices in active markets or other clear and objective evidence of fair value.

The fair value of our long-term debt is based on quoted market prices in active markets.

The fair values of the derivative financial instruments we use to manage our exposure to currency risks are estimated based upon quoted market prices in active markets for the same or similar financial instruments or on the current rates offered to us for financial instruments of the same maturity, as well as discounted future cash flows determined using current rates for similar financial instruments subject to similar risks and maturities (such fair value estimates being largely based on the Canadian dollar: U.S. dollar forward exchange rate as at the statement of financial position dates).

The fair values of the derivative financial instruments we use to manage our exposure to increases in compensation costs arising from certain forms of share-based compensation are based upon fair value estimates of the related cash-settled equity forward agreements provided by the counterparty to the transactions (such fair value estimates being largely based on our Common Share price as at the statement of financial position dates).

The financial instruments that we measure at fair value on a recurring basis in periods subsequent to initial recognition and the level within the fair value hierarchy at which they are measured are as set out in the following table.

			Fair value measurements at reporting date using					
			Quoted prices in active markets for identical items (Level 1)		Significant other observable inputs (Level 2)		Significant unobservable inputs (Level 3)	
	Carrying value							
As at December 31 (millions)	2015	2014	2015	2014	2015	2014	2015	2014

Assets								
Foreign exchange derivatives	**$ 40**	$ 4	**$ —**	$ —	**$ 40**	$ 4	**$ —**	$ —
Share-based compensation derivatives	**—**	27	**—**	—	**—**	27	**—**	—
Available-for-sale portfolio investments	**30**	26	**2**	5	**28**	21	**—**	—
	$ 70	$ 57	**$ 2**	$ 5	**$ 68**	$ 52	**$ —**	$ —
Liabilities								
Share-based compensation derivatives	**$ 11**	$ —	**$ —**	$ —	**$ 11**	$ —	**$ —**	$ —

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Derivative

The derivative financial instruments that we measure at fair value on a recurring basis subsequent to initial recognition are as set out in the following table.

			2015		2014	
As at December 31 (millions)	**Designation**	**Maximum maturity date**	**Notional amount**	**Fair value and carrying value**	**Notional amount**	**Fair value and carrying value**
Current Assets [1]						
Derivatives used to manage						
Currency risks arising from U.S. dollar denominated purchases	HFT [2]	2016	**$ 115**	**$ 15**	$ 109	$ 4
Currency risks arising from U.S. dollar denominated purchases	HFH [3]	2016	**$ 161**	**11**	$ —	—
Currency risks arising from U.S. dollar revenues	HFT [2]	2016	**$ 62**	**—**	$ 30	—
Changes in share-based compensation costs *(Note 13(c))*	HFH [3]	2015	**$ —**	**—**	$ 91	23
Currency risks arising from U.S. dollar denominated commercial paper (*Note 21(c)*)	HFH [3]	2016	**$ 243**	**14**	$ —	—
				$ 40		$ 27
Other Long-Term Assets [1]						
Derivatives used to manage						
Changes in share-based compensation costs *(Note 13(c))*	HFH [3]	2016	**$ —**	**$ —**	$ 64	$ 4
Current Liabilities [1]						
Derivatives used to manage						
Currency risks arising from U.S. dollar denominated purchases	HFT [2]	2016	**$ 31**	**$ —**	$ —	$ —
Currency risks arising from U.S. dollar denominated purchases	HFH [3]	2016	**$ 11**	**—**	$ —	—
Currency risks arising from U.S. dollar revenues	HFT [2]	2016	**$ 8**	**—**	$ 19	—
Changes in share-based compensation costs *(Note 13(c))*	HFH [3]	2016	**$ 71**	**2**	$ —	—
				$ 2		$ —
Other Long-Term Liabilities [1]						
Derivatives used to manage						
Changes in share-based compensation costs *(Note 13(c))*	HFH [3]	2017	**$ 68**	**$ 9**	$ —	$ —

(1) Derivative financial assets and liabilities are not set off.
(2) Designated as held for trading (HFT) upon initial recognition; hedge accounting is not applied.
(3) Designated as held for hedging (HFH) upon initial recognition (cash flow hedging item); hedge accounting is applied.

Non-derivative

Our long-term debt, which is measured at amortized cost, and the fair value thereof, are as set out in the following table.

	2015	2014

As at December 31 (millions)	Carrying value	Fair value	Carrying value	Fair value
Long-term debt (*Note 21*)	**$ 12,038**	**$ 12,575**	$ 9,310	$ 10,143

(i) Recognition of derivative gains and losses

The following table sets out the gains and losses, excluding income tax effects, on derivative instruments that are classified as cash flow hedging items and their location within the Consolidated statements of income and other comprehensive income. There was no ineffective portion of derivative instruments classified as cash flow hedging items for the periods presented.

	Amount of gain (loss) recognized in other comprehensive income (effective portion) (Note 10)		Gain reclassified from other comprehensive income to income (effective portion) (Note 10)		
				Amount	
Years ended December 31 (millions)	2015	2014	Location	2015	2014
Derivatives used to manage:					
Currency risks arising from U.S. dollar denominated purchases	**$ 12**	$ —	Goods and services purchased	**$ 2**	$ 2
Changes in share-based compensation costs *(Note 13(c))*	**(15)**	20	Employee benefits expense	**—**	17
Currency risks arising from U.S. dollar denominated commercial paper *(Note 21(c))*	**14**	—	Financing costs	**14**	—
	$ 11	$ 20		**$ 16**	$ 19

The following table sets out the gains and losses arising from derivative instruments that are classified as held for trading and that are not designated as being in a hedging relationship, and their location within the Consolidated statements of income and other comprehensive income.

		Gain recognized in income on derivatives	
Years ended December 31 (millions)	Location	2015	2014
Derivatives used to manage currency risks	Financing costs	**$ 10**	$ 4

5 segmented information

General

The operating segments that are regularly reported to our Chief Executive Officer (our chief operating decision-maker) are wireless and wireline. Operating segments are components of an entity that engage in business activities from which they earn revenues and incur expenses (including revenues and expenses related to transactions with the other component(s)), the operating results of which are regularly reviewed by a chief operating decision-maker to make resource allocation decisions and to assess performance. As referred to in *Note 1(b)*, segmentation represents a significant judgment for us.

As we do not currently aggregate operating segments, our reportable segments are also wireless and wireline. The wireless segment includes network revenues (data and voice) and equipment sales. The wireline segment includes data revenues (which includes Internet protocol; television; hosting, managed information technology and cloud-based services; business process outsourcing; and certain healthcare solutions), voice revenues, and other telecommunications services revenues, excluding wireless. Segmentation is based on similarities in technology, the technical expertise required to deliver the services and products, customer characteristics, the distribution channels used and regulatory treatment. Intersegment sales are recorded at the exchange value, which is the amount agreed to by the parties.

The following segmented information is regularly reported to our chief operating decision-maker.

Years ended December 31 (millions)	Wireless		Wireline		Eliminations		Consolidated	
	2015	2014	2015	2014	2015	2014	2015	2014
Operating revenues								
External revenue	**$ 6,933**	$ 6,587	**$ 5,569**	$ 5,415	**$ —**	$ —	**$ 12,502**	$ 12,002
Intersegment revenue	**61**	54	**174**	175	**(235)**	(229)	**—**	—
	$ 6,994	$ 6,641	**$ 5,743**	$ 5,590	**$ (235)**	$ (229)	**$ 12,502**	$ 12,002
EBITDA [1]	**$ 2,806**	$ 2,727	**$ 1,456**	$ 1,489	**$ —**	$ —	**$ 4,262**	$ 4,216
CAPEX, excluding spectrum licences [2]	**$ 893**	$ 832	**$ 1,684**	$ 1,527	**$ —**	$ —	**$ 2,577**	$ 2,359

Operating revenues (above)	**$ 12,502**	$ 12,002
Goods and services purchased	**5,532**	5,299
Employee benefits expense	**2,708**	2,487
EBITDA (above)	**4,262**	4,216
Depreciation	**1,475**	1,423

Amortization	**434**	411
Operating income	**2,353**	2,382
Financing costs	**447**	456
Income before income taxes	**$ 1,906**	$ 1,926

(1) Earnings before interest, income taxes, depreciation and amortization (EBITDA) does not have any standardized meaning prescribed by IFRS-IASB and is therefore unlikely to be comparable to similar measures presented by other issuers; we define EBITDA as operating revenues less goods and services purchased and employee benefits expense. We have issued guidance on, and report, EBITDA because it is a key measure that management uses to evaluate the performance of our business, and it is also utilized in measuring compliance with certain debt covenants.

(2) Total capital expenditures (CAPEX); see *Note 25(b)* for a reconciliation of capital expenditures, excluding spectrum licences to cash payments for capital assets, excluding spectrum licences reported in the Consolidated statements of cash flows.

Geographical information

We attribute revenues from external customers to individual countries on the basis of the location where the goods and/or services are provided. We do not have material revenues that we attribute to countries other than Canada (our country of domicile), nor do we have material amounts of property, plant, equipment, intangible assets and/or goodwill located outside of Canada; information about such non-material amounts is not regularly reported to our chief operating decision-maker.

notes to consolidated financial statements

6 other operating income

Years ended December 31 (millions)	Note	2015	2014
Government assistance, including deferral account amortization		**$ 48**	$ 55
Investment (loss)		**(5)**	(2)
Interest income	*18(c)*	**3**	3
Gain on disposal of assets and other		**26**	19
		$ 72	$ 75

We receive government assistance, as defined by IFRS-IASB, from a number of sources and include such amounts received in Other operating income.

CRTC subsidy

Local exchange carriers' costs of providing the level of residential basic telephone services that the CRTC requires to be provided in high cost serving areas are greater than the amounts the CRTC allows the local exchange carriers to charge for the level of service. To ameliorate the situation, the CRTC directs the collection of contribution payments, in a central fund, from all registered Canadian telecommunications service providers (including voice, data and wireless service providers) that are then disbursed to incumbent local exchange carriers as subsidy payments to partially offset the costs of providing residential basic telephone services in non-forborne high cost serving areas. The subsidy payments are based upon a total subsidy requirement calculated on a per network access line/per band subsidy rate. For the year ended December 31, 2015, our subsidy receipts were $22 million (2014 — $23 million).

The CRTC currently determines, at a national level, the total annual contribution requirement necessary to pay the subsidies and then collects contribution payments from the Canadian telecommunications service providers, calculated as a percentage of their CRTC-defined telecommunications service revenue. The final contribution expense rate for 2015 was 0.55% and the interim rate for 2016 has been set at 0.56%. For the year ended December 31, 2015, our contributions to the central fund, which are accounted for as goods and services purchased, were $26 million (2014 — $28 million).

Government of Quebec

Salaries for qualifying employment positions in the province of Quebec, mainly in the information technology sector, are eligible for tax credits. In respect of such tax credits, for the year ended December 31, 2015, we recorded $8 million (2014 — $7 million).

7 employee benefits expense

Years ended December 31 (millions)	Note	2015	2014
Employee benefits expense — gross			
Wages and salaries		**$ 2,537**	$ 2,424
Share-based compensation [1]	*13*	**125**	120
Pensions — defined benefit	*14(b)*	**118**	86
Pensions — defined contribution	*14(f)*	**90**	84
Other defined benefits	*14(g)*	**—**	1

Restructuring costs [1]	*15(b)*	**156**	54
Other		**149**	151
		3,175	2,920
Capitalized internal labour costs			
Property, plant and equipment		**(319)**	(293)
Intangible assets subject to amortization		**(148)**	(140)
		(467)	(433)
		$ 2,708	$ 2,487

(1) For the year ended December 31, 2015, $7 of share-based compensation was included in restructuring costs (2014 — $NIL).

notes to consolidated financial statements

8 financing costs

Years ended December 31 (millions)	Note	2015	2014
Interest expense			
Interest on long-term debt — gross		**$ 498**	$ 433
Capitalized long-term debt interest [1]		**(45)**	—
Interest on long-term debt — net		**453**	433
Interest on short-term borrowings and other		**5**	5
Interest accretion on provisions	*20*	**12**	8
Long-term debt prepayment premium [2]		**—**	13
		470	459
Employee defined benefit plans net interest	*14(b),(g)*	**27**	3
Foreign exchange		**(25)**	(4)
		472	458
Interest income			
Interest on income tax refunds		**(23)**	—
Other		**(2)**	(2)
		(25)	(2)
		$ 447	$ 456

(1) Long-term debt interest at a composite rate of 3.31% was capitalized to intangible assets with indefinite lives.
(2) On August 7, 2014, we exercised our right to early redeem, on September 8, 2014, all of our 5.95% Notes, Series CE.

9 income taxes

(a) Expense composition and rate reconciliation

Years ended December 31 (millions)	2015	2014
Current income tax expense (recovery)		
For current reporting period	**$ 553**	$ 340
Adjustments recognized in the current period for income tax of prior periods	**(97)**	(27)
	456	313
Deferred income tax expense (recovery)		
Arising from the origination and reversal of temporary differences	**(47)**	167
Revaluation of deferred income tax liability to reflect future statutory income tax rates	**48**	—
Adjustments recognized in the current period for income tax of prior periods	**67**	21
	68	188
	$ 524	$ 501

Our income tax expense and effective income tax rate differs from that calculated by applying the applicable statutory rates for the following reasons:

Years ended December 31 ($ in millions)	2015		2014	
Income taxes computed at applicable statutory rates	**$ 505**	**26.5%**	$ 504	26.2%
Revaluation of deferred income tax liability to reflect future income tax rates	**48**	**2.5**	—	—
Adjustments recognized in the current period for income tax of prior periods	**(30)**	**(1.6)**	(6)	(0.4)
Other	**1**	**0.1**	3	0.2
Income tax expense per Consolidated statements of income and other comprehensive income	**$ 524**	**27.5%**	$ 501	26.0%

Our applicable statutory rate is the aggregate of the following:

Years ended December 31	2015	2014
Basic federal rate	**14.4%**	14.7%
Weighted average provincial rate	**10.8**	10.9
Non-Canadian jurisdictions	**1.3**	0.6
	26.5%	26.2%

(b) Temporary differences

We must make significant estimates in respect of the composition of our deferred income tax liability. Our operations are complex and the related income tax interpretations, regulations and legislation are continually changing. As a result, there are usually some income tax matters in question.

Temporary differences comprising the net deferred income tax liability and the amounts of deferred income tax expense recognized in the Consolidated statements of income and other comprehensive income are estimated as follows:

(millions)	Property, plant and equipment and intangible assets subject to amortization	Intangible assets with indefinite lives	Partnership income unallocated for income tax purposes	Net pension and share-based compensation amounts	Reserves not currently deductible	Losses available to be carried forward [1]	Other	Net deferred income tax liability
As at January 1, 2014	$ 540	$ 1,235	$ 398	$ (18)	$ (90)	$ (154)	$ (20)	$ 1,891
Recognized in								
Net income	61	38	(39)	(19)	(23)	147	23	188
Other comprehensive income	—	—	—	(157)	—	—	—	(157)
Business acquisitions and other	—	16	—	—	(22)	2	18	14
As at December 31, 2014	601	1,289	359	(194)	(135)	(5)	21	1,936
Recognized in								
Net income	**184**	**91**	**(164)**	**(5)**	**(25)**	**2**	**(15)**	**68**
Other comprehensive income	**—**	**—**	**—**	**154**	**—**	**—**	**(3)**	**151**
As at December 31, 2015	**$ 785**	**$ 1,380**	**$ 195**	**$ (45)**	**$ (160)**	**$ (3)**	**$ 3**	**$ 2,155**

(1) We expect to be able to utilize our non-capital losses prior to expiry.

IFRS-IASB requires the separate disclosure of temporary differences arising from the carrying value of the investments in subsidiaries and partnerships exceeding their tax base, for which no deferred income tax liabilities have been recognized. In our specific instance, this is relevant to our investments in Canadian subsidiaries and Canadian partnerships. We are not required to recognize such deferred income tax liabilities as we are in a position to control the timing and manner of the reversal of the temporary differences, which would not be expected to be exigible to income tax, and it is probable that such differences will not reverse in the foreseeable future. Although we are in a position to control the timing and manner of the reversal of temporary differences in respect of our non-Canadian subsidiaries, and it is not probable that such differences will reverse in the foreseeable future, we recognize potential taxes for repatriation of certain unremitted earnings of our non-Canadian subsidiaries.

(c) Other

We have net capital losses and such losses may only be applied against realized taxable capital gains. We expect to include a net capital loss carry-forward of $4 million (2014 — $3 million) in our Canadian income tax returns. During the year ended December 31, 2015, we recognized the benefit of $3 million (2014 — $1 million) of net capital losses.

We conduct research and development activities, which are eligible to earn Investment Tax Credits. During the year ended December 31, 2015, we recorded Investment Tax Credits of $6 million (2014 — $9 million). Of this amount, $4 million (2014 — $6 million) was recorded as a reduction of property, plant and equipment and/or intangible assets and the balance was recorded as a reduction of Goods and services purchased.

10 other comprehensive income

	Items that may subsequently be reclassified to income						Item never reclassified to income	
	Change in unrealized fair value of derivatives designated as cash flow hedges in current period (Note 4(i))							
(millions)	Gains (losses) arising	Prior period (gains) losses transferred to net income	Total	Cumulative foreign currency translation adjustment	Change in unrealized fair value of available-for-sale financial assets	Accumulated other comp. income	Employee defined benefit plan re-measurements [1]	Other comp. income
Accumulated balance as at January 1, 2014			$ 3	$ 8	$ 20	$ 31		
Other comprehensive income (loss)								
Amount arising	$ 20	$ (19)	1	10	(4)	7	$ (602)	$ (595)
Income taxes	$ 5	$ (5)	—	—	—	—	(157)	(157)
Net			1	10	(4)	7	$ (445)	$ (438)

Accumulated balance as at December 31, 2014			4	18	16	38		
Other comprehensive income (loss)								
Amount arising	$ 11	$ (16)	(5)	25	—	20	$ 597	$ 617
Income taxes	$ 3	$ (4)	(1)	—	—	(1)	152	151
Net			(4)	25	—	21	$ 445	$ 466
Accumulated balance as at December 31, 2015			**$ —**	**$ 43**	**$ 16**	**$ 59**		

notes to consolidated financial statements

(1) The amounts presented as employee defined benefit plan re-measurements are comprised as follows:

	2015			2014		
Years ended December 31	**Defined benefit pension plans (Note 14(b))**	**Other defined benefit plans (Note14(g))**	**Total**	**Defined benefit pension plans (Note 14(b))**	**Other defined benefit plans (Note14(g))**	**Total**
Actual return on plan assets greater (less) than discount rate	**$ 139**	**$ —**	**$ 139**	$ 429	$ —	$ 429
Re-measurements arising from:						
Demographic assumptions	**69**	**1**	**70**	(67)	2	(65)
Financial assumptions	**418**	**—**	**418**	(984)	(2)	(986)
Changes in the effect of limiting the net defined benefit assets to the asset ceiling	**(30)**	**—**	**(30)**	20	—	20
	$ 596	**$ 1**	**$ 597**	$ (602)	$ —	$ (602)

As at December 31, 2015, our estimate of the net amount of existing gains (losses) arising from the unrealized fair value of derivatives designated as cash flow hedges that are reported in accumulated other comprehensive income and are expected to be reclassified to net income in the next twelve months, excluding income tax effects, is $(1) million.

11 per share amounts

Basic net income per Common Share is calculated by dividing net income by the total weighted average number of Common Shares outstanding during the period. Diluted net income per Common Share is calculated to give effect to share option awards and restricted stock units.

The following table presents the reconciliations of the denominators of the basic and diluted per share computations. Net income was equal to diluted net income for all periods presented.

Years ended December 31 (millions)	**2015**	**2014**
Basic total weighted average number of Common Shares outstanding	**603**	616
Effect of dilutive securities		
Share option awards	**1**	2
Diluted total weighted average number of Common Shares outstanding	**604**	618

For the years ended December 31, 2015 and 2014, no outstanding share option awards were excluded in the computation of diluted net income per Common Share.

12 dividends per share

(a) Dividends declared

Years ended December 31 (millions except per share amounts)	**2015**				**2014**			
	Declared		**Paid to**		**Declared**		**Paid to**	
Common Share dividends	**Effective**	**Per share**	**shareholders**	**Total**	**Effective**	**Per share**	**shareholders**	**Total**
Quarter 1 dividend	**Mar. 11, 2015**	**$ 0.40**	**Apr. 1, 2015**	**$ 243**	Mar. 11, 2014	$ 0.36	Apr. 1, 2014	$ 224
Quarter 2 dividend	**Jun. 10, 2015**	**0.42**	**Jul. 2, 2015**	**253**	Jun. 10, 2014	0.38	Jul. 2, 2014	234
Quarter 3 dividend	**Sep. 8, 2015**	**0.42**	**Oct. 1, 2015**	**252**	Sep. 10, 2014	0.38	Oct. 1, 2014	233
Quarter 4 dividend	**Dec. 11, 2015**	**0.44**	**Jan. 4, 2016**	**263**	Dec. 11, 2014	0.40	Jan. 2, 2015	244
		$ 1.68		**$ 1,011**		$ 1.52		$ 935

On February 10, 2016, the Board of Directors declared a quarterly dividend of $0.44 per share on our issued and outstanding Common Shares payable on April 1, 2016, to holders of record at the close of business on March 11, 2016. The final amount of the dividend payment depends upon the number of Common Shares issued and outstanding at the close of business on March 11, 2016.

(b) Dividend Reinvestment and Share Purchase Plan

General

We have a Dividend Reinvestment and Share Purchase Plan under which eligible holders of Common Shares may acquire additional Common

Shares by reinvesting dividends and by making additional optional cash payments to the trustee. Under this Plan, we have the option of offering Common Shares from Treasury or having the trustee acquire Common Shares in the stock market.

notes to consolidated financial statements

Reinvestment of dividends

We may, at our discretion, offer Common Shares at a discount of up to 5% from the market price under the Plan. We opted to have the trustee acquire the Common Shares in the stock market with no discount offered. In respect of Common Share dividends declared during the year ended December 31, 2015, $59 million (2014 — $46 million) was to be reinvested in Common Shares.

Optional cash payments

Under the share purchase feature of the Plan, eligible shareholders can, on a monthly basis, make optional cash payments and purchase our Common Shares at the market price without brokerage commissions or service charges; such purchases are subject to a minimum investment of $100 per transaction and a maximum investment of $20,000 per calendar year.

13 share-based compensation

(a) Details of share-based compensation expense

Reflected in the Consolidated statements of income and other comprehensive income as Employee benefits expense and in the Consolidated statements of cash flows are the following share-based compensation amounts:

	2015			2014		
Years ended December 31 (millions)	**Employee benefits expense**	**Associated operating cash outflows**	**Statement of cash flows adjustment**	**Employee benefits expense**	**Associated operating cash outflows**	**Statement of cash flows adjustment**
Share option awards	**$ 1**	**$ —**	**$ 1**	$ 3	$ —	$ 3
Restricted stock units [1]	**93**	**(132)**	**(39)**	81	(10)	71
Employee share purchase plan	**38**	**(38)**	**—**	36	(36)	—
	$ 132	**$ (170)**	**$ (38)**	$ 120	$ (46)	$ 74

(1) The expense arising from restricted stock units was net of cash-settled equity swap agreement effects (see *Note 4(i)*). Within employee benefits expense (see *Note 7*), restricted stock unit expense of $86 (2014 — $81) is presented as share-based compensation and the balance is included in restructuring costs.

For the year ended December 31, 2015, the associated operating cash outflows in respect of restricted stock units are net of cash inflows arising from the cash-settled equity swap agreements of $27 million (2014 — $7 million). For the year ended December 31, 2015, the income tax benefit arising from share-based compensation was $35 million (2014 — $31 million).

(b) Share option awards

We use share option awards as a form of retention and incentive compensation. Employees may receive options to purchase Common Shares at a price equal to the fair market value at the time of grant. Share option awards granted under the plan may be exercised over specific periods not to exceed seven years from the time of grant. No share options were awarded in fiscal 2015 or 2014.

We apply the fair value method of accounting for share-based compensation awards granted to officers and other employees. Share option awards typically have a three-year vesting period (the requisite service period), but may vest over periods of up to five years. The vesting method of share option awards, which is determined on or before the date of grant, may be either cliff or graded; all share option awards granted subsequent to 2004 have been cliff-vesting awards.

The weighted average fair value of share option awards granted is calculated by using the Black-Scholes model (a closed-form option pricing model). The risk-free interest rate used in determining the fair value of the share option awards is based on a Government of Canada yield curve that is current at the time of grant. The expected lives of the share option awards are based on our historical share option award exercise data. Similarly, expected volatility considers the historical volatility in the price of our Common Shares. The dividend yield is the annualized dividend current at the time of grant divided by the share option award exercise price. Dividends are not paid on unexercised share option awards and are not subject to vesting.

Our share option awards have a net-equity settlement feature. The optionee does not have the choice of exercising the net-equity settlement feature; it is at our option whether the exercise of a share option award is settled as a share option or settled using the net-equity settlement feature.

The following table presents a summary of the activity related to our share option plan.

Years ended December 31	2015 Number of share options	2015 Weighted average share option price	2014 Number of share options	2014 Weighted average share option price
Outstanding, beginning of period	**4,667,422**	**$ 23.53**	8,101,853	$ 23.03
Exercised [1]	**(2,064,100)**	**$ 24.23**	(3,252,373)	$ 22.07
Forfeited	**(72,350)**	**$ 26.13**	(108,366)	$ 26.80
Expired	**(155,376)**	**$ 21.90**	(73,692)	$ 28.24
Outstanding, end of period	**2,375,596**	**$ 22.96**	4,667,422	$ 23.53

(1) The total intrinsic value of share option awards exercised for the year ended December 31, 2015, was $38 million (2014 — $57 million) (reflecting a weighted average price at the dates of exercise of $42.64 per share (2014 — $39.52 per share)). The difference between the number of share options exercised and the number of Common Shares issued (as reflected in the Consolidated statements of changes in owners' equity) is the effect of our choosing to settle share option award exercises using the net-equity settlement feature.

The following is a life and exercise price stratification of our outstanding share options, all of which are vested, as at December 31, 2015.

Options outstanding and exercisable

				Total	Weighted average price
Range of option prices					
Low	$ 14.91	$ 21.42	$ 28.56	$ 14.91	
High	$ 18.92	$ 25.64	$ 31.69	$ 31.69	
Year of expiry and number of options					
2016	245,293	—	—	245,293	$ 15.30
2017	579,811	35,020	—	614,831	$ 16.66
2018	—	627,482	—	627,482	$ 23.29
2019	—	—	887,990	887,990	$ 29.21
	825,104	662,502	887,990	2,375,596	
Weighted average remaining contractual life (years)	0.9	2.1	3.4	2.2	
Weighted average price	$ 16.05	$ 23.20	$ 29.21	$ 22.96	
Aggregate intrinsic value [1] (millions)	$ 18	$ 10	$ 8	$ 36	

(1) The aggregate intrinsic value is calculated based on the December 31, 2015, price of $38.26 per Common Share.

(c) Restricted stock units

We use restricted stock units as a form of retention and incentive compensation. Each restricted stock unit is nominally equal in value to one Common Share and is nominally entitled to the dividends that would arise thereon if it were an issued and outstanding Common Share. The notional dividends are recorded as additional issuances of restricted stock units during the life of the restricted stock unit. Due to the notional dividend mechanism, the grant-date fair value of restricted stock units equals the fair market value of the corresponding Common Shares at the grant date. The restricted stock units generally become payable when vesting is completed and typically vest over a period of 33 months (the requisite service period). The vesting method of restricted stock units, which is determined on or before the date of grant, may be either cliff or graded; the majority of restricted stock units outstanding have cliff vesting. The associated liability is normally cash-settled.

We also award restricted stock units that largely have the same features as our general restricted stock units, but have a variable payout (0% — 200%) depending upon the achievement of our total customer connections performance condition (with a weighting of 25%) and the total shareholder return on our Common Shares relative to an international peer group of telecommunications companies (with a weighting of 75%). The grant-date fair value of the notional subset of our restricted stock units affected by the total customer connections performance condition equals the fair market value of the corresponding Common Shares at the grant date and thus the notional subset has been included in the presentation of our restricted stock units with only service conditions. The recurring estimate, which reflects a variable payout, of the fair value of the notional subset of our restricted stock units affected by the relative total shareholder return performance element is determined using a Monte Carlo simulation.

The following table presents a summary of our outstanding non-vested restricted stock units.

Number of non-vested restricted stock units as at December 31	2015	2014
Restricted stock units without market performance conditions		
Restricted stock units with only service conditions	**3,468,679**	5,455,368
Notional subset affected by total customer connections performance condition	**135,404**	69,072
	3,604,083	5,524,440
Restricted stock units with market performance conditions		
Notional subset affected by relative total shareholder return performance condition	**406,243**	207,215
	4,010,326	5,731,655

The following table presents a summary of the activity related to our restricted stock units without market performance conditions.

	2015			2014		
	Number of restricted stock units [1]		Weighted average grant-date fair value	Number of restricted stock units [1]		Weighted average grant-date fair value
Years ended December 31	Non-vested	Vested		Non-vested	Vested	
Outstanding, beginning of period						
Non-vested	**5,524,440**	**—**	**$ 35.04**	3,833,297	—	$ 32.73
Vested	**—**	**38,717**	**$ 34.20**	—	18,759	$ 32.47
Issued						
Initial award	**1,844,161**	**—**	**$ 44.00**	2,051,739	—	$ 38.90
In lieu of dividends	**211,545**	**363**	**$ 41.98**	214,316	391	$ 39.96
Vested	**(3,810,514)**	**3,810,514**	**$ 33.44**	(451,363)	451,363	$ 33.05
Settled in cash	**—**	**(3,820,476)**	**$ 33.34**	—	(431,796)	$ 33.11
Forfeited and cancelled	**(165,549)**	**—**	**$ 38.19**	(123,549)	—	$ 34.59
Outstanding, end of period						
Non-vested	**3,604,083**	**—**	**$ 41.42**	5,524,440	—	$ 35.04
Vested	**—**	**29,118**	**$ 40.00**	—	38,717	$ 34.20

(1) Excluding the notional subset of restricted stock units affected by the relative total shareholder return performance element.

With respect to certain issuances of restricted stock units, we have entered into cash-settled equity forward agreements that fix our cost; that information, as well as a schedule of our non-vested restricted stock units outstanding as at December 31, 2015, is set out in the following table.

Vesting in years ending December 31	Number of fixed-cost restricted stock units	Our fixed cost per restricted stock unit	Number of variable-cost restricted stock units	Total number of non-vested restricted stock units [1]
2016	1,727,000	$ 41.07	217,904	1,944,904
2017	1,539,107	$ 45.58	120,072	1,659,179
	3,266,107		337,976	3,604,083

(1) Excluding the notional subset of restricted stock units affected by the relative total shareholder return performance element.

(d) Employee share purchase plan

We have an employee share purchase plan under which eligible employees up to a certain job classification can purchase our Common Shares through regular payroll deductions by contributing between 1% and 10% of their pay (subsequent to December 31, 2015, the range was increased to between 1% and 20% of their pay); for more highly compensated job classifications, employees may contribute between 1% and 55% of their pay. For every dollar contributed by an employee, up to a maximum of 6% of eligible employee pay, we are required to make a contribution at a percentage between 20% and 40%. For the years ended December 31, 2015 and 2014, we contributed 40% for employees up to a certain job classification; for more highly compensated job classifications, we contributed 35%. We record our contributions as a component of Employee benefits expense and our contribution vests on the earlier of a plan participant's last day in our employ or the last business day of the calendar year of our contribution, unless the plan participant's employment is terminated with cause, in which case the plan participant will forfeit any in-year contribution from us.

Years ended December 31 (millions)	2015	2014
Employee contributions	**$ 105**	$ 98
Employer contributions	**38**	36
	$ 143	$ 134

notes to consolidated financial statements

14 employee future benefits

We have a number of defined benefit and defined contribution plans providing pension and other retirement and post-employment benefits to

most of our employees. As at December 31, 2015 and 2014, all registered defined benefit pension plans were closed to substantially all new participants and substantially all benefits had vested. The benefit plans in which our employees are participants reflect developments in our corporate history.

TELUS Corporation Pension Plan

Management and professional employees in Alberta who joined us prior to January 1, 2001, and certain unionized employees who joined us prior to June 9, 2011, are covered by this contributory defined benefit pension plan, which comprises slightly more than one-half of our total accrued benefit obligation. The plan contains a supplemental benefit account that may provide indexation up to 70% of the annual increase in a specified cost-of-living index. Pensionable remuneration is determined by the average of the best five years in the last ten years preceding retirement.

Pension Plan for Management and Professional Employees of TELUS Corporation

This defined benefit pension plan, which with certain limited exceptions ceased accepting new participants on January 1, 2006, and which comprises approximately one-quarter of our total accrued benefit obligation, provides a non-contributory base level of pension benefits. Additionally, on a contributory basis, employees annually can choose increased and/or enhanced levels of pension benefits above the base level. At an enhanced level of pension benefits, the plan has indexation of 100% of the annual increase in a specified cost-of-living index, to an annual maximum of 2%. Pensionable remuneration is determined by the annualized average of the best 60 consecutive months.

TELUS Québec Defined Benefit Pension Plan

This contributory defined benefit pension plan, which ceased accepting new participants on April 14, 2009, covers any employee not governed by a collective agreement in Quebec who joined us prior to April 1, 2006, any non-supervisory employee governed by a collective agreement who joined us prior to September 6, 2006, and certain other unionized employees. The plan comprises approximately one-tenth of our total accrued benefit obligation. The plan has no indexation and pensionable remuneration is determined by the average of the best four years.

TELUS Edmonton Pension Plan

This contributory defined benefit pension plan ceased accepting new participants on January 1, 1998. Indexation is 60% of the annual increase in a specified cost-of-living index and pensionable remuneration is determined by the annualized average of the best 60 consecutive months. The plan comprises less than one-tenth of our total accrued benefit obligation.

Other defined benefit pension plans

In addition to the foregoing plans, we have non-registered, non-contributory supplementary defined benefit pension plans, which have the effect of maintaining the earned pension benefit once the allowable maximums in the registered plans are attained. As is common with non-registered plans of this nature, these plans are typically funded only as benefits are paid. These plans comprise less than 5% of our total accrued benefit obligation.

We have three contributory, non-indexed defined benefit pension plans arising from a pre-merger acquisition, which comprise less than 1% of our total accrued benefit obligation; these plans ceased accepting new participants in September 1989.

Telecommunication Workers Pension Plan

Certain employees in British Columbia are covered by a negotiated-cost, target-benefit union pension plan. Our contributions are determined in accordance with provisions of negotiated labour contracts, the current one of which expired December 31, 2015, and are generally based on employee gross earnings. We are not required to guarantee the benefits or assure the solvency of the plan, and we are not liable to the plan for other participating employers' obligations. For the years ended December 31, 2015 and 2014, our contributions comprised a significant proportion of the employer contributions to the union pension plan; similarly, a significant proportion of the plan participants were our active and retired employee participants.

British Columbia Public Service Pension Plan

Certain employees in British Columbia are covered by a public service pension plan. Contributions are determined in accordance with provisions of labour contracts negotiated by the Province of British Columbia and are generally based on employee gross earnings.

Defined contribution pension plans

We offer three defined contribution pension plans, which are contributory, and these are the pension plans that we sponsor that are available to our non-unionized and certain of our unionized employees. Employees, annually, can generally choose to contribute to the plans at a rate of between 3% and 6% of their pensionable earnings. Generally, we match 100% of the contributions of employees up to 5% of their pensionable earnings and 80% of employee contributions greater than that. Membership in a defined contribution pension plan is generally voluntary until an employee's third-year service anniversary. In the event that annual contributions exceed allowable maximums, excess amounts are in certain cases contributed to a non-registered supplementary defined contribution pension plan.

Other defined benefit plans

Other defined benefit plans, which are all non-contributory and, as at December 31, 2015 and 2014, non-funded, are comprised of a healthcare plan for retired employees and a life insurance plan, both of which ceased accepting new participants on January 1, 1997.

(a) Defined benefit pension plans — funded status overview

Information concerning our defined benefit pension plans, in aggregate, is as follows:

As at December 31 (millions)	2015	2014
ACCRUED BENEFIT OBLIGATIONS:		
Balance at beginning of year	**$ 9,036**	$ 7,910
Current service cost	**126**	106
Past service cost	**11**	1
Interest expense	**349**	371
Actuarial loss (gain) arising from:		
Demographic assumptions	**(69)**	67
Financial assumptions	**(418)**	984
Benefits paid	**(415)**	(403)
Balance at end of year	**8,620**	9,036
PLAN ASSETS:		
Fair value at beginning of year	**8,480**	7,974
Return on plan assets		
Notional interest income on plan assets at discount rate	**325**	372
Actual return on plan assets greater than discount rate	**139**	429
Contributions		
Employer contributions *(d)*	**93**	87
Employees' contributions	**25**	27
Benefits paid	**(415)**	(403)
Administrative fees	**(6)**	(6)
Fair value at end of year	**8,641**	8,480
Effect of asset ceiling limit		
Beginning of year	**(42)**	(59)
Change	**(32)**	17
End of year	**(74)**	(42)
Fair value of plan assets at end of year, net of asset ceiling limit	**8,567**	8,438
FUNDED STATUS — PLAN SURPLUS (DEFICIT)	**$ (53)**	$ (598)

The plan surplus (deficit) is reflected in the Consolidated statements of financial position as follows:

As at December 31 (millions)	Note	2015	2014
Funded status — plan surplus (deficit)			
Pension benefit plans		**$ (53)**	$ (598)
Other benefit plans		**(42)**	(43)
		$ (95)	$ (641)
Presented in the Consolidated statements of financial position as:			
Other long-term assets	*25(a)*	**$ 356**	$ 49
Other long-term liabilities	*25(a)*	**(451)**	(690)
		$ (95)	$ (641)

The measurement date used to determine the plan assets and accrued benefit obligations was December 31.

(b) Defined benefit pension plans — details

Expense

Our defined benefit pension plan expense (recovery) was as follows:

	2015				2014			
Years ended December 31 (millions) Recognized in	Employee benefits expense (Note 7)	Financing costs (Note 8)	Other comp. income (Note 10)	Total	Employee benefits expense (Note 7)	Financing costs (Note 8)	Other comp. income (Note 10)	Total
Current service cost	**$ 101**	**$ —**	**$ —**	**$ 101**	$ 79	$ —	$ —	$ 79
Past service costs	**11**	**—**	**—**	**11**	1	—	—	1
Net interest; return on plan assets								

Interest expense arising from accrued benefit obligations	—	349	—	349	—	371	—	371
Return, including interest income, on plan assets [1]	—	(325)	(139)	(464)	—	(372)	(429)	(801)
Interest effect on asset ceiling limit	—	2	—	2	—	3	—	3
	—	26	(139)	(113)	—	2	(429)	(427)
Administrative fees	6	—	—	6	6	—	—	6
Re-measurements arising from:								
Demographic assumptions	—	—	(69)	(69)	—	—	67	67
Financial assumptions	—	—	(418)	(418)	—	—	984	984
	—	—	(487)	(487)	—	—	1,051	1,051
Changes in the effect of limiting net defined benefit assets to the asset ceiling	—	—	30	30	—	—	(20)	(20)
	$ 118	$ 26	$ (596)	$ (452)	$ 86	$ 2	$ 602	$ 690

(1) The interest income on the plan assets portion of the employee defined benefit plans net interest amount included in Financing costs reflects a rate of return on plan assets equal to the discount rate used in determining the accrued benefit obligations.

Future benefit payments

Estimated future benefit payments from our defined benefit pension plans, calculated as at December 31, 2015, are as follows:

Years ending December 31 (millions)	
2016	$ 428
2017	439
2018	448
2019	455
2020	459
2021-2025	2,380

Disaggregation of defined benefit pension plan funding status

Accrued benefit obligations are the actuarial present values of benefits attributed to employee services rendered to a particular date. Our disaggregation of defined benefit pension plan surpluses and deficits at year-end is as follows:

	2015				2014			
As at December 31 (millions)	Accrued benefit obligations	Plan assets	Difference	PBSR solvency position [1]	Accrued benefit obligations	Plan assets	Difference	PBSR solvency position [1]
Pension plans that have plan assets in excess of accrued benefit obligations	$ 7,429	$ 7,785	$ 356	$ 459	$ 624	$ 673	$ 49	$ 134
Pension plans that have accrued benefit obligations in excess of plan assets								
Funded	1,001	782	(219)	(30)	8,109	7,765	(344)	(203)
Unfunded	190	—	(190)	N/A [2]	303	—	(303)	N/A [2]
	1,191	782	(409)	(30)	8,412	7,765	(647)	(203)
	$ 8,620	$ 8,567	$ (53)	$ 429	$ 9,036	$ 8,438	$ (598)	$ (69)
Accrued benefit obligations owed to:								
Active members	$ 2,271				$ 2,562			
Deferred members	513				579			
Pensioners	5,836				5,895			
	$ 8,620				$ 9,036			

(1) The Office of the Superintendent of Financial Institutions, by way of the *Pension Benefits Standards Regulations, 1985* (PBSR) (see *(d)*), requires that a solvency valuation be performed on a periodic basis. The actual PBSR solvency positions are determined in conjunction with mid-year annual funding reports prepared by actuaries (see *(d)*); as a result, the PBSR solvency positions in this table as at December 31, 2015 and 2014, are interim estimates and updated estimates, respectively. The interim estimate as at December 31, 2014, was a net deficit of $426.

Interim estimated solvency ratios as at December 31, 2015, ranged from 96% to 110% (2014 – updated estimate is 91% to 103%; interim estimate was 89% to 98%) and the estimated three-year average solvency ratios, adjusted as required by the *Pension Benefits Standards Regulations, 1985*, ranged from 97% to 108% (2014 – updated estimate is 91% to 102%; interim estimate was 91% to 101%).

The solvency valuation effectively uses the fair value (excluding any asset ceiling limit effects) of the funded defined benefit pension plan assets (adjusted for theoretical wind-up expenses) to measure the solvency assets. Although the accrued benefit obligations and the solvency liabilities are calculated similarly, the assumptions used for each differ, primarily in respect of retirement ages and discount rates, and the solvency liabilities, due to the required assumption about each plan being terminated on the valuation date, do not reflect assumptions about future compensation levels. Relative to the experience-based estimates of retirement ages used for purposes of determining the accrued benefit obligations, the minimum no-consent retirement age used for solvency valuation purposes may result in either a greater or lesser pension liability, depending upon the provisions of each plan. The solvency positions in this table reflect composite weighted average discount rates of 3.00% (2014 – 2.40%). A hypothetical decrease of 25 basis points in the composite weighted average discount rate would result in a $107 decrease in the PBSR solvency position as at December 31, 2015 (2014 – $300); these sensitivities are hypothetical, should be used with caution, are calculated without changing any other assumption and generally cannot be extrapolated because changes in amounts may not be linear.

(2) PBSR solvency position calculations are not required for the three pension plans arising from a pre-merger acquisition or for the non-registered, unfunded pension plans.

Fair value measurements

Information about the fair value measurements of our defined benefit pension plan assets, in aggregate, is as follows:

			Fair value measurements at reporting date using			
	Total		Quoted prices in active markets for identical items		Other	
As at December 31 (millions)	2015	2014	2015	2014	2015	2014
Asset class						
Equity securities						
Canadian	**$ 1,841**	$ 2,205	**$ 1,387**	$ 1,758	**$ 454**	$ 447
Foreign	**2,232**	2,355	**1,527**	1,720	**705**	635
Debt securities						
Issued by national, provincial or local governments	**1,558**	1,704	**1,252**	1,245	**306**	459
Corporate debt securities	**1,353**	904	**—**	—	**1,353**	904
Asset-backed securities	**32**	33	**—**	—	**32**	33
Commercial mortgages	**691**	497	**—**	—	**691**	497
Cash and cash equivalents	**308**	246	**12**	3	**296**	243
Real estate	**626**	536	**14**	17	**612**	519
	8,641	8,480	**$ 4,192**	$ 4,743	**$ 4,449**	$ 3,737
Effect of asset ceiling limit	**(74)**	(42)				
	$ 8,567	$ 8,438				

As at December 31, 2015, we administered pension benefit trusts that held Common Shares and debt of TELUS Corporation with fair values of approximately $NIL (2014 – $NIL) and $3 million (2014 – $8 million), respectively. As at December 31, 2015 and 2014, pension benefit trusts that we administered did not lease real estate to us.

(c) Plan investment strategies and policies

Our primary goal for the defined benefit pension plans is to ensure the security of the retirement income and other benefits of the plan members and their beneficiaries. A secondary goal is to maximize the long-term rate of return on the defined benefit plans' assets within a level of risk acceptable to us.

Risk management

We consider absolute risk (the risk of contribution increases, inadequate plan surplus and unfunded obligations) to be more important than relative return risk. Accordingly, the defined benefit plans' designs, the nature and maturity of defined benefit obligations and the characteristics of the plans' memberships significantly influence investment strategies and policies. We manage risk by specifying allowable and prohibited investment types, setting diversification strategies and determining target asset allocations.

Allowable and prohibited investment types

Allowable and prohibited investment types, along with associated guidelines and limits, are set out in each plan's required Statement of Investment Policies and Procedures (SIPP), which is reviewed and approved annually by the designated governing body. The SIPP guidelines and limits are further governed by the permitted investments and lending limits set out in the *Pension Benefits Standards Regulations, 1985*. As well as conventional investments, each fund's SIPP may provide for the use of derivative products to facilitate investment operations and to manage risk, provided that no short position is taken, no use of leverage is made and there is no violation of guidelines and limits established in the SIPP. Internally managed funds are prohibited from increasing grandfathered investments in our

securities; grandfathered investments were made prior to the merger of BC TELECOM Inc. and TELUS Corporation, our predecessors. Externally managed funds are permitted to invest in our securities, provided that the investments are consistent with the funds' mandate and are in compliance with the relevant SIPP.

Diversification

Our strategy for investments in equity securities is to be broadly diversified across individual securities, industry sectors and geographical regions. A meaningful portion (20% – 30% of total plan assets) of the plans' investment in equity securities is allocated to foreign equity securities with the intent of further increasing the diversification of plan assets. Debt securities may include a meaningful allocation to mortgages with the objective of enhancing cash flow and providing greater scope for the management of the bond component of the plan assets. Debt securities also may include real return bonds to provide inflation protection, consistent with the indexed nature of some defined benefit obligations. Real estate investments are used to provide diversification of plan assets, hedging of potential long-term inflation and comparatively stable investment income.

Relationship between plan assets and benefit obligations

With the objective of lowering the long-term costs of our defined benefit pension plans, we purposely mismatch plan assets and benefit obligations. This mismatching is effected by including equity investments in the long-term asset mix, as well as fixed income securities and mortgages with durations that differ from those of the benefit obligations.

As at December 31, 2015, the present value-weighted average timing of estimated cash flows for the obligations (duration) of the defined benefit pension plans was 14.0 years (2014 – 14.2 years) and of the other defined benefit plans was 7.3 years (2014 – 8.3 years). Compensation for liquidity issues that may have otherwise arisen from the mismatching of plan assets and benefit obligations is provided by broadly diversified investment holdings (including cash and short-term investments) and cash flows from dividends, interest and rents from those diversified investment holdings.

Asset allocations

Our defined benefit pension plans' target asset allocations and actual asset allocations are as follows:

	Target allocation	Percentage of plan assets at end of year	
Years ended December 31	**2016**	**2015**	**2014**
Equity securities	20-50%	**47%**	54%
Debt securities	40-75%	**46%**	40%
Real estate	5-25%	**7%**	6%
Other	0-4%	**—**	—
		100%	100%

(d) Employer contributions

The determination of the minimum funding amounts necessary for substantially all of our registered defined benefit pension plans is governed by the *Pension Benefits Standards Act, 1985*, which requires that, in addition to current service costs being funded, both going-concern and solvency valuations be performed on a specified periodic basis.

- Any excess of plan assets over plan liabilities determined in the going-concern valuation reduces our minimum funding requirement for current service costs, but may not reduce the requirement to an amount less than the employees' contributions. The going-concern valuation generally determines the excess (if any) of a plan's assets over its liabilities, determined on a projected benefit basis.
- As of the date of these consolidated financial statements, the solvency valuation generally requires that a plan's average solvency liabilities, determined on the basis that the plan is terminated on the valuation date, in excess of its assets (if any) be funded, at a minimum, in equal annual amounts over a period not exceeding five years. So as to manage the risk of overfunding the plans, which results from the solvency valuation for funding purposes utilizing the average solvency ratios, our funding may include the provision of letters of credit. As at December 31, 2015, undrawn letters of credit in the amount of $161 million (2014 – $133 million) secured certain obligations of the defined benefit pension plans.

Our best estimate of fiscal 2016 employer contributions to our defined benefit plans is approximately $57 million for defined benefit pension plans. This estimate is based upon the mid-year 2015 annual funding reports that were prepared by actuaries using December 31, 2014, actuarial valuations. The funding reports are based on the pension plans' fiscal years, which are calendar years. The next annual funding valuations are expected to be prepared mid-year 2016.

(e) Assumptions

As referred to in *Note 1(b)*, management is required to make significant estimates about certain actuarial and economic assumptions that are used in determining defined benefit pension costs, accrued benefit obligations and pension plan assets. These significant estimates are of a long-term nature, which is consistent with the nature of employee future benefits.

Demographic assumptions

In determining the defined benefit pension expense recognized in net income for the years ended December 31, 2015 and 2014, we utilized the Canadian Institute of Actuaries CPM 2014 mortality tables.

Financial assumptions

The discount rate, which is used to determine a plan's accrued benefit obligations, is based upon the yield on long-term, high-quality fixed-term investments, and is set annually. The rate of future increases in compensation is based upon current benefits policies and economic forecasts.

The significant weighted average actuarial assumptions arising from these estimates and adopted in measuring our accrued benefit obligations are as follows:

	2015	2014
Discount rate used to determine:		
Net benefit costs for the year ended December 31	**3.90%**	4.75%
Accrued benefit obligations as at December 31	**4.00%**	3.90%
Rate of future increases in compensation used to determine:		
Net benefit costs for the year ended December 31	**3.00%**	3.00%
Accrued benefit obligations as at December 31	**3.00%**	3.00%

Sensitivity of key assumptions

The sensitivity of our key assumptions for our defined benefit pension plans was as follows:

	2015		2014	
Years ended, or as at, December 31 Increase (decrease) (in millions)	**Change in obligations**	**Change in expense**	**Change in obligations**	**Change in expense**
Sensitivity of key demographic assumptions to an increase of one year [1] in life expectancy	**$ 214**	**$ 11**	$ 230	$ 11
Sensitivity of key financial assumptions to a hypothetical decrease of 25 basis points [1] in:				
Discount rate	**$ 302**	**$ 17**	$ 328	$ 18
Rate of future increases in compensation	**$ (26)**	**$ (3)**	$ (28)	$ (3)

(1) These sensitivities are hypothetical and should be used with caution. Favourable hypothetical changes in the assumptions result in decreased amounts, and unfavourable hypothetical changes in the assumptions result in increased amounts, of the obligations and expenses. Changes in amounts based on a variation in assumptions of one year or 25 basis points generally cannot be extrapolated because the relationship of the change in assumption to the change in amounts may not be linear. Also, in this table, the effect of a variation in a particular assumption on the change in obligation or change in expense is calculated without changing any other assumption; in reality, changes in one factor may result in changes in another (for example, increases in discount rates may result in changes in expectations about the rate of future increases in compensation), which might magnify or counteract the sensitivities.

(f) Defined contribution plans — expense

Our total defined contribution pension plan costs recognized were as follows:

Years ended December 31 (millions)	2015	2014
Union pension plan and public service pension plan contributions	**$ 28**	$ 27
Other defined contribution pension plans	**62**	57
	$ 90	$ 84

We expect that our 2016 union pension plan and public service pension plan contributions will be approximately $91 million.

(g) Other defined benefit plans

For the year ended December 31, 2015, other defined benefit current service cost was $NIL (2014 – $1 million), financing cost was $1 million (2014 – $1 million) and other re-measurements recorded in other comprehensive income were $(1) million (2014 – $NIL). Estimated future benefit payments from our other defined benefit plans, calculated as at December 31, 2015, are $2 million annually for 2016-2020 and $8 million for the five-year period 2021-2025.

15 restructuring and other costs

(a) Details of restructuring and other costs

With the objective of reducing ongoing costs, we incur associated incremental, non-recurring restructuring costs, as discussed further in *(b)* following. We may also incur atypical charges when undertaking major or transformational changes to our business or operating models. We also include incremental external costs incurred in connection with business acquisition or disposition activity, as well as litigation costs, in the context of significant losses or settlements, in other costs.

Restructuring and other costs are presented in the Consolidated statements of income and other comprehensive income as set out in the following table:

Years ended December 31 (millions)	2015	2014
Goods and services purchased	**$ 70**	$ 21
Employee benefits expense	**156**	54
	$ 226	$ 75

(b) Restructuring provisions

Employee related provisions and other provisions, as presented in *Note 20,* include amounts in respect of restructuring activities. In 2015, restructuring activities included ongoing and incremental efficiency initiatives including personnel-related costs largely from the reduction of 1,500 full-time positions announced in November 2015 and rationalization of real estate. These initiatives were intended to improve our long-term operating productivity and competitiveness.

	2015			2014		
Years ended December 31 (millions)	Employee related [1]	Other [1]	Total [1]	Employee related [1]	Other [1]	Total [1]
Restructuring costs						
Additions	**$ 160**	**$ 74**	**$ 234**	$ 54	$ 22	$ 76
Reversal	**(4)**	**(4)**	**(8)**	—	(1)	(1)
Expense	**156**	**70**	**226**	54	21	75
Use	**(81)**	**(41)**	**(122)**	(48)	(26)	(74)
Expenses greater (less) than disbursements	**75**	**29**	**104**	6	(5)	1
Restructuring provisions						
Balance, beginning of period	**41**	**28**	**69**	35	33	68
Balance, end of period	**$ 116**	**$ 57**	**$ 173**	$ 41	$ 28	$ 69

(1) The transactions and balances in this column, excluding share-based compensation amounts, are included in, and thus are a subset of, the transactions and balances in the column with the same caption in *Note 20*.

16 property, plant and equipment

(millions)	Network assets	Buildings and leasehold improvements	Other	Land	Assets under construction	Total
At cost						
As at January 1, 2014	$ 25,119	$ 2,713	$ 1,146	$ 55	$ 432	$ 29,465
Additions [1]	750	23	43	—	1,274	2,090
Additions arising from business acquisitions *(Note 17(d))*	—	—	1	—	—	1
Dispositions, retirements and other	(463)	(52)	(103)	—	—	(618)
Assets under construction put into service	1,009	117	76	—	(1,202)	—
As at December 31, 2014	26,415	2,801	1,163	55	504	30,938
Additions [1]	**732**	**24**	**93**	—	**1,252**	**2,101**
Dispositions, retirements and other	**(1,098)**	**(106)**	**(209)**	—	—	**(1,413)**
Assets under construction put into service	**1,142**	**128**	**73**	—	**(1,343)**	**—**
As at December 31, 2015	**$ 27,191**	**$ 2,847**	**$ 1,120**	**$ 55**	**$ 413**	**$ 31,626**
Accumulated depreciation						
As at January 1, 2014	$ 18,478	$ 1,734	$ 825	$ —	$ —	$ 21,037
Depreciation	1,192	126	105	—	—	1,423
Dispositions, retirements and other	(468)	(52)	(125)	—	—	(645)
As at December 31, 2014	19,202	1,808	805	—	—	21,815
Depreciation	**1,268**	**95**	**112**	**—**	**—**	**1,475**
Dispositions, retirements and other	**(1,119)**	**(93)**	**(188)**	**—**	**—**	**(1,400)**
As at December 31, 2015	**$ 19,351**	**$ 1,810**	**$ 729**	**$ —**	**$ —**	**$ 21,890**
Net book value						
As at December 31, 2014	$ 7,213	$ 993	$ 358	$ 55	$ 504	$ 9,123
As at December 31, 2015	**$ 7,840**	**$ 1,037**	**$ 391**	**$ 55**	**$ 413**	**$ 9,736**

(1) For the year ended December 31, 2015, additions include $65 (2014 – $172) in respect of asset retirement obligations (see *Note 20*).

The gross carrying value of fully depreciated property, plant and equipment that was still in use as at December 31, 2015, was $3.0 billion (2014 – $2.9 billion). As at December 31, 2015, our contractual commitments for the acquisition of property, plant and equipment were $326 million over a period ending December 31, 2017 (2014 – $321 million over a period ending December 31, 2015).

notes to consolidated financial statements

17 intangible assets and goodwill

(a) Intangible assets and goodwill, net

(millions)	Intangible assets subject to amortization						Intangible assets with indefinite lives			
	Subscriber base	Customer contracts, related customer relationships and leasehold interests	Software	Access to rights-of-way and other	Assets under construction	Total	Spectrum licences	Total intangible assets	Goodwill [1]	Total intangible assets and goodwill
At cost										
As at January 1, 2014	$ 245	$ 217	$ 3,207	$ 84	$ 189	$ 3,942	$ 5,168	$ 9,110	$ 4,101	$ 13,211
Additions	—	—	11	3	427	441	1,171	1,612	—	1,612
Additions arising from business acquisitions *(d)*	—	12	4	—	—	16	51	67	20	87
Dispositions, retirements and other (including capitalized interest)	—	(1)	(207)	(7)	—	(215)	—	(215)	—	(215)
Assets under construction put into service	—	—	391	3	(394)	—	—	—	—	—
As at December 31, 2014	245	228	3,406	83	222	4,184	6,390	10,574	4,121	14,695
Additions	**—**	**—**	**19**	**4**	**508**	**531**	**2,048**	**2,579**	**—**	**2,579**
Additions arising from business acquisitions *(d)*	**—**	**—**	**2**	**—**	**—**	**2**	**—**	**2**	**4**	**6**
Dispositions, retirements and other (including capitalized interest)	**—**	**—**	**(140)**	**3**	**—**	**(137)**	**42**	**(95)**	**—**	**(95)**
Assets under construction put into service	**—**	**—**	**514**	**—**	**(514)**	**—**	**—**	**—**	**—**	**—**
As at December 31, 2015	**$ 245**	**$ 228**	**$ 3,801**	**$ 90**	**$ 216**	**$ 4,580**	**$ 8,480**	**$ 13,060**	**$ 4,125**	**$ 17,185**
Accumulated amortization										
As at January 1, 2014	$ 84	$ 111	$ 2,335	$ 49	$ —	$ 2,579	$ —	$ 2,579	$ 364	$ 2,943
Amortization	14	28	363	6	—	411	—	411	—	411
Dispositions, retirements and other	—	—	(208)	(5)	—	(213)	—	(213)	—	(213)
As at December 31, 2014	98	139	2,490	50	—	2,777	—	2,777	364	3,141
Amortization	**14**	**29**	**387**	**4**	**—**	**434**	**—**	**434**	**—**	**434**
Dispositions, retirements and other	**—**	**—**	**(138)**	**2**	**—**	**(136)**	**—**	**(136)**	**—**	**(136)**
As at December 31, 2015	**$ 112**	**$ 168**	**$ 2,739**	**$ 56**	**$ —**	**$ 3,075**	**$ —**	**$ 3,075**	**$ 364**	**$ 3,439**
Net book value										
As at December 31, 2014	$ 147	$ 89	$ 916	$ 33	$ 222	$ 1,407	$ 6,390	$ 7,797	$ 3,757	$ 11,554
As at December 31, 2015	**$ 133**	**$ 60**	**$ 1,062**	**$ 34**	**$ 216**	**$ 1,505**	**$ 8,480**	**$ 9,985**	**$ 3,761**	**$ 13,746**

(1) Accumulated amortization of goodwill is amortization recorded prior to 2002; there are no accumulated impairment losses in the accumulated amortization of goodwill.

The gross carrying value of fully amortized intangible assets subject to amortization that were still in use as at December 31, 2015, was $736 million (2014 — $706 million). As at December 31, 2015, our contractual commitments for the acquisition of intangible assets were $55 million over a period ending December 31, 2018 (2014 — $89 million over a period ending December 31, 2018).

The Department of Innovation, Science and Economic Development (formerly Industry Canada)'s AWS-3 spectrum auction occurred during the

three-month period ended March 31, 2015; we were the successful auction participant on 15 spectrum licences with a purchase price of $1.5 billion. The Department's 2500 MHz spectrum auction occurred during the three-month period ended June 30, 2015; we were the successful auction participant on 122 spectrum licences with a purchase price of $479 million. Previously, the Department's 700 MHz spectrum

auction occurred during the three-month period ended March 31, 2014; we were the successful auction participant on 30 spectrum licences with a purchase price of $1.14 billion.

(b) Intangible assets with indefinite lives — spectrum licences

Our intangible assets with indefinite lives include spectrum licences granted by the Canadian Department of Innovation, Science and Economic Development. The spectrum licence policy terms indicate that the spectrum licences will likely be renewed. We expect our spectrum licences to be renewed every 20 years following a review of our compliance with licence terms. In addition to current usage, our licensed spectrum can be used for planned and new technologies. As a result of our assessment of the combination of these significant factors, we currently consider our spectrum licences to have indefinite lives and, as referred to in *Note 1(b)*, this represents a significant judgment for us.

(c) Impairment testing of intangible assets with indefinite lives and goodwill

General

As referred to in *Note 1(j)*, the carrying values of intangible assets with indefinite lives and goodwill are periodically tested for impairment and, as referred to in *Note 1(b)*, this test represents a significant estimate for us as well as requiring significant judgments to be made.

The carrying values of intangible assets with indefinite lives and goodwill allocated to each cash-generating unit are as set out in the following table.

	Intangible assets with indefinite lives		Goodwill		Total	
As at December 31 (millions)	**2015**	**2014**	**2015**	**2014**	**2015**	**2014**
Wireless	**$ 8,480**	$ 6,390	**$ 2,646**	$ 2,646	**$ 11,126**	$ 9,036
Wireline	**—**	—	**1,115**	1,111	**1,115**	1,111
	$ 8,480	$ 6,390	**$ 3,761**	$ 3,757	**$ 12,241**	$ 10,147

The recoverable amounts of the cash-generating units' assets have been determined based on a value in use calculation. There is a material degree of uncertainty with respect to the estimates of the recoverable amounts of the cash-generating units' assets, given the necessity of making key economic assumptions about the future.

We validate our value in use calculation results through a market-comparable approach and an analytical review of industry facts and facts that are specific to us. The market-comparable approach uses current (at time of test) market consensus estimates and equity trading prices for U.S. and Canadian firms in the same industry. In addition, we ensure that the combination of the valuations of the cash-generating units is reasonable based on our current (at time of test) market values.

Key assumptions

The value in use calculation uses discounted cash flow projections that employ the following key assumptions: future cash flows and growth projections (including judgments about the allocation of future capital expenditures supporting both wireless and wireline operations); associated economic risk assumptions and estimates of achieving key operating metrics and drivers; estimates of generational infrastructure future capital expenditures; and the future weighted average cost of capital. We consider a range of reasonably possible amounts to use for key assumptions and decide upon amounts that represent management's best estimates. In the normal course, we make changes to key assumptions to reflect current (at time of test) economic conditions, updates of historical information used to develop the key assumptions and changes (if any) in our debt ratings.

The cash flow projection key assumptions are based upon our approved financial forecasts, which span a period of three years and are discounted, for December 2015 annual test purposes, at a consolidated pre-tax notional rate of 9.11% (2014 — 9.07%). For impairment testing valuations, the cash flows subsequent to the three-year projection period are extrapolated, for December 2015 annual test purposes, using perpetual growth rates of 1.75% (2014 — 1.75%) for the wireless cash-generating unit and 0.50% (2014 — 0.50%) for the wireline cash-generating unit; these growth rates do not exceed the long-term average growth rates observed in the markets in which we operate.

We believe that any *reasonably possible* change in the key assumptions on which the calculation of the recoverable amounts of our cash-generating units is based would not cause the cash-generating units' carrying values (including the intangible assets with indefinite lives and the goodwill allocated to each cash-generating unit) to exceed their recoverable amounts. If the future were to *adversely* differ from management's best estimates of key assumptions and associated

cash flows were to be materially adversely affected, we could potentially experience future material impairment charges in respect of our intangible assets with indefinite lives and goodwill.

Sensitivity testing

Sensitivity testing was conducted as a part of the December 2015 annual test, a component of which was hypothetical changes in the future weighted average cost of capital. Stress testing included moderate declines in annual cash flows with all other assumptions being held constant; under this scenario, we would be able to recover the carrying values of our intangible assets with indefinite lives and goodwill for the foreseeable

future.

(d) Business acquisitions

During the years ended December 31, 2015 and 2014, we acquired 100% ownership of multiple businesses complementary to our existing lines of business. The primary factor that gave rise to the recognition of goodwill was the earnings capacity of the acquired businesses in excess of the net tangible assets and net intangible assets acquired (such excess arising from: the low levels of tangible assets relative to the earnings capacity of the businesses; expected synergies; the benefits of acquiring established businesses with certain capabilities in the industry; and the geographic presence of the acquired businesses). A portion of the amounts assigned to goodwill may be deductible for income tax purposes. The acquisition-date fair values assigned to assets acquired and liabilities assumed in the individually immaterial acquisitions are also individually immaterial. Any differences between the results of operations currently presented and the pro forma operating revenues, net income and basic and diluted net income per Common Share amounts reflecting the results of operations as if the business acquisitions had been completed at the beginning of the fiscal year are immaterial (as are the post-acquisition operating revenues and net income of the acquired businesses for the year ended December 31, 2015).

18 real estate joint ventures

(a) General

In 2011, we partnered, as equals, with an arm's-length party in a residential condominium, retail and commercial real estate redevelopment project, TELUS Garden, in Vancouver, British Columbia. TELUS is a tenant in TELUS Garden, which is now our new global headquarters. The new-build office tower was built to the 2009 Leadership in Energy and Environmental Design (LEED) Platinum standard and the neighbouring new-build residential condominium tower, scheduled for completion in the first half of 2016, is being built to the LEED Gold standard.

In 2013, we partnered, as equals, with two arm's-length parties (one of which is also our TELUS Garden partner) in a residential, retail and commercial real estate redevelopment project, TELUS Sky, in Calgary, Alberta. The new-build tower, scheduled for completion in 2018, is to be built to the LEED Platinum standard.

(b) Real estate joint ventures — summarized financial information

As at December 31 (millions)	2015	2014
ASSETS		
Current assets		
Cash and temporary investments, net	**$ 20**	$ 11
Escrowed deposits for tenant inducements and liens	**20**	—
Sales contract deposits held by arm's-length trustee	**6**	30
Other	**21**	7
Property under development — residential condominiums (subject to sales contracts)	**179**	—
	246	48
Non-current assets		
Property under development		
Residential condominiums (subject to sales contracts)	**—**	106
Investment property	**73**	228
Investment property	**238**	—
	311	334
	$ 557	$ 382
LIABILITIES AND OWNERS' EQUITY		
Current liabilities		
Accounts payable and accrued liabilities	**$ 46**	$ 7
Sales contract deposits		
Payable	**55**	—
Held by arm's-length trustee	**6**	—
Current portion of senior secured 3.4% bonds due July 2025	**4**	—
Construction credit facilities	**96**	—
Construction holdback liabilities	**10**	—
Other financial liability [1]	**18**	—
	235	7
Non-current liabilities		
Sales contract deposits		
Payable	**—**	36
Held by arm's-length trustee	**—**	30
Construction credit facilities	**9**	204
Construction holdback liabilities	**—**	10
Other	**4**	—
Senior secured 3.4% bonds due July 2025	**217**	—

Other financial liability [1]	—	18
	230	298
Liabilities	465	305
Owners' equity		
TELUS [2]	36	32
Other partners	56	45
	92	77
	$ 557	$ 382

(1) Other financial liability is due to us; such amount is non-interest bearing, is secured by an $18 mortgage on the TELUS Garden residential condominium tower, is payable in cash and is due subsequent to repayment of the residential condominium tower construction credit facility.
(2) The equity amounts recorded by the real estate joint ventures differ from those recorded by us by the amount of the deferred gains on our real estate contributed.

Years ended December 31 (millions)	2015	2014
Revenue from investment property	$ 17	$ —
Depreciation and amortization	$ 7	$ —
Interest expense [1]	$ 7	$ —
Net income (loss) and comprehensive income (loss)	$ (4)	$ —

(1) During the year ended December 31, 2015, the real estate joint ventures capitalized $5 (2014 — $5) of financing costs.

(c) Our transactions with the real estate joint ventures

Our investment-related transactions with the real estate joint ventures are as set out in the following table.

	2015			2014		
Years ended December 31 (millions)	Loans and receivables [1]	Equity [2]	Total	Loans and receivables [1]	Equity [2]	Total
Related to real estate joint ventures' statements of income and other comprehensive income						
Comprehensive income (loss) attributable to us	$ —	$ (2)	$ (2)	$ —	$ —	$ —
Related to real estate joint ventures' statements of financial position						
Items not affecting currently reported cash flows						
Our real estate contributed	—	—	—	—	7	7
Deferral of gain on our remaining interest in real estate contributed	—	—	—	—	(2)	(2)
Construction credit facilities financing costs charged by us and other *(Note 6)*	3	—	3	3	—	3
Cash flows in the current reporting period						
Construction credit facilities						
Amounts advanced	44	—	44	51	—	51
Amounts repaid	(95)	—	(95)	—	—	—
Financing costs paid to us	(3)	—	(3)	(3)	—	(3)
Funds we advanced or contributed, excluding construction credit facilities	—	6	6	—	6	6
Cash payment arising from joint venture capital account rebalancing	—	—	—	—	(1)	(1)
Net increase (decrease)	(51)	4	(47)	51	10	61
Accounts with real estate joint ventures						
Balance, beginning of period	120	21	141	69	11	80
Balance, end of period	$ 69	$ 25	$ 94	$ 120	$ 21	$ 141
Accounts with real estate joint ventures						
Current assets	$ 66	$ —	$ 66	$ —	$ —	$ —
Non-current assets	3	25	28	120	21	141
	$ 69	$ 25	$ 94	$ 120	$ 21	$ 141

(1) Loans and receivables are included in our Consolidated statements of financial position as Real estate joint venture advances and are comprised of advances under construction credit facilities (see *(d)*) and an $18 mortgage on the TELUS Garden residential condominium tower.

(2) We account for our interests in the real estate joint ventures using the equity method of accounting.

During the year ended December 31, 2015, the TELUS Garden real estate joint venture recognized $6 million (2014 — $NIL) of revenue from our TELUS Garden office tenancy; of this amount, one-half is due to our economic interest in the real estate joint venture and one-half is due to our partner's economic interest in the real estate joint venture.

(d) Commitments and contingent liabilities

Construction commitments

The TELUS Garden real estate joint venture is expected to spend a total of approximately $470 million on the construction of an office tower and a residential condominium tower. As at December 31, 2015, the real estate joint venture's construction-related contractual commitments were approximately $38 million through to 2016 (2014 — $100 million through to 2016).

The TELUS Sky real estate joint venture is expected to spend a total of approximately $400 million on the construction of a mixed-use tower. As at December 31, 2015, the real estate joint venture's construction-related contractual commitments were approximately $124 million through to 2018 (2014 — $4 million through to 2018).

Operating leases

During the year ended December 31, 2015, we entered into a 20-year operating lease for office space in the TELUS Sky real estate joint venture. Future minimum lease payments in respect of our office space operating leases at TELUS Garden and TELUS Sky are set out in *Note 23(a)*.

Construction credit facilities

The TELUS Garden real estate joint venture has a credit agreement with two Canadian financial institutions (as 50% lender) and TELUS Corporation (as 50% lender) to provide $136 million (2014 — $374 million) of construction financing for the residential project; subsequent to December 31, 2015, the credit agreement was extended to July 31, 2016. The

TELUS Sky real estate joint venture has a credit agreement with three Canadian financial institutions (as 66-2/3% lender) and TELUS Corporation (as 33-1/3% lender) to provide $342 million of construction financing for the project.

The construction credit facilities contain customary real estate construction financing representations, warranties and covenants and are secured by demand debentures constituting first fixed and floating charge mortgages over the underlying real estate assets. The construction credit facilities are available by way of bankers' acceptance or prime loan and bear interest at rates in line with similar construction financing facilities.

As at December 31 (millions)	Note	2015	2014
Construction credit facilities commitment — TELUS Corporation			
Undrawn	*4(c)*	**$ 131**	$ 85
Advances		**51**	102
		182	187
Construction credit facilities commitment — other		**296**	187
		$ 478	$ 374

Other — TELUS Garden

We are to receive 50% of the earnings from the sale of residential condominium tower units in excess of the first $18 million of earnings; we are to receive 25% of the first $18 million of earnings and the arm's-length co-owner is to receive 75%.

We have guaranteed the payment of 50% of the TELUS Garden real estate joint venture's construction credit facility carrying costs, cost overruns and costs to complete. We have also provided an environmental indemnity in favour of the construction lenders. If we pay out under such guarantee or indemnity because the arm's-length co-owner has not paid its pro rata share of project costs, then we have recourse options available, including against the arm's-length co-owner's interest in the real estate joint venture. As at December 31, 2015, we had no liability recorded in respect of TELUS Garden real estate joint venture obligations and guarantees.

Other — TELUS Sky

We have guaranteed the payment of 33-1/3% of the TELUS Sky real estate joint venture's construction credit facility carrying costs, cost overruns and costs to complete. We have also provided an environmental indemnity in favour of the construction lenders. If we pay out under such guarantee or indemnity because either of the arm's-length co-owners have not paid their pro rata share of project costs, then we have recourse options available, including against such arm's-length co-owner's interest in the real estate joint venture. As at December 31, 2015, we had no liability recorded in respect of TELUS Sky real estate joint venture obligations and guarantees.

19 short-term borrowings

On July 26, 2002, one of our subsidiaries, TELUS Communications Inc. (see *Note 1(a)*), entered into an agreement with an arm's-length securitization trust associated with a major Schedule I bank under which it is able to sell an interest in certain trade receivables up to a maximum of $500 million (2014 — $500 million). This revolving-period securitization agreement was renewed in 2014, its current term ends December 31, 2016, and it requires minimum cash proceeds of $100 million from monthly sales of interests in certain trade receivables. TELUS Communications Inc. is required to maintain at least a BB (2014 — BB) credit rating by Dominion Bond Rating Service or the securitization trust may require the sale program to be wound down prior to the end of the term.

When we sell our trade receivables, we retain reserve accounts, which are retained interests in the securitized trade receivables, and servicing rights. As at December 31, 2015, we had sold to the trust (but continued to recognize) trade receivables of $124 million (2014 — $113 million). Short-term borrowings of $100 million (2014 — $100 million) are comprised of amounts advanced to us by the arm's-length securitization trust pursuant to the sale of trade receivables.

The balance of short-term borrowings (if any) comprised amounts drawn on our bilateral bank facilities.

20 provisions

(millions)	Asset retirement obligation	Employee related	Other	Total
As at January 1, 2014	$ 155	$ 49	$ 125	$ 329
Additions	8	54	79	141
Use	(6)	(62)	(96)	(164)
Reversal	(8)	—	(2)	(10)
Interest effect [1]	171	—	1	172
As at December 31, 2014	320	41	107	468
Additions [2]	**5**	**153**	**85**	**243**
Use	**(9)**	**(81)**	**(45)**	**(135)**
Reversal	**(10)**	**(4)**	**(4)**	**(18)**
Interest effect [1]	**71**	—	**1**	**72**
As at December 31, 2015	**$ 377**	**$ 109**	**$ 144**	**$ 630**
Current	$ 21	$ 41	$ 64	$ 126
Non-current	299	—	43	342
As at December 31, 2014	$ 320	$ 41	$ 107	$ 468
Current	**$ 19**	**$ 109**	**$ 69**	**$ 197**
Non-current	**358**	**—**	**75**	**433**
As at December 31, 2015	**$ 377**	**$ 109**	**$ 144**	**$ 630**

(1) The difference of $60 (2014 — $164) between the interest effect in this table and the amount disclosed in *Note 8* is in respect of the change in the discount rates applicable to the provision, such difference being included in the cost of the associated asset(s) by way of being included with (netted against) the additions detailed in *Note 16*.

(2) For the year ended December 31, 2015, employee related additions are net of share-based compensation of $7.

Asset retirement obligation

We establish provisions for liabilities associated with the retirement of property, plant and equipment when those obligations result from the acquisition, construction, development and/or normal operation of the assets. We expect that the cash outflows in respect of the balance accrued as at the financial statement date will occur proximate to the dates these assets are retired.

Employee related

The employee related provisions are largely in respect of restructuring activities (as discussed further in *Note 15*). The timing of the cash outflows in respect of the balance accrued as at the financial statement date is substantially short-term in nature.

Other

The provision for other includes: legal claims; non-employee related restructuring activities (as discussed further in *Note 15*); and written put options, contract termination costs and onerous contracts related to business acquisitions. Other than as set out following, we expect that the cash outflows in respect of the balance accrued as at the financial statement date will occur over an indeterminate multi-year period.

As discussed further in *Note 23*, we are involved in a number of legal claims and we are aware of certain other possible legal claims. In respect of legal claims, we establish provisions, when warranted, after taking into account legal assessments, information presently available, and the expected availability of recourse. The timing of cash outflows associated with legal claims cannot be reasonably determined.

In connection with business acquisitions, we have established provisions for contingent consideration, written put options in respect of non-controlling interests, contract termination costs and onerous contracts acquired. No cash outflows for the written put options occurred prior to their initial exercisability in December 2015. In respect of contract termination costs and onerous contracts acquired, cash outflows are expected to occur through mid-2018.

notes to consolidated financial statements

21 long-term debt

(a) Details of long-term debt

As at December 31 (millions)	Note	2015	2014
TELUS Corporation notes	*(b)*	**$ 11,164**	$ 8,437
TELUS Corporation commercial paper	*(c)*	**256**	130
TELUS Communications Inc. debentures	*(e)*	**618**	743
Long-term debt		**$ 12,038**	$ 9,310
Current		**$ 856**	$ 255
Non-current		**11,182**	9,055
Long-term debt		**$ 12,038**	$ 9,310

(b) TELUS Corporation notes

The notes are our senior, unsecured and unsubordinated obligations and rank equally in right of payment with all of our existing and future unsecured, unsubordinated obligations, are senior in right of payment to all of our existing and future subordinated indebtedness, and are effectively subordinated to all existing and future obligations of, or guaranteed by, our subsidiaries.

The indentures governing the notes contain certain covenants which, among other things, place limitations on our ability and the ability of certain of our subsidiaries to: grant security in respect of indebtedness; enter into sale-leaseback transactions; and incur new indebtedness.

				Principal face amount		Redemption present value spread	
Series [1]	Issued	Maturity	Issue price	Originally issued	Outstanding at financial statement date	Basis points	Cessation date
4.95% Notes, Series CD	March 2007	March 2017	$ 999.53	$ 700 million	$ 700 million	24 [2]	N/A
5.05% Notes, Series CG [3]	December 2009	December 2019	$ 994.19	$ 1.0 billion	$ 1.0 billion	45.5 [2]	N/A
5.05% Notes, Series CH [3]	July 2010	July 2020	$ 997.44	$ 1.0 billion	$ 1.0 billion	47 [2]	N/A
3.65% Notes, Series CI [3]	May 2011	May 2016	$ 996.29	$ 600 million	$ 600 million	29.5 [2]	N/A
3.35% Notes, Series CJ [3]	December 2012	March 2023	$ 998.83	$ 500 million	$ 500 million	40 [4]	Dec. 15, 2022
3.35% Notes, Series CK [3]	April 2013	April 2024	$ 994.35	$ 1.1 billion	$ 1.1 billion	36 [4]	Jan. 2, 2024
4.40% Notes, Series CL [3]	April 2013	April 2043	$ 997.68	$ 600 million	$ 600 million	47 [4]	Oct. 1, 2042
3.60% Notes, Series CM [3]	November 2013	January 2021	$ 997.15	$ 400 million	$ 400 million	35 [2]	N/A
5.15% Notes, Series CN [3]	November 2013	November 2043	$ 995.00	$ 400 million	$ 400 million	50 [4]	May 26, 2043
3.20% Notes, Series CO [3]	April 2014	April 2021	$ 997.39	$ 500 million [5]	$ 500 million [5]	30 [4]	Mar. 5, 2021
4.85% Notes, Series CP [3]	Multiple [5]	April 2044	$ 987.91 [5]	$ 500 million [5]	$ 900 million [5]	46 [4]	Oct. 5, 2043
3.75% Notes, Series CQ [3]	September 2014	January 2025	$ 997.75	$ 800 million	$ 800 million	38.5 [4]	Oct. 17, 2024
4.75% Notes, Series CR [3]	September 2014	January 2045	$ 992.91	$ 400 million	$ 400 million	51.5 [4]	July 17, 2044
1.50% Notes, Series CS [3]	March 2015	March 2018	$ 999.62	$ 250 million	$ 250 million	N/A [6]	N/A
2.35% Notes, Series CT [3]	March 2015	March 2022	$ 997.31	$ 1.0 billion	$ 1.0 billion	35.5 [4]	Feb. 28, 2022
4.40% Notes, Series CU [3]	March 2015	January 2046	$ 999.72	$ 500 million	$ 500 million	60.5 [4]	July 29, 2045
3.75% Notes, Series CV [3]	December 2015	March 2026	$ 992.14	$ 600 million	$ 600 million	53.5 [4]	Dec. 10, 2025

(1) Interest is payable semi-annually.
(2) The notes are redeemable at our option, in whole at any time, or in part from time to time, on not fewer than 30 and not more than 60 days' prior notice. The redemption price is equal to the greater of (i) the present value of the notes discounted at the Government of Canada yield plus the redemption present value spread, or (ii) 100% of the principal amount thereof. In addition, accrued and unpaid interest, if any, will be paid to the date fixed for redemption.
(3) This series of notes requires us to make an offer to repurchase the notes at a price equal to 101% of their principal amount plus accrued and unpaid interest to the date of repurchase upon the occurrence of a change in control triggering event, as defined in the supplemental trust indenture.
(4) At any time prior to the respective maturity dates set out in the table, the notes are redeemable at our option, in whole at any time, or in part from time to time, on not fewer than 30 and not more than 60 days' prior notice. The redemption price is equal to the greater of (i) the present value of the notes discounted at the Government of Canada yield plus the redemption present value spread calculated over the period to maturity, other than in the case of the Series CT and Series CU notes where it is calculated over the period to the redemption present value spread cessation date, or (ii) 100% of the principal amount thereof. In addition, accrued and unpaid interest, if any, will be paid to the date fixed for redemption. On or after the respective redemption present value spread cessation dates set out in the table, the notes are redeemable at our option, in whole but not in part, on not fewer than 30 and not more than 60 days' prior notice, at redemption prices equal to 100% of the principal amount thereof.
(5) $500 million of 4.85% Notes, Series CP were issued in April 2014 at an issue price of $998.74. This series of notes was reopened in December 2015 and a further $400 million of notes were issued at an issue price of $974.38.
(6) The notes are not redeemable at our option, other than in the event of certain changes in tax laws.

(c) TELUS Corporation commercial paper

TELUS Corporation has an unsecured commercial paper program, which is backstopped by our $2.25 billion syndicated credit facility (see *(d)*) and is to be used for general corporate purposes, including capital expenditures and investments. This program enables us to issue commercial paper, subject to conditions related to debt ratings, up to a maximum aggregate amount at any one time of $1.4 billion (2014 — $1.2 billion). Foreign currency forward contracts are used to manage currency risk arising from issuing commercial paper denominated in U.S. dollars. Commercial paper debt is due within one year and is classified as a current portion of long-term debt as the amounts are fully supported, and we expect that they will continue to be supported, by the revolving credit facility, which has no repayment requirements within the next year. As at December 31, 2015, we had $256 million of commercial paper outstanding, all of which was denominated in U.S. dollars (U.S.$185 million), with an effective weighted average interest rate of 0.65%, maturing in March 2016.

(d) TELUS Corporation credit facility

As at December 31, 2015, TELUS Corporation had an unsecured, revolving $2.25 billion bank credit facility, expiring on May 31, 2019, with a syndicate of financial institutions, which is to be used for general corporate purposes, including the backstopping of commercial paper.

TELUS Corporation's credit facility bears interest at prime rate, U.S. Dollar Base Rate, a bankers' acceptance rate or London interbank offered rate (LIBOR) (all such terms as used or defined in the credit facility), plus applicable margins. The credit facility contains customary representations, warranties and covenants, including two financial quarter-end financial ratio tests. These tests are that our net debt to operating cash flow ratio must not exceed 4.00:1.00 and our operating cash flow to interest expense ratio must not be less than 2.00:1.00, each as defined under the credit facility.

Continued access to TELUS Corporation's credit facility is not contingent on TELUS Corporation maintaining a specific credit rating.

As at December 31 (millions)	2015	2014
Net available	**$ 1,994**	$ 2,120
Backstop of commercial paper	**256**	130
Gross available	**$ 2,250**	$ 2,250

We had $202 million of letters of credit outstanding as at December 31, 2015 (2014 — $164 million), issued under various uncommitted facilities; such letter of credit facilities are in addition to the ability to provide letters of credit pursuant to our committed bank credit facility. In addition, we had arranged incremental letters of credit totalling $198 million that allowed us to participate in the AWS-3 auction and 2500 MHz auction, which were held in March 2015 and in April-May 2015, respectively (see *Note 17)*. Concurrent with funding the purchase of the spectrum licences these incremental letters of credit were extinguished.

(e) TELUS Communications Inc. debentures

The Series 2, 3 and 5 Debentures were issued by a predecessor corporation of TELUS Communications Inc., BC TEL, under a Trust Indenture dated May 31, 1990. The Series B Debentures were issued by a predecessor corporation of TELUS Communications Inc., AGT Limited, under a Trust Indenture dated August 24, 1994, and a supplemental trust indenture dated September 22, 1995.

				Principal face amount		Redemption present value spread
Series [1]	Issued	Maturity	Issue price	Originally issued	Outstanding at financial statement date	Basis points
11.90% Debentures, Series 2	November 1990	November 2015	$ 998.50	$ 125 million	$ NIL	N/A (non-redeemable)
10.65% Debentures, Series 3	June 1991	June 2021	$ 998.00	$ 175 million	$ 175 million	N/A (non-redeemable)
9.65% Debentures, Series 5 [2]	April 1992	April 2022	$ 972.00	$ 150 million	$ 249 million	N/A (non-redeemable)
8.80% Debentures, Series B	September 1995	September 2025	$ 995.10	$ 200 million	$ 200 million	15 [3]

(1) Interest is payable semi-annually.
(2) Series 4 debentures were exchangeable, at the holder's option, effective on April 8 of any year during the four-year period from 1996 to 1999 for Series 5 debentures; $99 million of Series 4 debentures were exchanged for Series 5 debentures.
(3) At any time prior to the maturity date set out in the table, the debentures are redeemable at our option, in whole at any time, or in part from time to time, on not less than 30 days' prior notice. The redemption price is equal to the greater of (i) the present value of the debentures discounted at the Government of Canada yield plus the redemption present value spread, or (ii) 100% of the principal amount thereof. In addition, accrued and unpaid interest, if any, will be paid to the date fixed for redemption.

The debentures became obligations of TELUS Communications Inc. pursuant to an amalgamation on January 1, 2001, are not secured by any mortgage, pledge or other charge and are governed by certain covenants, including a negative

pledge and a limitation on issues of additional debt, subject to a debt to capitalization ratio and interest coverage test. Effective June 12, 2009,

TELUS Corporation guaranteed the payment of the debentures' principal and interest.

(f) Long-term debt maturities

Anticipated requirements to meet long-term debt repayments, calculated upon such long-term debts owing as at December 31, 2015, for each of the next five fiscal years are as follows:

Long-term debt denominated in	Cdn. dollars	U.S. dollars				
			Derivative liability			
Years ending December 31 (millions)	Debt	Debt	(Receive) [1]	Pay	Total	Total
2016	$ 600	$ 256	$ (256)	$ 242	$ 242	$ 842
2017	700	—	—	—	—	700
2018	250	—	—	—	—	250
2019	1,000	—	—	—	—	1,000
2020	1,000	—	—	—	—	1,000
Thereafter	8,324	—	—	—	—	8,324
Future cash outflows in respect of long-term debt principal repayments	11,874	256	(256)	242	242	12,116
Future cash outflows in respect of associated interest and like carrying costs [2]	6,014	—	—	—	—	6,014
Undiscounted contractual maturities (*Note 4(c)*)	$ 17,888	$ 256	$ (256)	$ 242	$ 242	$ 18,130

(1) Where applicable, principal-related cash flows reflect foreign exchange rates at December 31, 2015.
(2) Future cash outflows in respect of associated interest and like carrying costs for commercial paper and amounts drawn under our credit facilities (if any) have been calculated based upon the rates in effect at December 31, 2015.

22 Common Share capital

(a) General

Our authorized share capital is as follows:

As at December 31	2015	2014
First Preferred Shares	1 billion	1 billion
Second Preferred Shares	1 billion	1 billion
Common Shares	2 billion	2 billion

Only holders of Common Shares may vote at our general meetings, with each holder of Common Shares entitled to one vote per Common Share held at all such meetings so long as not less than 66-2/3% of the issued and outstanding Common Shares are owned by Canadians. With respect to priority in payment of dividends and in the distribution of assets in the event of our liquidation, dissolution or winding-up, whether voluntary or involuntary, or any other distribution of our assets among our shareholders for the purpose of winding up our affairs, preferences are as follows: First Preferred Shares; Second Preferred Shares; and finally Common Shares.

As at December 31, 2015, approximately 48 million Common Shares were reserved for issuance, from Treasury, under a share option plan (see *Note 13(b)*).

(b) Purchase of Common Shares for cancellation pursuant to normal course issuer bid

As referred to in *Note 3*, we may purchase our Common Shares for cancellation pursuant to normal course issuer bids in order to maintain or adjust our capital structure. During the years ended December 31, 2015 and 2014, we purchased for cancellation our Common Shares, through the facilities of the Toronto Stock Exchange, the New York Stock Exchange and/or alternative trading platforms or otherwise as may be permitted by applicable securities laws and regulations, including privately negotiated block purchases, as set out in the following table.

	2015		2014	
Years ended December 31 (millions)	Common Shares	Cost	Common Shares	Cost
Normal course issuer bid period:				
January 1, 2014 — December 31, 2014 (bid maximum reached on September 23, 2014)	—	$ —	13	$ 500
October 1, 2014 — September 30, 2015 (bid maximum reached on September 14, 2015)	9	385	3	115
September 15, 2015 — September 14, 2016 [1]	7	250	—	—
	16	$ 635	16	$ 615

(1) On September 11, 2015, we announced that we had received approval for a normal course issuer bid to purchase and cancel up to 16 million of our Common Shares (up to a maximum amount of $500) from September 15, 2015, to September 14, 2016. Additionally, we have entered into an automatic share purchase plan with a broker for the purpose of permitting us to purchase our Common Shares under the normal course issuer bid at times when we would not

be permitted to trade in our own Common Shares during internal blackout periods, including during regularly scheduled quarterly blackout periods. Such purchases will be determined by the broker in its sole discretion based on parameters we have established. We record a liability and charge share capital and retained earnings for purchases that may occur during such blackout periods based upon the parameters of the normal course issuer bid as at the statement of financial position date.

In respect of our 2016 normal course issuer bid, during the month ended January 31, 2016, 1 million of our Common Shares were purchased by way of the automatic share purchase plan at a cost of $39.

The excess of the purchase price over the average stated value of Common Shares purchased for cancellation is charged to retained earnings. We cease to consider Common Shares outstanding on the date of our purchase of the Common Shares, although the actual cancellation of the Common Shares by the transfer agent and registrar occurs on a timely basis on a date shortly thereafter.

23 commitments and contingent liabilities

(a) Leases

We occupy leased premises in various locations and have land, buildings and equipment under operating leases. As referred to in *Note 15*, we have consolidated administrative real estate and, in some instances, this has resulted in subletting land and buildings. The future minimum lease payments under operating leases are as follows:

	2015			2014		
As at December 31 (millions) Years ending	**Operating leases with arm's-length lessors [1]**	**Operating leases with related party lessors [2]**	**Total**	**Operating leases with arm's-length lessors[1]**	**Operating lease with related party lessor [2]**	**Total**
1 year hence	**$ 206**	**$ 6**	**$ 212**	$ 214	$ 5	$ 219
2 years hence	**177**	**6**	**183**	191	6	197
3 years hence	**157**	**12**	**169**	159	6	165
4 years hence	**132**	**12**	**144**	138	6	144
5 years hence	**112**	**13**	**125**	116	6	122
Thereafter	**624**	**228**	**852**	640	110	750
	$ 1,408	**$ 277**	**$ 1,685**	$ 1,458	$ 139	$ 1,597

(1) Immaterial amounts for minimum lease receipts from sublet land and buildings have been netted against the minimum lease payments in this table. Minimum lease payments exclude occupancy costs and thus will differ from future amounts reported for operating lease expenses. As at December 31, 2015, commitments under operating leases for occupancy costs totalled $907 (2014 — $873).

(2) As set out in *Note 18(d),* we have entered into leases with the real estate joint ventures. This table includes 100% of the minimum lease payment amounts due under the leases (2014 — TELUS Garden lease only); of the total, $116 (2014 — $70) is due to our economic interests in the real estate joint ventures and $159 (2014 — $69) is due to our partners' economic interests in the real estate joint ventures. No amount related to the TELUS Sky lease letter of intent has been included in the December 31, 2014, amounts in this table.

Of the total amount above as at December 31, 2015:

- Approximately 37% (2014 — 36%) of this amount was in respect of our five largest leases, all of which were for office premises over various terms, with expiry dates ranging from 2024 to 2036 (2014 — ranging from 2024 to 2034); the weighted average term of these leases is approximately 15 years (2014 — 14 years).
- Approximately 29% (2014 — 28%) of this amount was in respect of wireless site leases; the weighted average term of these leases is approximately 17 years (2014 — 16 years).

See *Note 2* for significant changes to IFRS-IASB that are not yet effective and have not yet been applied, but will significantly affect the timing of the recognition of operating lease expenses, their recognition in the Consolidated statement of financial position, as well as their classification in the Consolidated statement of income and other comprehensive income and the Consolidated statement of cash flows.

(b) Indemnification obligations

In the normal course of operations, we provide indemnification in conjunction with certain transactions. The terms of these indemnification obligations range in duration. These indemnifications would require us to compensate the indemnified parties for costs incurred as a result of failure to comply with contractual obligations or litigation claims or statutory sanctions or damages that may be suffered by an indemnified party. In some cases, there is no maximum limit on these indemnification obligations. The overall maximum amount of an indemnification obligation will depend on future events and conditions and therefore cannot be reasonably estimated. Where appropriate, an indemnification obligation is recorded as a liability. Other than obligations recorded as liabilities at the time of such transactions, historically we have not made significant payments under these indemnifications.

See *Note 18(d)* for details regarding our guarantees to the real estate joint ventures.

As at December 31, 2015, we had no liability recorded in respect of indemnification obligations.

(c) Claims and lawsuits

General

A number of claims and lawsuits (including class actions) seeking damages and other relief are pending against us. As well, we have received notice of, or are aware of, certain possible claims (including intellectual property infringement claims) against us and, in some cases, numerous other wireless carriers and telecommunications service providers.

It is not currently possible for us to predict the outcome of such claims, possible claims and lawsuits due to various factors, including: the preliminary nature of some claims; uncertain damage theories and demands; an incomplete factual record; uncertainty concerning legal theories, procedures and their resolution by the courts, at both the trial and the appeal levels; and the unpredictable nature of opposing parties and their demands.

However, subject to the foregoing limitations, management is of the opinion, based upon legal assessments and information presently available, that it is unlikely that any liability, to the extent not provided for through insurance or otherwise, would have a material effect on our financial position and the results of our operations, including cash flows, with the exception of the following items. As referred to in *Note 1(b)*, this is a significant judgment for us.

Certified class actions

Certified class actions against us include:

- A 2004 class action brought in Saskatchewan against a number of past and present wireless service providers, including us, which alleged breach of contract, misrepresentation, unjust enrichment and violation of competition, trade practices and consumer protection legislation across Canada in connection with the collection of system access fees. In September 2007, a national class was certified by the Saskatchewan Court of Queen's Bench in relation to the unjust enrichment claim only; all appeals of this certification decision have now been exhausted.

- A 2008 class action brought in Ontario which alleged breach of contract, breach of the Ontario *Consumer Protection Act*, breach of the *Competition Act* and unjust enrichment, in connection with our practice of "rounding up" wireless airtime to the nearest minute and charging for the full minute. In November 2014, an Ontario class was certified by the Ontario Superior Court of Justice in relation to the breach of contract, breach of *Consumer Protection Act*, and unjust enrichment claims; all appeals of this decision have now been exhausted.

- A 2012 class action brought in Quebec alleging that we improperly unilaterally amended customer contracts to increase various wireless rates for optional services, contrary to the Quebec *Consumer Protection Act* and the *Civil Code of Quebec*. On June 13, 2013, the Superior Court of Quebec authorized this matter as a class action. This class action follows on a non-material 2008 class action brought in Quebec alleging that we improperly unilaterally amended customer contracts to charge for incoming SMS messages. On April 8, 2014, judgment was granted in part against TELUS in the 2008 class action. We had appealed that judgment, but have now settled both the 2008 and 2012 class actions. This settlement is subject to court approval.

- A 2005 class action brought against us in British Columbia alleging that we have engaged in deceptive trade practices in charging for incoming calls from the moment the caller connects to the network, and not from the moment the incoming call is connected to the recipient.

We believe that we have good defences to these actions. Should the ultimate resolution of these actions differ from management's assessments and assumptions, a material adjustment to our financial position and the results of our operations, including cash flows, could result. Management's assessments and assumptions include that a reliable estimate of any such exposure cannot be made considering the continued uncertainty about the causes of action.

Uncertified class actions

Uncertified class actions against us include:

- A 2005 class action brought against us in Alberta alleging that we have engaged in deceptive trade practices in charging for incoming calls from the moment the caller connects to the network, and not from the moment the incoming call is connected to the recipient. This is a companion class action to the certified 2005 British Columbia claim reference above;

- A 2008 class action brought in Saskatchewan against us and other Canadian telecommunications carriers alleging that, among other matters, we failed to provide proper notice of 9-1-1 charges to the public and have been deceitfully passing them off as government charges. A virtually identical class action was filed in Alberta at the same time, but the Alberta Court of Queen's Bench declared that class action expired as of 2009;

- A 2013 class action brought in British Columbia against us, other telecommunications carriers, and cellular telephone manufacturers alleging that prolonged usage of cellular telephones causes adverse health effects;

- A 2015 class action brought in Quebec against us, other telecommunications carriers, and various other defendants alleging that electromagnetic field radiation causes adverse health effects, creates a nuisance, and constitutes an abuse of right pursuant to Quebec laws;
- Class actions brought in 2014 against us in Quebec and Ontario on behalf of Public Mobile's customers, alleging that changes to the technology, services and rate plans made by us contravene our statutory and common law obligations;
- A number of class actions against Canadian telecommunications carriers alleging various causes of action in connection with the collection of system access fees, including:
  - Companion class actions to the certified 2004 Saskatchewan class action, filed in eight of the nine other Canadian provinces, the status of which is as follows:
    - British Columbia — dismissed;
    - Alberta — an application for an order that this claim has expired was dismissed in July 2015 but is under appeal;
    - Manitoba — stayed, but the stay is under appeal;
    - Ontario — an application to dismiss is pending;
    - Quebec, New Brunswick and Newfoundland and Labrador — dormant; and
    - Nova Scotia — an application by other defendants to stay the class action was initially unsuccessful, but on April 9, 2015, the Nova Scotia Court of Appeal ordered that the claim be permanently and unconditionally stayed against those defendants. The plaintiff has sought leave to appeal this decision to the Supreme Court of Canada;
  - A second class action filed in 2009 in Saskatchewan by plaintiff's counsel acting in the certified 2004 Saskatchewan class action, following the enactment of opt-out class action legislation in that province. This claim makes substantially the same allegations as the certified 2004 Saskatchewan class action, and was stayed by the court in December 2009 upon an application by the defendants to dismiss it for abuse of process, conditional on possible future changes in circumstance. The plaintiff's separate applications to appeal and lift the stay were denied in 2013;
  - A class action filed in 2011 in British Columbia alleging misrepresentation and unjust enrichment. On June 5, 2014, the B.C. Supreme Court dismissed the plaintiff's application for certification of this class action. The plaintiff's appeal of that decision was dismissed on June 9, 2015. The plaintiff has sought leave to appeal this decision to the Supreme Court of Canada; and
  - A class action filed in 2013 in Alberta by plaintiff's counsel acting in the certified 2004 Saskatchewan class action. This class action appears to be a nullity, and plaintiff's counsel filed a replacement class action in 2014. On March 10, 2015, the Alberta Court of Queen's Bench stayed the 2014 class action on an interim basis. On October 7, 2015, the Alberta Court of Appeal allowed an appeal of this decision and stayed the 2014 class action on a permanent basis.

We believe that we have good defences to these actions. Should the ultimate resolution of these actions differ from management's assessments and assumptions, a material adjustment to our financial position and the results of our operations could result. Management's assessments and assumptions include that reliable estimates of any such exposure cannot be made for the majority of these class actions considering continued uncertainty relating to the causes of action that may ultimately be pursued by the plaintiffs and certified by the courts and the nature of the damages that will be sought by the plaintiffs.

Intellectual property infringement claims

Claims and possible claims received by us include notice of one claim that certain wireless products used on our network infringe two third-party patents. The potential for liability and magnitude of potential loss cannot be readily determined at this time.

(d) Concentration of labour

In 2015, we commenced collective bargaining with the Telecommunications Workers Union, United Steel Workers Local Union 1944, to renew a collective agreement that expired on December 31, 2015; the expired contract covered approximately 40% of our Canadian workforce as at December 31, 2015.

24 related party transactions

(a) Transactions with key management personnel

Our key management personnel have authority and responsibility for overseeing, planning, directing and controlling our activities and consist of

our Board of Directors and our Executive Leadership Team.

Total compensation expense for key management personnel, and the composition thereof, is as follows:

Years ended December 31 (millions)	2015	2014
Short-term benefits	**$ 13**	$ 11
Post-employment pension [1] and other benefits	**14**	4
Termination benefits	**8**	—
Share-based compensation [2]	**30**	30
	$ 65	$ 45

(1) Our Executive Leadership Team members are either: members of our *Pension Plan for Management and Professional Employees of TELUS Corporation* and non-registered, non-contributory supplementary defined benefit pension plans; or members of one of our defined contribution pension plans.

(2) For the year ended December 31, 2015, share-based compensation is net of $1 (2014 — $6) of the effects of derivatives used to manage share-based compensation costs (*Note 13(c)*). For the year ended December 31, 2015, $(6) (2014 — $5) is included in share-based compensation representing restricted stock unit and deferred share unit expense arising from changes in the fair market value of the corresponding Common Shares, which is not affected by derivatives used to manage share-based compensation costs. For the year ended December 31, 2015, share-based compensation of $7 was included in restructuring costs (*Note 15*).

As disclosed in *Note 13*, we made awards of share-based compensation in 2015 and 2014. In respect of our key management personnel, for the year ended December 31, 2015, the total grant-date fair value of restricted stock units awarded was $30 million (2014 — $22 million). As most of these awards are cliff-vesting or graded-vesting and have multi-year requisite service periods, the expense will be recognized ratably over a period of years and thus only a portion of the 2015 and 2014 awards are included in the amounts in the table above.

During the year ended December 31, 2015, key management personnel (including retirees) exercised 98,702 share options (2014 — 245,320 share options) that had an intrinsic value of $2 million (2014 — $5 million) at the time of exercise, reflecting a weighted average price at the date of exercise of $42.04 (2014 — $40.54).

The liability amounts accrued for share-based compensation awards to key management personnel are as follows:

As at December 31 (millions)	2015	2014
Restricted stock units	**$ 21**	$ 50
Deferred share units [1]	**29**	31
	$ 50	$ 81

(1) Our *Directors' Deferred Share Unit Plan* provides that, in addition to his or her annual equity grant of deferred share units, a director may elect to receive his or her annual retainer and meeting fees in deferred share units, Common Shares or cash. Deferred share units entitle directors to a specified number of, or a cash payment based on the value of, our Common Shares. Deferred share units are paid out when a director ceases to be a director, for any reason, at a time elected by the director in accordance with the *Directors' Deferred Share Unit Plan*; during the year ended December 31, 2015, $3 (2014 — $7) was paid out.

Employment agreements with members of the Executive Leadership Team typically provide for severance payments if an executive's employment is terminated without cause: generally 18—24 months of base salary, benefits and accrual of pension service in lieu of notice and 50% of base salary in lieu of an annual cash bonus. In the event of a change in control, the Executive Leadership Team members are not entitled to treatment any different than that given to our other employees with respect to non-vested share-based compensation.

(b) Transactions with defined benefit pension plans

During the year ended December 31, 2015, we provided management and administrative services to our defined benefit pension plans; the charges for these services were on a cost recovery basis and amounted to $7 million (2014 — $5 million).

(c) Transactions with real estate joint ventures

During the years ended December 31, 2015 and 2014, we had transactions with the real estate joint ventures, which are related parties, as set out in *Note 18* and *Note 23(a)*.

(a) Statements of financial position

As at December 31 (millions)	Note	2015	2014
Accounts receivable			
Customer accounts receivable	*4(b)*	**$ 1,199**	$ 1,214
Accrued receivables — customer		**128**	120
Allowance for doubtful accounts	*4(b)*	**(52)**	(44)
		1,275	1,290
Accrued receivables — other		**153**	193
		$ 1,428	$ 1,483
Inventories [1]			
Wireless handsets, parts and accessories		**$ 319**	$ 284
Other		**41**	36
		$ 360	$ 320
Other long-term assets			
Pension assets	*14(a)*	**$ 356**	$ 49
Investments		**69**	49
Real estate joint ventures	*18(c)*	**25**	21
Real estate joint venture advances	*18(c)*	**3**	120
Other		**140**	115
		$ 593	$ 354
Accounts payable and accrued liabilities			
Accrued liabilities		**$ 843**	$ 857
Payroll and other employee related liabilities		**410**	399
Restricted stock units liability		**58**	122
		1,311	1,378
Trade accounts payable		**476**	458
Interest payable		**134**	105
Other		**69**	78
		$ 1,990	$ 2,019
Advance billings and customer deposits			
Advance billings		**$ 706**	$ 686
Regulatory deferral accounts		**16**	17
Deferred customer activation and connection fees		**19**	21
Customer deposits		**19**	29
		$ 760	$ 753
Other long-term liabilities			
Pension and other post-retirement liabilities	*14(a)*	**$ 451**	$ 690
Other		**150**	128
Restricted stock units and deferred share units liabilities		**57**	60
		658	878
Regulatory deferral accounts		**—**	16
Deferred customer activation and connection fees		**30**	37
		$ 688	$ 931

(1) Cost of goods sold for the year ended December 31, 2015, was $1,806 (2014 — $1,621).

(b) Statements of cash flows

Years ended December 31 (millions)	Note	2015	2014
Net change in non-cash operating working capital			
Accounts receivable		**$ 55**	$ (20)
Inventories		**(40)**	3
Prepaid expenses		**(22)**	(31)
Accounts payable and accrued liabilities		**(60)**	173
Income and other taxes receivable and payable, net		**202**	(165)
Advance billings and customer deposits		**7**	20
Provisions		**72**	(44)
		$ 214	$ (64)

Years ended December 31 (millions)	Note	2015	2014
Cash payments for capital assets, excluding spectrum licences			
Capital asset additions, excluding spectrum licences			
Capital expenditures			
Property, plant and equipment	*16*	**$ (2,046)**	$ (1,918)

Intangible assets	*17(a)*	**(531)**	(441)
		(2,577)	(2,359)
Asset retirement obligations included in additions		**(65)**	(172)
		(2,642)	(2,531)
Non-cash items included above			
Change in associated non-cash investing working capital		**60**	(6)
Non-cash change in asset retirement obligation		**60**	164
		120	158
		$ (2,522)	$ (2,373)
Cash payments for acquisitions and related investments			
Acquisitions and related investments		**$ (6)**	$ (45)
Cash acquired		**—**	1
Change in associated non-cash investing working capital and non-current provisions		**(4)**	(5)
		$ (10)	$ (49)
Dividends paid to holders of Common Shares	*12*		
Current period dividends			
Declared		**$ (1,011)**	$ (935)
Of which was payable at end of period		**263**	244
		(748)	(691)
Dividends declared in a previous fiscal period, payable in current fiscal period		**(244)**	(222)
		$ (992)	$ (913)
Purchase of Common Shares for cancellation (excluding changes in liability for automatic share purchase plan)			
Normal course issuer bid purchase of Common Shares		**$ (635)**	$ (615)
Change in associated non-cash financing working capital		**7**	3
		$ (628)	$ (612)
Long-term debt issued			
TELUS Corporation commercial paper		**$ 5,707**	$ 4,046
TELUS Corporation credit facility		**780**	1,034
TELUS Corporation notes		**2,732**	2,193
		$ 9,219	$ 7,273
Redemptions and repayment of long-term debt			
TELUS Corporation commercial paper		**$ (5,581)**	$ (3,916)
TELUS Corporation credit facility		**(780)**	(1,034)
TELUS Corporation notes		**—**	(500)
TELUS Communications Inc. debentures		**(125)**	—
		$ (6,486)	$ (5,450)
Interest paid			
Amount paid in respect of interest expense		**$ (458)**	$ (399)
Amount paid in respect of long-term debt prepayment premium		**—**	(13)
		$ (458)	$ (412)

TELUS CORPORATION

Management's discussion and analysis

2015

Caution regarding forward-looking statements

This document contains forward-looking statements about expected events and the financial and operating performance of TELUS Corporation. The terms *TELUS*, *the Company*, *we, us* and *our* refer to TELUS Corporation and where the context of the narrative permits or requires, its subsidiaries. Forward-looking statements include statements relating to annual targets, outlook, updates, our multi-year dividend growth program, our multi-year share purchase program, and trends. Forward-looking statements are typically identified by the words *assumption, goal, guidance, objective, outlook, strategy, target* and other similar expressions, or future or conditional verbs such as *aim, anticipate, believe, predict, could, expect, intend, may, plan, seek, should, strive* and *will*. By their nature, forward-looking statements do not refer to historical facts, are subject to inherent risks and require us to make assumptions. There is significant risk that forward-looking statements will not prove to be accurate. Accordingly, readers are cautioned not to place undue reliance on forward-looking statements. Except as required by law, we disclaim any intention or obligation to update or revise any forward-looking statements. Our general outlook and assumptions for 2016 are presented in

Section 9 General trends, outlook and assumptions in this Management's discussion and analysis (MD&A).

Factors that could cause actual performance to differ materially from the forward-looking statements made herein and in other TELUS filings include, but are not limited to, the following:

- Competition including: continued intense rivalry across all services among wireless and wireline telecommunications companies, cable-TV providers, other communications companies and over-the-top (OTT) services, which, among other things, places pressures on average revenue per subscriber unit per month (ARPU) and churn for all services; mergers and acquisitions of industry competitors, including the integration of cable-TV and wireless companies; the potential entry of new competitors; competition from global players for international roaming services; our ability to continue to retain customers through an enhanced customer service experience; pressures on wireless ARPU and churn from market conditions and government actions, customer usage patterns, flat-rate pricing trends for voice and data, inclusive long distance plans for voice, moderating growth in postpaid market penetration and increasing availability of Wi-Fi networks for data; pressures on high-speed Internet and TV ARPU and churn resulting from market conditions, government actions and customer usage patterns; residential network access line (NAL) losses; subscriber additions and retention volumes and associated costs for wireless, TV and high-speed Internet services; competition for wireless spectrum; and our ability to obtain and offer content on a timely basis across multiple devices on wireless and TV platforms at a reasonable cost.

- Technological substitution including: reduced utilization and increased commoditization of traditional wireline voice local and long distance services from impacts of OTT applications and wireless substitution, and overall slower subscriber growth in the wireline segment; the increasing number of households that have only wireless and/or Internet-based telephone services; continuation of wireless voice ARPU declines as a result of, among other factors, substitution to messaging and OTT applications; substitution to increasingly available Wi-Fi services from wireless services; and OTT Internet protocol (IP) services that may displace TV and entertainment services, and impact revenue.

- Technology including: subscriber demand for data that challenges wireless networks and spectrum capacity levels; our reliance on legacy systems and information technology; technology options, evolution paths and roll-out plans for wireline and wireless networks (including broadband initiatives, such as fibre-to-the-premises (FTTP) and wireless small-cell deployment); our reliance on wireless network access agreements; choice of suppliers and those suppliers' ability to maintain and service their product lines; supplier concentration and market power for network equipment, TELUS TV® and wireless handsets; the performance of long-term evolution (LTE) wireless technology; our expected long-term need to acquire additional spectrum capacity through future spectrum auctions and from third parties to address increasing demand for data; deployment and operation of new wireless networks and success of new products, new services and supporting systems, including the Internet of Things (IoT) services for Internet-connected devices; deployment and operation of new wireline broadband networks at a reasonable cost and availability, and success of new products and services to be rolled out on such networks; availability of resources and ability to build out adequate broadband capacity; network reliability and change management (including migration risks related to technology and customer retention, to new, more efficient Internet data centres (IDCs) and realizing the expected benefits); timing of decommissioning of certain legacy wireline networks, systems and services to reduce operating costs; timing of decommissioning of CDMA and iDEN wireless networks to redeploy spectrum and reduce operating costs, and the associated subscriber migration costs and customer retention risks; and success of upgrades and evolution of TELUS TV technology, which depend on third-party suppliers.

- Regulatory decisions and developments including: potential of government intervention to further increase wireless competition; the Canadian Radio-television and Telecommunications Commission (CRTC) wireless wholesale services review, in which it was determined that the CRTC will regulate wholesale GSM-based domestic roaming rates and the setting of such rates; future spectrum auctions (including limitations on established wireless providers, spectrum set-aside favouring certain carriers and other advantages provided to new and foreign participants, and the amount and cost of spectrum acquired); restrictions on the purchase, sale and transfer of spectrum licences; the undetermined long-term impact of the CRTC's wireline wholesale services review, which concluded that wholesale competitors shall receive regulated access to FTTP facilities owned by incumbent Internet service providers; increased subsidy requirements for telecommunications facilities in Yukon, Nunavut and the Northwest Territories, and possible changes to the scope and nature of basic service obligations, including higher minimum Internet access speeds; the CRTC's new code of conduct for TV services; vertical integration by competitors moving into broadcast content ownership and timely and effective enforcement of related regulatory safeguards; ongoing monitoring and compliance with restrictions on non-Canadian ownership of TELUS Common Shares; modification, interpretation and application of tower sharing and roaming rules; and the non-harmonization of provincial consumer protection legislation, particularly in light of the CRTC's mandatory national Wireless Code (the Code) in effect since December 2, 2013, and pressures on retention costs and other operational challenges resulting from the retroactive application of the Code, which led to two-year and three-year customer contracts ending coterminously starting in June 2015.

- Economic growth and fluctuations including: the state of the economy in Canada, which may be influenced by economic developments outside of Canada; future interest rates; inflation; unemployment levels; effects of low oil prices; effects of low business spend (reducing investments and cost structure); pension investment returns, funding and discount rates; and Canada: U.S. dollar exchange rates.

- Capital expenditure levels and potential outlays for spectrum licences in spectrum auctions or from third parties , due to: our ongoing deployment of wireless LTE and future technologies; utilizing newly acquired spectrum; our wireline broadband initiatives, including connecting more homes and businesses directly to fibre; investments in network resiliency and reliability; subscriber demand for data; evolving systems and business processes; implementing efficiency initiatives; supporting large complex deals; and future wireless spectrum auctions held by the Department of Innovation, Science and Economic Development. Our capital expenditure levels could be impacted by the achievement of our targeted operational and financial results.

- Ability to successfully implement cost reduction initiatives and realize planned savings, net of restructuring and other costs, without losing customer service focus or negatively affecting business operations. Initiatives include: our earnings enhancement program to drive

improvements in earnings before interest, income taxes, depreciation and amortization (EBITDA), including the initiative announced in November 2015; business integrations; business process outsourcing; offshoring and reorganizations, including any full-time equivalent (FTE) employee reduction programs; procurement initiatives; and real estate rationalization. Additional cost reduction initiatives may be needed if we do not achieve our targeted operational and financial results.

- Financing and debt requirements including our ability to carry out financing activities and our ability to maintain investment grade credit ratings in the range of BBB+ or the equivalent.

- Ability to sustain our dividend growth program of circa 10% per annum through 2016 and our ability to sustain and complete our multi-year share purchase program through 2016. These programs may be affected by factors such as regulatory decisions and developments, our earnings and free cash flow, our levels of capital expenditures and spectrum licence purchases, the competitive environment and economic performance in Canada. Quarterly dividend decisions are subject to assessment and determination by our Board of Directors (Board), based on the Company's financial position and outlook. The share purchase program may be affected by a change in our intention to purchase shares, and the assessment and determination of our Board from time to time. Consequently, there can be no assurance that these programs will be maintained through 2016 and/or renewed thereafter.

- Human resource matters including: recruitment, retention and appropriate training in a highly competitive industry; the future outcome of collective bargaining for an agreement with the Telecommunications Workers Union (TWU), United Steel Workers Local Union 1944, which expired at the end of 2015; and the level of employee engagement.

- Process risks including: our reliance on legacy systems and ability to implement and support new products and services and business operations; our ability to implement effective change management for system replacements and upgrades, process redesigns and business integrations; implementation of complex large enterprise deals that may be adversely impacted by available resources, system limitations and degree of co-operation from other service providers; our ability to successfully manage operations in foreign jurisdictions; information security and privacy breaches, including data loss or theft of data; intentional threats to our infrastructure and business operations; and real estate joint venture re-development risks.

- Tax matters including: complex tax laws that may be subject to interpretation by the tax authorities that may differ from our interpretations; changes in tax laws, including tax rates; elimination of income tax deferrals through the use of different tax year-ends for operating partnerships and corporate partners; and international tax complexity and compliance.

- Business continuity events including: our ability to maintain customer service and operate our networks in the event of human error or human-caused threats, such as electronic attacks and equipment failures that could cause various degrees of network outages; supply chain disruptions; natural disaster threats; epidemics and pandemics; and the completeness and effectiveness of business continuity and disaster recovery plans and responses.

- Litigation and legal matters including: our ability to defend successfully against investigations, claims and lawsuits, including class actions pending against us and possible class actions based on consumer claims, data or security breaches and secondary market liability; and the complexity of legal compliance in domestic and foreign jurisdictions.

- Acquisitions or divestitures including: our ability to successfully integrate acquisitions or complete divestitures in a timely manner, and realize expected strategic benefits.

- Health, safety and environmental developments and other risk factors discussed herein and listed from time to time in our reports and public disclosure documents, including our annual report, annual information form, and other filings with securities commissions or similar regulatory authorities in Canada (on SEDAR at **sedar.com**) and in our filings with the Securities and Exchange Commission (SEC) in the United States, including Form 40-F (on EDGAR at **sec.gov**). *Section 10: Risks and risk management* in this MD&A is incorporated by reference in this cautionary statement.

Management's discussion and analysis
February 11, 2016

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1. Introduction

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of Management's discussion and analysis (MD&A).

1.1 Preparation of the MD&A

The following sections are a discussion of the consolidated financial position and financial performance of TELUS for the year ended December 31, 2015, and should be read together with TELUS' December 31, 2015 audited Consolidated financial statements (subsequently referred to as the Consolidated financial statements). The generally accepted accounting principles (GAAP) we use are the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). Our Consolidated financial statements comply with IFRS-IASB and Canadian GAAP. Our use of the term IFRS in this MD&A is a reference to these standards. In our discussion, we also use certain non-GAAP financial measures, such as earnings before interest, income taxes, depreciation and amortization (EBITDA), to evaluate our performance, monitor compliance with debt covenants and manage our capital structure. These measures are defined, qualified and reconciled with their nearest GAAP measures in *Section 11.1*. All currency amounts are in Canadian dollars, unless otherwise specified.

Our disclosure controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported to senior management on a timely basis, so that appropriate decisions can be made regarding public disclosure. The MD&A and the Consolidated financial statements were reviewed by TELUS' Audit Committee and approved by the Board of Directors for issuance on February 11, 2016.

1.2 Who we are

TELUS is one of Canada's largest telecommunications companies, with $12.5 billion of annual revenues and 12.5 million customer connections, including 8.5 million wireless subscribers, 1.6 million Internet subscribers, 1.5 million wireline residential network access lines (NALs) and 1.0 million TELUS TV customers. We no longer include business NALs in our reported subscriber base (see *Section 5.5*). We employ approximately 47,640 employees, including 26,960 in Canada. In support of our philosophy to give where we live, TELUS, our team members and retirees have contributed $440 million to charitable and not-for-profit organizations and volunteered 6.8 million hours of service to local communities since 2000. We were named to the Dow Jones Sustainability North America Index (the Index) in 2015, for the 15th consecutive year. The Index ranks the performance of the world's sustainability leaders based on a comprehensive assessment of long-term economic, environmental and social criteria. We are the only Canadian telecommunications company and one of two telecommunications companies in North America to be named to the Index.

Our strategic intent, culture and significant accomplishments

Our strategic intent is to unleash the power of the Internet to deliver the best solutions to Canadians at home, in the workplace and on the move. Our culture is anchored in our TELUS leadership values and customers first commitments, both of which were developed collaboratively by team members to guide our actions and interactions with our customers and with each other. In 2015, we delivered an outstanding customer experience, evidenced by the lowest blended wireless churn rate we have recorded since we became a national carrier 15 years ago. In addition, we had the lowest postpaid customer churn rate among wireless carriers in 2015, on a national basis. In 2015, we also had the most rapidly growing wireline business in Canada, with strong EBITDA — excluding restructuring and other costs growth and margin expansion. In December 2015, the office of the Commissioner for Complaints for Telecommunications Services (CCTS) issued its annual report. For the fourth consecutive year, our approach to customer service resulted in a substantial decline in the number of complaints submitted to the CCTS — 29% fewer than in the previous year. Despite a substantial increase in the number of new customers added to both our wireless and wireline services, TELUS once again was the subject of the fewest complaints of any of the major national carriers and as compared to certain new entrants.

The environment in which we operate

Economic growth

We estimate that the rate of economic growth in Canada was 1.1% in 2015 and our assumption for 2016 is approximately 1.7%, both of which are based on a composite of estimates from Canadian banks and other sources. For our incumbent local exchange carrier (ILEC) provinces in Western Canada, we estimate that economic growth in British Columbia was 2.3% in 2015 and will be in the range of 2.0% to 2.5% in 2016, and that economic growth (contraction) in Alberta was approximately (1.0)% in 2015 and will be in the range of 0.5% to 1.0% in 2016, in part due to low oil prices. The Bank of Canada's January 2016 Monetary Policy Report estimated economic growth in Canada was 1.2% in 2015, and the Bank expects the economy to gradually strengthen with estimates of economic growth of 1.4% in 2016 and 2.5% in 2017. In respect of the national unemployment rate, Statistics Canada's Labour Force Survey reported a rate of 7.1% for December 2015 (7.1% reported for September 2015 and 6.6% reported for December 2014).

Canadian telecommunications industry growth

We estimate that growth in industry revenues (including TV revenue and excluding media revenue) was approximately 2% in 2015 (2% in 2014). We estimate Canadian wireless industry revenue and EBITDA growth in 2015 was approximately 7% and approximately 5%, respectively (both approximately 5% in 2014), while the Canadian wireline industry continued to experience low revenue growth and flat or declining EBITDA. (See *Section 9 General trends, outlook and assumptions.*)

Regulatory developments

There were numerous regulatory developments in 2015 and early 2016, which are described in *Section 10.4 Regulatory matters*. Following the federal election in Canada in October 2015, the new government announced that the responsibilities of the former Industry Canada would fall under the new Department of Innovation, Science and Economic Development.

1.3 Highlights of 2015

Leadership changes

On August 10, 2015, we announced leadership changes following an extensive review by our Board of Directors (Board), which included the resignation of Joe Natale as President and Chief Executive Officer (CEO) and as a member of the Board, with Darren Entwistle resuming the role of President and CEO and Dick Auchinleck being named independent Chair of the Board. Darren and Dick have both agreed to serve in these capacities on a long-term basis.

Wireless spectrum auctions (AWS-3, 2500 MHz, and residual 700 MHz and AWS-3 bands)

During 2015, we successfully acquired 21 AWS-3 wireless spectrum licences in the Department of Innovation, Science and Economic Development's (formerly Industry Canada) AWS-3 wireless spectrum auction and a residual spectrum licences auction, as well as 122 wireless licences in the Department of Innovation, Science and Economic Development's 2500 MHz wireless spectrum auction. In aggregate, these licences cost approximately $2 billion and increased our national spectrum holdings by approximately 57 MHz to approximately 151 MHz.

Fibre-optic network investments of $1 billion in both Edmonton and Vancouver

During the second and third quarters of 2015, we announced $1 billion fibre-optic investments in each of the cities of Edmonton and Vancouver over the next several years. These investments are part of our broader fibre-optic strategy to bring our network of the future to communities across British Columbia, Alberta and Eastern Quebec. The fibre-optic network will create the foundation for access to future solutions like the connected home, smart cities, Internet of Things (IoT) services and our health applications, and will form the backbone of our wireless network. In addition, a more extensive deployment of fibre-optic networks is expected to help reduce the costs of providing service over time.

Returning significant cash to our shareholders through our share purchase program and dividends

We returned approximately $628 million to our shareholders in 2015 under our normal course issuer bid (NCIB) program. We also increased our dividend per share by 11% to $1.68 from $1.52 in 2014, in alignment with our announced intention of sustained dividend growth of circa 10% per annum through 2016. For additional information on our multi-year share purchase program and dividend growth program, see *Section 4.3*. Also, see *Caution regarding forward-looking statements — Ability to sustain our dividend growth program of circa 10% per annum through 2016 and our ability to sustain and complete our multi-year share purchase program through 2016.*

Closing of debt offerings

On March 27 and December 8, 2015, we closed debt offerings of $1.75 billion and $1.0 billion, respectively, to enable us to continue investing in future sustainable growth. We used the proceeds of the March 27 offering to fund our wireless spectrum licence purchases in the AWS-3 spectrum auction and to repay indebtedness drawn from our credit facility, as well as for general corporate purposes. The net proceeds from the December 8 offering were used to repay approximately $956 million of outstanding commercial paper, and will be used to repay, on maturity, a portion of the $600 million principal amount outstanding on the Company's Series CI Notes due May 25, 2016, and the balance to be used for general corporate purposes. These debt issues contributed to an increase in our average term to maturity of long-term debt (excluding commercial paper) to 11.1 years at December 31, 2015, from 10.9 years at the end of 2014, and a decrease in our weighted average cost of long-term debt to 4.32% at December 31, 2015, from 4.72% at the end of 2014. These debt issues also contributed to an increase in our Net debt to EBITDA — excluding restructuring and other costs to 2.66 times at December 31, 2015, from 2.19 times at the end of 2014. (See *Section 7.4 Cash provided by financing activities*.)

Increase in our 2015 restructuring charge

In the second quarter of 2015, we revised our assumption for Restructuring and other costs to $125 million from our original assumption of $75 million to support ongoing operational efficiency initiatives. In November 2015, we increased our estimated 2015 restructuring charge from approximately $125 million to approximately $250 million (actual result $226 million), related to ongoing and incremental operational efficiencies, including a net reduction of approximately 1,500 full-time positions over several quarters. This efficiency initiative is expected to generate annual recurring savings of between $100 million and $125 million without affecting customer service or our significant infrastructure investments.

Consolidated highlights

Years ended December 31 ($ millions, unless noted otherwise)	2015	2014	Change
Consolidated statements of income			
Operating revenues	**12,502**	12,002	4.2%
Operating income	**2,353**	2,382	(1.2)%
Income before income taxes	**1,906**	1,926	(1.0)%
Net income	**1,382**	1,425	(3.0)%
Earnings per share (EPS) ($)			
Basic EPS	**2.29**	2.31	(0.9)%
Adjusted basic EPS [1]	**2.58**	2.41	6.8%
Diluted EPS	**2.29**	2.31	(0.9)%
Dividends declared per Common Share ($)	**1.68**	1.52	10.5%
Basic weighted-average Common Shares outstanding (millions)	**603**	616	(2.1)%
Consolidated statements of cash flows			
Cash provided by operating activities	**3,542**	3,407	4.0%
Cash used by investing activities	**(4,477)**	(3,668)	(22.1)%
Capital expenditures (excluding spectrum licences and non-monetary transactions) [2]	**(2,577)**	(2,359)	(9.2)%
Cash provided (used) by financing activities	**1,098**	(15)	n/m
Other highlights			
Subscriber connections [3] (thousands)	**12,495**	12,228	2.2%
EBITDA [1]	**4,262**	4,216	1.1%
Restructuring and other costs included in EBITDA [1]	**226**	75	n/m
EBITDA — excluding restructuring and other costs [1]	**4,488**	4,291	4.6%
EBITDA margin — excluding restructuring and other costs [1, 4] (%)	**35.9**	35.8	0.1pts.

Free cash flow [1]	**1,078**	1,057	2.0%
Net debt to EBITDA — excluding restructuring and other costs [1] (times)	**2.66**	2.19	0.47

Notations used in MD&A: n/m — not meaningful; pts. — percentage points.

(1) Non-GAAP and other financial measures. See *Section 11.1.*

(2) Capital expenditures (excluding spectrum licences and non-monetary transactions) include assets purchased, but not yet paid for, and consequently differ from Cash payments for capital assets, excluding spectrum licences, on the Consolidated statements of cash flows.

(3) The sum of active wireless subscribers, residential NALs, high-speed Internet access subscribers and TELUS TV subscribers (Optik TV™ and TELUS Satellite TV® subscribers) measured at the end of the respective periods based on information in billing and other systems. Effective January 1, 2014, subscriber connections have been restated to exclude 25,000 dial-up Internet subscribers and include 222,000 Public Mobile prepaid subscribers in the opening subscriber balances. TELUS acquired 100% of Public Mobile, a Canadian wireless communications operator focused on the Toronto and Montreal markets, in November 2013. Effective December 31, 2015, business NALs has been removed from the reported subscriber base due to its diminishing relevance as a key performance indicator (for example, the impact of migrations from voice lines to IP services has led to business NAL losses without a similar decline in revenue). Accordingly, December 31, 2014 has been retrospectively adjusted to exclude 1,613,000 business NALs in the reported subscriber balances. As of December 31, 2015, the business NAL subscriber base was 1,586,000 and business NAL losses were 27,000 in 2015, as compared to business NAL gains of 2,000 in 2014. Total subscriber connections, if business NALs were included, would have been 14,081,000 in 2015, or an increase of 1.7% from 2014.

(4) EBITDA — excluding restructuring and other costs, as a percentage of operating revenues.

Operating highlights

- **Consolidated operating revenues** increased by $500 million or 4.2% in 2015, as a result of growth in wireless network revenue, wireless equipment revenue and wireline data revenue, partially offset by declines in legacy wireline voice and other wireline service and equipment revenues.

  Wireless network revenue increased by $290 million or 4.8% in 2015 as a result of $438 million or 15% higher wireless data revenue partly offset by $148 million or a 4.9% decline in wireless voice revenue. The growth in wireless data revenue was mainly due to growth in the wireless subscriber base, an increased but moderating proportion of higher-rate two-year plans in the revenue mix, a growing proportion of postpaid subscribers in our customer base, and increases in data roaming and chargeable data usage, partly offset by the impacts of the economic slowdown, particularly in Alberta. The decline in wireless voice revenue was primarily from increased adoption of unlimited nationwide voice plans and a continued but moderating substitution of voice to data services. Wireless equipment and other revenues increased by $56 million or 9.7% in 2015 as a result of increased retention volumes, in part from the simultaneous expiration of two-year and three-year contracts starting in June 2015, and higher-priced smartphones in the sales mix, partially offset by lower gross additions and lower Black's Photography revenue due to the closure of stores in August 2015.

  Wireless blended average revenue per subscriber unit per month (ARPU) was $63.45, up $1.20 or 1.9% from 2014. The increase was driven by the effects of higher-rate two-year plans, a more favourable postpaid subscriber mix, and growth in data roaming and data usage, partly offset by a decline in voice revenue, elimination of charges for paper bills and the impact of the economic slowdown, particularly in Alberta. Growth in chargeable data usage slowed during the year as a result of increased data allotments in Your Choice™ plans commencing in June 2015, customer reactions to increased frequency of real-time data usage notifications as part of our customers first initiatives, and the launch of our US Easy Roam™ service in July 2015 for customers travelling in the United States. These data usage initiatives are aligned with our priority of putting customers first, and consequently are expected to drive margin accretion through higher customer satisfaction. Postpaid subscribers represented 86.9% of the total subscriber base at December 31, 2015, compared to 85.8% at December 31, 2014.

  Wireline data revenue increased by $300 million or 8.6% in 2015, due to revenue growth in Internet and enhanced data services from a larger subscriber base and higher revenue per customer primarily from upgrades to faster Internet speeds and larger usage rate Internet plans, the introduction of usage-based billing and certain rate increases in late 2014. Wireline data revenue also increased due to growth in business process outsourcing services, growth in TELUS TV services from a larger subscriber base and increased TELUS Health services revenue, net of lower wireline data equipment sales. The increase in wireline data revenue was partly offset by ongoing declines in legacy wireline voice services, other wireline services and equipment revenues, and other operating income of $146 million or 7.5% in 2015, as well as the impact of the economic slowdown, continued competitive pressures and product substitution.

- During the year ended December 31, 2015, our **subscriber connections** increased by 267,000. This growth reflects a 2.1% increase in wireless subscribers, a 9.7% growth in TELUS TV subscribers and a 6.2% increase in high-speed Internet subscribers, partly offset by a 5.7% decline in residential NALs.

  Our postpaid wireless subscriber net additions were 244,000 in 2015, a decrease of 113,000 from 2014. The decrease reflects lower gross additions due to the economic slowdown, particularly in Alberta, increased competitive intensity, moderating growth in industry penetration and the effect of higher handset prices on customer demand, as well as a modest increase in our postpaid subscriber churn rate. Our average monthly postpaid subscriber churn rate was 0.94% in 2015, as compared to 0.93% in 2014. This increase in postpaid churn was primarily due to increased competitive intensity as two-year and three-year contracts began expiring concurrently in June 2015, as well as the effects of the economic slowdown, particularly in Alberta, and our focused marketing efforts on higher-value loading. Our blended churn rate was 1.26% in 2015, as compared to 1.41% in 2014, representing our lowest annual blended churn rate since we became a national carrier 15 years ago. This improvement in blended churn was due to the effects of our continued focus on our customers first

initiatives and our clear and simple approach, which more than offset the economic slowdown, competitive intensity and our focused marketing efforts on higher-value loading impacting postpaid churn noted above.

Our wireline subscriber net additions were 91,000 in 2015, a decrease of 3,000 from 2014. Net additions of high-speed Internet subscribers were 91,000 in 2015, an increase of 11,000 driven by the expansion of our high-speed broadband footprint and the pull-through impact from the continued bundling with Optik TV, partly offset by an increase in our customer churn rate. Net additions of TELUS TV subscribers were 89,000 in 2015, representing a decrease of 12,000 from 2014 as a result of slower growth for paid TV services, lower oil sands construction camp activity, and increasing competition from over-the-top (OTT) services and technology substitution, partly offset by the continued expansion of our high-speed broadband footprint. In 2015, our TELUS TV subscriber base surpassed the one-million-subscriber mark. Residential NAL losses were 89,000 in 2015, as compared to 87,000 in 2014. The residential NAL losses continue to reflect the ongoing trend of substitution to wireless and Internet-based services, including losses to competitors, partially mitigated by the success of our bundled service offerings.

- Consolidated **EBITDA** increased by $46 million or 1.1% in 2015. This increase reflects growth in wireless network revenues and wireline data revenues, improvements in Internet, TV, business process outsourcing and TELUS Health margins, and executing on our operational efficiency initiatives, all partly offset by higher restructuring and other costs, higher wireless retention costs and continued declines in legacy wireline voice revenues. EBITDA — excluding restructuring and other costs increased by $197 million or 4.6% in 2015.

- **Operating income** decreased by $29 million or 1.2% in 2015. The decrease reflected an increase in total depreciation and amortization expenses from a higher asset base and the impact of our continuing program of asset life studies, partly offset by growth in EBITDA.

- **Income before income taxes** decreased by $20 million or 1.0% in 2015, reflecting lower operating income as noted above, partly offset by a decrease in financing costs. The decrease in financing costs was primarily due to higher interest income, mainly from the settlement of prior years' income tax-related matters, higher foreign exchange gains, and a debt prepayment premium incurred in 2014, partly offset by higher interest on long-term debt and an increase in employee defined benefit plans net interest costs. Higher interest on long-term debt resulted from an increase in average long-term debt outstanding, net of a lower weighted average cost of long-term debt (*see Financing costs in Section 5.3).*

- **Income taxes** increased by $23 million or 4.6% in 2015, primarily from a $48 million non-cash adjustment to revalue deferred income tax liabilities for an increase to the Alberta provincial corporate income tax rate from 10% to 12% effective July 1, 2015, partly offset by a year-over-year increase in recoveries related to the settlement of prior years' income tax-related matters (excluding related interest income) of $30 million and lower income before income taxes.

- **Net income** decreased by $43 million or 3.0% in 2015 as a result of an increase in depreciation and amortization expenses and higher income tax expenses, partly offset by growth in EBITDA and lower financing costs. Excluding the effects of restructuring and other costs, long-term debt prepayment premiums, income tax-related adjustments and asset retirement from the closure of Black's Photography stores, Net income increased by $70 million or 4.7% in 2015.

Analysis of Net income

Years ended December 31 ($ millions)	2015	2014	Change
Net income	**1,382**	1,425	(43)
Add back (deduct):			
Restructuring and other costs, after income taxes	**166**	56	110
Long-term debt prepayment premium, after income taxes	**—**	10	(10)
Unfavourable (favourable) income tax-related adjustments	**1**	(6)	7
Asset retirement from closure of Black's Photography, after income taxes	**6**	—	6
Adjusted net income	**1,555**	1,485	70

- **Basic EPS** decreased by $0.02 or 0.9% in 2015. The decline in basic EPS is driven by the decline in Net income. The reduction in the number of shares that resulted from our completed 2015 and advanced 2016 NCIB programs, net of share option exercises, contributed approximately $0.05 year over year in basic EPS in 2015. Excluding the effects of restructuring and other costs, long-term debt prepayment premium, income tax-related adjustments and asset retirement from the closure of Black's Photography stores, basic EPS increased by $0.17 or 6.8% in 2015.

Analysis of basic EPS

Years ended December 31 ($)	2015	2014	Change
Basic EPS	**2.29**	2.31	(0.02)
Add back (deduct):			
Restructuring and other costs, after income taxes, per share	**0.28**	0.09	0.19

Long-term debt prepayment premium, after income taxes, per share	—	0.02	(0.02)
Unfavourable (favourable) income tax-related adjustments, per share	—	(0.01)	0.01
Asset retirement from closure of Black's Photography, after income taxes, per share	**0.01**	—	0.01
Adjusted basic EPS	**2.58**	2.41	0.17

- **Dividends declared per Common Share** totalled $1.68 in 2015, up 11% from 2014. On February 10, 2016, the Board declared a first quarter dividend of $0.44 per share on the issued and outstanding Common Shares, payable on April 1, 2016, to shareholders of record at the close of business on March 11, 2016. The first quarter dividend increased by $0.04 per share or 10% from the $0.40 per share dividend declared one year earlier, consistent with our multi-year dividend growth program described in *Section 4.3*.

Liquidity and capital resource highlights

- **Net debt to EBITDA — excluding restructuring and other costs** was 2.66 times at December 31, 2015, up from 2.19 times at December 31, 2014, as the increase in net debt, primarily from the purchase of spectrum licences, was only partly offset by growth in EBITDA — excluding restructuring and other costs (see *Section 7.5 Liquidity and capital resource measures*). Our long-term objective range for this ratio is from 2.00 to 2.50 times, which we believe is consistent with maintaining investment grade credit ratings in the range of BBB+, or the equivalent, and providing reasonable access to capital. As at December 31, 2015, this ratio was outside of the long-term objective range, primarily due to our purchases of spectrum licences during the atypical concentration of wireless spectrum auctions in 2014 and 2015. These acquired licences have more than doubled our national spectrum holdings, from approximately 75 MHz to approximately 151 MHz, aligning with our top corporate priority of putting customers first. We will endeavour to return this ratio to within the objective range in the medium term, as we believe that this range is supportive of our long-term strategy. While the ratio currently exceeds our long-term objective range, we are well in compliance with the leverage ratio covenant in our credit facilities, which states that we may not permit our net debt to operating cash flow ratio to exceed 4.00:1.00 (see *Section 7.6 Credit facilities*).

- **Cash provided by operating activities** increased by $135 million or 4.0% in 2015. The increase reflected lower income tax payments, lower restructuring disbursements net of expenses and higher consolidated EBITDA, partly offset by higher share-based compensation payments and changes in non-cash operating working capital.

- **Cash used by investing activities** increased by $809 million or 22% in 2015, mainly due to higher capital expenditures and larger expenditures for auctioned spectrum licences. **Capital expenditures** (excluding spectrum licences and non-monetary transactions) increased by $218 million in 2015, mainly due to our continued focus on investing in wireline and wireless broadband infrastructure to enhance our network coverage, speed and capacity to support growth in wireless and wireline data services. These investments include continuing the deployment of 700 MHz spectrum, expanding our long-term evolution (LTE) and fibre-optic networks, and readying our network and systems for the future retirement of legacy technologies. We also continued to make investments in system and network resiliency and reliability.

- **Cash provided by financing activities** was $1.1 billion in 2015, as compared to $NIL in 2014, due to an increase in long-term debt issued, net of repayments, and lower repayments of Short-term borrowings, partly offset by higher payments for the purchase and cancellation of our Common Shares under our NCIB program and higher dividends paid (see *Section 7.4)*.

In 2015, we returned $1.6 billion in cash to shareholders, consisting of $992 million in dividends paid and $628 million in share purchases pursuant to our NCIB program. In 2014, we returned $1.5 billion to our shareholders, including $913 million in dividends paid and $612 million in share purchases. For additional details on our multi-year dividend growth and share purchase programs, see *Section 4.3* and *Section 7.4*.

- **Free cash flow** was $1.1 billion in 2015, or an increase of $21 million, as lower income tax payments, lower restructuring disbursements net of expenses and EBITDA growth were partly offset by higher capital expenditures (excluding spectrum licences) and higher share-based compensation payments net of expenses.

1.4 Performance scorecard (key performance measures)

In 2015, we achieved three of four original consolidated targets and all four of our original segmented targets, which were announced on February 12, 2015. We achieved our consolidated revenue targets, primarily due to growth in wireless network revenues and wireline data revenues. Wireless network revenues were close to the high end of our target range, reflecting growth in our subscriber base and higher ARPU. Wireline revenues were near the midpoint of our target range, as growth in wireline data revenues was partly offset by declines in legacy voice services and lower business spending.

We met our target for consolidated EBITDA — excluding restructuring and other costs. Our target for wireless EBITDA — excluding restructuring and other costs was met due to an increase in network revenues partially offset by higher retention spending. Our target for wireline EBITDA — excluding restructuring and other costs was met due to growth in wireline data revenues, as well as improving margins in enhanced data services, TELUS TV services, business process outsourcing services and TELUS Health services.

Our basic EPS excluding restructuring and other costs and income tax-related adjustments met our target range, primarily due to growth in our wireless and wireline EBITDA — excluding restructuring and other costs noted above, as well as a reduction in the number of shares outstanding resulting from our NCIB program.

Our capital expenditures in 2015 exceeded both our original target and revised guidance as we continued to focus on investments in wireless and wireline broadband infrastructure, including the expansion of our LTE and fibre-optic networks and the continued deployment of 700 MHz spectrum, as well as in network and system resiliency and reliability in support of our ongoing customers first initiatives, and readying our network and systems for the future retirement of legacy assets.

We met all but one of our long-term financial objectives, policies and guidelines, including generally maintaining a minimum of $1.0 billion of unutilized liquidity, adhering to our dividend payout ratio guideline of 65 to 75% of sustainable earnings on a prospective basis and maintaining long-term investment grade credit ratings in the range of BBB+ or the equivalent. As at December 31, 2015, our Net debt to EBITDA — excluding restructuring and other costs was outside of the long-term objective range of 2.00 to 2.50 times, primarily due to our purchases of spectrum licences during the atypical concentration of wireless spectrum auctions in 2014 and 2015. We will endeavour to return this ratio to within the objective range in the medium term, as we believe that this range is supportive of our long-term strategy.

We also completed 10 semi-annual dividend increases from 2011 to 2015, consistent with our intention to target ongoing semi-annual dividend increases, with an annual increase of circa 10% through to the end of 2016, subject to the assessment and determination by our Board of Directors of our financial position and outlook, as well as our long-term dividend payout ratio guideline of 65 to 75% of prospective sustainable earnings. There can be no assurance that we will maintain this dividend growth program. See *Caution regarding forward-looking statements — Ability to sustain dividend growth program of circa 10% per annum through 2016.*

The following scorecard compares TELUS' performance to our original 2015 targets. See our general trends, outlook and assumptions for 2016 in *Section 9*.

Scorecard

	2015 performance		
	Actual results and growth	**Original or revised targets and growth**	**Result**
Consolidated			
Revenues	**$12.502 billion** **4.2%**	$12.350 to $12.550 billion 3 to 5%	ü
EBITDA [1, 2]	**$4.488 billion** **4.6%**	$4.400 to $4.575 billion [3] 3 to 7%	ü
Basic EPS	**$2.48** [4] **7.4%**	$2.40 to $2.60 4 to 13%	ü
Capital expenditures [5]	**$2.577 billion**	Approx. $2.5 billion [5]	X
Wireless segment			
Network revenue (external)	**$6.298 billion** **4.8%**	$6.175 to $6.300 billion 3 to 5%	ü
EBITDA[1, 2]	**$2.887 billion** **4.7%**	$2.850 to $2.950 billion 3 to 7%	ü
Wireline segment			
Revenue (external)	**$5.569 billion** **2.8%**	$5.525 to $5.625 billion 2 to 4%	ü
EBITDA[1, 2]	**$1.601 billion** **4.4%**	$1.550 to $1.625 billion 1 to 6%	ü

Met target ü; Missed target X.

(1) See description in *Section 11.1 Non-GAAP and other financial measures*.

(2) Excludes restructuring and other costs.

(3) Original 2015 guidance was EBITDA *including* restructuring and other costs of $4.325 billion to $4.500 billion, however, due to significant increases in restructuring and other costs announced in the second and third quarters of 2015, we revised guidance in those respective periods to be EBITDA — *excluding* restructuring and other costs of $4.400 billion to $4.575 billion, reflecting the exclusion of our original assumption for restructuring and other costs of $75 million.

(4) Target-related basic EPS reflects basic EPS, as reported, excluding the impact of incremental restructuring and other costs in excess of our original restructuring and other costs guidance of $75 million, as well as income tax-related adjustments.

(5) Excludes expenditures for spectrum licences and excludes non-monetary transactions. Our capital expenditures guidance was revised in the second quarter of 2015; the original target was approximately the same as 2014 capital expenditures ($2.359 billion).

We made the following key assumptions when we announced the 2015 targets in February 2015.

Assumptions for 2015 targets and result

- Our original estimate for economic growth in Canada was 2.1% in 2015. In our second quarter MD&A, we revised our estimate for 2015 economic growth in Canada to a range of 1.0% to 1.5%. We estimate that growth in 2015 was 1.1%.

- No material adverse regulatory rulings or government actions. Regulatory developments in 2015 are discussed in *Section 10.4 Regulatory matters*. None of these developments had a material impact on our operations.

- Intense wireless and wireline competition, continuing from 2014, in both consumer and business markets. See *Section 10.2 Competition*.

- Approximately one percentage point increase in wireless industry penetration of the Canadian market. In 2015, we estimate that wireless industry penetration of the Canadian market increased by approximately two percentage points.

- Ongoing subscriber adoption of, and upgrades to, data-intensive smartphones, as customers want more mobile connectivity to the Internet. In 2015, retention costs as a percentage of network revenue increased year over year by 2.1 pts. to 13.9%, driven by greater retention volumes and higher per-unit subsidy costs that were primarily due to our customers' preference for higher-value smartphone devices.

- Wireless revenue growth resulting from postpaid subscriber loadings consistent with increased market penetration, as well as a modest increase in blended ARPU resulting from higher-rate two-year plans, increased data usage, including increased use of shared data plans, and subscriber mix. In 2015, wireless network revenues grew by 4.8% and blended ARPU grew by 1.9%.

- Higher wireless acquisition and retention expenses, dependent on gross loadings, market pressures and the impact of coterminous renewals of two-year and three-year contracts. In 2015, retention expenses grew by approximately 23% and retention volumes increased by 10%, however, acquisition expenses declined by approximately 3% and gross additions

declined by 11%.

- Growth in wireline data revenue, consistent with 2014, resulting from an increase in high-speed Internet and Optik TV subscribers, speed upgrades and expanding broadband infrastructure, as well as business outsourcing and healthcare solutions. In 2015, wireline data revenue increased by 8.6%, as compared to 8.2% in 2014, while the total of high-speed Internet subscribers and TV subscribers increased by 7.5% in 2015, as compared to 8.2% in 2014.

- Pension plans: Defined benefit pension plan expense of approximately $106 million recorded in Employee benefits expense and approximately $26 million recorded in employee defined benefit plans net interest in Financing costs; a 3.90% discount rate for employee defined benefit pension plan accounting purposes (2014 — 4.75%); and defined benefit pension plan funding of approximately $88 million. In 2015, the defined benefit pension plan expenses and defined benefit pension plan funding were approximately as estimated, except for a defined benefit pension plan expense of $118 million recorded in Employee benefits expense.

- Restructuring and other costs of approximately $75 million for continuing operational efficiency initiatives, with other margin enhancement initiatives to mitigate pressures from technological substitution and subscriber growth. We revised our assumption to approximately $125 million in our second quarter MD&A. Subsequently, in our third quarter MD&A, we revised the assumption to $250 million (see *Investing in internal capabilities* in *Section 2.2*). The actual result was $226 million for 2015.

- Income taxes: Income taxes computed at applicable statutory rate of 26.0 to 26.5% and cash income tax payments between $280 million and $340 million. Cash tax payments were expected to decrease in 2015, primarily due to lower final payments for the previous tax year. In our second quarter MD&A, we revised our assumption for cash income tax payments downward to a range of $200 million to $260 million, due to the deferral of the 2015 instalments to 2016 and higher refunds from the settlement of prior years' income tax-related matters. The actual income taxes were computed at an applicable statutory rate of 26.5% in 2015, including the impact of an increase in the Alberta provincial corporate tax rate from 10% to 12% effective July 1, 2015. The actual cash income tax payments were $256 million for 2015.

- Continued investments in broadband infrastructure and 4G LTE expansion and upgrades, as well as in network and systems resiliency and reliability. In 2015, capital expenditures (excluding spectrum licences and non-monetary transactions) were $2.577 billion, including continued investment in the expansion of our LTE and fibre-optic networks, as well as in system and network resiliency and reliability (see *Building national capabilities* in *Section 2.2*).

- Participation in the Department of Innovation, Science and Economic Development's (formerly Industry Canada) wireless spectrum auctions for AWS-3 spectrum (1755 — 1780 MHz and 2155 — 2180 MHz), as well as for 2.5 GHz (2500 — 2690 MHz) bands in March 2015 and April 2015. We participated in these auctions, as well as a residual auction held in August 2015 (see *Building national capabilities* in *Section 2.2*).

- Further weakening of the Canadian dollar to U.S. dollar exchange rate from the U.S. 90.5 cent average exchange rate in 2014, in part due to the impact of lower oil prices on Canadian exports. Assumption of further weakening in the exchange rate during 2015 was confirmed, as the average exchange rate for the Canadian dollar in 2015 was U.S. 78 cents.

2. Core business and strategy

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

2.1 Core business

We provide a wide range of telecommunications services and products, including wireless and wireline voice and data. Data services including Internet protocol (IP), TV, hosting, managed information technology, security and cloud-based services, healthcare solutions and business process outsourcing. We earn the majority of our revenue from access to, and the usage of, our telecommunications infrastructure, and from providing services and products that facilitate access to and usage of our infrastructure.

2.2 Strategic imperatives

Since 2000, we have maintained a proven national growth strategy. Our strategic intent is to unleash the power of the Internet to deliver the best solutions to Canadians at home, in the workplace and on the move. Our focus is on our core telecommunications business in Canada, supported by our international contact centres and outsourcing capabilities.

We developed six strategic imperatives in 2000 that remain relevant for future growth, despite changing regulatory, technological and competitive environments. We believe that a consistent focus on these imperatives guides our actions and contributes to the achievement of our financial goals. To advance these long-term strategic imperatives and address near-term opportunities and challenges, we also set new corporate priorities each year, as further described in *Section 3*. Following is a discussion of 2015 activities and initiatives that relate to our six strategic imperatives.

Focusing relentlessly on growth markets of data, IP and wireless

External wireless revenues and wireline data revenues were $10.7 billion in 2015, up by $646 million or 6.4% from 2014, while wireline voice and other revenues and Other operating income totalled $1.8 billion in 2015, down $146 million or 7.5% from 2014. Wireless revenues and wireline data revenues combined represented 86% of TELUS' consolidated revenues in 2015 (84% in 2014).

Providing integrated solutions that differentiate TELUS from our competitors

Continuing with our long-standing clear and simple approach to wireless pricing and putting our customers first, we are no longer charging the incoming short messaging service (SMS) fee for our wireless customers roaming outside Canada. Our customers can now receive unlimited incoming text messages free of charge and feel more comfortable using their mobile phones while travelling abroad.

In the first quarter of 2015, we partnered with Jasper Technologies Inc. to implement Internet of Things (IoT) self-serve solutions for our IoT platform, the TELUS Control Centre. The new platform is intended to help Canadian businesses simplify the deployment and management of IoT services by offering automated device provisioning, real-time diagnostics, integrated billing and cost-management features. Furthermore, in September, we introduced the TELUS Global IoT Connectivity Platform, which enables businesses to seamlessly scale their IoT operations globally. Through a network of more than 70 carriers, we can offer a global SIM card that delivers seamless connectivity in nearly every country around the world.

In March 2015, we launched TELUS Business Connect™, an integrated business communications solution for small businesses across Canada. This cloud-based solution provides businesses with a full suite of communications tools for both office and mobile use, including an automated attendant, call routing, teleconferencing, video-conferencing and toll-free numbers, as well as a wireless backup for office Internet access. Business Connect allows users to use a single number across their mobile phone, tablet, desk phone and computers through voice over IP (VoIP) technology.

In June 2015, we announced a free public Wi-Fi service available to both TELUS and non-TELUS customers at more than 8,000 hotspots across B.C. and Alberta. Since early 2014, we have been actively expanding our public Wi-Fi network by working with thousands of businesses and many major sports and entertainment venues. This public Wi-Fi service is part of our network strategy of deploying small cells that integrate seamlessly with our 4G wireless network, automatically shifting our smartphone customers to Wi-Fi and offloading data traffic from our wireless spectrum to increasingly available Wi-Fi hotspots.

In July 2015, we launched US Easy Roam™ service to encourage our wireless customers to stay connected and save while travelling in the United States. Available to customers on TELUS consumer monthly postpaid rate plans, US Easy Roam is an optional service offering our customers the choice of using their existing rate plan while in the United States for $7 a day.

In December 2015, we announced the expansion of our cloud portfolio for Canadian businesses with the offer of a full suite of managed infrastructure as a service (IaaS) solutions that includes public, private and hybrid cloud options. Our cloud services portfolio enables organizations to build flexible and secure IT environments that can increase business agility and drive operational efficiencies. This expansion of our cloud portfolio, paired with our Internet data centres and expertise in managed services, allows us to meet the growing storage demands of Canadian businesses that are being driven by mobile, social, IoT and big data applications, as well as their growing IT security concerns.

Building national capabilities across data, IP, voice and wireless

In 2015, we continued investing in broadband infrastructure and 4G LTE expansion and upgrades, as well as in network and systems resiliency and reliability, in order to provide faster available Internet speeds and greater capacity, connect more homes and businesses to high-speed Internet services, extend the reach of Optik TV and enhance our healthcare solutions. We continued our long-term strategy of investing in urban and rural communities with commitments to deliver broadband network capabilities to as many Canadians as possible. We expanded our fibre-optic footprint by connecting more homes and businesses directly to fibre-optic cable and delivering faster broadband Internet speeds.

Highlights include:

- In 2015, we acquired 21 AWS-3 wireless spectrum licences in the Department of Innovation, Science and Economic Development's (formerly Industry Canada) AWS-3 wireless spectrum auction and a residual spectrum licences auction, as well as 122 licences in the Department of Innovation, Science and Economic Development's 2500 MHz wireless spectrum auction (see *Section 7.3 Cash used by investing activities* for additional details on wireless spectrum licence acquisitions). Wireless data consumption continues to grow and we have continued to invest in extending the capacity of our network to support that additional data consumption, as well as growth in our wireless customer base. AWS-3 spectrum is well suited for delivering both coverage and added capacity in urban and rural environments. The 2500 MHz spectrum is ideal for carrying large amounts of data, making it especially valuable in urban centres, and will complement TELUS' existing low band spectrum, which is able to penetrate further into buildings and elevators and also travels farther in rural areas. We expect to incorporate the AWS-3 spectrum licences into our existing network within the next three years, once international standards for the spectrum frequencies are established and associated equipment is available, whereas the general deployment of the 2500 MHz spectrum licences into our network has commenced. Since mid-2013, in support of our top corporate priority of putting customers first, we have invested more than $3.6 billion to acquire wireless spectrum licences in the Department of Innovation, Science and Economic Development's spectrum auctions and other transactions, which has more than doubled our national spectrum holdings.

- In June 2015, we announced a $1 billion investment in the City of Edmonton to connect more than 90% of homes and businesses directly to our state-of-the-art fibre-optic network over the next six years. In October 2015, we announced a $1 billion investment to connect the majority of homes and businesses in the City of Vancouver directly to our fibre-optic network over the next five years. As the networks are launched beginning in 2015 for some areas, local residents and businesses will have access to dramatically faster Internet speeds of up to 150 megabits per second. In the coming years, we plan to offer families and businesses increasingly faster speeds over this gigabit-capable network. These investments are part of our broader fibre-optic strategy to bring our network of the future to communities across British Columbia, Alberta and Eastern Quebec. Moreover, this investment provides a distinct advantage to these communities and their residents by potentially stimulating employment and economic growth, and allows healthcare providers, educators and technology companies to reimagine how they deliver services and develop entirely new solutions.

- Under a 10-year strategic partnership agreement with the Government of B.C. to provide it and its public sector partners with telecommunications and strategic services, by December 2015, we had extended wireless coverage along 1,484 km of primary and secondary provincial highways and upgraded service at 1,141 of 1,650 B.C. public schools from legacy networks to the province's Next Generation Network.

- At the end of 2015, our 4G LTE network covered 96% of Canada's population, up from more than 89% of the population at the end of 2014. Our broadband HD TV coverage reached more than 2.85 million households and businesses in B.C., Alberta and Eastern Quebec, including approximately 0.69 million homes and businesses covered by fibre-optic cable, which now provides those premises with immediate access to our gigabit-capable fibre-optic network.

Partnering, acquiring and divesting to accelerate the implementation of our strategy and focus our resources on core business

In February 2015, we partnered with Public Safety Canada in launching the #BeAppSafe campaign to inform, educate and inspire action among Canadians to secure the personal information they store on the Internet and their mobile devices. Through our work with Public Safety Canada and TELUS WISE® (wise Internet and smartphone education), we are committed to educating Canadians and their families about Internet and smartphone safety. TELUS WISE is the first program of its kind in Canada. Since its inception in 2013, we have informed more than 850,000 Canadians about how to stay safe online.

In March 2015, we partnered with Alcatel-Lucent as a first customer for Enterprise Small Cell solution, a small cell technology capable of extending LTE and Wi-Fi connectivity and coverage into offices and other densely populated buildings. This technology will help relieve congestion and offload traffic from the macro wireless network to deliver seamless connectivity and high performance in public and enterprise indoor environments.

Also in March 2015, we completed our acquisition of Medesync, a certified electronic medical records (EMR) product that will bring a bilingual web-based interface to our EMR portfolio in Quebec. Medesync uses the latest cloud-based and mobile technologies to provide physicians with access to EMRs from any computer or mobile device. Medesync's EMR technology features a number of tools for managing and accessing all aspects of a clinic's operations, including scheduling, prescribing, billing and electronic lab results.

In May 2015, we partnered with a major Schedule I Canadian bank to launch a new co-branded credit card that allows customers to earn reward points on everyday card purchases, which can be redeemed for select TELUS products and services.

In June 2015, we announced the closure of the remaining 59 Black's Photography retail stores across Canada by August 2015. Technological innovations have changed the way Canadians take and share photographs, with fewer of them using retail photo outlets. As a result, we determined that Black's was not core to our future operations. We sold the Black's trademark and online and mobile businesses to Les Pros de la Photo (Les Pros), a Quebec-based photo imaging company, effective August 4, 2015. As a result, Les Pros will carry forward the Black's brand, serving the online photography needs of Canadians.

In July 2015, we announced that the TELUS Garden™ real estate joint venture, in which TELUS is a 50% partner, had issued $225 million of 3.4% green bonds, secured by the office tower, due in 2025. This is the first time in North America that green mortgage bonds have been used to support real estate financing. Proceeds of the issuance were primarily used to retire short-term construction financing for the office tower. The TELUS Garden development includes a 24-storey office tower built to leadership in energy and environmental design (LEED) platinum specifications, as well as a residential condominium tower built to LEED gold standards.

In September 2015, in partnership with Westbank Projects Corp, we announced the opening of TELUS Garden's office tower in the heart of downtown Vancouver. The one-million-square-foot development includes 450,000 square feet of office space and 65,000 square feet of retail space. The office tower houses our new global headquarters, as well as other tenants. The 53-storey residential building, which is also part of the TELUS Garden development, is scheduled to open in 2016.

In October 2015, we partnered with a leading national home, auto and business insurance company to provide a fleet-management insurance solution for Canadian businesses. TELUS Fleet Tracker allows businesses to leverage IoT technology to better manage their fleets by providing real-time information, such as vehicle speeds and how the vehicles are being operated, with the aim of reducing fuel and maintenance costs and improving driver safety. Through this partnership, TELUS Fleet Tracker customers can now be eligible for potential insurance savings, such as enrollment discounts.

Going to market as one team under a common brand, executing a single strategy

Our top corporate priority is putting customers first as we strive to consistently deliver exceptional client experiences and become the most recommended company in the markets we serve.

In December 2015, the office of the Commissioner for Complaints for Telecommunications Services (CCTS) issued its report for the 12-month period ended July 31, 2015, and, once again, TELUS was the subject of significantly fewer complaints than in the prior year. With only 4.7% of the total complaints submitted to the CCTS, TELUS had the lowest number of complaints among national wireless carriers in Canada. Complaints related to TELUS decreased by 29% from a year earlier, continuing our trend of consistent improvement since 2011. Complaints related against Koodo Mobile increased by 1.7% from a year earlier, while Public Mobile achieved a 57% reduction in complaints compared to the previous year. With only 1.8% and 0.6% of the total complaints, respectively, Koodo Mobile and Public Mobile continued to lead their peer group of national carrier flanker brands with the lowest number of complaints submitted to the CCTS.

In 2015, we continued to deliver a leading postpaid customer churn rate on a national basis. Notwithstanding the additional competitive pressures resulting from the coterminous expiration of two-year and three-year contracts beginning in June 2015, our monthly postpaid churn rate further exemplifies the success of our differentiated customers first culture and our ongoing focus on delivering outstanding customer service, coupled with attractive new products and services.

Our customer commitments underpin our internal goals and corporate priorities and help us deliver an elevated experience to our customers. These four commitments are:

- We take ownership of every customer experience
- We work as a team to deliver on our promises
- We learn from customer feedback and take action to get better, every day
- We are friendly, helpful and thoughtful.

Investing in internal capabilities to build a high-performance culture and efficient operation

Each year, we conduct team member Pulsecheck engagement surveys, administered by Aon Hewitt, to gather confidential team member feedback about TELUS as a place to work and measure our progress in establishing a high-performance culture. Following each survey, business units and departments make use of their Pulsecheck results to review their current action plans and prioritize their ongoing actions. In 2015, our employee engagement score increased by two percentage points over last year to 87%, elevating our high-performance culture and realizing world-leading engagement results for the third year in a row. As well, in 2015 every business unit across TELUS either maintained or improved its employee engagement score. Improvements in our overall employee engagement in each of the past six years have helped us focus on putting customers first.

In addition, we incurred incremental, non-recurring restructuring and other costs with the objectives of improving our operating efficiency and effectiveness and addressing the profitability challenges in certain areas of our business. Restructuring costs associated with the rationalization of administrative, channel and network real estate were recorded in Goods and services purchased. Employee-related restructuring costs for reorganizing and streamlining business processes, such as certain client care, marketing and support functions, were recorded in Employee benefits expense. Other costs for incremental external expenses in connection with business acquisition or disposition activity, as well as litigation costs, in the context of significant losses and settlements, were recorded in Goods and services purchased.

In the second quarter of 2015, we revised our assumption for Restructuring and other costs in 2015 to $125 million from our original assumption of $75 million. The increase supports ongoing operational efficiency initiatives, with other margin enhancement initiatives to mitigate pressures from technological substitution and subscriber growth, as well as the closure of Black's Photography retail stores. In the third quarter of 2015, we further revised our assumption for Restructuring and other costs to approximately $250 million to support ongoing and incremental operational efficiencies, including personnel-related costs and real estate rationalization. The new efficiency initiative included a net reduction of approximately 1,500 full-time equivalent (FTE) employees over several quarters beginning in the fourth quarter of 2015, of which approximately 60% were to be management-related positions. This efficiency initiative is expected to generate annual recurring savings of between $100 million and $125 million. We continually invest in operational efficiency initiatives, similar to our continual investment in our products, services and technology, all of which is in support of our top priority of putting customers first, while continuing our drive toward a more efficient cost structure. These efficiency measures are not expected to affect customer service or our significant infrastructure investments.

Restructuring and other costs

Years ended December 31 ($ millions)	2015	2014

Goods and services purchased	**70**	21
Employee benefits expense	**156**	54
Restructuring and other costs included in EBITDA	**226**	75

3. Corporate priorities

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

We confirm or set new corporate priorities each year to both advance TELUS' long-term strategic priorities (see *Section 2.2*) and address near-term opportunities and challenges.

2016 corporate priorities

Delivering on TELUS' future friendly® brand promise by putting customers first, enhancing reliability, and pursuing global leadership in the likelihood of our clients to recommend our products, services and people

Elevating our winning culture for sustained competitive advantage, with the world's most engaged team

Continuing to enhance our operational efficiency, effectiveness and reliability

Increasing our competitive advantage by expediting the build of reliable, client-centric networks and through technology leadership

Driving TELUS' leadership position in our chosen business, public sector and international markets

Advancing TELUS' leadership position in healthcare information management.

Progress on 2015 corporate priorities

Delivering on TELUS' future friendly brand promise by putting customers first, enhancing reliability, and pursuing global leadership in the likelihood of our clients to recommend our products, services and people

- We continued to develop and deliver TELUS WISE, our national Internet and smartphone safety program, offered nationally to our customers, as well as to school, community and seniors' groups. To date, TELUS WISE has informed 850,000 Canadians about how to stay safe online and participate responsibly in our increasingly digital society.
- We introduced a new tool for monitoring and managing data usage for consumer and business wireless postpaid customers. Our new Data Manager tool enables customers to view usage details online for each member on their account through an enhanced dashboard, receive real-time notifications of the percentage of their monthly data allotment they have used, receive notifications of any overage charges in dollars, choose when and how to receive notifications, including email notifications to track data usage on tablets, and determine which members on their account can unblock data.
- We opened connected experience stores in Toronto and Edmonton, which represent the next iteration of our retail experience, offering hands-on interaction with our technology integrated into the retail experience at all touchpoints. These stores contain a broad range of integrated digital lifestyle solutions, including wearable technology, premium home electronic brands, and our latest smartphone and tablet lineup.
- As a result of numerous customers first initiatives, including those described above and in *Section 2.2*, our customers' likelihood-to-recommend scores improved in 2015 for Consumer, Koodo, Small Business, Business Solutions and TELUS Quebec, while scores for Enterprise and TELUS Health declined slightly. In addition, in December 2015, the office of the Commissioner for Complaints for Telecommunications Services (CCTS) issued its annual report and, once again, TELUS was the subject of significantly fewer customer complaints than in the previous year. (See *Going to market as one team under a common brand, executing a single strategy* in *Section 2.2*.)

Elevating our winning culture for a sustained competitive advantage, while giving compassionately in the communities where we live, work and serve

- Our team member engagement score increased by two percentage points to 87% in 2015, representing our sixth consecutive year of improvement. (See *Investing in internal capabilities* in *Section 2.2*.)
- For the seventh consecutive year, TELUS was named one of Canada's Top 100 Employers and one of Canada's Best Diversity Employers by Mediacorp Canada. In addition, for the seventh consecutive year, TELUS was recognized as one of Canada's 10 Most Admired Corporate Cultures by Waterstone Human Capital.
- We were named to the Dow Jones Sustainability North America Index for the 15 th consecutive year. We were also named One of the Global 100 Most Sustainable Companies in the World by Corporate Knights, and One of Canada's Greenest Employers by Mediacorp Canada.
- We received the global BEST Award from the Association for Talent Development (ATD) in recognition of the enterprise-wide success we have achieved as a result of employee talent development. We also received ATD's first ever Best of the BEST award, recognizing our 10 years of BEST Award wins.
- We give where we live® to help our fellow citizens in need build stronger communities and create a stronger bond with our customers. We

accomplish this through a range of initiatives, such as the TELUS Days of Giving®, Team TELUS Charitable Giving, Dollars for Doers and grants to local not-for-profit organizations through local community boards, both domestically and internationally. In 2015, a record 17,850 team members, family and friends participated in our 10th annual TELUS Days of Giving, volunteering at more than 1,300 charitable events across Canada. For more information, see our sustainability report at **sustainability.telus.com**.

Strengthening our operational efficiency, effectiveness and reliability

- We deployed numerous systems upgrades and releases across our wireless and wireline systems portfolio during the year, significantly enhancing our clients' experiences with our services, improving the efficiency of our business operations and providing insightful business information.
- We continued to execute clear and simple principles to reduce complexity and customer support requirements.
- We implemented price-management initiatives to enhance revenues and margins, and vendor-management initiatives to improve the efficiency of our procurement activities and achieve savings on equipment, handsets, information technology and other goods and services.
- We received the leadership in energy and environmental design (LEED) gold certification from the Canada Green Building Council for our Rimouski Intelligent Internet data centre (IDC). This is our second IDC to receive LEED gold certification, along with the Laird facility in Toronto. Our TELUS House office buildings in Toronto, Ottawa and Quebec have also received LEED certification in recent years.
- Our restructuring and other costs totalled $226 million in 2015, composed of $156 million for workforce-related initiatives and $70 million for other initiatives, including rationalization of real estate.

Increasing our competitive advantage through reliable client-centric network and technology leadership

- We participated in three wireless spectrum auctions during 2015, resulting in the acquisition of 40 MHz of 2500 MHz spectrum and 17 MHz of AWS-3 spectrum, in support of our long-term LTE deployment strategy to continue meeting the varied needs of our customers.
- We continued to invest in our leading-edge broadband technology, which has enabled the success of Optik TV, Internet and

business services, as well as the ongoing advancement of our world-class wireless networks. Our 4G LTE network covers 96% of Canada's population and our high-speed broadband coverage reaches more than 2.85 million households and businesses in B.C., Alberta and Eastern Quebec, including approximately 0.69 million homes and businesses with immediate access to our fibre-optic network.

- We are connecting more homes and businesses directly to fibre-optic cable in Edmonton, Vancouver and numerous other municipalities in B.C., Alberta and Eastern Quebec. (See *Building national capabilities* in *Section 2.2*.) Investments in our new fibre-optic network support our strategy of bringing the most advanced broadband network in the world directly to homes and businesses to deliver improvements in speed and capacity for many generations to come, and to create the foundation for access to future solutions like the connected home, smart cities, Internet of Things (IoT) services and TELUS Health services.
- We expanded our cloud technology portfolio for Canadian businesses with the offer of a full suite of managed solutions that includes public and private cloud options, as well as Canada's first hybrid cloud offering to meet the growing demands for flexible and secure IT environments.

Driving TELUS' leadership position in our chosen business, public sector and international markets

- During the year, we announced a free public Wi-Fi service available at hotspots across B.C. and Alberta. This public Wi-Fi service is made possible by our network strategy of deploying small cells that integrate seamlessly with our 4G wireless network to deliver enhanced coverage and capacity.
- We introduced two new IoT platforms, one for domestic and one for global deployments, which provide self-service options to our customers in more than 200 markets around the world. We also expanded the catalogue of innovative IoT solutions we offer to Canadian businesses.

Advancing TELUS' leadership position in healthcare information management

- As described in *Partnering, acquiring and divesting* in *Section 2.2*, we completed our acquisition of Medesync, a certified electronic medical records (EMR) product, and we made a strategic investment in Sprout, a Canadian-based organization helping companies to engage employees in improving their health and wellness and to measure the positive effects on their business. We have also expanded our suite of personal health tracking technology solutions by entering into a reseller arrangement with Sprout that allows us to promote its Wellness Engagement Platform as part of our Self-Health online portal for large enterprise customers seeking to improve the health and wellness of their employees.
- Organically, we have grown the user base of our consumer and provider health solutions in 2015, reflecting a 13% increase in the number of physicians across Canada using a TELUS EMR, a 28% increase in extended healthcare providers using our electronic claims solutions and a 34% increase in consumers using our TELUS Pharma Space® prescription renewal platform.
- We provide drug and dental claim processing to over 13 million Canadians. Over 15,000 physicians use our EMRs, over 31,000 extended healthcare providers use our electronic claims solutions and over 400,000 Canadians use TELUS Pharma Space.
- In 2015, we also collaborated in the roll-out of an EMR platform for the greater Toronto area. This platform offers clinicians access to a provincial health data repository to facilitate clinical care decision-making.

4. Capabilities

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

4.1 Principal markets addressed and competition

Wireless: Services for consumers and businesses across Canada

Our services and products

- Data and voice — Fast web access, social networking, messaging (text, picture and video), the latest mobile applications, including Optik™ on the go, the Internet of Things (IoT) solutions (including machine-to-machine (M2M) connectivity), clear and reliable voice services, push-to-talk (PTT) solutions, including TELUS Link™ service, and international roaming.
- Devices — Leading-edge smartphones, tablets, mobile Internet keys, mobile Wi-Fi devices, M2M modems and wearable technology.

Our capabilities

- Licensed national wireless spectrum, including:
  - LTE coverage being enhanced with the deployment of the 700 MHz wireless spectrum acquired in 2014 and deployment of 2500 MHz wireless spectrum acquired in 2015. We also acquired AWS-3 wireless spectrum licences in 2015 which we expect to deploy into our existing network within the next three years, once international standards for the spectrum frequencies are established and associated equipment is available.
- Coast-to-coast digital 4G LTE network, first launched in major centres in February 2012:
  - Coverage of 96% of Canada's population at December 31, 2015
  - Expansion of our LTE services supported by continued re-purposing of wireless spectrum to increase capacity and coverage
  - Manufacturer-rated peak data download speeds of up to 110 Mbps on LTE network (typical speeds of 12 to 45 Mbps expected with a compatible device)[1]
  - Manufacturer-rated peak data download speeds of up to 225 Mbps on LTE advanced portions of the network (typical speeds of 12 to 65 Mbps expected with a compatible device)[1]
  - Reverts to the HSPA+ network and speeds when outside LTE coverage areas.
- Coast-to-coast digital 4G HSPA+ network, launched in November 2009:
  - Coverage of 99% of Canada's population, with typical speeds of 4 to14 Mbps with a compatible device [1]
  - Provides international roaming capabilities in more than 225 countries.
- Suite of IoT solutions to support Canadian businesses locally and internationally, including asset tracking, fleet management, remote monitoring, digital signage and security.
- Interconnections with our wireline networks.
- Digital PCS (CDMA) network with a 3G high-speed evolution data optimized (EVDO) Revision A overlay. We expect to continue operating our CDMA network at least through to the end of 2016.
- iDEN network supporting Mike® service, a PTT service focused on the commercial marketplace. In 2016, we will commence a staged decommissioning of the iDEN network. Throughout 2016, we will continue to support our Mike private network customers and actively work with them to migrate their services onto our HSPA and LTE networks.

Competition overview

- Facilities-based national competitors Rogers Wireless, Bell Mobility and Wind Mobile (to be acquired by our primary wireline competitor, Shaw Communications), as well as provincial or regional telecommunications companies SaskTel, MTS, Eastlink, Videotron and Tbaytel.
- Resellers of competitors' wireless networks.
- Services offered by cable-TV and wireless competitors over wireless and metropolitan Wi-Fi networks.
- In December 2015, Shaw Communications announced that it was acquiring Wind Mobile, effectively making Shaw the fourth wireless carrier in B.C., Alberta and Ontario. This acquisition provides Shaw with the opportunity to develop a converged wireline and wireless network, that would enable them to offer a four-product consumer bundle in B.C. and Alberta (wireless, high-speed Internet, TV and home phone services), as well as expand their offerings to the business market.

(1) Actual speed may vary based on device being used, topography and environmental conditions, network congestion, signal strength and other factors.

Wireline: Residential services in British Columbia, Alberta and Eastern Quebec; healthcare solutions; business services across Canada; and contact centre and outsourcing solutions offered internationally

Our services and products

- Voice — Reliable phone service with long distance and advanced calling features.
- Internet — High-speed Internet service with email and a comprehensive suite of security solutions.
- TELUS TV — High-definition entertainment service with Optik TV and TELUS Satellite TV. Optik TV offers extensive content options and innovative features such as PVR Anywhere, Remote Recording, Optik Smart Remote channel browsing with a tablet or smartphone, and Optik on the go. TELUS Satellite TV service is offered only in B.C. and Alberta by way of an agreement with Bell Canada.
- IP networks and applications — IP networks that offer converged voice, video, data or Internet access on a high-performing network.
- Contact centre, business process and IT outsourcing solutions in more than 30 languages — Managed solutions providing low-cost and scalable infrastructure in North America, Central America, Europe and Asia.
- Hosting, managed IT and cloud-based services — Cybersecurity and other solutions with ongoing assured availability of telecommunications, networks, servers, databases, files and applications, with critical applications stored in our Internet data centres (IDCs) across Canada.
- Healthcare — TELUS Health's proprietary technology, including pharmacy management, electronic medical records, electronic health records, remote patient monitoring and online settlement claims management solutions.
- Conferencing and collaboration — Full range of equipment and application solutions to support meetings and webcasts by means of phone, video and Internet.

Our capabilities

- An IP-based national network overlaying an extensive switched network in B.C., Alberta and Eastern Quebec, as well as global interconnection arrangements.
- Ongoing connection of homes and businesses directly to fibre-optic cable.
- Eight data centres in six communities directly connected to the national TELUS IP network, creating an advanced and regionally diverse computing infrastructure in Canada.
- Wireline residential access line services provided to an estimated 37% of households in B.C. and Alberta, and 60% of households in our Eastern Quebec region.
- Access to businesses across Canada through our networks, as well as competitive local exchange carrier status.
- ADSL2+ or VDSL2 coverage reaching more than 2.85 million homes and businesses in B.C., Alberta and Eastern Quebec.
- Broadcasting distribution licences to offer digital television services in incumbent territories and licences to offer commercial video-on-demand services.
- Business process outsourcing services with global delivery capabilities through our multi-shore, multi-language programs, supported by 20,680 employees across North America, Central America, Europe and Asia, as of December 31, 2015.
- Technology solutions to assist healthcare providers, consumers, health regions, hospitals, insurers and employers.

Competition overview

- Substitution of wireless services, including our own wireless offerings, for residential local and long distance services. The percentage of households with wireless-only telephone services (among all providers, including TELUS) is estimated to be 37% in B.C. and Alberta, and 14% in Eastern Quebec.
- Wireless carrier competitors whose services are a substitute for local and long distance services, such as Bell Canada, MTS, Rogers Communications, Videotron (in Quebec).
- Cable-TV competitors for Internet and entertainment services, such as Shaw Communications (in B.C. and Alberta), Cogeco Cable and Videotron (in Eastern Quebec).
- In November 2015, Zayo Group Holdings Inc., a U.S.-based provider of communications infrastructure services, announced it had acquired Allstream Inc, a national telecommunications service provider for business customers.
- Various others (e.g. Vonage) that offer resale or voice over IP-based (VoIP-based) local, long distance and Internet services.
- Over-the-top (OTT) voice and entertainment services, such as Skype, Netflix and Shomi.
- Satellite-based entertainment and Internet services (Bell Canada, Shaw Communications and Xplornet).
- Competitors for contact centre services, such as Convergys, Sykes and Verizon LiveSource.
- Customized managed outsourcing solutions competitors, such as system integrators CGI Group Inc., EDS division of HP Enterprise Services and IBM.
- Competitors for TELUS Health services, such as system integrators, BCE, Cerner, Express Scripts, GE Health, Katz Group, Kroll and McKesson.

4.2 Operational resources

Resources

Our team

- Approximately 47,640 employees (46,600 full-time equivalent (FTE) employees) at the end of 2015, across a wide range of operational functions domestically (26,960) and certain functions internationally (20,680).
- Approximately 12,100 of our team members are covered by a collective agreement. The agreement with the Telecommunications Workers Union (TWU), United Steel Workers Local Union 1944, which covers 10,560 employees, expired on December 31, 2015. Contract negotiations to renew the collective agreement are in progress. The agreement with the Syndicat québécois des employés de TELUS (SQET), which covers 820 employees, expires on December 31, 2017. Our collective agreement with the Syndicat des agents de maîtrise de TELUS (SAMT) covers 650 team members in the TELUS Quebec region and expires in March 2017.
- Operations at Canadian and international locations to support contact centres and business process outsourcing services for external wholesale customers.
- Employee compensation programs that support a high-performance culture and contain market-driven and performance-based components (bonus and share-based compensation) to attract and retain key employees.
- Succession plans to cover ongoing retirement, ready access to labour in Canada and, for contact centres and specific support functions, in various locations internationally. We use a small number of external contractors or consultants.
- Training, mentoring and development programs to maintain and improve employee engagement levels and enhance the customer experience.

Our brand and distribution channels

- A well-established and recognizable national brand (TELUS, the future is friendly ®).
- Koodo Mobile is a national provider of postpaid and prepaid wireless voice and data services with a broad distribution network, including TELUS-owned stores, dealers and third-party electronics retailers.
- Public Mobile is a prepaid wireless service, relaunched in 2015 with a web-based distribution channel and provides customers with a SIM-only service.
- Optik TV brand, launched in mid-2010.
- Our sales and support distribution channels:
  - Wireless services are supported through a broad network of TELUS-owned and branded stores, including our 50% ownership of the kiosk channel WOW! Mobile, an extensive distribution network of exclusive dealers and large third-party electronics retailers (e.g. Best Buy, Wal-Mart and London Drugs) and a white label brand for a premier retail chain, as well as online self-serve applications, mass-marketing campaigns and client-care telephone agents.
  - Wireline residential services are supported through TELUS-owned and branded stores, including third-party electronics retailers, as well as mass-marketing campaigns, client care telephone agents, and online and TV-based self-serve applications.
  - Business services, including healthcare, across wireless and wireline are supported through TELUS sales representatives, product specialists, independent dealers and online self-serve applications for small and medium-sized businesses (SMBs). Business process outsourcing services are supported through sales representatives and client relationship management teams.

Our technology, systems and properties

- Our Intangible assets include wireless spectrum licensed from the Department of Innovation, Science and Economic Development, which is essential to providing wireless services.
- TELUS is a highly complex technology-dependent company with a multitude of interconnected wireless and wireline telecommunications networks, IT systems and processes.
- Network facilities are constructed under or along streets and highways, pursuant to rights-of-way granted by the owners of land, including municipalities and the Crown, or on freehold land owned by TELUS.
- Real estate properties (owned or leased) include administrative office space, work centres and space for telecommunications equipment. Some buildings are constructed on leasehold land and the majority of wireless towers are situated on lands or buildings held under leases or licences with varying terms. We also participate in two real estate re-development joint ventures. (See *Section 7.11*.)
- TELUS International provides contact centre, business process and IT outsourcing services by utilizing on-site facilities, including contact centre solutions, and by utilizing international data networks and data centres. Global rerouting capabilities and geographic diversity are provided by facilities located in North America, Central America, Europe and Asia.
- Through its proprietary technology, including pharmacy management, electronic medical records, electronic health records, remote patient monitoring and online settlement claims management software solutions, TELUS Health facilitates the integration of electronic health records from the home to the doctor's office to the hospital, making critical health information available to healthcare providers over wireless and wireline broadband networks.

4.3 Liquidity and capital resources

Capital structure financial policies

Our objective when managing capital is to maintain a flexible capital structure that optimizes the cost and availability of capital at acceptable risk.

In the management of capital and in its definition, we include Common Share equity (excluding Accumulated other comprehensive income), Long-term debt (including long-term credit facilities, commercial paper backstopped by long-term credit facilities and any associated hedging assets or liabilities, net of amounts recognized in Accumulated other comprehensive income), Cash and temporary investments and securitized trade receivables.

We manage our capital structure and make adjustments in light of changes in economic conditions and the risk characteristics of our telecommunications infrastructure and business. In order to maintain or adjust our capital structure, we may adjust the amount of dividends paid to holders of Common Shares, purchase shares for cancellation pursuant to our normal course issuer bid (NCIB) program, issue new shares, issue new debt, issue new debt to replace existing debt with different characteristics and/or increase or decrease the amount of trade receivables sold to an arm's-length securitization trust.

We monitor capital utilizing a number of measures, including the net debt to EBITDA — excluding restructuring and other costs ratio and the dividend payout ratio. (See definitions in *Section 11.1*.)

Financing and capital structure management plans

Report on financing and capital structure management plans

Pay dividends to the holders of Common Shares under our multi-year dividend growth program

- In May 2013, we announced an intention to target ongoing semi-annual dividend increases, with an annual increase in the range of circa 10% through to the end of 2016, extending the policy announced in May 2011. Notwithstanding this policy, dividend decisions will continue to be subject to our Board's assessment and the determination of our financial situation and outlook on a quarterly basis. There can be no assurance that we will maintain a dividend growth program through 2016 and/or renew thereafter. See *Caution regarding forward-looking statements — Ability to sustain our dividend growth program of circa 10% per annum through 2016.*

- Dividends declared in 2015 totalled $1.68 per share, an increase of 11% over 2014. On February 10, 2016, a first quarter dividend of $0.44 per share was declared, payable on April 1, 2016, to shareholders of record at the close of business on March 11, 2016. The first quarter dividend for 2016 reflects a cumulative increase of $0.04 per share or 10% from the $0.40 per share dividend paid in April 2015.

Purchase Common Shares under our multi-year NCIB

- On September 11, 2015, we announced the successful completion of our 2015 NCIB, purchasing approximately 12.1 million Common Shares for cancellation and returning $500 million to shareholders. The average share purchase price was $41.25. The purchased shares represent 2.0% of the Common Shares outstanding prior to commencement of the 2015 NCIB. Moreover, we received approval from the Toronto Stock Exchange (TSX) for a new 2016 NCIB to purchase and cancel up to 16 million Common Shares with a value of up to $500 million over a 12-month period, commencing September 15, 2015. This represents up to an additional 2.7% of outstanding TELUS Common Shares prior to the commencement of the 2016 NCIB. Such purchases are made through the facilities of the TSX, the New York Stock Exchange (NYSE) and alternative trading platforms or otherwise as may be permitted by applicable securities laws and regulations. Common Shares will be purchased only when and if we consider it advisable.

- We have also entered into an automatic share purchase plan (ASPP) with a broker for the purpose of permitting us to purchase our Common Shares under our NCIB program at times when we would not be permitted to trade in our shares, including regularly scheduled quarterly blackout periods. Such purchases will be determined by the broker in its sole discretion based on parameters that we established prior to any blackout period, in accordance with TSX rules and applicable securities laws. The ASPP has been approved by the TSX, was implemented on October 1, 2015 and may be implemented from time to time thereafter. All other purchases under the 2016 NCIB will be at the discretion of the Company. During the month ended January 31, 2016, 1.0 million of our Common Shares were purchased by way of the ASPP at a cost of $39 million.

- The 2016 NCIB represents the final year of our three-year share purchase program and there can be no assurance that we will complete our 2016 NCIB or renew the NCIB program. See *Caution regarding forward-looking statements — A bility to sustain and complete multi-year share purchase program through 2016.*

Use proceeds from securitized trade receivables (Short-term borrowings), bank facilities, commercial paper and dividend reinvestment, as needed, to supplement free cash flow and meet other cash requirements

- Our issued and outstanding commercial paper was $256 million at December 31, 2015, all of which was denominated in U.S. dollars (U.S.$185 million), compared to $130 million as at December 31, 2014.

- Proceeds from securitized trade receivables were $100 million as at December 31, 2015, consistent with the balance as at December 31, 2014.

Maintain compliance with financial objectives, policies and guidelines

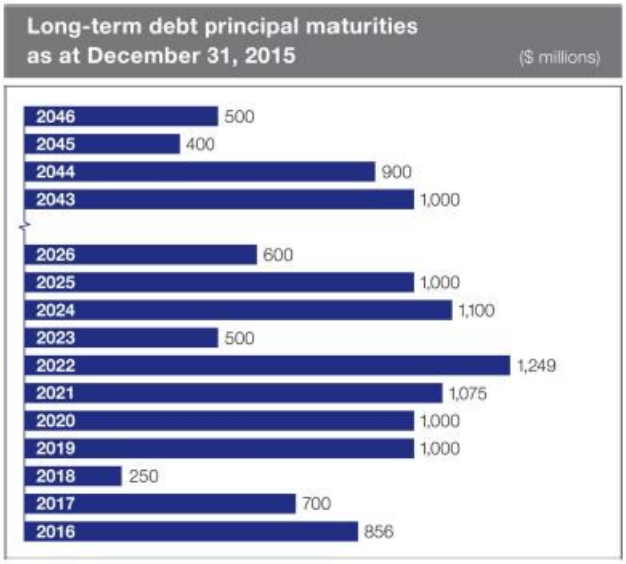
Except for Net debt to EBITDA — excluding restructuring and other costs ratio, we comply with our objectives:

- Maintain long-term investment grade credit ratings in the range of BBB+ or the equivalent — On February 11, 2016, investment grade credit ratings from the four rating agencies that cover TELUS were in the desired range.
- Net debt to EBITDA — excluding restructuring and other costs ratio of 2.00 to 2.50 times — As at December 31, 2015, this ratio was outside of the range, primarily due to funding of spectrum licences acquired in the Department of Innovation, Science and Economic Development's wireless spectrum auctions during 2014 and 2015. We will endeavour to return the ratio to within this objective range in the medium term, as we believe that this range is supportive of our long-term strategy. See *Section 7.5 Liquidity and capital resource measures*.
- Dividend payout ratio of 65 to 75% of sustainable earnings on a prospective basis — See *Section 7.5 Liquidity and capital resource measures*.
- Generally maintain a minimum $1 billion in unutilized liquidity — See *Section 7.6 Credit facilities*.

Financing and capital structure management plans for 2016

At the end of 2015, our long-term debt (excluding commercial paper) was $11.8 billion and the weighted average term to maturity (excluding commercial paper) was approximately 11.1 years. Aside from Short-term borrowings of $100 million and commercial paper of $256 million (U.S.$185 million), all of our debt was on a fixed-rate basis. During 2016, we may issue senior Notes to refinance maturing debt or to use for general corporate purposes.

Anticipated free cash flow and sources of capital are expected to be more than sufficient to meet requirements. For the related risk discussion, see *Section 10.7 Financing and debt requirements.*



4.4 Disclosure controls and procedures and changes in internal control over financial reporting

Disclosure controls and procedures

Disclosure controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported to senior management, including the President and Chief Executive Officer (CEO) and the Executive Vice-President and Chief Financial Officer (CFO), on a timely basis so that appropriate decisions can be made regarding public disclosure.

The CEO and the CFO have evaluated the effectiveness of our disclosure controls and procedures related to the preparation of the MD&A and the December 31, 2015, Consolidated financial statements. They have concluded that our disclosure controls and procedures were effective, at a reasonable assurance level, to ensure that material information relating to TELUS and its consolidated subsidiaries would be made known to them by others within those entities, particularly during the period in which the MD&A and the Consolidated financial statements were being prepared.

Internal control over financial reporting

Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS-IASB and the requirements of the Securities and Exchange Commission in the United States, as applicable. TELUS' CEO and CFO have assessed the effectiveness of our internal control over financial reporting as of December 31, 2015, in accordance with *Internal Control — Integrated Framework (2013)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, TELUS' CEO and CFO have concluded that our internal control over financial reporting is effective as of December 31, 2015, and expect to certify TELUS' annual filings with the Form 40-F, as required by the United States' *Sarbanes-Oxley Act of 2002*, and TELUS' Annual Information Form as required by National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*.

Deloitte LLP, our auditor, has audited our internal controls over financial reporting as at December 31, 2015.

Changes in internal control over financial reporting

There were no changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

5. Discussion of operations

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

5.1 Selected annual information

The selected information presented below has been derived from, and should be read in conjunction with, our audited December 31, 2015 and December 31, 2014 Consolidated financial statements, which were prepared under IFRS-IASB. All currency amounts are in Canadian dollars, unless otherwise specified.

Selected annual information

Years ended December 31 ($ in millions, except per share amounts)	2015	2014	2013
Operating revenues	**12,502**	12,002	11,404
Net income and Net income attributable to Common Shares	**1,382**	1,425	1,294
Net income per Common Share			
Basic earnings per share (basic EPS)	**2.29**	2.31	2.02
Adjusted basic EPS	**2.58**	2.41	2.16
Diluted	**2.29**	2.31	2.01
Cash dividends declared per Common Share	**1.68**	1.52	1.36

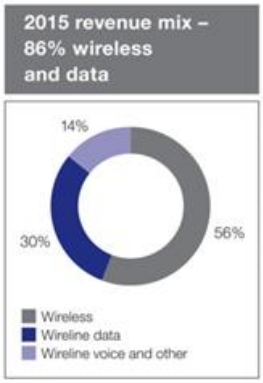
At December 31 ($ millions)	2015	2014	2013
Total assets	**26,406**	23,217	21,566
Current maturities of long-term debt	**856**	255	—
Non-current financial liabilities [1]			
Provisions	**55**	29	66
Long-term debt	**11,182**	9,055	7,493
Other long-term financial liabilities	**150**	128	122
	11,387	9,212	7,681
Deferred income taxes	**2,155**	1,936	1,891
Common equity	**7,672**	7,454	8,015

(1) In our specific current instance, financial liabilities do not include liabilities that are excluded by definition (e.g. employee benefits and share-based compensation liabilities) or liabilities that do not involve a future outlay of economic resources (e.g. deferred recognition of customer activation and connection fees; deferred gains on sale-leaseback of buildings).

Operating revenues: Combined wireless revenue and wireline data revenue represented approximately 86% of consolidated revenues in 2015 (84% in 2014 and 82% in 2013). Legacy wireline and wireless voice revenues continue to be eroded by competition and technological substitution.

Net income decreased as EBITDA growth impacted by higher restructuring and other costs, and lower financing costs was more than offset by an increase in total depreciation and amortization expenses and an increase in income tax expense. Income tax-related adjustments resulting from legislated income tax changes and adjustments recognized in the current period for income tax of prior periods, including any related interest, negatively impacted Net income by $1 million in 2015, positively impacted Net income by $6 million in 2014 and negatively impacted Net income by $3 million in 2013.

Long-term debt, current maturities: The increase in 2015 is composed of $126 million of issued commercial paper and $600 million of 3.65% Series CI notes maturing in May 2016, partly offset by the repayment of $125 million of 11.9% TCI Series 2 debentures that matured in November 2015. The increase in 2014 is composed of $130 million of issued commercial paper and the TCI Series 2 debentures that matured in 2015 as noted above.



Long-term debt, non-current portion: The increase in 2015 reflects our first quarter financing activities, which primarily funded the purchase of wireless spectrum licences in the Department of Innovation, Science and Economic Development's AWS-3 auction, partly offset by the reclassification of $600 million Series CI notes that became current. The increase in 2014 reflected our second quarter financing activities to fund the purchase of 700 MHz spectrum licences. (See *Section 7.4*.)

5.2 Summary of consolidated quarterly results, trends and fourth quarter recap

Summary of quarterly results

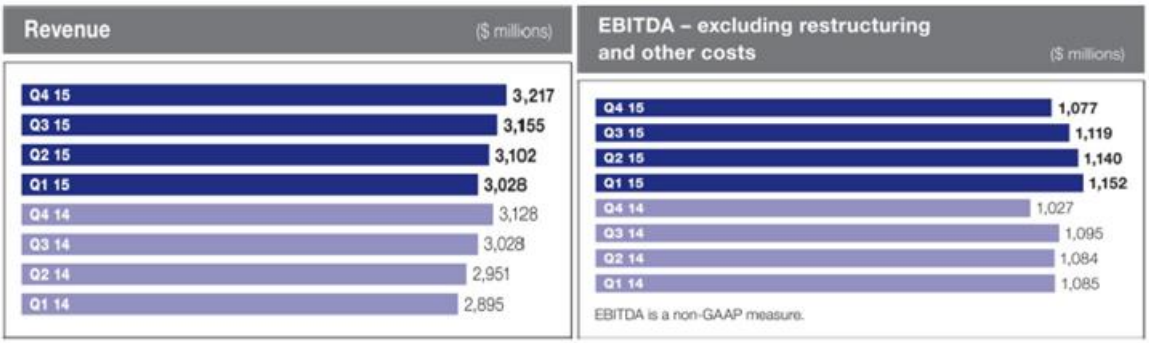
($ millions, except per share amounts)	2015 Q4	2015 Q3	2015 Q2	2015 Q1	2014 Q4	2014 Q3	2014 Q2	2014 Q1
Operating revenues	**3,217**	**3,155**	**3,102**	**3,028**	3,128	3,028	2,951	2,895
Operating expenses								
Goods and services purchased [1]	**1,482**	**1,394**	**1,372**	**1,284**	1,476	1,333	1,268	1,222
Employee benefits expense [1]	**757**	**693**	**649**	**609**	651	630	610	596
Depreciation and amortization	**518**	**471**	**464**	**456**	468	459	444	463
Total operating expenses	**2,757**	**2,558**	**2,485**	**2,349**	2,595	2,422	2,322	2,281
Operating income	**460**	**597**	**617**	**679**	533	606	629	614
Financing costs	**114**	**106**	**110**	**117**	115	124	115	102
Income before income taxes	**346**	**491**	**507**	**562**	418	482	514	512
Income taxes	**85**	**126**	**166**	**147**	106	127	133	135
Net income and Net income attributable to Common Shares	**261**	**365**	**341**	**415**	312	355	381	377
Net income per Common Share:								
Basic (basic EPS)	**0.44**	**0.61**	**0.56**	**0.68**	0.51	0.58	0.62	0.61
Adjusted basic EPS [2]	**0.54**	**0.66**	**0.66**	**0.70**	0.53	0.64	0.63	0.62
Diluted	**0.44**	**0.61**	**0.56**	**0.68**	0.51	0.58	0.62	0.60
Dividends declared per Common Share	**0.44**	**0.42**	**0.42**	**0.40**	0.40	0.38	0.38	0.36
Additional information:								
EBITDA [2]	**978**	**1,068**	**1,081**	**1,135**	1,001	1,065	1,073	1,077
Restructuring and other costs included in EBITDA [2]	**99**	**51**	**59**	**17**	26	30	11	8
EBITDA — excluding restructuring and other costs [2]	**1,077**	**1,119**	**1,140**	**1,152**	1,027	1,095	1,084	1,085
Cash provided by operating activities	**863**	**1,018**	**943**	**718**	917	1,037	855	598
Free cash flow [2]	**197**	**310**	**300**	**271**	337	219	210	291

(1) Goods and services purchased and Employee benefits expense amounts include restructuring and other costs.

(2) See *Section 11.1 Non-GAAP and other financial measures*.

Trends

The consolidated revenue trend continues to reflect year-over-year increases in: (i) wireless network revenues generated from a moderating growth in the subscriber base due to the impacts of the economic slowdown, particularly in Alberta, slower growth in wireless postpaid market penetration, increased competitive intensity and higher handset prices, as well as a moderating growth in average revenue per subscriber unit per month (ARPU) driven by a larger proportion of higher-rate two-year plans, a more favourable postpaid subscriber mix, and increases in data roaming and chargeable data usage, partly offset by a decline in voice revenue; (ii) wireless equipment revenue that has generally increased due to higher retention volumes, especially in 2015 as two-year and three-year customer contracts began to expire coterminously, and an increase in the sales mix of higher-priced smartphones; and (iii) growth in wireline data revenues, driven by Internet, enhanced data services, business process outsourcing, TELUS TV and TELUS Health services. This growth was partially offset by the continued declines in wireless voice revenues, as well as wireline voice service and other wireline services and equipment revenues.



The wireless data revenue growth trend is moderating as it is impacted by competitive pressures driving larger allotments of data provided in rate plans, including data sharing and international data roaming features and plans, and unlimited messaging rate plans, as well as customer reactions to increased frequency of real-time data usage notifications and offloading of data traffic from our wireless network to increasingly available Wi-Fi hotspots. We introduced two-year wireless rate plans in July 2013, which have impacted acquisition and retention trends, as well as data usage, as subscribers optimize unlimited talk and text and shared data plans, and which we expect will increase the frequency of subscribers updating their devices and services. ARPU is expected to continue to increase over time, though at lower growth rates, as a result of the declining proportion of customers on legacy three-year plans renewing to higher-rate two-year plans, continued but moderating growth in chargeable data usage, and the ongoing shift in our subscriber base towards higher-value postpaid customers. However, the level of ARPU is highly dependent on competition, the economic situation, consumer behaviour, government decisions, device selection and other factors, and, as a consequence, there cannot be any assurance that ARPU growth will continue to materialize. In the third and fourth quarters of 2015, for instance, ARPU growth was tempered by the impact of the economic slowdown, particularly in Alberta, and also by the ongoing decline in voice revenue. These factors are expected to continue to impact growth through 2016.

Retention spending as a percentage of network revenue has increased year over year from 11.8% in 2014 to 13.9% in 2015 mainly from the coterminous expiration of two-year and three-year contracts beginning on June 3, 2015 (see *CRTC's national Wireless Code/Provincial consumer protection legislation* in *Section 10.4 Regulatory matters)* and an increase in the sales mix of higher-subsidy smartphones. We may continue to experience a higher volume of contract renewals than previously experienced prior to June 3, 2015. We may also experience continuing pressure on our postpaid subscriber churn if some of our remaining clients on three-year contracts choose to terminate their contracts early or if increased competitive intensity continues in 2016. Accordingly, our wireless segment historical operating results and trends prior to the coterminous expiration of two-year and three-year contracts may not be reflective of results and trends for future periods.

Historically, there has been significant third and fourth quarter seasonality due to higher wireless subscriber additions, an increase in related acquisition costs and equipment sales, and higher retention costs due to contract renewals. Typically, these impacts can also be more pronounced around popular device launches. Wireless EBITDA usually decreases sequentially from the third to the fourth quarter, due to seasonal loading volumes. Subscriber additions have typically been lowest in the first quarter. Historically, monthly wireless ARPU has experienced seasonal sequential increases in the second and third quarters, reflecting higher levels of usage and roaming in the spring and summer, followed by seasonal sequential declines in the fourth and first quarters. This seasonal effect on ARPU is expected to diminish in the future, as unlimited nationwide voice plans become more prevalent and chargeable usage and long distance spikes become less pronounced.

The trend of increasing wireline data revenue reflects growth in high-speed Internet and enhanced data services, including increases in usage and adoption of higher-speed services, growth in business process outsourcing, the continuing but moderating expansion of our TELUS TV subscriber base (up 9.7% in 2015), growth in TELUS Health solutions and certain rate increases. Higher Internet service revenues are due to a larger high-speed Internet subscriber base (up 6.2% in 2015), bundling of offers with Optik TV, the introduction of usage-based billing and certain rate increases. A general trend of declining wireline voice revenues is due to competition from voice over IP (VoIP) service providers (including cable-TV competitors), resellers and facilities-based competitors, as well as technological substitution to wireless and IP-based services and applications, increased competition in the small and medium-sized business market, and the impact of the economic slowdown and associated customers' re-sizing of services.

The trend in Goods and services purchased expense reflects increasing wireless equipment expenses associated with higher-value smartphones in the sales mix and higher retention volumes, increasing content costs due to a growing wireline TELUS TV subscriber base, growing wireless customer service and distribution channel expenses, and increasing non-labour restructuring and other costs, partly offset by lower wireless network operating expenses from operational efficiency initiatives.

The trend in Employee benefits expense reflects increases in compensation and employee-related restructuring costs, as well as more full-time equivalent (FTE) employees supporting business process outsourcing revenue growth, partly offset by lower domestic FTE employees in part due to the reduction of full-time positions announced in November 2015 and higher capitalized labour costs associated with increased capital expenditures, as described in *Section 7.3*.

The general trend in depreciation and amortization reflects increases due to growth in capital assets in support of the expansion of our broadband footprint and enhanced LTE network coverage, as well as adjustments related to our continuing program of asset life studies.

The general trend in Financing costs reflects an increase in long-term debt outstanding associated with significant investments in wireless spectrum licences acquired in the Department of Innovation, Science and Economic Development's (formerly Industry Canada) spectrum auctions in 2014 and 2015. Financing costs also include the Employee defined benefit net interest expense that has increased for 2015, primarily

due to the increase in the defined benefit plan deficit at December 31, 2014, as compared to the defined benefit plan surplus at December 31, 2013. Employee defined benefit plans net interest expense is expected to decrease in 2016 as a result of the decrease in net deficit, partially offset by the application of a higher discount rate at December 31, 2015 (see *Note 14* of our 2015 Consolidated financial statements). Moreover, Financing costs are net of capitalized interest related to spectrum licences acquired during the spectrum auctions held by the Department of Innovation, Science and Economic Development, which we expect to deploy into our existing network in future periods (capitalized long-term debt interest is $45 million since commencement in the second quarter of 2015). Financing costs for the eight periods shown include varying amounts of foreign exchange gains or losses and varying amounts of interest income, including $20 million of interest income in the second quarter of 2015 resulting from the settlement of prior years' income tax-related matters. In addition, Financing costs in the third quarter of 2014 included long-term debt prepayment premiums of approximately $13 million.

The trend in Net income reflects the items noted above, as well as non-cash adjustments arising from legislated income tax changes and adjustments recognized in the current period for income tax of prior periods, including any related after-tax interest on reassessments. The trend in basic EPS also reflects the impact of share purchases under our normal course issuer bid (NCIB) program.

The trend in cash provided by operating activities reflects growth in consolidated EBITDA and lower income tax payments in 2015, net of higher interest expenses related to our financing activities. The trend in free cash flow reflects the factors affecting cash provided by operating activities, as well as increases in capital expenditures (excluding spectrum licences), but excludes the effects of certain changes in working capital, such as trade accounts receivable and trade accounts payable. For information on future trends, see *Section 9 General trends, outlook and assumptions*.

Fourth quarter recap

Results for the fourth quarter of 2015 were discussed in Management's review of operations contained in our February 11, 2016 news release.

- **Consolidated operating revenues** increased by $89 million or 2.8% in the fourth quarter of 2015, when compared to the fourth quarter of 2014. Wireless network revenue increased year over year by $46 million or 3.0% in the fourth quarter because of subscriber growth and a 0.6% increase in wireless blended ARPU. Wireline data revenues increased year over year by $80 million or 8.8% in the fourth quarter due to growth in Internet and enhanced data services, business process outsourcing services, TELUS TV services and TELUS Health services, while wireline other operating income increased year over year by $11 million or 85% from gains on the sale of certain real estate assets. These increases were partly offset by the year-over-year decline in wireless equipment and other revenues of $18 million or 9.2%, from lower gross additions, net of higher retention volumes, as well as lower Black's Photography revenue due to the closure of all remaining stores in August 2015 and the continued year-over-year decline in legacy wireline voice revenue of $35 million or 8.9%.

- Consolidated **EBITDA** decreased year over year by $23 million or 2.3% in the fourth quarter of 2015, while EBITDA — excluding restructuring and other costs increased year over year by $50 million or 4.9% in the fourth quarter of 2015. This increase is primarily due to growth in wireless network revenues, and higher wireline data revenues and associated margins, partly offset by higher wireless retention costs and continued declines in legacy wireline voice revenues.

- In the fourth quarter of 2015, Net income decreased year over year by $51 million or 16% and basic EPS decreased year over year by $0.07 or 14%. Both net income and basic EPS were affected by higher restructuring and other costs, as well as an increase in depreciation and amortization expenses. Excluding restructuring and other costs and income tax-related adjustments, adjusted basic EPS increased year over year by $0.01 or 1.9%.

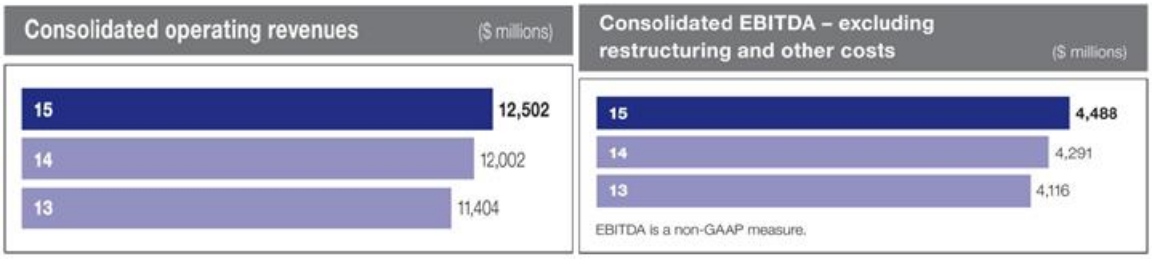
- **Cash provided by operating activities** decreased by $54 million in the fourth quarter of 2015 due to higher share-based compensation payments net of expenses and lower consolidated EBITDA, partly offset by lower restructuring disbursements net of expenses.

- **Cash used by investing activities** increased by $88 million in the fourth quarter of 2015, mainly due to increased capital expenditures primarily from wireline and wireless broadband investments and continued investment in system and network resiliency and reliability.

- **Cash provided by financing activities** increased by $214 million in the fourth quarter of 2015 when compared to the same period in 2014, mainly due to a year-over-year increase of $354 million in long-term debt issued net of repayments, partly offset by higher dividend payments and share purchases under our NCIB program.

5.3 Consolidated operations

The following is a discussion of our consolidated financial performance. Segmented information in *Note 5* of the Consolidated financial statements is regularly reported to our chief executive officer (CEO), the chief operating decision-maker. We discuss the performance of our segments in *Section 5.4 Wireless segment, Section 5.5 Wireline segment* and *Section 7.3 Cash used by investing activities — capital expenditures.*



Operating revenues

Years ended December 31 ($ millions)	2015	2014	Change
Service	**11,590**	11,108	4.3%
Equipment	**840**	819	2.6%
Revenues arising from contracts with customers	**12,430**	11,927	4.2%
Other operating income	**72**	75	(4.0)%
	12,502	12,002	4.2%

Consolidated operating revenues increased year over year by $500 million in 2015, as follows:

- **Service revenue** increased by $482 million in 2015, reflecting higher wireless network revenue resulting from growth in the wireless subscriber base and an increased wireless monthly blended ARPU; higher wireline Internet and enhanced data services revenues due to subscriber growth and higher revenue per customer; and increased wireline business process outsourcing, TELUS TV and TELUS Health services revenues. This growth was partly offset by ongoing declines in wireline voice, continued competitive pressures, product substitution, the impacts of the economic slowdown, particularly in Alberta, and a decline in other services revenue.

- **Equipment revenue** increased by $21 million in 2015. Wireless equipment revenues increased by $61 million in 2015, reflecting greater retention volumes and higher-priced smartphones in the sales mix, partly offset by lower gross additions and lower Black's Photography equipment revenues from the closure of all remaining stores in August 2015. Wireline equipment revenues decreased by $40 million, mainly from declines in business spending.

- **Other operating income** decreased year over year by $3 million in 2015, mainly from a decrease in the current period amortization of deferred revenue in respect of the regulatory price cap deferral account for provisioning broadband Internet services to eligible rural and remote communities, as well as lower investment income, partly offset by higher gains from the sale of certain real estate assets in 2015.

Operating expenses

Years ended December 31 ($ millions)	2015	2014	Change
Goods and services purchased	**5,532**	5,299	4.4%
Employee benefits expense	**2,708**	2,487	8.9%
Depreciation	**1,475**	1,423	3.7%
Amortization of intangible assets	**434**	411	5.6%
	10,149	9,620	5.5%

Consolidated operating expenses increased by $529 million in 2015.

- **Goods and services purchased** increased by $233 million in 2015. The increase reflects higher wireless subscriber retention costs to 13.9% of wireless network revenue in 2015, as compared to 11.8% in 2014. This increase also reflects higher non-labour restructuring and other costs mainly from real estate rationalization and an increase in our wireless customer service and distribution channel expenses. This increase was partially offset by lower wireline equipment cost of sales associated with lower equipment revenues, a decline in advertising and promotions expenses, lower wireless network operating costs, and a retroactive assessment of additional TV revenue contribution expense in 2014 of approximately $15 million towards our Canadian programming funding requirements.

- **Employee benefits expense** increased by $221 million in 2015, primarily driven by increased wages and salaries mainly from higher number of FTE employees to support growth in business process outsourcing revenue, as well as higher labour restructuring expenses (see *Section 2.2*) and increased employee defined pension benefit plan costs. These increases were partially offset by higher capitalized labour costs associated with increased capital expenditures.

- **Depreciation** increased by $52 million in 2015 due to growth in capital assets (such as the broadband network, the wireless LTE network and TELUS TV-related assets), as well as the impact of our continuing program of asset life studies.

- **Amortization of intangible assets** increased by $23 million in 2015, reflecting growth in the intangible asset base, partially offset by software asset life adjustments arising from our continuing program of asset life studies.

Operating income

Years ended December 31 ($ millions)	2015	2014	Change
	2,353	2,382	(1.2)%

Operating income decreased by $29 million in 2015 from increases in total depreciation and amortization expenses of $75 million discussed above, and a decline in wireline EBITDA of $33 million largely driven by higher restructuring and other costs. Partly offsetting this decrease was growth in wireless EBITDA of $79 million, which was limited by higher retention spend and restructuring and other costs.

Financing costs

Years ended December 31 ($ millions)	2015	2014	Change
Gross interest expense	**515**	446	15.5%
Capitalized long-term debt interest	**(45)**	—	n/m
Long-term debt prepayment premium	**—**	13	(100.0)%
Interest expense	**470**	459	2.4%
Employee defined benefit plans net interest	**27**	3	n/m
Interest income and foreign exchange net gains	**(50)**	(6)	n/m
	447	456	(2.0)%

Financing costs decreased by $9 million in 2015, mainly due to the following factors:

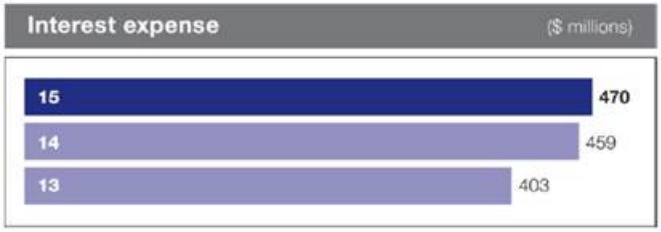
- **Gross interest expense**, excluding capitalized long-term debt interest and long-term debt prepayment premium, increased by $69 million or 16% in 2015. This increase was due to growth in the average long-term debt balances outstanding, resulting primarily from the purchase of spectrum licences, partly offset by a reduction in the effective interest rate. As a result of our 2015 financing activities, our weighted average interest rate on long-term debt (excluding commercial paper) was 4.32% as at December 31, 2015, as compared to 4.72% one year earlier. For additional details on our financing activities, see *Long-term debt issues and repayments* in *Section 7.4*.

- **Capitalized long-term debt interest** is in respect of debt incurred for the purchase of spectrum licences during spectrum auctions held by the Department of Innovation, Science and Economic Development, which we expect to deploy in our existing network in future periods. Capitalization of long-term debt interest will continue until such spectrum is deployed in our network**.**

- **Long-term debt prepayment premium** decreased by $13 million in 2015. The 2014 premium of $13 million before income taxes was related to the early redemption of $500 million of 5.95% Series CE Notes in September 2014.

- **Employee defined benefit plans net interest** is calculated for each year based on the net defined benefit plan surplus (deficit) at December 31 of the previous year. Employee defined benefit plans net interest expense increased by $24 million in 2015, primarily due to the increase in the defined benefit plan deficit at December 31, 2014, as compared to the defined benefit plan surplus at December 31, 2013.

- **Interest income and foreign exchange net gains** fluctuate from period to period. Interest income was $25 million in 2015, as compared to $2 million in 2014, mainly due to the settlement of prior years' income-tax related matters. Foreign exchange net gains were $25 million in 2015, as compared to $4 million in 2014, mainly due to the positive effects of foreign exchange derivatives contracts.



Income taxes

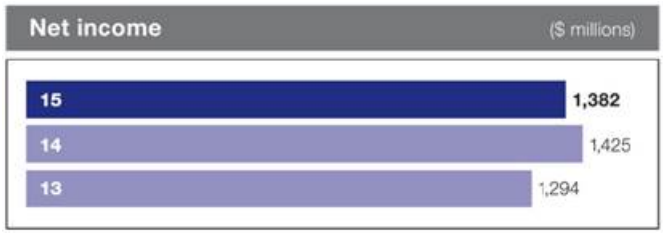
Years ended December 31 ($ millions, except tax rates)	2015	2014	Change
Income taxes computed at applicable statutory rates	**505**	504	0.2%
Revaluation of deferred income tax liability to reflect future statutory income tax rates	**48**	—	n/m
Adjustments recognized in the current period for income taxes of prior periods	**(30)**	(6)	n/m
Other	**1**	3	(66.7)%
	524	501	4.6%
Income taxes computed at applicable statutory rates (%)	**26.5**	26.2	0.3pts.
Effective tax rates (%)	**27.5**	26.0	1.5pts.

Total income tax expense increased by $23 million or 4.6% in 2015, mainly due to a $48 million non-cash adjustment in the second quarter of 2015 to revalue deferred income tax liabilities arising from an increase to the Alberta provincial corporate tax rate from 10% to 12% effective July 1, 2015, partly offset by higher recoveries from the settlement of prior years' income tax-related matters and lower income before income taxes.

Comprehensive income

Years ended December 31 ($ millions)	2015	2014	Change
Net income	**1,382**	1,425	(3.0)%
Other comprehensive income (loss) (net of income taxes):			
Items that may be subsequently reclassified to income	**21**	7	n/m
Item never subsequently reclassified to income — Employee defined benefit plans re-measurements	**445**	(445)	n/m
Comprehensive income	**1,848**	987	87.2%

Comprehensive income increased by $861 million or 87% in 2015. This was primarily due to positive increases in employee defined benefit plan re-measurements from changes to estimates regarding actuarial assumptions, including an increased discount rate and adjustments in the cost of living allowance indexing assumption, partly offset by a decline in Net income. Items that may be subsequently reclassified to income are composed of changes in the unrealized fair value of derivatives designated as cash flow hedges, foreign currency translation adjustments arising from translating financial statements of foreign operations, and changes in the unrealized fair value of available-for-sale investments.



5.4 Wireless segment

Wireless operating indicators

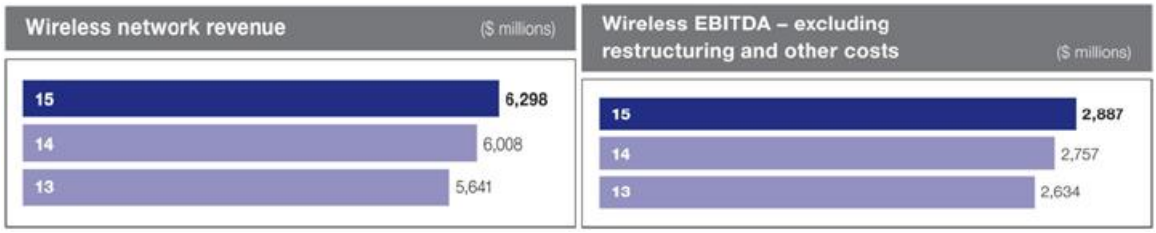
At December 31	2015	2014 [1]	Change
Subscribers (000s):			
Postpaid	**7,352**	7,108	3.4%
Prepaid	**1,105**	1,173	(5.8)%
Total	**8,457**	8,281	2.1%
Postpaid proportion of subscriber base (%)	**86.9**	85.8	1.1pts.
HSPA+ population coverage [2] (millions)	**35.7**	35.3	1.1%
LTE population coverage [2] (millions)	**34.9**	31.7	10.1%

Years ended December 31	2015	2014	Change
Subscriber gross additions (000s):			
Postpaid	**1,014**	1,075	(5.7)%
Prepaid	**429**	545	(21.3)%
Total	**1,443**	1,620	(10.9)%
Subscriber net additions (000s):			
Postpaid	**244**	357	(31.7)%
Prepaid	**(68)**	(105)	35.2%
Total	**176**	252	(30.2)%
Blended ARPU, per month [3] ($)	**63.45**	62.25	1.9%
Churn, per month [3] (%)			
Blended	**1.26**	1.41	(0.15)pts.
Postpaid	**0.94**	0.93	0.01pts.
Cost of acquisition (COA) per gross subscriber addition [3] ($)	**418**	385	8.5%
Retention spend to network revenue [3] (%)	**13.9**	11.8	2.1pts.
Retention volume [3] (in thousands of units)	**2,169**	1,971	10.1%

(1) Effective January 1, 2014, prepaid subscribers, total subscribers and associated operating statistics (gross additions, net additions, blended ARPU, blended churn and COA per gross subscriber addition) have been adjusted for the inclusion of 222,000 Public Mobile prepaid subscribers in the opening subscriber balances and subsequent Public Mobile subscriber changes.

(2) Including network access agreements with other Canadian carriers.

(3) See *Section 11.2 Operating indicators*. These are industry measures useful in assessing operating performance of a wireless company, but are not measures defined under IFRS-IASB.



Operating revenues — Wireless segment

Years ended December 31 ($ in millions, except ratios)	2015	2014	Change
Network revenues	**6,298**	6,008	4.8%
Equipment and other	**635**	579	9.7%
External operating revenues	**6,933**	6,587	5.3%
Intersegment network revenue	**61**	54	13.0%
Total operating revenues	**6,994**	6,641	5.3%
Data revenue to network revenues (%)	**55**	50	5pts.

Total wireless operating revenues increased by $353 million or 5.3% in 2015, reflecting growth in both network and equipment revenues.

Network revenues from external customers increased by $290 million or 4.8% in 2015. Data network revenue increased by 15% in 2015, reflecting growth in the subscriber base, a larger proportion of higher-rate two-year plans in the revenue mix, a favourable postpaid subscriber mix, and increases in data roaming and chargeable data usage, partly offset by the impacts of the economic slowdown, particularly in Alberta. Voice network revenue decreased by 4.9%

in 2015 due to the increased adoption of unlimited nationwide voice plans and continued substitution to data services and features.

- **Monthly blended ARPU** was $63.45 in 2015, reflecting an increase of $1.20 or 1.9% from 2014. The increase was driven by the effects of higher-rate two-year plans, a more favourable postpaid subscriber mix, increased data roaming and moderating growth in chargeable data usage, partly offset by declines in voice revenue, elimination of charges for paper bills and the impact of the economic slowdown, particularly in Alberta. Growth in chargeable data usage slowed during the year as a result of increased data allotments in Your Choice plans commencing June 2015, customer reactions to increased frequency of real-time data usage notifications as part of our customers first initiatives, and the launch of our US Easy Roam service in July 2015 for customers travelling in the United States. These data usage initiatives are aligned with our priority of putting customers first, and are consequently expected to drive margin accretion through higher customer satisfaction.

- **Gross subscriber additions** were 1,443,000 in 2015, reflecting a decrease of 177,000 from 2014. Postpaid gross additions were 1,014,000 in 2015, down 61,000 from 2014 due to the impacts of the economic slowdown, particularly in Alberta, moderating growth in market penetration, increased competitive intensity and the effect of higher handset prices on customer demand. Prepaid gross additions were 429,000 in 2015, reflecting a decrease of 116,000 from 2014 mainly from lower Public Mobile gross additions.

- **Net subscriber additions** were 176,000 in 2015, reflecting a decrease of 76,000 from 2014 due to lower gross subscriber additions, partly offset by an improvement in our blended monthly churn rate. Postpaid net additions were 244,000 in 2015, down 113,000 from 2014 due to the factors affecting gross subscriber additions described above and a modest increase in our postpaid churn rate to 0.94%. Prepaid subscribers decreased by 68,000 in 2015, as compared to a decrease of 105,000 in 2014. Prepaid losses reflect conversions to postpaid services, our focused marketing efforts on higher-value loading and increased competition for prepaid services.

- Our **average monthly postpaid subscriber churn rate** was 0.94% in 2015, as compared to 0.93% in 2014. The modest increase in our postpaid churn rate was mainly due to continued competitive intensity as two-year and three-year customer contracts began expiring concurrently in June 2015, as well as the effects of the economic slowdown, particularly in Alberta, and our focused marketing efforts on higher-value loading. We expect these impacts to continue in 2016. Our blended monthly subscriber churn rate was 1.26% in 2015, as compared to 1.41% in 2014. The improvement in our blended churn rate was due to our increasing proportion of postpaid subscribers in the subscriber base and our continued focus on customers first initiatives, our clear and simple approach and retention programs, partly offset by the economic slowdown, particularly in Alberta, competitive intensity, and our focused marketing efforts on higher-value loading impacting postpaid subscriber churn noted above.

Equipment and other revenues increased by $56 million in 2015, mainly due to higher retention volumes in part from the simultaneous expiration of two-year and three-year contracts, as well as higher-priced smartphones in the sales mix, partly offset by lower gross additions and lower Black's Photography revenue from the closure of stores in August 2015.

Intersegment revenue in the wireless segment represents network services provided to the wireline segment. Such revenues are eliminated upon consolidation along with the associated expenses.

Operating expenses — Wireless segment

Years ended December 31 ($ in millions)	2015	2014	Change

Goods and services purchased:			
Equipment sales expenses	**1,623**	1,423	14.1%
Network operating expenses	**759**	776	(2.2)%
Marketing expenses	**436**	426	2.3%
Other [1]	**653**	603	8.3%
Employee benefits expense [1]	**717**	686	4.5%
Total operating expenses	**4,188**	3,914	7.0%

(1) Includes restructuring and other costs. See *Investing in internal capabilities* in *Section 2.2*.

Wireless segment expenses increased by $274 million in 2015.

Equipment sales expenses increased by $200 million in 2015, reflecting increased retention volumes and higher-value smartphones in the sales mix, partly offset by lower gross additions and lower cost of sales from the closure of Black's Photography stores in August 2015.

- **Retention costs as a percentage of network revenue** were 13.9% in 2015, as compared to 11.8% in 2014, representing an increase of $165 million or 23%, as compared to 2014. The increase was driven by greater retention volumes in part from the simultaneous expiration of two-year and three-year contracts, as well as increased commissions and higher per-unit subsidy costs due to a continued customer preference for higher-value smartphones, higher subsidies during peak period loading in the third and fourth quarters of 2015 and lower device upgrade fees.

- **COA per gross subscriber addition** was $418 in 2015, an increase of $33 from 2014, mainly due to an increase in per-unit subsidy costs reflecting a greater proportion of postpaid gross additions, increased commissions, higher-value smartphones in the sales mix and increased subsidies during peak period loading in the third and fourth quarters of 2015.

Network operating expenses decreased by $17 million in 2015, reflecting lower network maintenance and support costs resulting from turning down the Public Mobile CDMA network in late 2014, partly offset by higher roaming costs driven by volume increases.

Marketing expenses increased by $10 million in 2015, mainly from higher commission costs driven by higher retention volumes, partly offset by reduced advertising and promotional expenses.

Other goods and services purchased increased by $50 million in 2015, reflecting higher non-labour restructuring and other costs mainly from real estate rationalization, higher bad debt provision to support our growing subscriber base, the expansion of our distribution channels and increases in external labour costs.

Employee benefits expense increased by $31 million in 2015, mainly from higher labour restructuring costs of $23 million, lower capitalized labour costs of $3.6 million and higher share-based compensation of $2.8 million.

EBITDA — Wireless segment

Years ended December 31 ($ millions, except margins)	2015	2014	Change
EBITDA	**2,806**	2,727	2.9%
Restructuring and other costs included in EBITDA	**81**	30	170.0%
EBITDA — excluding restructuring and other costs	**2,887**	2,757	4.7%
EBITDA margin (%)	**40.1**	41.1	(1.0)pts.
EBITDA margin — excluding restructuring and other costs (%)	**41.3**	41.5	(0.2)pts.

Wireless EBITDA increased by $79 million or 2.9% in 2015. Wireless EBITDA — excluding restructuring and other costs increased by $130 million or 4.7% reflecting network revenue growth driven by a larger customer base and ARPU growth, partly offset by higher retention spend, higher bad debt provisions, and increased customer service and distribution channel expenses.

5.5 Wireline segment

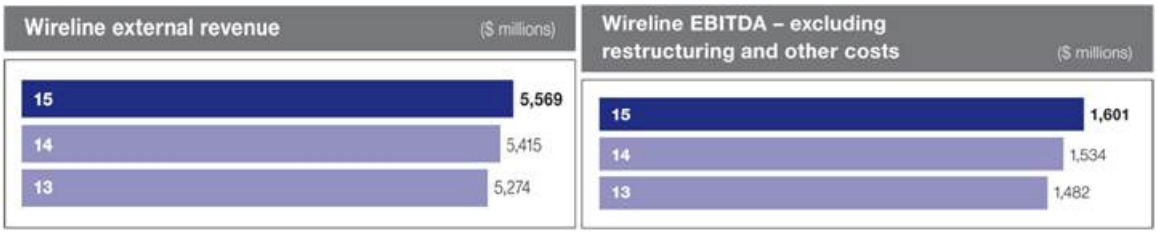
Wireline operating indicators

At December 31 (000s)	2015	2014	Change
Subscriber connections:			
High-speed Internet subscribers	**1,566**	1,475	6.2%
TELUS TV subscribers	**1,005**	916	9.7%
Residential network access lines (NALs)	**1,467**	1,556	(5.7)%
Total wireline subscriber connections [1]	**4,038**	3,947	2.3%

Years ended December 31 (000s)	2015	2014	Change
Subscriber connection net additions (losses):			
High-speed Internet	**91**	80	13.8%
TELUS TV	**89**	101	(11.9)%

Residential NALs	**(89)**	(87)	(2.3)%
Total wireline subscriber connection net additions [1]	**91**	94	(3.2)%

(1) Effective December 31, 2015, business NALs has been removed from the reported subscriber base due to its diminishing relevance as a key performance indicator (for example, the impact of migrations from voice lines to IP services has led to business NAL losses without a similar decline in revenue). Accordingly, December 31, 2014 has been retrospectively adjusted to exclude 1,613,000 business NALs in the reported subscriber balances. As of December 31, 2015, the business NAL subscriber base was 1,586,000 and business NAL losses were 27,000 in 2015, as compared to business NAL gains of 2,000 in 2014. Total wireline subscriber connections, if business NALs were included, would have been 5,624,000 in 2015, or an increase of 1.2% from 2014.



Operating revenues — Wireline segment

Years ended December 31 ($ in millions)	2015	2014	Change
Data service and equipment	**3,772**	3,472	8.6%
Voice service	**1,496**	1,615	(7.4)%
Other services and equipment	**238**	255	(6.7)%
Revenues arising from contracts with customers	**5,506**	5,342	3.1%
Other operating income	**63**	73	(13.7)%
External operating revenues	**5,569**	5,415	2.8%
Intersegment revenue	**174**	175	(0.6)%
Total operating revenues	**5,743**	5,590	2.7%

Total wireline operating revenues increased by $153 million or 2.7% in 2015 from continued growth in Internet and enhanced data services revenue resulting from a larger subscriber base and higher revenue per customer, growth in business process outsourcing services, growth in TELUS TV services revenue from a larger subscriber base, and increased TELUS Health services revenue, partly offset by declines in legacy voice services and other services and equipment revenues, as well as the impact of the economic slowdown, particularly in Alberta, continued competitive pressures and product substitution.

Revenues arising from contracts with customers increased by $164 million or 3.1% in 2015.

- **Data service and equipment revenues** increased year over year by $300 million, primarily due to: (i) increased Internet and enhanced data service revenues of $125 million resulting from a 6.2% increase in high-speed Internet subscribers over the year, higher revenue per customer from upgrades to faster Internet speeds and larger usage rate Internet plans, subscribers coming off of promotional offers, the introduction of usage-based billing and certain rate increases in late 2014; (ii) growth in business process outsourcing revenues of $120 million; (iii) increased TELUS TV revenues of $48 million resulting from a 9.7% subscriber growth over the year and certain rate increases in 2015; and (iv) increased TELUS Health revenues of $17 million. These increases were partly offset by declines in managed services, video-conferencing revenues and data equipment sales of $10 million, largely driven by an economic slowdown and lower business spending, particularly in Alberta.

- **Voice service revenues** decreased by $119 million in 2015. The decrease reflects the ongoing decline in legacy voice revenues from technological substitution, increased competition, greater use of inclusive long distance plans and lower long distance minutes of use, partially offset by certain rate increases. We experienced a 5.7% decline in residential NALs in the year, compared to a 5.3% decline in 2014.

- **Wireline subscriber connections net additions** were 91,000 in 2015, reflecting a modest decline of 3,000 from 2014.

  - **Net additions** of high-speed Internet subscribers increased in 2015 when compared to 2014, as a result of the expansion of our high-speed broadband footprint and the pull-through impact from the continued bundling with Optik TV, partially offset by an increase in our customer churn rate. Net additions of TELUS TV subscribers declined in 2015 as expansion of our addressable high-speed broadband footprint and increasing broadband speeds were more than offset by the effects of slower subscriber growth for paid TV services, lower oil sands construction camp activity and increasing competition from over-the-top (OTT) services. In 2015, our TELUS TV subscriber base surpassed the one-million-subscriber mark. Continued focus on expanding our addressable Optik TV and high-speed Internet footprint, connecting more homes and businesses directly to fibre and bundling these services together, has resulted in combined Internet and TV subscriber growth of 7.5% in 2015.

- **Residential NAL losses** of 89,000 in 2015 was a modest increase from 87,000 NAL losses in 2014, reflecting the ongoing trend of substitution to wireless and Internet-based services, including losses to competitors, partially mitigated by the success of our bundled service offerings and customers first initiatives.

- **Other services and equipment revenues** decreased by $17 million, reflecting declines in voice equipment sales and the elimination of charges for paper bills.

Other operating income decreased by $10 million in 2015 as a result of a decline in the current period amortization of deferred revenue in respect of the regulatory price cap deferral account for provisioning broadband Internet services to eligible rural and remote communities, as well as lower investment income, partly offset by higher gains from the sale of certain real estate assets.

Intersegment revenue represents services provided to the wireless segment. Such revenue is eliminated upon consolidation together with the associated expenses.

Operating expenses — Wireline segment

Years ended December 31 ($ millions)	2015	2014	Change
Goods and services purchased [1]	**2,296**	2,300	(0.2)%
Employee benefits expense [1]	**1,991**	1,801	10.5%
Total operating expenses	**4,287**	4,101	4.5%

(1) Includes restructuring and other costs. See *Section 11.1 Non-GAAP and other financial measures.*

Total wireline operating expenses increased by $186 million in 2015, primarily due to the following factors:

- **Goods and services purchased** decreased by $4 million in 2015, mainly from a decrease in business equipment cost of sales associated with lower equipment revenues, reduced advertising and promotions costs, and a retroactive assessment of additional TV revenue contribution expense in 2014 of approximately $15 million towards our Canadian programming funding requirements. This decrease was partly offset by higher non-labour restructuring and other costs from real estate rationalization, as well as increased network operating costs and administrative costs to support our growing subscriber base.

- **Employee benefits expense** increased by $190 million in 2015, primarily due to higher compensation and benefit costs of $113 million mainly to support increased business process outsourcing revenue, higher labour restructuring costs of $78 million from efficiency initiatives and increased employee defined benefit pension plan expenses of $29 million, partly offset by increases in capitalized labour costs of $38 million associated with increased capital expenditures.

EBITDA — Wireline segment

Years ended December 31 ($ millions, except margins)	2015	2014	Change
EBITDA	**1,456**	1,489	(2.2)%
Restructuring and other costs included in EBITDA	**145**	45	n/m
EBITDA — excluding restructuring and other costs	**1,601**	1,534	4.4%
EBITDA margin (%)	**25.4**	26.6	(1.2)pts.
EBITDA — excluding restructuring and other costs margin (%)	**27.9**	27.4	0.5pts.

Wireline EBITDA decreased by $33 million or 2.2% in 2015. EBITDA — excluding restructuring and other costs increased by $67 million or 4.4% in 2015 as compared to revenue growth of 2.7% in 2015 reflecting improving margins in data services, including Internet, TELUS TV, business process outsourcing and TELUS Health services.

6. Changes in financial position

Financial position at: ($ millions)	December 31 2015	December 31 2014	Change		Change includes:
Current assets					
Cash and temporary investments, net	**223**	60	163	n/m	See *Section 7 Liquidity and capital resources*
Accounts receivable	**1,428**	1,483	(55)	(4)%	A decrease in days outstanding in receivables, partly offset by an increase in operating revenue

Income and other taxes receivable	**1**	97	(96)	(99)%	Refund received, as well as Income and other taxes payable for the current year more than offsetting Income and other taxes receivable for prior years
Inventories	**360**	320	40	13%	An increase in the average unit costs resulting from a higher-value mix of smartphones, partly offset by a decrease in the quantity of wireless handsets on hand
Prepaid expenses	**213**	199	14	7%	An increase in prepayment of maintenance contracts net of amortization
Real estate joint venture advances	**66**	—	66	n/m	Amounts reclassified from Non-current assets reflecting advances on the construction facility for the TELUS Garden residential building scheduled for completion in 2016
Derivative assets	**40**	27	13	48%	An increase in U.S. currency hedging items, partly offset by a decrease from maturation of restricted stock units hedges.
Current liabilities					
Short-term borrowings	**100**	100	—	—%	See *Section 7.7 Sale of trade receivables*
Accounts payable and accrued liabilities	**1,990**	2,019	(29)	(1)%	A decrease in restricted stock unit liability, partly offset by the timing of accounts payable and interest payments and an increase in payroll and other employee-related liabilities
Income and other taxes payable	**108**	2	106	n/m	An increase is due to current income tax expense in excess of instalments
Dividends payable	**263**	244	19	8%	An increase in the dividend rate, partly offset by a reduction in shares outstanding as a result of the normal course issuer bid (NCIB) program
Advance billings and customer deposits	**760**	753	7	1%	An increase in billings to wireless dealers for handsets not activated partly offset by lower customer deposits
Provisions	**197**	126	71	56%	Primarily employee-related restructuring expenses in excess of associated disbursements
Current maturities of long-term debt	**856**	255	601	n/m	Amounts reclassified from long-term debt relating to the upcoming maturity of $600 million of our 3.65% Notes, Series CI in May 2016, net of repayment of $125 million of 11.9% Debentures in November 2015, as well as an increase in outstanding commercial paper of $126 million
Current derivative liabilities	**2**	—	2	n/m	An increase from U.S. currency hedges.
Working capital (Current assets subtracting Current liabilities)	**(1,945)**	(1,313)	(632)	(48)%	Working capital decreased due to an increase in Current maturities of long-term debt, a decrease in Income and other taxes receivable/payable, an increase in Provisions and a decrease in Accounts receivable, partly offset by an increase in Cash and temporary investments, amounts from Real estate joint venture advances reclassified as current assets, an increase in Inventories and a decrease in Accounts payable and accrued liabilities.

Financial position at: ($ millions)	**December 31** 2015	2014	**Change**		**Change includes:**
Non-current assets					
Property, plant and equipment, net	**9,736**	9,123	613	7%	See *Capital expenditures* in *Section 7.3 Cash used by investing activities* and *Depreciation* in *Section 5.3*
Intangible assets, net	**9,985**	7,797	2,188	28%	See *Capital expenditures* in *Section 7.3 Cash used by investing activities* and *Amortization of intangible assets* in *Section 5.3*
Goodwill, net	**3,761**	3,757	4	—%	An increase due to the acquisition of an electronic medical records (EMR) provider
Other long-term assets	**593**	354	239	68%	An increase in pension and post-retirement assets resulting from actuarial gains in the pension plans, partly offset by the reclassification of real estate joint venture advances to Current assets.
Non-current liabilities					
Provisions	**433**	342	91	27%	An increase in asset retirement obligations arising from a decrease in discount rates, as well as higher restructuring costs expensed in the period and classified as non-current
Long-term debt	**11,182**	9,055	2,127	23%	See *Section 7.4 Cash provided by financing activities* for a discussion of our financing activities

Other long-term liabilities	**688**	931	(243)	(26)%	Primarily a decrease in pension and post-retirement plan liabilities due to a pension plan actuarial gain (resulting in certain of the funded plans becoming net assets rather than net obligations) associated with an increased discount rate and reduction in cost of living allowance indexing assumption, as well as returns on plan assets in excess of the discount rate
Deferred income taxes	**2,155**	1,936	219	11%	Deferred income tax expense arising from increases in temporary differences and revaluation of the deferred tax liability for the increase in the Alberta corporate income tax rate.
Owners' equity					
Common equity	**7,672**	7,454	218	3%	Net income of $1.4 billion and Other comprehensive income of $466 million, net of dividend declarations of $1.0 billion and share purchase activity under our NCIB program of $620 million.

7. Liquidity and capital resources

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

7.1 Overview

In 2015, we paid $1.5 billion for wireless spectrum licences acquired in the first quarter AWS-3 spectrum auction, $479 million for the licences acquired in the second quarter 2500 MHz spectrum auction and $58 million for the licences acquired in the third quarter residual spectrum auction (700 MHz and AWS-3 bands). In March 2015, we publicly issued $1.75 billion of senior unsecured notes in three series with the proceeds mainly used to fund the spectrum licences purchased in the AWS-3 spectrum auction, repay approximately $110 million of indebtedness drawn from the 2014 Credit Facility and repay approximately $135 million of outstanding commercial paper. We utilized existing Short-term borrowings and long-term credit facilities to fund the spectrum licences purchased in the 2500 MHz and residual spectrum licence auctions. In December 2015, we publicly issued $1.0 billion of senior unsecured notes in two series with the proceeds used to repay $956 million of outstanding commercial paper and to fund the repayment, on maturity, of a portion of the $600 million principal amount outstanding on our Series CI Notes due May 2016.

In 2015, we paid dividends of $992 million to the holders of Common Shares and returned $628 million of cash to shareholders through share purchases under our completed 2015 and advanced 2016 normal course issuer bid (NCIB). During the month ended January 31, 2016, 1.0 million of our Common Shares were purchased by way of the automatic share purchase plan (ASPP) at a cost of $39 million. Subsequent to December 31, 2015, we paid dividends of $263 million to the holders of Common Shares in January 2016. Our capital structure financial policies, financing plan and report on financing and capital structure management plans are described in *Section 4.3*.

Cash flows

Years ended December 31 ($ millions)	2015	2014	Change
Cash provided by operating activities	**3,542**	**3,407**	4.0 %
Cash used by investing activities	**(4,477)**	**(3,668)**	(22.1)%
Cash provided (used) by financing activities	**1,098**	**(15)**	n/m
Increase (decrease) in Cash and temporary investments, net	**163**	**(276)**	159.1 %
Cash and temporary investments, net, beginning of period	**60**	**336**	(82.1)%
Cash and temporary investments, net, end of period	**223**	**60**	n/m

7.2 Cash provided by operating activities

Cash provided by operating activities increased by $135 million in 2015.

Analysis of changes in cash provided by operating activities

Years ended December 31 ($ millions)	2015	2014	Change
EBITDA (see *Section 5.4* and *Section 5.5*)	**4,262**	4,216	46
Restructuring and other costs, net of disbursements	**97**	1	96
Employee defined benefit plans expense, net of employer contributions	**24**	(1)	25
Share-based compensation expense, net of payments	**(38)**	74	(112)
Interest paid, including long-term debt prepayment premium of $13 million in September 2014	**(458)**	(412)	(46)
Interest received	**24**	2	22
Income taxes paid, net of refunds received	**(256)**	(464)	208
Other operating working capital changes	**(113)**	(9)	(104)
Cash provided by operating activities	**3,542**	3,407	135

- Restructuring and other costs, net of disbursements, increased in 2015, primarily due to increased year-over-year restructuring and other costs mainly from the reduction of full-time positions announced in November 2015, closure of the remaining Black's Photography retail stores in August 2015 and other real estate rationalizations, partly offset by higher year-over-year associated disbursements.

- Share-based compensation expense, net of payments, decreased in 2015, mainly from higher year-over-year cash outflows associated with restricted stock units (RSUs) arising from a timing difference which resulted in a cash outflow that would have typically arisen in the fourth quarter of 2014 but ended up occurring in the first quarter of 2015 due to a delay in our 2012 annual allocation of RSUs.

- Income taxes paid, net of refunds received, decreased in 2015, mainly reflecting lower required instalments and a lower final income tax payment for the 2014 income tax year than was required in the comparable period of 2014 for the 2013 income tax year.

- Other operating working capital changes reflected a net $104 million decrease in 2015, compared to 2014. This included a decrease in Accounts payable and accrued liabilities and an increase in Inventories, partly offset by decreases in Accounts receivable and Prepaid expenses. (See *Section 6 Changes in financial position* and *Note 25(b)* of the Consolidated financial statements.)



7.3 Cash used by investing activities

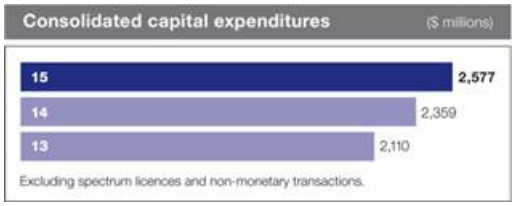
Cash used by investing activities increased by $809 million in 2015 and included the following:

- Cash payments for capital assets (excluding spectrum licences) increased by $149 million in 2015, including a $218 million increase in capital expenditures (see table and discussion below), partly offset by a $66 million comparative increase in Accounts payable and accrued liabilities that reflected payment timing differences in respect of capital expenditures.

- Our payments for spectrum licences were $2.0 billion in 2015, as compared to approximately $1.2 billion in 2014.

- In 2015, we made business acquisitions and related investments to complement our existing lines of business, totalling $10 million, as compared to $49 million in 2014.

- Our receipts from the real estate joint ventures, net of advances and contributions, were $48 million in 2015, mainly from repayment of construction financing by the TELUS Garden real estate joint venture pursuant to its bond issuance for the completed, and now occupied, office tower. This compares to advances and contributions to the real estate joint ventures, net of receipts, of $53 million in 2014.



Capital expenditure measures

Years ended December 31 ($ millions, except capital intensity)	2015	2014	Change
Capital expenditures (excluding spectrum licences and non-monetary transactions) [1]			
Wireless segment	**893**	832	7.3 %
Wireline segment	**1,684**	1,527	10.3 %
Consolidated	**2,577**	2,359	9.2 %
Wireless segment capital intensity (%)	**13**	13	—pt.
Wireline segment capital intensity (%)	**29**	27	2pts.
Consolidated capital intensity [2] (%)	**21**	20	1pt.

(1) Capital expenditures include assets purchased, but not yet paid for, and therefore differ from Cash payments for capital assets, as presented on the Consolidated statements of cash flows.

(2) See calculation and description in *Section 11.1 Non-GAAP and other financial measures*.

Wireless segment capital expenditures increased by $61 million in 2015, due to the continued investment in wireless broadband infrastructure to enhance our network coverage, speed and capacity, including the deployment of 700 MHz spectrum, as well as the continued investment in

system resiliency and reliability in support of our ongoing customers first initiatives, and to ready the network and systems for future retirement of legacy assets. Wireless segment capital intensity of 13% in 2015 was consistent with 2014.

Wireline segment capital expenditures increased by $157 million in 2015. We continued to invest in our wireline broadband infrastructure, including connecting more homes and businesses directly to our fibre-optic network. This investment supports our high-speed Internet and Optik TV subscriber growth, as well as customers' demand for faster Internet speeds, and extends the reach and functionality of our healthcare solutions. We also continued to make investments in system and network resiliency and reliability. Wireline segment capital intensity was 29% in 2015, up from 27% in 2014.

7.4 Cash provided by financing activities

Net cash provided by financing activities increased year over year by $1.1 billion in 2015. Financing activities included the following:

Dividends paid to the holders of Common Shares

Dividends paid to the holders of Common Shares totalled $992 million in 2015, a year-over-year increase of $79 million. The increase reflects higher dividend rates under our dividend growth program, offset by lower outstanding shares resulting from shares purchased and cancelled under our NCIB programs.

Purchase of Common Shares for cancellation

Under our 2015 NCIB, which commenced October 1, 2014, we purchased approximately 9.3 million shares in 2015, for $385 million, reaching the aggregate maximum purchase cost of $500 million on September 14, 2015. In respect of our 2016 NCIB, which commenced September 15, 2015, we purchased approximately 6.3 million of our Common Shares for $243 million during the remainder of 2015. See *Section 4.3* for details of our planned multi-year share purchase program through 2016.

Normal course issuer bids in 2015

Period	Common Shares purchased and cancelled	Average purchase price per share ($)	Purchase costs ($ millions)	Increase (decrease) in Accounts payable ($ millions)	Cash outflow ($ millions)
First quarter	3,793,200	41.06	156	—	156
Second quarter	3,322,600	40.74	135	29	106
Third quarter	2,531,862	43.43	110	(30)	140
Fourth quarter	5,962,800	39.15	234	8	226
Total	15,610,462	40.64	635	7	628

In January 2016, we purchased, by way of the ASPP, 1,043,300 Common Shares for cancellation under our 2016 NCIB.

Normal course issuer bid in 2016

Period	Common Shares purchased and cancelled	Average purchase price per share ($)	Purchase costs ($ millions)	Decrease in Accounts payable ($ millions)	Cash outflow ($ millions)
January 2016	1,043,300	37.34	39	(5)	44



Short-term borrowings

Short-term borrowings are composed primarily of amounts advanced to us from an arm's-length securitization trust pursuant to the transfer of receivables securitization transactions (see *Section 7.7 Sale of trade receivables*). Proceeds were $100 million at December 31, 2015, consistent with the balance at December 31, 2014.

Long-term debt issues and repayments

Long-term debt issues, net of repayments, were $2.7 billion in 2015 and were composed primarily of:

- A March 24, 2015, public issue of $1.75 billion of senior unsecured notes in three series composed of a $250 million offering at 1.50% due March 27, 2018, a $1.0 billion offering at 2.35% due March 28, 2022, and a $500 million offering at 4.40% due January 29, 2046. The net proceeds were used to fund a portion of the $1.5 billion purchase price of the wireless spectrum licences acquired in the Department of

Innovation, Science and Economic Development's AWS-3 spectrum auction during the first quarter of 2015, and to repay approximately $110 million of indebtedness drawn from the 2014 Credit Facility and approximately $135 million of outstanding commercial paper. The remainder was used for general corporate purposes.

- A $400 million draw on our five-year revolving credit facility in the second quarter of 2015, which was reduced to $NIL during the third quarter of 2015. At December 31, 2015, no amounts were drawn against our five-year credit facility ($256 million was utilized to backstop outstanding commercial paper). Our commercial paper program, when utilized, provides low-cost funds and is fully backstopped by this five-year committed credit facility (see *Section 7.6 Credit facilities*).

- A November 23, 2015, repayment of our $125 million TELUS Communications Inc. Series 2 Debentures, upon maturity.

- A December 8, 2015, public issue of $1.0 billion of senior unsecured notes composed of a $600 million offering at 3.75% due March 10, 2026 and $400 million of 4.85% Notes through the re-opening of Series CP notes, maturing April 5, 2044. The net proceeds were used to repay approximately $956 million of outstanding commercial paper and to fund the repayment, on maturity, of a portion of the $600 million principal amount outstanding on TELUS' Series CI Notes due May 2016. The balance will be used for general corporate purposes.

- A net increase in commercial paper to $256 million at December 31, 2015, all of which is denominated in U.S. dollars (U.S.$185 million), from $130 million at December 31, 2014.

All of our debt transactions contributed to an increase in our average term to maturity of long-term debt (excluding commercial paper) to approximately 11.1 years at December 31, 2015, compared to approximately 10.9 years at the end of 2014. Additionally, our weighted average cost of long-term debt was 4.32% at December 31, 2015, compared to 4.72% at the end of 2014.

In comparison, in 2014, we had long-term debt issues, net of repayments of $1.8 billion, composed of:

- An April 4, 2014, public issue of $1.0 billion of senior unsecured notes in two series: a $500 million offering at 3.20% due April 5, 2021, and a $500 million offering at 4.85% due April 5, 2044. The net proceeds were used to repay approximately $914 million of indebtedness drawn to fund a portion of the purchase price of the 700 MHz spectrum licences and the remainder was used for general corporate purposes.

- A September 10, 2014, public issue of $1.2 billion of senior unsecured notes in two series: an $800 million offering at 3.75% due January 17, 2025, and a $400 million offering at 4.75% due January 17, 2045. The net proceeds were used to repay indebtedness consisting of: (i) advances on the 2014 credit facility and commercial paper issued to fund a substantial portion of the early redemption, on September 8, 2014, of our $500 million 5.95% Series CE Notes; and (ii) other outstanding commercial paper, which had been incurred for general corporate purposes.

- A net increase in commercial paper to $130 million at December 31, 2014, from a $NIL balance at December 31, 2013.



7.5 Liquidity and capital resource measures

Net debt was $12.0 billion as at December 31, 2015, an increase of $2.6 billion when compared to one year earlier, resulting from incremental debt issued (primarily for the acquisition of AWS-3 and 2500 MHz spectrum licences), as discussed above.

Fixed-rate debt as a proportion of total indebtedness was 97% as at December 31, 2015, down from 98% one year earlier, due to an increase in commercial paper, which emulates floating-rate debt.

Net debt to EBITDA — excluding restructuring and other costs ratio was 2.66 times for the year ended December 31, 2015, up from 2.19 times one year earlier. Our long-term objective for this measure is within a range of 2.00 to 2.50 times, which we believe is consistent with maintaining investment grade credit ratings in the range of BBB+, or the equivalent, and providing reasonable access to capital. At the end of 2015, this ratio was outside of the long-term objective range due to the issuance of incremental debt primarily for the acquisition of spectrum licences, which were auctioned in unprecedented amounts and in atypical concentrations during 2014 and 2015, partly offset by growth in EBITDA — excluding restructuring and other costs. These acquired licences have more than doubled our national spectrum holdings and represent an investment to extend our network capacity to support continuing data consumption growth, as well as growth in our wireless customer base. We will endeavour to return this ratio to within the objective range in the medium term, as we believe that this range is supportive of our long-term strategy. While this ratio currently exceeds our long-term objective range, we are well in compliance with the leverage ratio covenant in our credit facilities, which states that we may not permit our net debt to operating cash flow ratio to exceed 4.00:1.00 (see *Section 7.6 Credit facilities*).

Liquidity and capital resource measures

As at, or years ended, December 31	2015	2014	Change
Components of debt and coverage ratios [1] ($ millions)			
Net debt	**11,953**	9,393	2,560
EBITDA — excluding restructuring and other costs	**4,488**	4,291	197
Net interest cost [2]	**465**	453	12
Debt ratios			
Fixed-rate debt as a proportion of total indebtedness (%)	**97**	98	(1)pt.
Average term to maturity of long-term debt (excluding commercial paper) (years)	**11.1**	10.9	0.2
Weighted average interest rate on long-term debt (excluding commercial paper)	**4.32**	4.72	(0.40)
Net debt to EBITDA — excluding restructuring and other costs [1] (times)	**2.66**	2.19	0.47
Coverage ratios [1] (times)			
Earnings coverage	**4.8**	5.3	(0.5)
EBITDA — excluding restructuring and other costs interest coverage [2]	**9.7**	9.5	0.2
Other measures (%)			
Dividend payout ratio of adjusted net earnings [1,3]	**73**	66	7pts.
Dividend payout ratio [1,3]	**73**	66	7pts.

(1) See *Section 11.1 Non-GAAP and other financial measures.*

(2) The figure for the 12-month period ended December 31, 2014 has been restated.

(3) For the year ended December 31, 2015, the numerator period has been aligned with the denominator period; the comparative amounts have been restated. (See *Section 11.1*.)

Earnings coverage ratio for the 12-month period ended December 31, 2015, was 4.8 times, down from 5.3 times one year earlier. Higher borrowing costs reduced the ratio by 0.4, while a decline in income before borrowing costs and income taxes reduced the ratio by 0.1.

EBITDA — excluding restructuring and other costs interest coverage ratio for the 12-month period ended December 31, 2015, was 9.7 times, up from 9.5 times one year earlier. Growth in EBITDA — excluding restructuring and other costs increased the ratio by 0.4, while an increase in net interest costs reduced the ratio by 0.2. (See *Section 7.6 Credit facilities*.)

Dividend payout ratios: Actual dividend payout decisions will continue to be subject to our Board's assessment and the determination of our financial position and outlook, as well as our long-term dividend payout ratio guideline of 65 to 75% of prospective sustainable earnings. The disclosed basic and adjusted dividend payout ratios are historical measures utilizing the last four quarters of dividends declared and earnings per share. These historical ratios are presented for illustrative purposes in evaluating our target guideline, and for the year ended December 31, 2015, were consistent with the objective range.

7.6 Credit facilities

At December 31, 2015, we had liquidity of $2.0 billion available from unutilized credit facilities and $134 million available from uncommitted letters of credit facilities, as well as $400 million available under our trade receivables securitization program (see *Section 7.7*). This adheres to our objective of generally maintaining at least $1 billion of available liquidity.

Revolving credit facility

We have a $2.25 billion (or U.S. dollar equivalent) revolving credit facility with a syndicate of 15 financial institutions that was renewed in the second quarter of 2014 and expires on May 31, 2019. The revolving credit facility is used for general corporate purposes, including the backstop of commercial paper, as required.

Revolving credit facility at December 31, 2015

($ millions)	Expiry	Size	Drawn	Outstanding undrawn letters of credit	Backstop for commercial paper program	Available liquidity
Five-year revolving facility [1]	May 31, 2019	2,250	—	—	(256)	1,994

(1) Canadian dollars or U.S. dollar equivalent.

Our revolving credit facility contains customary covenants, including a requirement that we not permit our consolidated leverage ratio to exceed 4.00 to 1.00 and that we not permit our consolidated coverage ratio (EBITDA to interest expense on a trailing 12-month basis) to be less than 2.00 to 1.00, at the end of any financial quarter. Our consolidated leverage ratio was approximately 2.66 to 1.00 as at December 31, 2015, and our consolidated coverage ratio was approximately 9.65 to 1.00 as at December 31, 2015, and these ratios are expected to remain well above the covenants. There are certain minor differences in the calculation of the leverage ratio and coverage ratio under the revolving credit facility, as compared with the calculation of Net debt to EBITDA — excluding restructuring and other costs and EBITDA —

excluding restructuring and other costs interest coverage. Historically, the calculations have not been materially different. The covenants are not impacted by revaluation, if any, of Property, plant and equipment, Intangible assets or Goodwill for accounting purposes. Continued access to our credit facilities is not contingent on maintaining a specific credit rating.

Commercial paper

TELUS Corporation has an unsecured commercial paper program, which is backstopped by our revolving credit facility, enabling us to issue commercial paper up to a maximum aggregate amount of $1.4 billion at December 31, 2015 (December 31, 2014 — $1.2 billion), including a U.S. dollar denominated commercial paper program for up to U.S.$1.0 billion within this maximum aggregate amount. The commercial paper program is to be used for general corporate purposes, including but not limited to capital expenditures and investments. Our ability to reasonably access the commercial paper market in Canada and the U.S. is dependent on our credit ratings (see *Section 7.8 Credit ratings*).

Other letter of credit facilities

As at December 31, 2015, we had $202 million of letters of credit outstanding (December 31, 2014 — $164 million), issued under various uncommitted facilities; such letter of credit facilities are in addition to the ability to provide letters of credit pursuant to our committed bank credit facility. Available liquidity under various uncommitted letters of credit facilities was $134 million at December 31, 2015.

7.7 Sale of trade receivables

TELUS Communications Inc., a wholly owned subsidiary of TELUS, is a party to an agreement with an arm's-length securitization trust associated with a major Schedule I Canadian bank, under which it is able to sell an interest in certain trade receivables for an amount up to a maximum of $500 million. The agreement is in effect until December 31, 2016, and available liquidity was $400 million at December 31, 2015. (See *Note 19* of the Consolidated financial statements.) Sales of trade receivables in securitization transactions are recognized as collateralized Short-term borrowings and thus do not result in our de-recognition of the trade receivables sold.

TELUS Communications Inc. is required to maintain at least a BB credit rating by DBRS Ltd., or the securitization trust may require the sale program to be wound down prior to the end of the term. The necessary credit rating was exceeded as of February 11, 2016.

7.8 Credit ratings

As at February 11, 2016, our investment grade credit ratings were in the range of BBB+ or the equivalent. In May 2015, DBRS Ltd. announced a downgrade to its long-term rating of TELUS, but such revised rating is still consistent with our objective of maintaining investment grade credit ratings in the range of BBB+ or the equivalent. DBRS had also downgraded its short-term credit rating for TELUS, which limits our ability to access the commercial paper markets in Canada. We expect to be able to continue to access short-term funding from other available sources, including the U.S. commercial paper market.

We believe adherence to most of our stated financial policies and the resulting investment grade credit ratings, coupled with our efforts to maintain a constructive relationship with banks, investors and credit rating agencies, continues to provide reasonable access to capital markets. (See *Section 10.7 Financing and debt requirements*.)

7.9 Financial instruments, commitments and contingent liabilities

Financial instruments

Our financial instruments and the nature of certain risks that they may be subject to are set out below and described in *Note 4* of the Consolidated financial statements. Our policies in respect of the recognition and measurement of financial instruments are described in *Note 1(c)* of the Consolidated financial statements.

Financial instrument	Recognition and measurement accounting classification	Risks				
				Market risks		
		Credit	Liquidity	Currency	Interest rate	Other price
Measured at cost or amortized cost						
Accounts receivable	Loans and receivables	X		X		
Construction credit facilities advances to real estate joint venture	Loans and receivables				X	
Short-term obligations	Amortized cost		X	X	X	
Accounts payable	Amortized cost		X	X		
Provisions	Amortized cost		X	X		X
Long-term debt	Amortized cost		X	X	X	
Measured at fair value						

Cash and temporary investments	Fair value through net income	X		X	X		
Long-term investments (not subject to significant influence) [1]	Available-for-sale			X		X	
Foreign exchange derivatives [2]	Fair value through net income; part of a cash flow hedging relationship	X	X	X			
Share-based compensation derivatives [2]	Fair value through net income; part of a cash flow hedging relationship	X	X			X	

(1) Long-term investments over which we do not have significant influence are measured at fair value if those fair values can be reliably measured.

(2) Use of derivative financial instruments is subject to a policy which requires that no derivative transaction is to be entered into for the purpose of establishing a speculative or leveraged position (the corollary being that all derivative transactions are to be entered into for risk management purposes only) and sets criteria for the creditworthiness of the transaction counterparties.

Credit risk

Credit risk arises from Cash and temporary investments, Accounts receivable and derivative financial instruments. We mitigate credit risk as follows:

- Credit risk associated with Cash and temporary investments is managed by ensuring that these financial assets are placed with governments, major financial institutions that have been accorded strong investment grade ratings by a primary rating agency, and/or other creditworthy counterparties. An ongoing review is performed to evaluate changes in the status of counterparties.

- Credit risk associated with Accounts receivable is inherently managed by our large and diverse customer base, which includes substantially all consumer and business sectors in Canada. We follow a program of credit evaluations of customers and limit the amount of credit extended when deemed necessary. At December 31, 2015, the weighted average life of past-due customer Accounts receivable was 62 days (2014 — 62 days).

  We maintain allowances for potential credit losses related to doubtful accounts. Current economic conditions, historical information, reasons for the accounts being past-due and line of business from which the customer Accounts receivable arose are all considered when determining whether to make allowances for past-due accounts. The same factors are considered when determining whether to write off amounts charged to the allowance for doubtful accounts against the customer Accounts receivable. The doubtful accounts expense is calculated on a specific-identification basis for customer Accounts receivable over a specific balance threshold and on a statistically derived allowance basis for the remainder. No customer Accounts receivable are written off directly to the doubtful accounts expense.

- Counterparties to our share-based compensation cash-settled equity forward agreements and foreign exchange derivatives are major financial institutions that have been accorded investment grade ratings by a primary rating agency. The dollar amount of credit exposure under contracts with any one financial institution is limited and counterparties' credit ratings are monitored. We do not give or receive collateral on swap agreements and hedging items due to our credit rating and those of our counterparties. While we are exposed to potential credit losses due to the possible non-performance of our counterparties, we consider this risk remote. Our derivative liabilities do not have credit risk-related contingent features.

Liquidity risk

Liquidity risk is the risk that we may not have cash available to satisfy our financial obligations as they come due. As a component of our capital structure financial policies, discussed in *Section 4.3 Liquidity and capital resources* , we manage liquidity risk by: maintaining a daily cash pooling process that enables us to manage our available liquidity and our liquidity requirements according to our actual needs; maintaining bilateral bank facilities and a syndicated credit facility (see *Section 7.6 Credit facilities*); maintaining an agreement to sell trade receivables to an arm's-length securitization trust; maintaining a commercial paper program; maintaining an in-effect shelf prospectus; continuously monitoring forecast and actual cash flows; and managing maturity profiles of financial assets and financial liabilities.

Our debt maturities in future years are as disclosed in the long-term debt principal maturities chart in *Section 4.3*. As at December 31, 2015, we had liquidity of $2.0 billion available from unutilized credit facilities, as well as $400 million available under our trade receivables securitization program, and we could offer $250 million of debt or equity securities pursuant to a shelf prospectus that is in effect until December 2016. This adheres to our objective of generally maintaining at least $1 billion of available liquidity. We also believe that our investment grade credit ratings contribute to reasonable access to capital markets.

The expected maturities of our undiscounted financial liabilities do not differ significantly from the contractual maturities, other than as noted in the table in *Note 4(c)* of the Consolidated financial statements.

Currency risk

Our functional currency is the Canadian dollar, but certain routine revenues and operating costs are denominated in U.S. dollars and some inventory purchases and capital asset acquisitions are sourced internationally. The U.S. dollar is the only foreign currency to which we have a significant exposure.

Our foreign exchange risk management includes the use of foreign-currency forward contracts and currency options to fix the exchange rates on short-term U.S. dollar denominated transactions, commitments and commercial paper.

Interest rate risk

Changes in market interest rates will cause fluctuations in the fair value or future cash flows of temporary investments, construction credit facility advances made to the real estate joint ventures, short-term obligations, long-term debt and interest rate swap derivatives.

When we have temporary investments, they have short maturities and fixed interest rates and, as a result, their fair value will fluctuate with changes in market interest rates; absent monetization prior to maturity, the related future cash flows will not change due to changes in market interest rates.

Due to the short-term nature of the applicable rates of interest charged, the fair value of the construction credit facilities advances made to the real estate joint ventures is not materially affected by changes in market interest rates; associated cash flows representing interest payments will be affected until such advances are repaid.

As short-term obligations arising from bilateral bank facilities, which typically have variable interest rates, are rarely outstanding for periods that exceed one calendar week, interest rate risk associated with this item is not material.

Short-term borrowings arising from the sales of trade receivables to an arm's-length securitization trust are fixed-rate debt. Due to the short maturities of these borrowings, interest rate risk associated with this item is not material.

All of our currently outstanding long-term debt, other than for commercial paper and amounts drawn on our credit facilities, is fixed-rate debt (see *Section 7.5*). The fair value of fixed-rate debt fluctuates with changes in market interest rates; absent early redemption, the related future cash flows will not change. Due to the short maturities of commercial paper, its fair value is not materially affected by changes in market interest rates, but the associated cash flows representing interest payments may be affected if the commercial paper is rolled over.

Amounts drawn on our short-term and long-term credit facilities will be affected by changes in market interest rates in a manner similar to commercial paper.

Other price risk

- Provisions: We are exposed to other price risk arising from written put options provided for non-controlling interests.
- Long-term investments: We are exposed to equity price risk arising from investments classified as available-for-sale. Such investments are held for strategic rather than trading purposes.
- Share-based compensation derivatives: We are exposed to other price risk arising from cash-settled share-based compensation (appreciating Common Share prices increase both the expense and the potential cash outflow). Certain cash-settled equity swap agreements have been entered into that fix the cost associated with our RSUs (see *Note 13(c)* of the Consolidated financial statements).

Market risk

Net income and other comprehensive income for the years ended December 31, 2015 and 2014 could have varied if the Canadian dollar: U.S. dollar exchange rate and our Common Share price varied by reasonably possible amounts from their actual statement of financial position date amounts.

The sensitivity analysis of our exposure to market risks is shown in *Note 4(g)* of the Consolidated financial statements.

Fair values — General

The carrying values of Cash and temporary investments, Accounts receivable, short-term obligations, Short-term borrowings, Accounts payable and certain provisions (including restructuring Accounts payable) approximate their fair values due to the immediate or short-term maturity of these financial instruments. The fair values are determined directly by reference to quoted market prices in active markets.

The carrying values of our investments accounted for using the cost method do not exceed their fair values. The fair values of our investments accounted for as available-for-sale are based on quoted market prices in active markets or other clear and objective evidence of fair value.

The fair value of our Long-term debt is based on quoted market prices in active markets.

The fair values of the derivative financial instruments we use to manage our exposure to currency risks are estimated based upon quoted market prices in active markets for the same or similar financial instruments or on the current rates offered to us for financial instruments of the same maturity, as well as discounted future cash flows determined using current rates for similar financial instruments subject to similar risks and

maturities (such value estimates being largely based on the Canadian dollar: U.S. dollar forward exchange rates as at the statement of financial position dates).

The fair values of the derivative financial instruments we use to manage our exposure to increases in compensation costs arising from certain forms of share-based compensation are based upon fair value estimates of the related cash-settled equity forward agreements provided by the counterparty to the transactions (such fair value estimates being largely based on our Common Share price as at the statement of financial position dates).

The financial instruments that we measure at fair value on a recurring basis in periods subsequent to initial recognition and the level within the fair value hierarchy at which they are measured are as set out in *Note 4(h)* of the Consolidated financial statements.

Fair values — Derivative and non-derivative

The derivative financial instruments that we measure at fair value on a recurring basis subsequent to initial recognition, and our Long-term debt, which is measured at amortized cost, and the fair value thereof, are set out in tables in *Note 4(h)* of the Consolidated financial statements.

Recognition of derivative gains and losses

Gains and losses, excluding income tax effects, on derivative instruments that are classified as cash flow hedging items, as well as gains and losses on derivative instruments that are classified as held for trading items and that are not designated as being in a hedging relationship, and their respective locations within the Consolidated statements of income and other comprehensive income, are detailed in *Note 4(i)* of the Consolidated financial statements.

Commitments and contingent liabilities

Contractual obligations as at December 31, 2015

($ millions)	2016	2017	2018	2019	2020	Thereafter	Total
Short-term borrowings							
Interest obligations	1	—	—	—	—	—	1
Principal obligations [1]	100	—	—	—	—	—	100
	101	—	—	—	—	—	101
Long-term debt							
Interest obligations	497	474	455	453	402	3,733	6,014
Principal maturities [2]	856	700	250	1,000	1,000	8,324	12,130
	1,353	1,174	705	1,453	1,402	12,057	18,144
Construction credit facilities commitment [3]	131	—	—	—	—	—	131
Minimum operating lease payments [3, 4]	212	183	169	144	125	852	1,685
Occupancy costs [3]	89	88	86	80	75	489	907
Purchase obligations [5]							
Operating expenditures	579	161	102	90	86	216	1,234
Capital expenditures	293	86	2	—	—	—	381
	872	247	104	90	86	216	1,615
Non-interest bearing financial liabilities	1,895	28	8	6	6	6	1,949
Other obligations	(16)	9	—	—	—	—	(7)
Total	4,637	1,729	1,072	1,773	1,694	13,620	24,525

(1) See *Section 7.7 Sale of trade receivables*.
(2) See Long-term debt maturity chart in *Section 4.3*.
(3) Construction credit facilities reflect loan amounts for a real estate joint venture, a related party. Minimum operating lease payments and occupancy costs include transactions with real estate joint ventures. See *Section 7.11 Transactions between related parties.*
(4) Total minimum operating lease payments include approximately 37% in respect of our five largest leases for office premises over various terms, with expiry dates that range between 2024 and 2036; and approximately 29% in respect of wireless site leases with a weighted average term of approximately 17 years. Total minimum operating lease payments with related parties are approximately $277 million. See *Note 23(a)* of the Consolidated financial statements.
(5) Where applicable, purchase obligations reflect foreign exchange rates at December 31, 2015. Purchase obligations include future operating and capital expenditures that have been contracted for at the current year-end and include the most likely estimates of prices and volumes, where necessary. As purchase obligations reflect market conditions at the time the obligation was incurred for the items being purchased, they may not be representative of future years. Obligations from personnel supply contracts and other such labour agreements have been excluded.

Indemnification obligations

In the normal course of operations, we provide indemnification in conjunction with certain transactions. The terms of these indemnification obligations range in duration. These indemnifications would require us to compensate the indemnified parties for costs incurred as a result of

failure to comply with contractual obligations or litigation claims or statutory sanctions or damages that may be suffered by an indemnified party. In some cases, there is no maximum limit on these indemnification obligations. The overall maximum amount of an indemnification obligation will depend on future events and conditions and therefore cannot be reasonably estimated. Where appropriate, an indemnification obligation is recorded as a liability. Other than obligations recorded as liabilities at the time of such transactions, historically we have not made significant payments under these indemnifications.

As at December 31, 2015, we had no liability recorded in respect of indemnification obligations.

Claims and lawsuits

A number of claims and lawsuits (including class actions) seeking damages and other relief are pending against us. As well, we have received notice of, or are aware of, certain possible claims (including intellectual property infringement claims) against us and, in some cases, numerous other wireless carriers and telecommunications service providers. (See *Section 10.9 Litigation and legal matters*.)

It is not currently possible for us to predict the outcome of such claims, possible claims and lawsuits due to various factors, including: the preliminary nature of some claims; uncertain damage theories and demands; an incomplete factual record; uncertainty concerning legal theories, procedures and their resolution by the courts, at both the trial and the appeal levels; and the unpredictable nature of opposing parties and their demands.

However, subject to the foregoing limitations, management is of the opinion, based upon legal assessments and information presently available, that it is unlikely that any liability, to the extent not provided for through insurance or otherwise, would have a material effect on our financial position and the results of our operations, including cash flows, with the exception of the items disclosed in *Section 10.9*. This is a significant judgment for us (see *Note 1(b)* of the Consolidated financial statements).

7.10 Outstanding share information

Outstanding shares (millions)	December 31, 2015	January 31, 2016
Common Shares	594	593
Common Share options — all exercisable	2	2

7.11 Transactions between related parties

Investments in significant controlled entities

As at December 31, 2015, TELUS Corporation controlled 100% of the equity of TELUS Communications Inc., which, in turn, ultimately controlled 100% of the equity of TELUS Communications Company and TELE-MOBILE COMPANY. This is unchanged from December 31, 2014.

Transactions with key management personnel

Our key management personnel have authority and responsibility for overseeing, planning, directing and controlling our activities. They consist of our Board of Directors and our Executive Leadership Team. Total compensation expense amounts for key management personnel were $65 million in 2015, as compared to $45 million in 2014. See *Note 24(a)* of the Consolidated financial statements for additional detail.

Transactions with defined benefit pension plans

We made employer contributions to defined benefit pension plans as shown in the table in *Section 7.2*. We also provided management and administrative services to our defined benefit pension plans. Charges for these services were on a cost recovery basis and were immaterial.

Transactions with real estate joint ventures

During 2015, we had transactions and have lease commitments with the real estate joint ventures, which are related parties to us, as set out in *Note 18* and *Note 23(a)* of our Consolidated financial statements, respectively. In regard to the TELUS Garden real estate joint venture, commitments and contingent liabilities include construction-related contractual commitments through to 2016 (approximately $38 million at December 31, 2015) and construction credit facilities ($136 million with two Canadian financial institutions as 50% lender and TELUS as 50% lender). For the TELUS Sky™ real estate joint venture, commitments and contingent liabilities include construction-related contractual commitments through to 2018 (approximately $124 million at December 31, 2015) and construction credit facilities ($342 million with three Canadian financial institutions as 66-2/3% lender and TELUS as 33-1/3% lender). As at December 31, 2015, we had no liability recorded in respect of either TELUS Garden or TELUS Sky real estate joint venture obligations and guarantees.

Future minimum lease payments in respect of our office space operating leases at TELUS Garden and TELUS Sky are set out in *Note 23(a)* of the Consolidated financial statements.

8. Accounting matters

8.1 Critical accounting estimates

Our significant accounting policies are described in *Note 1* of the Consolidated financial statements for the year ended December 31, 2015. The

preparation of financial statements in conformity with generally accepted accounting principles requires us to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Our critical accounting estimates and significant judgments are generally discussed with the Audit Committee each quarter.

Examples of significant judgments, apart from those involving estimation, include the following:

- Assessments about whether line items are sufficiently material to warrant separate presentation in the primary financial statements and, if not, whether they are sufficiently material to warrant separate presentation in the financial statement notes. In the normal course, we make changes to our assessments regarding presentation materiality so that they reflect current economic conditions. Due consideration is given to the view that it is reasonable to expect differing opinions of what is, and is not, material.

- In respect of revenue-generating transactions, generally we must make judgments that affect the timing of the recognition of revenue. See *Note 2* of our Consolidated financial statements for significant changes to IFRS-IASB that are not yet effective and have not yet been applied, but which will significantly affect the timing of the recognition of revenue and the classification of our revenues presented as either service or equipment.
  - We must make judgments about when we have satisfied our performance obligations to our customers, either over a period of time or at a point in time. Service revenues are recognized based upon customers' access to, or usage of, our telecommunications infrastructure; we believe this method faithfully depicts the transfer of the services and thus the revenues are recognized as the services are made available and/or rendered. We consider our performance obligations arising from the sale of equipment to have been satisfied when the equipment has been delivered and accepted by the end-user customers.
  - Principally in the context of revenue-generating transactions involving wireless handsets, we must make judgments about whether third-party re-sellers delivering equipment to our customers are acting in the transaction as principals or as our agents. Upon due consideration of the relevant indicators, we believe the decision to consider the re-sellers to be acting, solely for accounting purposes, as our agents is more representative of the economic substance of the transactions as we are the primary obligor to the end-user customers.
- The decision to depreciate and amortize any property, plant, equipment and intangible assets that are subject to amortization on a straight-line basis, as we believe that this method reflects the consumption of resources related to the economic lifespan of those assets better than an accelerated method and is more representative of the economic substance of the underlying use of those assets.
- The preparation of financial statements in accordance with generally accepted accounting principles requires management to make judgments that affect the financial statement disclosure of information regularly reviewed by our chief operating decision-maker used to make resource allocation decisions and to assess performance (segmented information). A significant judgment we make is that our wireless and wireline operations and cash flows are sufficiently distinct to be considered both operating segments and reportable segments, notwithstanding the convergence our wireless and wireline telecommunications infrastructure technology and operations have experienced to date. If our wireless and wireline telecommunications infrastructure technology and operations continue to converge, it may become impractical, if not impossible, to objectively distinguish between our wireless and wireline operations and cash flows. If sufficient convergence were to occur, our wireless and wireline operations would no longer be individual components of the business or discrete operating segments; rather, they could each become a group of similar products and services.

  As well, if it were to become impractical to distinguish between our wireless and wireline cash flows, which would be evidence of their interdependence, this could result in the unification of the current wireless cash-generating unit and the current wireline cash-generating unit as a single cash-generating unit for impairment testing purposes.
- The view that our spectrum licences granted by the Canadian Department of Innovation, Science and Economic Development will likely be renewed by the Department of Innovation, Science and Economic Development, that we intend to renew them, that we believe we have the financial and operational ability to renew them and, thus, that they have an indefinite life, as discussed further in *Note 17(b)* of the December 31, 2015, Consolidated financial statements.
- In connection with the annual impairment testing of Intangible assets with indefinite lives and Goodwill, there are instances where we must exercise judgment in allocating our net assets, including shared corporate and administrative assets, to our cash-generating units when determining their carrying amounts. These judgments are necessary because of the convergence our wireless and wireline telecommunications infrastructure technology and operations have experienced to date and our continuous development. There are instances where similar judgments must also be made in respect of future capital expenditures in support of both wireless and wireline operations, which are a component of the discounted cash flow projections that are used in the annual impairment testing, as discussed further in *Note 17(c)* of the December 31, 2015, Consolidated financial statements.
- In respect of claims and lawsuits, as discussed further in *Note 23(c)* of the Consolidated financial statements for the year ended December 31, 2015, the determination of whether an item is a contingent liability or whether an outflow of resources is probable and thus needs to be accounted for as a provision.

Our critical accounting estimates and assumptions are described below.

General

- In determining our critical accounting estimates, we consider trends, commitments, events or uncertainties that we reasonably expect to materially affect the methodology or assumptions, subject to the items identified in the *Caution regarding forward-looking statements* section of this MD&A.

- In the normal course, we make changes to assumptions underlying all critical accounting estimates to reflect: current economic conditions, updated historical information used to develop the assumptions, and changes in our credit ratings, where applicable. Unless indicated otherwise in the discussion below, we expect that no material changes in overall financial performance and financial statement line items would arise either from reasonably likely changes in material assumptions underlying the estimate or from selection of a different estimate from within a valid range of estimates.

- Our critical accounting estimates affect line items on the Consolidated statements of income and other comprehensive income, and line items on the Consolidated statements of financial position, as follows:

	Consolidated statements of income and other comprehensive income						
		Operating revenues					
Consolidated statements of financial position	**Operating expenses**	**Goods and services purchased**	**Employee benefits expense**	**Depreciation**	**Amortization of intangible assets**	**Financing costs**	**Employee defined benefit plans remeasurements[2]**
Employee defined benefit pension plans			X	X[1]	X[1]	X	X[2]
Intangible assets, net, and Goodwill, net					X[3]		
Property, plant and equipment, net				X			
Provisions for asset retirement obligations		X		X		X	
Investments	X						
Accounts receivable		X					
Inventories		X					

(1) Accounting estimate impact due to internal labour capitalization rates.
(2) Other comprehensive income — Item never subsequently reclassified to income.
(3) Accounting estimate, as applicable to Intangible assets with indefinite lives and Goodwill, primarily relates to spectrum holdings and accordingly affects our wireless cash-generating unit.

- All critical accounting estimates are uncertain at the time of making the estimate and affect the following Consolidated statements of income and other comprehensive income line items: Income taxes (except for estimates about Goodwill) and Net income. Similarly, all critical accounting estimates affect the following Consolidated statements of financial position line items: Current assets (Income and other taxes receivable), Current liabilities (Income and other taxes payable), Deferred income tax liabilities and Common equity (retained earnings). The discussion of each critical accounting estimate does not differ between our two segments, wireless and wireline, unless explicitly noted.

Employee defined benefit pension plans

Certain actuarial and economic assumptions used in determining defined benefit pension costs, accrued pension benefit obligations and pension plan assets

- We review industry practices, trends, economic conditions and data provided by actuaries when developing assumptions used in the determination of defined benefit pension costs and accrued pension benefit obligations. Pension plan assets are generally valued using market prices, however, some assets are valued using market estimates when market prices are not readily available. Actuarial support is obtained for interpolations of experience gains and losses that affect the employee defined benefit plan actuarial gains and losses and accrued benefit obligations. The discount rate, which is used to determine the accrued benefit obligation, is based upon the yield on long-term, high-quality fixed-term investments. The discount rate is set annually at the end of each calendar year, based upon yields on long-term corporate bond indices in consultation with actuaries, and is reviewed quarterly for significant changes. Future increases in compensation are based upon the current benefits policies and economic forecasts.

- On an annual basis, at a minimum, the defined benefit pension plan assumptions are assessed and revised as appropriate. When the defined benefit pension plan key assumptions fluctuate significantly relative to their immediately preceding year-end values, actuarial gains (losses) arising from such significant fluctuations are recognized on an interim basis. Assumptions used in determining defined benefit pension costs, accrued pension benefit obligations and pension plan assets include life expectancy, discount rates, market estimates and rates of future compensation increases. Material changes in overall financial performance and financial statement line items would arise from reasonably likely changes, because of assumptions that have been revised to reflect updated historical information and updated economic conditions, in the material assumptions underlying this estimate. See *Note 14* of the Consolidated financial statements for further

analysis.

- The above accounting estimate related to employee defined benefit pension plans is in respect of components of the Operating expenses line item, Financing costs line item and Other comprehensive income line item on our Consolidated statements of income and other comprehensive income. If the future were to adversely differ from our best estimate of assumptions used in determining defined benefit pension costs, accrued benefit obligations and pension plan assets, we could experience future increased (or decreased) defined benefit pension expense, financing costs and charges to Other comprehensive income.

Property, plant and equipment, net; Intangible assets, net; and Goodwill, net

General

- The Property, plant and equipment, net, line item on our Consolidated statements of financial position represents approximately 37% of total assets at December 31, 2015 (39% at December 31, 2014).
- The Intangible assets, net, line item represents approximately 38% of total assets at December 31, 2015 (34% at December 31, 2014). Included in Intangible assets are spectrum licences, which represent approximately 32% of total assets at December 31, 2015 (28% at December 31, 2014).
- The Goodwill, net, line item represents approximately 14% of total assets at December 31, 2015 (16% at December 31, 2014).
- If our estimated useful lives of assets were incorrect, we could experience increased or decreased charges for amortization or depreciation in the future. If the future were to differ adversely from our best estimate of key economic assumptions and associated cash flows were to materially decrease, we could potentially experience future material impairment charges in respect of our Property, plant and equipment assets, our Intangible assets or our Goodwill. If Intangible assets with indefinite lives were determined to have finite lives at some point in the future, we could experience increased charges for amortization of Intangible assets. Such charges in and of themselves do not result in a cash outflow and would not immediately affect our liquidity.

The estimated useful lives of assets; the recoverability of tangible assets

- The estimated useful lives of assets are determined by a continuing program of asset life studies. The recoverability of assets with finite lives is significantly impacted by the estimated useful lives of assets.
- Assumptions underlying the estimated useful lives of assets include the life cycle of technology, competitive pressures and future infrastructure utilization plans.

The recoverability of Intangible assets with indefinite lives; *the recoverability of Goodwill*

- The carrying values of Intangible assets with indefinite lives and Goodwill are periodically tested for impairment and this test represents a significant estimate for us.
- The recoverable amounts of the cash-generating units' assets have been determined based on a value-in-use calculation. There is a material degree of uncertainty with respect to the estimates of the recoverable amounts of the cash-generating units' assets given the necessity of making key economic assumptions about the future. The value-in-use calculation uses discounted cash flow projections that employ the following key assumptions: future cash flows and growth projections, including economic risk assumptions and estimates of achieving key operating metrics and drivers; the future weighted average cost of capital; and earnings multiples.
- See *Note 17(c)* of the Consolidated financial statements for further discussion of methodology and sensitivity testing.

Income tax assets and liabilities

The amount and composition of income tax assets and income tax liabilities, including the amount of unrecognized tax benefits

- Assumptions underlying the composition of income tax assets and liabilities are based upon an assessment of the technical merits of tax positions. Income tax benefits on uncertain tax positions are only recognized when it is more likely than not that the ultimate determination of the tax treatment of the position will result in the benefit being realizable. Income tax assets and liabilities are measured at the amount that is expected to be realized or incurred upon ultimate settlement with taxation authorities. Such assessments are based upon the applicable income tax legislation, regulations and interpretations, all of which in turn are subject to change and interpretation.
- Current income tax assets and liabilities are estimated based upon the amount of tax that is calculated as being owed to taxation authorities, net of periodic instalment payments. Deferred income tax liabilities are composed of the tax effect of temporary differences between the carrying amount and tax basis of assets and liabilities, as well as the tax effect of undeducted tax losses. The timing of the reversal of temporary differences is estimated and the tax rate substantively enacted for the periods of reversal is applied to the temporary differences. The carrying amounts of assets and liabilities are based upon the amounts recorded in the financial statements and are, therefore, subject to accounting estimates that are inherent in those balances. The tax basis of assets and liabilities, as well as the amount of undeducted tax losses, are based upon the assessment and measurement of tax positions as noted above. Assumptions as to the timing of reversal of temporary differences include expectations about the future results of operations and cash flows. The composition of income tax liabilities is reasonably likely to change from period to period because of changes in the estimation of these significant uncertainties.

- This accounting estimate is in respect of material asset and liability line items on our Consolidated statements of financial position comprising less than 1% of total assets at December 31, 2015 (less than 1% at December 31, 2014) and approximately 9% of total liabilities and owners' equity at December 31, 2015 (8% at December 31, 2014). If the future were to adversely differ from our best estimate of the likelihood of tax positions being sustained, the amount of tax expected to be incurred, the future results of operations, the timing of reversal of deductible temporary differences and taxable temporary differences, and the tax rates applicable to future years, we could experience material deferred income tax adjustments. Such deferred income tax adjustments could result in an acceleration of cash outflows at an earlier time than might otherwise be expected.

Provisions for asset retirement obligations

Certain economic assumptions used in provisioning for asset retirement obligations

- Asset retirement obligation provisions are recognized for statutory, contractual or legal obligations, normally when incurred, associated with the retirement of Property, plant and equipment (primarily certain items of outside plant and wireless site equipment) when those obligations result from the acquisition, construction, development and/or normal operation of the assets. The obligations are measured initially at fair value, determined using present value methodology, and the resulting costs are capitalized as a part of the carrying value of the related asset.

- On an annual basis, at a minimum, assumptions underlying the provisions for asset retirement obligations include expectations, which may span numerous decades, about inflation, discount rates and the timing and amount of the underlying future cash flows. Material changes in financial position would arise from reasonably likely changes, because of assumptions that have been revised to reflect updated historical information and updated economic conditions, in the material assumptions underlying this estimate.

- This accounting estimate is in respect of the asset retirement obligations component of the Provisions line item on our Consolidated statements of financial position, and this component comprises approximately 1% of total liabilities and owners' equity at December 31, 2015 (approximately 1% at December 31, 2014). If the provisions for asset retirement obligations were inadequate, we could experience a charge to Goods and services purchased expense in the future. A charge for an inadequate asset retirement obligation provision would result in a cash outflow proximate to the time that the asset retirement obligation is satisfied.

Investments

The recoverability of long-term investments

- We assess the recoverability of our long-term investments on a regular, recurring basis. The recoverability of investments is assessed on a specific-identification basis taking into consideration expectations about future performance of the investments and comparison of historical results to past expectations.

- The most significant assumptions underlying the recoverability of long-term investments are the achievement of future cash flow and operating expectations. Our estimate of the recoverability of long-term investments could change from period to period due to the recurring nature of the recoverability assessment and due to the nature of long-term investments (we do not control the investees).

- Investments are included in the Other long-term assets line item on our Consolidated statements of financial position, which itself comprises approximately 2% of total assets at December 31, 2015 (2% at December 31, 2014). If the allowance for recoverability of long-term investments were inadequate, we could experience an increased charge to Other operating income in the future. Such a provision for recoverability of long-term investments does not result in a cash outflow. When there is clear and objective evidence of an increase in the fair value of an investment, which may be indicated by either a recent sale of shares by another current investor or the injection of new cash into the entity from a new or existing investor, we recognize the after-tax increase in value in Other comprehensive income (change in unrealized fair value of available-for-sale financial assets).

Accounts receivable

General

- When determining our allowance for doubtful accounts, we consider the business area that gave rise to the Accounts receivable, conduct statistical analysis of portfolio delinquency trends and perform specific account identification.

- These accounting estimates are in respect of the Accounts receivable line item on our Consolidated statements of financial position comprising approximately 5% of total assets at December 31, 2015 (6% at December 31, 2014). If the future were to differ adversely from our best estimates of the fair value of the residual cash flows and the allowance for doubtful accounts, we could experience a doubtful account expense in the future. Such a doubtful account expense in and of itself does not result in a cash outflow.

The allowance for doubtful accounts

- The estimate of our allowance for doubtful accounts could materially change from period to period due to the allowance being a function of the balance and composition of Accounts receivable, which can vary on a month-to-month basis. The variance in the balance of Accounts receivable can arise from a variance in the amount and composition of Operating revenues and from variances in Accounts receivable

collection performance.

Inventories

The allowance for inventory obsolescence

- We determine our allowance for inventory obsolescence based upon expected inventory turnover, inventory aging, and current and future expectations with respect to product offerings.

- Assumptions underlying the allowance for inventory obsolescence include future sales trends and offerings and the expected inventory requirements and inventory composition necessary to support these future sales offerings. Our estimate of the allowance for inventory obsolescence could materially change from period to period due to changes in product offerings and consumer acceptance of those products.

- This accounting estimate is in respect of the Inventories line item on our Consolidated statements of financial position, which comprises approximately 1% of total assets at December 31, 2015 (approximately 1% at December 31, 2014). If the allowance for inventory obsolescence were inadequate, we could experience a charge to Goods and services purchased expense in the future. Such an inventory obsolescence charge does not result in a cash outflow.

8.2 Accounting policy developments

- **Revenue from contracts with customers:** IFRS 15, *Revenue from Contracts with Customers*, is required to be applied for years beginning on or after January 1, 2018, such date reflecting the one-year deferral approved by the International Accounting Standards Board on July 22, 2015. The International Accounting Standards Board and the Financial Accounting Standards Board of the United States worked on this joint project to clarify the principles for the recognition of revenue and to develop the common revenue standard. The new standard was released in May 2014 and supersedes existing standards and interpretations, including IAS 18, *Revenue*. We are currently assessing the impacts and transition provisions of the new standard.

  The effects of the new standard and the materiality of those effects will vary by industry and entity. Like many other telecommunications companies, we currently expect to be materially affected by its application, primarily in respect of the timing of revenue recognition, the classification of revenue, the capitalization of costs of obtaining a contract with a customer and possibly the capitalization of the costs of contract fulfilment (as defined by the new standard). The timing of revenue recognition and the classification of our revenues as either service revenues or equipment revenues will be affected, since the allocation of consideration in multiple element arrangements (solutions for our customers that may involve deliveries of multiple services and products that occur at different points in time and/or over different periods of time) will no longer be affected by the current limitation cap methodology.

The effects of the timing of revenue recognition and the classification of revenue are expected to be most pronounced in our wireless segment. Although the measurement of the total revenue recognized over the life of a contract will be largely unaffected by the new standard, the prohibition of the use of the limitation cap methodology will accelerate the recognition of total contract revenue, relative to both the associated cash inflows from customers and our current practice (using the limitation cap methodology). The acceleration of the recognition of contract revenue relative to the associated cash inflows will also result in the recognition of an amount reflecting the resulting difference as an asset. Although the underlying transaction economics would not differ, during periods of sustained growth in the number of wireless subscriber connection additions, assuming comparable contract-lifetime per unit cash inflows, revenues would appear to be greater than under current practice (using the limitation cap methodology). Wireline segment results arising from transactions that include the initial provision of subsidized hardware or promotional pricing plans will be similarly affected.

Similarly, the measurement of the total costs of contract acquisition and contract fulfilment over the life of a contract will be unaffected by the new standard. The new standard will result in our wireless and wireline segments' costs of contract acquisition and contract fulfilment, to the extent that they are material, being capitalized and subsequently recognized as an expense over the life of a contract on a rational, systematic basis consistent with the pattern of the transfer of goods or services to which the asset relates. Although the underlying transaction economics would not differ, during periods of sustained growth in the number of customer connection additions, assuming comparable per unit costs of contract acquisition and contract fulfilment, absolute profitability measures would appear to be greater than under the current practice of immediately expensing such costs.

Our operations and associated systems are complex and our accounting for millions of multi-year contracts with our customers will be affected. Significantly, in order to effect the associated accounting, incremental compilation of historical data will be necessary for the millions of already existing multi-year contracts with our customers that are expected to be in-scope for purposes of transitioning to the new standard. Our current estimate of the time and effort necessary to develop and implement the accounting policies, estimates, judgments and processes (including incremental requirements of our information technology systems) we will need to have in place in order to comply with the new standard extends into mid-2017. As a result, at this time, it is not possible to make reasonable quantitative estimates of the effects of the new standard.

- **Leases:** IFRS 16, *Leases*, was released by the International Accounting Standards Board in January 2016, is required to be applied for years beginning on or after January 1, 2019, and supersedes IAS 17, *Leases*. The International Accounting Standards Board and the Financial Accounting Standards Board of the United States worked together to improve the accounting for leases, generally by eliminating lessees' classification of leases as either operating leases or finance leases and, for IFRS-IASB, introducing a single lessee accounting model.

The most significant effect of the new standard will be the lessee's recognition of the initial present value of unavoidable future lease payments as lease assets and lease liabilities on the statement of financial position, including for most leases which would be currently accounted for as operating leases. Leases with durations of 12 months or less and leases for low-value assets are both exempted. As set out in *Note 23(a)* of the Consolidated financial statements, we currently have significant operating lease commitments.

The measurement of the total lease expense over the term of a lease will be unaffected by the new standard. However, the new standard will result in the timing of lease expense recognition being accelerated for leases which would be currently accounted for as operating leases; the International Accounting Standards Board expects that this effect may be muted by a lessee having a portfolio of leases with varying maturities and lengths of term. The presentation on the statement of income and other comprehensive income required by the new standard will result in most lease expenses being presented as amortization of lease assets and financing costs arising from lease liabilities rather than as being a part of goods and services purchased.

Relative to the results of applying the current standard, the lessee's statement of cash flows will reflect increased operating activity cash flows equally offset by decreased financing activity cash flows due to the payment of the "principal" component of leases, which would be currently accounted for as operating leases, being presented as a cash flow use within financing activities under the new standard.

We are currently assessing the impacts and transition provisions of the new standard, but we expect that our Consolidated statement of financial position will be materially affected, as will be debt-related and operation-related financial metrics. At this time it is not possible to make reasonable quantitative estimates of the effects of the new standard.

- **Other issued standards:** Other issued standards required to be applied for periods beginning on or after January 1, 2016, are expected to have no significant effect on our financial performance.

9. General trends, outlook and assumptions

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

Telecommunications industry trends

We estimate that Canadian telecommunications industry revenues (including TV and excluding media) grew by about 2% to approximately $58 billion in 2015. Wireless and data services again drove industry growth, as the changing entertainment consumption behaviours of consumers continued to favour data-intensive smartphones and tablets.

As one of Canada's largest telecommunications companies, TELUS generated revenues of $12.5 billion in 2015, representing approximately 22% of industry revenues, with wireless services representing the largest portion of our business. In our wireline business, growth in high-speed Internet access, data and TV services, as well as a growing revenue base in business process outsourcing and services to the healthcare industry, are offsetting declining demand for legacy voice services.

Economic growth in Canada, estimated at 1.1% in 2015, was lower than the 2.1% assumed when we announced our 2015 financial targets. Significant downward pressures on prices for most commodities, particularly oil, continue to generate macroeconomic headwinds in Canada as we enter 2016, particularly in Alberta, which is a key market for TELUS. To mitigate against these pressures, we have accelerated our operational efficiency initiatives and are focusing resources on growth opportunities.

We believe that we may continue to moderately grow both wireless and wireline EBITDA due to the continued high demand for data consumption and high-speed Internet access in both wireless and wireline segments; our consistent strategic focus on our core wireless and wireline capabilities (see *Section 2.2 Strategic imperatives* and *Section 4.1 Principal markets addressed and competition*); significant ongoing investments in our leading broadband networks; continued efforts to enhance operational efficiency; and our intense focus on the customer experience across all areas of our operations.

Wireless

Based on publicly reported competitors' results and estimates, the Canadian wireless industry experienced year-over-year revenue and EBITDA growth of approximately 7% and approximately 5%, respectively, in 2015 (both approximately 5% in 2014). Growth in our wireless revenue and EBITDA — excluding restructuring and other costs in 2015 were 5.3% and 4.7%, respectively.

The Canadian wireless industry added approximately 780,000 new subscribers in 2015, compared to approximately 670,000 in 2014. Industry additions in 2015 represent an increase in the penetration rate of approximately two percentage points, compared to approximately 1.5 percentage points in 2014. We expect penetration to continue increasing in 2016 and future years, albeit at a slower pace.

Comparison of wireless industry metrics

	2016	2015
Market penetration of population		
Canada	84%	**83%**
U.S.	124%	**118%**
Europe	up to 184%	**up to 182%**

Asia-Pacific	up to 164%	**up to 169%**
Data usage (percentage of ARPU)		
Canada	56%	**53%**
U.S.	55%	**52%**
Europe	49%	**46%**
Asia-Pacific	60%	**58%**

Sources: TELUS estimates, CRTC's Communications Monitoring Reports, and other company and industry reports.

The U.S. wireless market has some attributes that are similar to the Canadian market. The wireless market in Western Europe differs significantly from the Canadian market for several reasons, including a more expensive wireline regime for local calls and the common practice in Europe of customers having multiple wireless subscriptions to reduce roaming charges when moving between countries. However, the European Parliament passed legislation in 2015 to virtually end the practice of wireless companies charging roaming fees to their customers travelling within any of the group's 28 member nations by 2017.

Data growth continues to be driven by the ongoing adoption of data-centric smartphones, the effects of higher-rate two-year plans, wireless access to services replacing wireline access and additional deployment of tablet devices, as

well as growth in machine-to-machine devices (M2M) and the Internet of Things (IoT). This trend is expected to continue to increase the demand for data services for the foreseeable future.

In 2015, the wireless market was characterized by heightened retention and acquisition activity associated with the concurrent expiry of two-year and three-year contracts as a result of the Wireless Code enacted in 2013. This led to higher industry retention and acquisition costs, exacerbated by the continued adoption of data-centric smartphones with higher upfront device subsidies and higher device costs given the recent depreciation of the Canadian dollar against the U.S. dollar. While this represents upfront pressure on industry margins, smartphones tend to generate higher ARPU, experience lower churn rates than earlier or more basic mobile devices, and result in higher average lifetime revenue. Our national industry leadership in postpaid churn and average lifetime revenue per subscriber, positions us to continue to monetize the investments we make in acquiring and upgrading customers.

We launched our 4G LTE network in 2012 and have since expanded coverage to 96% of Canadians, complemented by the 99% of Canadians covered by our HSPA+ network. While LTE increases download speeds and improves the customer experience, continually increasing data traffic demands pose challenges to wireless carriers' networks and their ability to manage and support this trend. Through our participation in significant spectrum auctions in recent years, we have approximately doubled our spectrum holdings (see *Building national capabilities* in *Section 2.2*). This, in addition to our network sharing agreement with a national peer, enables us to rapidly and cost efficiently roll out faster, next-generation high-speed wireless networks, even in rural areas, and enhance network capacity and reliability to meet expanding customer demand. (See *Subscriber demand for data* in *Section 10.3 Technology*.)

In 2015, the wireless industry continued to adjust to the highly competitive and capital intensive landscape in Canada. The small independent new entrants have been or are in the process of being consolidated. Mobilicity was acquired by Rogers Communications in June. Moreover, in December, cable-TV provider Shaw Communications announced that it would acquire Wind Mobile for $1.6 billion. In January 2016, Shaw Communications announced it had sold its wholly owned broadcasting subsidiary, Shaw Media Inc., to Corus Entertainment for $2.65 billion. Videotron continues to operate as a wireless new entrant in Quebec, and Eastlink in Atlantic Canada. These cable-TV-based wireless providers, in addition to provincial carriers in Manitoba and Saskatchewan, represent a fourth carrier in all major markets.

The majority of consumers are using mobile devices in all aspects of their day-to-day lives, including purchasing transactions, as mobile commerce (m-commerce) is more broadly deployed. M-commerce expands the transaction relationship between retailers and consumers. We continue to work to simplify the payment ecosystem by leveraging the latest technology and applications to bring together customers and retailers, while striving to address the security and privacy concerns of customers within the regulatory framework. Mobile wallet services represent an m-commerce opportunity for us. With near field communications (NFC) SIM card technology, customers are able to make purchases with NFC-compatible retail point of sale systems. We continue to evolve our product offerings in this space.

M2M and IoT technologies connect communications-enabled remote devices via wireless networks, allowing key information and processes to be exchanged. Advanced platforms and networks are already seen in industries such as utilities, agriculture and fleet management, with ongoing deployment in other industries such as vehicle insurance, retail, food services and healthcare.

M2M volume expansion is anticipated to represent a meaningful opportunity for growth in the wireless market. While M2M applications generally have lower ARPU, they tend to generate high volumes and feature low or no subsidy costs. In 2014, we launched Canada's first IoT Solution marketplace — an online portal for turnkey IoT solutions aimed at helping businesses incorporate Internet-connected devices to enhance their efficiency, productivity and profitability. This was expanded to include 53 more solutions and 23 new partners in 2015, and we continue to expand our competitive reach in this area, which may drive efficiencies for our business clients and improve the lives of our consumers.

Wireline

The traditional wireline telecommunications market is expected to remain very competitive in 2016 as technology substitution — such as the broad deployment of high-speed Internet; the use of email, messaging and social media as voice alternatives; and the growth of wireless and

voice over IP (VoIP) services — continues to replace higher-margin legacy voice revenues. Although we are a key provider of these substitution services, the decline in this legacy business continues as anticipated. Our long-standing growth strategy continues to focus on wireless, and data and IP-centric wireline capabilities.

Canada's four major cable-TV companies had an estimated installed base of approximately 4.1 million telephony subscribers at the end of 2015, or a national consumer market share of approximately 39%, down from 40% in 2014.

Other non-facilities-based competitors also offer local and long distance VoIP services and resell high-speed Internet solutions. This competition, along with technological substitution to wireless services, continues to erode the number of residential network access lines and associated local and long distance revenues, as expected.

The four major cable-TV companies had an estimated 6.3 million Internet subscribers at the end of 2015, up from 6.1 million at the end of 2014, while telecommunications companies had 6.1 million Internet subscribers, up from 5.9 million at the end of 2014. Although the consumer high-speed Internet market is maturing, with 82% penetration in Western Canada and 80% penetration across Canada, subscriber growth is expected to continue over the next several years. In addition, TELUS continues to make moderate market share gains due to the expansion of our fibre-optic network, as well as the pull-through of subscribers from our IP-based Optik TV service.

In 2015, Canadian IP TV providers increased their subscriber base by an estimated 16% to surpass 2.2 million through expanded network coverage, enhanced service offerings, and marketing and promotions focused on IP TV. This growth came at the expense of cable-TV and satellite TV subscriber losses, and was primarily driven by strong subscriber loading at TELUS and Bell. We estimate that the four major cable-TV companies have approximately 6.2 million TV subscribers or a 53% market share, down two percentage points from 2014. In 2015, our primary Western Canadian cable-TV competitor, Shaw Communications, continued to focus on the roll-out of its metropolitan Wi-Fi network, and in December announced the acquisition of Wind Mobile with the stated intention of expanding its ability to bundle wireless services with its cable-based services.

The increasing popularity of viewing TV and on-demand content anywhere, particularly on handheld devices, is expected to continue as customers adopt services that enable them to view content on multiple screens.

Streaming media providers continue to enhance over-the-top (OTT) streaming services to compete for a share of viewership. Recent studies suggest that 47% of Canadian English-speaking households had a subscription to Netflix at the end of 2015. Bell Media, as well as Rogers and Shaw (through the Shomi joint venture), have launched competing content streaming services. We continue to enhance our Optik on the go service with expanded content, including distribution deals with OTT content providers Netflix and Crave TV.

Cable-TV and telecommunications providers with media services are monitoring OTT developments and evolving their content and market strategy to compete with these non-traditional offerings, as OTT can be viewed as both competitive and complementary. We view OTT as an opportunity to add increased capabilities to our linear and on-demand assets, provide customers flexible options to view the content they want and expand customer use of our high-speed Internet and wireless networks.

Telecommunications companies continue to make investments in DSL broadband and increasingly fibre-optic technologies to maintain and enhance their ability to support enhanced IP-based services. Cable-TV companies continue to evolve their cable networks with an intention to gradually roll-out the DOCSIS 3.1 platform. Although this platform increases speed nearer term and is more cost efficient, it does not offer the same advanced capabilities as fibre over the longer term. Our Optik TV footprint covers more than 2.85 million households, with 90% having access to speeds of at least 50 Mbps through VDSL bonding and other newer technologies, enabling us to deliver a better customer experience and more simultaneous content. In addition, TELUS and other telecommunications companies continue to deploy fibre-to-the-premises (FTTP) technologies, which support even higher broadband speeds. We are making significant ongoing investments in our fibre-optic network, which, at the end of 2015, was available to 695,000 homes and businesses, with multi-year investments announced in 2015 to connect thousands of additional homes and businesses in Vancouver and Edmonton over the next few years.

Combined with wireline local and long distance, wireless and high-speed Internet and entertainment services, telecommunications companies are increasingly offering bundled products to achieve competitive differentiation and provide customers with more flexibility and choice on networks that can reliably support these services. Our broadband investments, including the build-out of our fibre-optic network, IP-based Optik TV service and bundled integrated service offers, continue to improve our competitive position and customer loyalty relative to our main cable-TV competitor.

The Canadian broadcasting industry has become more vertically integrated, with most of our competitors owning or controlling broadcast content. Our differentiated approach, consistent with our content strategy, is to aggregate, integrate and make accessible the best content and applications to customers, through whatever device they choose. We have consistently taken the position that it is not necessary to own content in order to make it accessible on an economically attractive basis, provided there is meaningful and timely enforcement of regulatory safeguards, as well as additional safeguards introduced, as required. (See *Section 10.4 Regulatory matters — Broadcasting distribution undertakings.*)

Consumers are increasingly demanding more personalized content. In September 2014, the CRTC concluded a review of the regulatory framework relating to television broadcasting, including its proposal to increase the ability of consumers to subscribe to programming on a service-by-service basis. In 2015, the CRTC released all of the policy decisions related to this consultation. This included the enhanced ability for consumers to choose content on a service-

by-service basis. Given our consistent strategy of advocating for and offering the highest level of choice, customization and flexibility, including a skinny basic offering with a wide range of theme packs to choose from, we believe we are well positioned in this space. (*See Section 10.4 Regulatory Matters — Public consultation on television broadcasting and distribution (Let's Talk TV review.*))

Additional wireline capabilities

In the business market (enterprise and small and medium-sized businesses, or SMB), the convergence of IT and telecommunications, facilitated by the ubiquity of IP, continues to shape competitive investments. Cable-TV companies are making significant investments to better compete in the highly contested SMB space. Telecommunications companies like us are providing network-centric managed applications, while IT service providers are bundling network connectivity with their software as service offerings. In addition, manufacturers continue to bring all-IP and converged (IP plus legacy) equipment to market, enabling ongoing migration to IP-based solutions. The development of IP-based platforms providing combined IP voice, data and video solutions creates potential cost efficiencies that compensate, in part, for reduced margins resulting from the migration from legacy to IP-based services. New opportunities exist for integrated solutions and business process outsourcing that have greater business impact than traditional telecommunications services. Data security is an area that represents both challenges as well as opportunities to provide customers with our robust data security solutions. Through TELUS International, we continue to offer business process outsourcing based in numerous locations around the world to Canadian and multi-national companies. Increasingly, businesses are looking to partner with their communications service provider to address their business goals and challenges, and to tailor solutions for their needs that leverage telecommunications in ways never imagined five to 10 years ago.

Healthcare is expected to be among the highest growth areas in the future, driven by an aging population in Canada, an increasing emphasis on chronic disease management, and the potential benefits that technology can deliver in terms of efficiency and effectiveness within the sector. It is believed that the current Canadian healthcare model is not sustainable with shifting demographics and requires material transformation to answer inclusively the challenges of economic affordability and improved human outcomes. To this end, the commercial and societal opportunities before us are significant. We have an exciting opportunity to harness the power of our wireless and wireline broadband networks to elevate the reach, integration and effectiveness of our innovative tools and applications across the primary care ecosystem. These tools include personal health records to facilitate self-management of healthcare data, electronic drug prescriptions with online insurance validation by the physician, and home health monitoring devices and data capture with caregiver oversight. By leveraging the digitization of everyday functions in the healthcare ecosystem and underpinning them with broadband network connectivity, we are providing a necessary open platform to support the development and delivery of even more advanced health applications for Canadians in need, as well as enabling the promotion of wellness.

Rapid growth is expected in cloud-based services in Canada. Leveraging our eight intelligent data centres (IDCs) located across Canada, we are expanding cloud-computing services in higher-margin segments with managed solutions. This provides significant differentiation relative to our peers that have largely chosen to acquire companies in the pure-play data hosting space. Investments in our IDCs also provide internal capabilities to strategically enhance our own network and IT systems.

As technology in our industry continues to change rapidly and customer demand continues to grow, we are committed to evolving our business to offer innovative and reliable services and thought leadership in core future growth areas that are complementary to our traditional business. This, along with our intense focus on delivering an enhanced customer experience, positions us for continued differentiation and moderate growth.

Assumptions for 2016

In 2016, we plan to build on the wireless and wireline operating results achieved in 2015, as well as generate efficiencies from restructuring initiatives to increase both wireless and wireline EBITDA. We plan to generate future growth through postpaid wireless net additions, combined with ongoing smartphone adoption and upgrades and continued Optik TV and high-speed Internet subscriber growth, as well as through business services, including TELUS International and TELUS Health services. We will also continue our strategic network and service-related investments, along with customer-focused operational execution.

Our assumptions for our 2016 outlook are generally based on the industry analysis above, as well as our 2015 results, our customers first focus, strategy and priorities discussed in *Section 2* and *Section 3*, and the trends description in *Section 5.2*. These assumptions are subject to risks and uncertainties, including, but not limited to, competition, technology substitution, regulatory matters, financing and debt requirements, taxation matters, economic conditions, litigation and other factors noted in our *Caution regarding forward-looking statements* and described in detail in *Section 10 Risks and risk management*. Some of our key assumptions include the following:

- Moderately higher economic growth in Canada in 2016, estimated to be 1.7%, up from an estimated 1.1% in 2015. For our incumbent local exchange carrier (ILEC) provinces in Western Canada, we estimate that economic growth in British Columbia was 2.3% in 2015 and will be in the range of 2.0% to 2.5% in 2016, and that economic growth (contraction) in Alberta was approximately (1.0)% in 2015 and will be in the range of 0.5% to 1.0% in 2016, in part due to low oil prices.
- No material adverse regulatory rulings or government actions.

- Continued intense wireless and wireline competition in both consumer and business markets.
- An increase in wireless industry penetration of the Canadian market, consistent with 2015.
- Ongoing subscriber adoption of, and upgrades to, data-intensive smartphones, as customers want more mobile connectivity to the Internet.
- Wireless revenue growth resulting from modest growth in both postpaid subscriber loadings and blended ARPU.
- Stable wireless acquisition and retention expenses to 2015, however, these will be dependent on gross loadings, market pressures and the continued impact of the coterminous expiration of two-year and three-year plans, which began in June 2015.
- Continued growth in wireline data revenue, resulting from an increase in high-speed Internet and Optik TV subscribers, speed upgrades and expanding broadband infrastructure, as well as business outsourcing and healthcare solutions.
- Continued focus on our customers first initiatives and maintaining our customers' likelihood-to-recommend scores.
- Pension plans: Defined benefit pension plan expense of approximately $89 million recorded in Employee benefits expense and approximately $5 million recorded in employee defined benefit plans net interest in Financing costs; a 4.00% discount rate for employee defined benefit pension plan accounting purposes (2015 — 3.90%); and defined benefit pension plan funding of approximately $57 million.
- Restructuring and other costs of approximately $175 million for continuing operational efficiency initiatives, with other margin enhancement initiatives to mitigate pressures from slow economic growth, technological substitution and modest subscriber growth. The completion of our initiative to reduce approximately 1,500 full-time positions previously announced in November 2015.
- Income taxes: Income taxes computed at applicable statutory rate of 26.3 to 26.8% and cash income tax payments between $570 million and $630 million (2015 — $256 million). Cash tax payments are increasing in 2016, primarily as a result of the impact of the use of the Public Mobile losses in 2014, which has the effect of: (i) deferring a portion of our 2015 current taxes payable to February 2016; and (ii) increasing, relative to 2015, the 2016 instalments payable, which ultimately is expected to reduce the 2017 cash income tax payments by approximately $150 million.
- Increased investments in broadband infrastructure, including our new fibre-optic network, and 4G LTE expansion and upgrades, as well as in network and systems resiliency and reliability.
- A continuing weakness in the average Canadian dollar to U.S. dollar exchange rate from the U.S. 78 cent average exchange rate in 2015, in part due to the continued effects of low oil prices and certain U.S. monetary policy changes.

10. Risks and risk management

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of this MD&A.

10.1 Overview

In the normal course of our business activities, we are inherently exposed to both risks and opportunities. Risk oversight and risk management processes are integral elements of our risk governance and strategic planning efforts.

Board risk governance and oversight

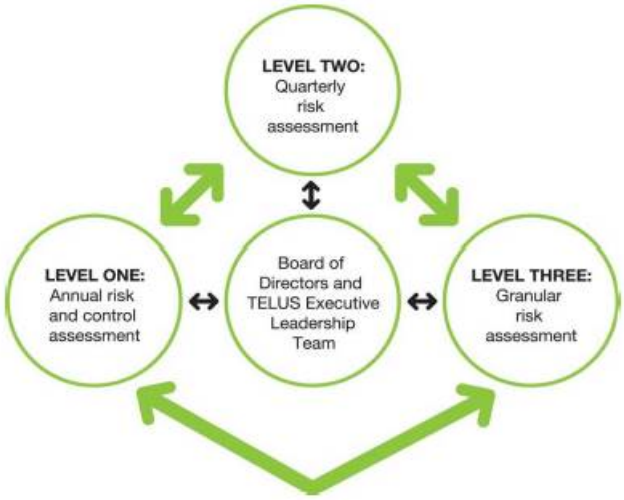
We maintain strong risk governance and oversight practices, with risk oversight responsibilities outlined in the Board's and the Board committees' terms of reference. The Board's terms of reference outline that our Board is responsible for ensuring timely identification of material risks to our business and implementation of appropriate systems and processes to identify, monitor and manage material risks.

In addition:

- Risks on the enterprise key risk profile are assigned for Board or Committee oversight
- Board committees provide updates to our Board on risks overseen by the committees based on their respective terms of reference
- Our Board or Board committees may request risk briefings by our executive risk owners. The Vice-President, Risk Management and Chief Internal Auditor attends and/or receives a summary of these briefings.

Responsibilities for risk management

We have a strong culture of risk ownership and use a multi-step approach to manage our risks, with responsibility shared across the organization. The first line of defence is executive and operating management, who have integrated risk management into core decision-making processes (including strategic planning processes) and day-to-day operations. We have risk management and compliance functions across the organization that form the second line of defence, and these functions are responsible for monitoring the design and operation of the controls established by management. Internal Audit is the third line of defence and provides independent assurance regarding the effectiveness and efficiency of risk management and controls across all aspects of the business.



Definition of business risk

We define business risk as the degree of exposure associated with the achievement of key strategic, financial, organizational and process objectives in relation to the effectiveness and efficiency of operations, the reliability and integrity of financial reporting, compliance with laws, regulations, policies, procedures and contracts, and safeguarding of assets within an ethical organizational culture.

Our enterprise risks arise primarily from our business environment and are fundamentally linked to our strategies and business objectives. We strive to proactively mitigate our risk exposures through performance planning, business operational management and risk response strategies, which can include mitigating, transferring, retaining and/or avoiding risks. For example, residual exposure for certain risks is mitigated through insurance coverage, where we judge this to be efficient and commercially viable. We also mitigate risks through contract terms, as well as through contingency planning and other risk response strategies, as appropriate.

We strive to avoid taking on undue risk whenever possible and ensure alignment of risks with business strategies, objectives, values and risk tolerances.

Risk and control assessment process

We use a three-level enterprise risk and control assessment process that solicits and incorporates the input of team members from all areas of TELUS. This process, established in 2002, tracks multi-year trends for various key risks and control environment perceptions across the organization.

Three-level enterprise risk and control assessment process

Level one: Annual risk and control assessment

Key inputs into this process include interviews with senior managers, information and updates from our ongoing strategic planning process, and the results of our annual risk and control assessment. The assessment aligns with the 2013 COSO (Committee of Sponsoring Organizations of the Treadway Commission) enterprise risk management and internal control integrated frameworks.

The assessment is widely distributed to our entire leadership team (all executive vice-president, vice-president and director-level team members) and a random sample of management professional team members. More than 2,000 individuals completed the assessment in 2015. Board members also complete an assessment to provide their perspectives on our key risks and approach to enterprise risk management, and to gauge our risk appetite and tolerance by key risk category.

Our assessment incorporates input from recent internal and external audits, results of various risk management activities, and management's SOX (*Sarbanes-Oxley Act of 2002*) compliance activities related to internal control over financial reporting. Key enterprise risks are identified, defined and prioritized, and classified into risk categories. Perceived risk resiliency (or readiness) is assessed for each risk, risk tolerance/appetite is evaluated by risk category and fraud risks are considered. Executive-level risk owners are assigned for each key risk and Board and Committee risk oversight responsibilities are defined in our Board Policy and Terms of Reference.

Results of the annual risk and control assessment are shared with senior management and our Board of Directors, including the Audit Committee. The annual risk assessment results guide the development of our annual internal audit program, which has an emphasis on assurance coverage of higher-rated risks and is approved by our Audit Committee. Risk assessments are also incorporated into our strategic planning, operational risk management and performance management processes, and are shared with our Board.

Level two: Quarterly risk assessment

We conduct quarterly risk assessment reviews with our executive-level risk owners and designated risk primes across all business units to capture and communicate changing business risks, identify key risk mitigation activities, and provide quarterly updates and assurance to our Audit Committee and other applicable Board committees.

Level three: Granular risk assessment

We conduct granular risk assessments for specific audit engagements and various risk management, strategic and operational initiatives (e.g. strategic planning, project, environmental management, safety, business continuity planning, network and IT vulnerability, and fraud and ethics). The results of the multiple risk assessments are evaluated, prioritized, updated and integrated into the key risk profile, policies and processes throughout the year.

Principal risks and uncertainties

The following subsections describe our principal risks and uncertainties and associated risk mitigation activities. The significance of these risks is such that they alone or in combination may have material impacts on our business operations, reputation, results and valuation.

Although we believe the measures taken to mitigate risks described in each risk section below are reasonable, there can be no expectation or assurance that they will effectively remove the risks described or that new developments and risks will not materially affect our operations or financial results.

10.2 Competition

Intense wireless competition is expected to continue

At the end of 2015, there were nine facilities-based wireless competitors operating in Canada, including TELUS (some nationally and others regionally — see *Competition overview* in *Section 4.1*). This included the three remaining competitors that first launched wireless service after acquiring AWS spectrum in 2008, namely Wind Mobile, EastLink and Quebecor. In December 2015, the Western Canada-based cable-TV company, Shaw Communications Inc., announced that it was acquiring Wind Mobile, effectively making Shaw the fourth wireless carrier in B.C., Alberta and Ontario. This acquisition provides them with the opportunity to develop a converged wireline and wireless network, which would enable them to offer a four-product consumer bundle in B.C. and Alberta (wireless, high-speed Internet, TV and home phone services), as well as expand their offerings to the business market.

All wireless competitors use various promotional offers, including price discounting on both handsets and rate plans, to attract customers. Such promotional activity, as well as consumer appetite for the latest smartphone, a continuing weakness in the Canadian dollar to U.S. dollar exchange rate, and more inclusive and shared plans, could result in continued pressure on average revenue per subscriber unit (ARPU), and on costs of acquisition and retention. Two-year and three-year contracts will continue to renew coterminously in 2016 as two-year contracts and, as a consequence, we expect high customer activity volumes, which could also result in higher churn rates, and elevated costs of acquisition, retention and operations to support the customer experience, while substitution to increasingly available Wi-Fi networks could lead to pressure on data usage, resulting in pressure on ARPU. In addition, in the future, with a large percentage of

the subscriber base already using devices with advanced features, customers may wish to upgrade less frequently, potentially requiring additional promotional incentives to upgrade to a new device, which will add more pressure to costs of acquisition and retention. (See *Trends* in *Section 5.2*.)

We also expect increased competition based on the use of unlicensed spectrum to deliver higher-speed data services, such as the use of Wi-Fi networks to deliver entertainment to customers beyond the home. Shaw launched one such service in 2012 to compete with TELUS' Optik on the go. In addition, satellite operators such as Xplornet are augmenting their existing high-speed Internet access (HSIA) by launching high-throughput satellites.

***Risk mitigation*:** Our 4G wireless networks cover approximately 99% of Canada's population, facilitated by network access agreements with Bell Canada and SaskTel. Wireless 4G technologies have enabled us to establish and maintain a strong position in smartphone and data device selection and expand roaming capability to more than 225 countries. Faster data download speeds provided by these technologies enable delivery of our Optik on the go service to mobile devices when beyond the reach of Wi-Fi.

To compete more effectively in serving a variety of customer segments, we offer two flanker brands, Koodo Mobile and Public Mobile. By maintaining separation among the TELUS, Koodo and Public Mobile brands through uniquely targeted value propositions and distinct distribution channels, including web-based channels, we believe we are well positioned to compete with other wireless providers. We also have a white label postpaid service provided through a premier retail chain. Our customers first initiatives, clear and simple approach and retention programs may mitigate the impacts of the two-year and three-year contracts renewing simultaneously as two-year contracts in 2016.

Shaw's acquisition of Wind will lead to increased competitive intensity in wireless and wireline services across major urban markets of B.C., Alberta and Ontario. However, we continue our disciplined long-term strategy of investing in the growth areas of our Company and executing upon our customers first priority. We intend to continue to market and distribute innovative and differentiated wireless services; offer bundled wireless services (e.g. voice, text and data), including data sharing plans; invest in our extensive network to support customer service; evolve technologies; invest in our distribution channels; and acquire the use of spectrum to facilitate service development and the expansion of our subscriber base, as well as to address accelerating demand for data usage.

Customer experience

Our customers' loyalty and their likelihood to recommend TELUS are both dependent upon our ability to provide a service experience that meets

or exceeds customer expectations. Consequently, if our service experience does not meet or exceed customer expectations, TELUS' brand image could suffer, business clients and consumers could change service providers, and our profitability could be negatively impacted should customer net additions decrease and/or the costs to acquire and retain customers increase.

Risk mitigation: Our top corporate priority is putting customers first and earning our way to industry leadership in the likelihood to recommend from our clients. We continue to invest in service development, system and network reliability, team members, and system and process improvements. Additionally, we continue to introduce new client experience initiatives to bring greater transparency and simplicity to our customers, to help differentiate our services and maintain a low subscriber churn rate. (See *Strategic imperatives* in *Section 2.2* and *Corporate priorities* in *Section 3*.)

Technological substitution may adversely affect market share, volume and pricing

We face intense competition and technological substitution across all key business lines and market segments, including the consumer, small and medium-sized business (SMB) and large enterprise markets.

Technological advances have blurred the boundaries between broadcasting, Internet and telecommunications. (See *Section 10.3 Technology*.) Wireless carriers and cable-TV companies continue to expand their offerings, resulting in intensified competition for local access, long distance and high-speed Internet services in residential and certain SMB markets. Over-the-top (OTT) content providers, such as Netflix, and traditional competitors that have launched their own OTT services, are expected to compete for share of viewership, which may accelerate the disconnection of TV services or affect subscriber and revenue growth in our TV and entertainment services. We expect industry pressure from content distribution, costs and pricing and customer acquisition efforts to continue across most product and service categories and market segments.

Risk mitigation: Our IP TV and OTT multimedia initiatives provide the next generation of IP TV, but importantly ties our OTT environment to one platform, enabling TELUS to be agile in the delivery of OTT services. It also facilitates cloud-based media delivery, and ultimately everything on demand, on any device, on any network. Active monitoring of competitive developments and internal prototyping in product and geographic markets enable us to respond rapidly to competitor offers and leverage our full suite of integrated wireless and wireline solutions and national reach, such as monitoring global telecom carriers for their next-generation OTT offers. To mitigate losses in legacy services in our incumbent areas of B.C., Alberta and Eastern Quebec, investments are being made in our broadband networks, including our new fibre-optic network, in order to increase speeds, improve network reliability, expand our reach and provide an industry-leading customer experience. We also continue to introduce innovative products and services, such as Optik on the go or cloud-based storage, enhance services with integrated bundled offers and invest in customer-focused initiatives to improve our customers' experience. The adoption of new technologies and products are aggressively pursued to improve the efficiency of our service offerings.

Wireline voice and data competition

We expect competition to remain intense from traditional telephony, data, IP and IT service providers, as well as from VoIP-focused entrants in both consumer and business markets.

The industry transition from legacy voice infrastructure to IP telephony and from legacy data platforms to Ethernet, IP virtual private networks, multi-protocol label switching IP platforms and IP-based service delivery models, continues to create uncertainties and opportunities. Legacy data revenues and margins continue to decline and have been only partially offset by growth in demand and/or migration of customers to IP-based platforms. IP-based solutions are also subject to downward pricing pressure, lower margins and technological evolution. Capital investments in wireline infrastructure are required to facilitate this ongoing transition process.

Business

The business market continues to be under pressure, particularly in Alberta, as the price of oil declined significantly in 2015. Voice and data services are becoming increasingly commoditized and prices for legacy services are becoming increasingly discounted as competition intensifies. As a result of recent cybersecurity breaches in the private and public sectors, security and privacy features are increasingly being bundled with other voice and data solutions. As well, bundling of local access, wireless and advanced data and IP services has evolved to include web-based and e-commerce services, as well as other IT services and support. Non-traditional competitors have entered the telecommunications space with new products that redirect and deliver email, voice and text messages from a variety of telecommunications and IT systems to the device nearest the intended recipient. With this broader bundling of traditional telecommunications services and IT services, we increasingly face competition from pure Internet and IT hardware, software and business process/consulting companies. Cable-TV companies are increasingly targeting the SMB market with their services. The result is that traditional and non-traditional competitors are now focused on providing a broad range of telecommunications services to the business sector, particularly in major urban areas.

Risk mitigation: We continue to add to our capabilities through prudent product development initiatives, a combination of acquisitions and partnerships, a focus on key vertical markets (public sector, healthcare, financial services, energy and telecommunications wholesale) and expansion of solution sets in the enterprise market, as well as our clear and simple modular approach in the SMB market (including services such as TELUS Business Connect) and Internet of Things (IoT) solutions. Through TELUS Health, we have leveraged our systems and proprietary solutions to extend our footprint in healthcare and benefit from the investments in eHealth being made by governments. Through our business process outsourcing services, we enable customer experience innovation to help our customers realize efficiencies and savings in their operations. We are also focused on implementing large enterprise deals that leverage our capital investments and capabilities.

Consumer

In the consumer wireline market, cable-TV companies and other competitors continue to combine a mix of residential local VoIP, long distance, HSIA and, in some cases, wireless services into one bundled and/or discounted monthly rate, along with their existing broadcast or satellite-based TV services. In addition, cable-TV companies continue to increase the speed of their HSIA offerings and roll-out of Wi-Fi services in metropolitan areas. To a lesser extent, other non-facilities-based competitors offer local and long distance VoIP services over the Internet and resell HSIA solutions. Erosion of our residential network access lines (NALs) is expected to continue because of this competition and ongoing technological substitution to wireless and VoIP. Legacy voice revenues are also expected to continue to decline. Although the HSIA market is maturing, we expect moderate subscriber growth to continue over the next several years, which requires ongoing investment.

Risk mitigation: We continue to invest in our broadband networks and services, including our fibre-optic network, in order to expand the coverage and increase the speed of our high-speed Internet service and extend the coverage, capability and content lineup of our IP-based Optik TV service in B.C., Alberta and Eastern Quebec (see *Broadcasting* below and *Section 2.2 Strategic imperatives).* The provision of Optik TV service and service bundles helps us attract and pull through Internet subscriptions and mitigate residential NAL losses. TELUS Satellite TV service in Alberta and B.C. complements our expanding IP TV service footprint, enabling us to serve households where our IP TV service is not currently available. TELUS Satellite TV service is made possible by an agreement with Bell Canada. We also continue to invest in other product development initiatives, including connected home capabilities and consumer health solutions, and expanding Optik TV content capabilities by offering channels through specific theme packs, as well as OTT options available directly through the set-top box.

Broadcasting

We offer Optik TV service to more than 2.85 million households and businesses in B.C., Alberta and Eastern Quebec, and we continue targeted roll-outs in new areas. TELUS TV provides numerous interactivity and customization advantages over cable-TV and we have achieved significant market share with more than 1.0 million TV subscribers at December 31, 2015. However, there can be no assurance that subscriber growth rates will be maintained, or that we will achieve planned revenue growth and improved operating efficiency, because of a high level of industry market penetration and actions by our competitors and content suppliers. In addition, competition from OTT services, including Netflix and other companies that have launched their own OTT services, could also affect subscriber and revenue growth by accelerating the disconnection of TV services or reducing TV spending.

Risk mitigation: We have broadened the addressable market for our HD TV services through the deployment of ADSL2+ technology, upgrades to VDSL2 technology including bonding, the continued roll-out of gigabit passive optical network (GPON) technology in selected areas, and the continued expansion of our fibre-optic network to homes and businesses in communities across British Columbia, Alberta and Eastern Quebec. We continue to introduce new features and capabilities to our TV services, including third-party OTT offerings, and strengthen our leadership position in Western Canada in the number of HD linear channels and video-on-demand services.

Vertical integration into broadcast content ownership by competitors

We are not currently seeking to be a broadcast content owner, but some of our competitors own and continue to acquire broadcast content assets. Greater vertical integration could result in content being withheld from us or being made available to us at inflated prices or on unattractive terms.

Risk mitigation: (See the risk and risk mitigation discussion in *Broadcasting distribution undertakings* in *Section 10.4 Regulatory matters*.)

10.3 Technology

Technology is a key enabler of our business. However, technology evolution brings risks and uncertainties, as well as opportunities. We maintain short-term and long-term technology strategies to optimize our selection and timely use of technology, while minimizing the associated costs, risks and uncertainties. Following are the main technology risks and uncertainties for TELUS and a description of how we proactively address them.

Subscriber demand for data challenges wireless network and is expected to be accompanied by decreasing prices

The demand for wireless data services continues to grow rapidly, driven by greater broadband penetration, growing personal connectivity and networking, increasing affordability and selection of smartphones and high-usage data devices (such as tablets and mobile Internet keys), richer multimedia services and applications, the IoT (including machine-to-machine (M2M) data applications and other wearable technology), growth in cloud services and wireless price competition. Given the highly competitive wireless business environment in Canada, we expect that wireless data revenues will grow more slowly than demand for bandwidth. Rising data traffic levels and the fast pace of data device innovation present challenges to providing adequate capacity and maintaining high service levels.

***Risk mitigation*:** Our ongoing investments in LTE, LTE advanced and 4.5G networks (heterogeneous small cell deployments) allow us to manage data capacity demands by more effectively utilizing the spectrum we own. Further standards-based enhancements will be implemented that are ready for commercial deployment to these networks in order to provide higher performance connectivity solutions. In addition, the evolution to LTE advanced technologies is supported by our investments in IP networks, IP/fibre backhaul to cell sites, including our small cells, and a software-upgradeable radio infrastructure. LTE advanced technologies are currently available in urban areas. LTE advanced expansion is expected to further increase network capacity and speed, reduce delivery costs per megabyte, enable richer multimedia applications and services, and deliver a superior subscriber experience. Some specific examples include an advanced modulation scheme to improve bandwidth efficiency, spatial diversity and small cell deployment to

enable efficient spectrum re-use, multiplying spectral capacity, centralized computing and storage to improve the capacity and manage the cost-effectiveness of our networks.

Rapid growth of wireless data volumes requires optimal and efficient utilization of our spectrum holdings. Our spectrum strategy is designed to further strengthen our ability to deliver the mobile Internet to Canadians. In line with this strategy, our national spectrum holdings have more than doubled through our purchases of 700 MHz, AWS-3 and 2500 MHz spectrum licences during wireless spectrum auctions in 2014 and 2015. The spectrum licences we acquired provide added capacity to mitigate risks from growing data traffic. In addition, the deployment of the 700 MHz and 2500 MHz spectrum has started and we plan to utilize other spectrum licences purchased in recent years in combination with unlicensed supplementary spectrum, as network and device ecosystems evolve. The spectrum currently used for our CDMA network will eventually be fully repurposed to LTE technology. Our public Wi-Fi service integrates seamlessly with our 4G network and offloads data traffic from our wireless spectrum to increasingly available Wi-Fi hotspots. Our deployment of small cell technology further increases the efficient utilization of our spectrum holdings.

Roll-out and evolution of wireless broadband technologies and systems

As part of a natural 4G network progression, we are committed to LTE advanced, LTE and HSPA+ technology to support medium-term and long-term growth of mobile broadband services. We expect to continue operating our CDMA network at least through to the end of 2016. We will commence a staged decommissioning of the iDEN network in 2016. Throughout 2016, we will continue to support our Mike private network customers and actively work with them to migrate their services to our HSPA and LTE networks. The future decommissioning of the CDMA network and the repurposing of the iDEN network must be managed appropriately to ensure optimal use of spectrum and tower facilities, reduce costs and minimize churn and retention risks. Overall, as wireless broadband technologies and systems evolve, there is the risk that our future capital expenditures may be higher as our ongoing technology investments could involve costs higher than those recorded historically.

***Risk mitigation*:** Our practice is to optimize capital investments continually in order to provide reasonable payback periods for generating positive cash flows from investments and flexibility in considering future technology evolutions. Some capital investments, such as wireless towers, leasehold improvements and power systems, are technology-neutral.

Our wireless networks evolve through software upgrades to support enhancements in LTE and HSPA+ that improve performance, capacity and speed. We expect to leverage the economies of scale and handset variety of the LTE and HSPA+ ecosystems. We continue to migrate both CDMA and Mike subscribers to high-speed LTE and HSPA+ data devices in an effort to increase the use of data services and grow revenues, as well as reduce costs associated with operating and maintaining multiple networks. As we plan to decommission these networks, TELUS is taking steps to minimize the impact on our customers.

Reciprocal network access agreements, principally with Bell Canada, have facilitated our deployment of wireless technologies and provided the means for us to better manage our capital expenditures. These agreements are expected to provide ongoing cost savings beyond the initial network build, as well as the flexibility to invest in service differentiation and support systems.

We maintain close co-operation with our network technology suppliers and operator partners in order to influence and benefit from developments in LTE advanced, LTE and HSPA+ technologies.

Disruptive technology

A paradigm shift with the consumer adoption of alternative technologies, such as competitors' OTT offerings and increasingly available Wi-Fi networks, has the potential to negatively affect TELUS revenue streams. For example, Wi-Fi networks are used to deliver entertainment to customers beyond the home. OTT content providers, such as Netflix and other companies that have launched their own OTT services, are expected to compete for share of entertainment viewership. These factors, including increasing consumer demand for access to Wi-Fi outside of their home, and OTT services on demand, on any device, may drive increased churn rates for our wireless, TELUS TV and high-speed Internet services. (See *Intense wireless competition is expected to continue* in *Section 10.2 Competition*.)

***Risk mitigation*:** In 2012, TELUS launched Optik on the go service to deliver entertainment to mobile devices over our wireless networks. In addition, entering into distribution agreements with OTT content providers, like Netflix and Crave TV, further enhanced our Optik on the go service. Since early 2014, while working with thousands of businesses and many major sports and entertainment venues, our public Wi-Fi network has expanded. This public Wi-Fi service is part of our network strategy of deploying small cells that integrate seamlessly with our 4G wireless network, automatically shifting our smartphone customers to Wi-Fi and offloading data traffic from our wireless spectrum.

Our large-scale move to national, geographically distributed, data centres using generalized commercial off-the-shelf compute and storage enables the utilization of broad-scale network function virtualization (NFV) and software-defined network (SDN) technologies, which will allow us to virtualize much of our infrastructure and facilitate a common control plane for

coordination of our virtualized and non-virtualized network assets. For example, in Mobility, this enables a centralized (virtual) radio access network control — facilitating more efficient and more dynamic management of our radio frequency spectrum.

Supplier risks

Restructuring of vendors or discontinuance of products may affect our networks and services

We have relationships with a number of vendors, which are important in supporting network and service evolution plans and delivery of services to our customers. Vendors may experience business difficulties, restructure their operations, be consolidated with other suppliers, discontinue products or sell their operations or products to other vendors, which could affect the future development and support of products or services we use. There can be no guarantee that the outcome of any particular vendor strategy will not affect the services that we provide to our customers, or that we will not incur additional costs to continue providing services. Certain customer needs and preferences may not be aligned with our vendor selection or product and service offering, which may result in limitations on growth or loss of existing business.

Supplier concentration and market power

The popularity of certain models of smartphones and tablets has resulted in a growing reliance on certain manufacturers, which may increase their market power and adversely affect our ability to purchase certain products at an affordable cost. In addition, owners of popular broadcasting content may increase distribution charges and attempt to renegotiate broadcasting distribution agreements we have with them, which can adversely affect our entertainment service offerings and/or profitability. See also *Broadcasting distribution undertakings* in *Section 10.4*.

***Risk mitigation*:** We consider possible vendor strategies and/or restructuring outcomes when planning for our future growth, as well as the maintenance and support of existing equipment and services. We have reasonable contingency plans for different scenarios, including working with multiple vendors, maintaining ongoing strong vendor relations and working closely with other product users to influence vendors' product development plans.

In respect of supplier market power, we offer and promote alternative devices or programming content to provide greater choice for consumers and to help lessen our dependence on a few key suppliers.

Support systems will be increasingly critical to operational efficiency

We have a very large number of interconnected operational and business support systems, and their complexity has been continually increasing, which can affect system stability and availability. The development and launch of a new service typically requires significant systems development and integration efforts. Management of associated development and ongoing operational costs is a significant factor in maintaining a competitive position and profit margins. As next-generation services are introduced, they must be designed to work with next-generation systems, frameworks and IT infrastructures, and at the same time, they must be compatible with legacy services and support systems. There can be no assurance that any of our proposed IT systems or process change initiatives will be implemented successfully, that they will be implemented in accordance with anticipated timelines, or that sufficiently skilled personnel will be available to complete such initiatives. If we fail to implement and maintain effective IT systems on a timely basis, fail to create and maintain an effective governance and operating framework to support the management of staff, or fail to understand and streamline our significant number of legacy systems and proactively meet constantly evolving business requirements, this could have an adverse effect on our business and financial performance.

Risk mitigation: In line with industry best practice, our approach is to separate business support systems (BSS) from operational support systems (OSS) and underlying network technology. Our aim is to decouple the introduction of new network technologies from the services sold to customers so that both can evolve independently. This allows us to optimize network investments while limiting the impact on customer services, and facilitates the introduction of new services. In addition, due to the maturing nature of telecommunications vendor software, we adopt industry standard software for BSS/OSS functions and avoid custom development where possible. This allows us to leverage vendor knowledge and industry practices acquired through the implementation of their platforms at numerous global telecommunications companies. We have established a next-generation BSS/OSS framework to ensure that, as new services and technologies are developed, they are part of the next-generation framework that will ease the retirement of legacy systems in accordance with TeleManagement Forum's Next Generation Operations Systems and Software program. We also continue to make significant investments in system resiliency and reliability in support of our ongoing customers first initiatives.

Evolving wired broadband access technology standards may outpace projected access infrastructure investment lifetimes

The technology standards for broadband access over copper loops to customer premises are evolving rapidly, enabling higher broadband access speeds. The evolution is fuelled by consumer demand for faster connectivity, the threat of growing competitor capabilities and offerings, increasing use of OTT applications and the intent of service providers like us to offer new services, such as IP TV, that require greater bandwidth. In general, the evolution to higher broadband

access speeds is achieved by deploying fibre-optic cable further out from the central office, thus shortening the copper loop portion of the access network, and by using faster modem technologies on the shortened copper loop. However, new access technologies are evolving faster than the traditional investment cycle for access infrastructure. The introduction of these new technologies and the pace of adoption could result in requirements for additional capital funding not currently planned, as well as shorter estimated useful lives for certain existing infrastructure, which would increase depreciation and amortization expenses.

Risk mitigation: As part of our multi-year broadband build program, we upgraded substantial parts of our network to fibre-to-the-neighbourhood (FTTN) technology. We continue to make incremental investments in this infrastructure in order to maintain our ability to support competitive services — most recently, the upgrade to VDSL2 and bonding technologies. In addition, we are actively deploying fibre-to-the-premises (FTTP) technologies, including major roll-outs in the cities of Edmonton and Vancouver (see *Building national capabilities* in *Section 2.2*), which supports higher bandwidths.

In addition to ongoing enhancements to FTTN, we actively monitor the development and carrier acceptance of competing proposed FTTx standards (such as FTTP and fibre to the distribution point or FTTDp). One or more of these fibre-based solutions may be a more practical technology to deploy in brownfield neighbourhoods or multiple dwelling units than the current xDSL deployments on copper loops. We are exploring business models for financially viable deployment of fibre-based technologies in areas currently connected by copper.

The evolution of these access architectures and corresponding standards, enabled with quality of service standards and network traffic engineering, all support our Future Friendly Home strategy to deliver IP-based Internet, voice and video services over a common broadband access infrastructure.

IP-based telephony as a replacement for legacy analogue telephony is evolving and cost savings are uncertain

We continue to monitor the evolution of IP-based telephony technologies and service offerings, and we have developed a consumer solution for IP-based telephony through broadband access. This solution is in field trials and is intended to replace legacy analogue telephone service in areas that are served by fibre-based facilities. The solution can be expanded to provide additional telephone services over the existing analogue service infrastructure and is designed to replace the current platform in use today. We are also in the process of deploying our next-generation IP telephony solution for business users, which is intended to replace existing business VoIP platforms, as well as addressing areas that are served through fibre access. We are deploying converged IP solutions in the consumer segment that deliver telephony, video and Internet access on the same broadband infrastructure. However, the exchange of information between service providers with different broadband infrastructures is still at an early stage.

Our long-term technology strategy is to move all services to IP to simplify the network, reduce costs, enable advanced Future Friendly Home services and converge wireless and wireline services. Pursuing this strategy fully would involve transitioning our standard telephone service offering to IP-based telephony and phasing out legacy analogue-based telephone service. We could support this strategy by discontinuing regular analogue telephone lines and using digital-only broadband access lines. However, digital-only broadband access may not be feasible or financially viable in many areas for some time, particularly in rural and remote areas. Accordingly, we expect to support both legacy and IP-based voice systems for some time and incur costs to maintain both systems. There is a risk that investments in IP-based voice systems may not be accompanied by a reduction in the costs of maintaining legacy voice systems. There is also the risk that IP-based access infrastructure and corresponding IP-based telephony platforms may not be in place in time to avoid the need for some reinvestment in traditional switching platforms to support the legacy public switched telephone network access base in certain areas, which could result in some investment in line adaptation in non-broadband central offices.

Risk mitigation: We continue to deploy residential IP-based voice technologies into fibre-based communities, and work with vendors and the industry to assess the technical applicability and evolving cost profiles of proactively migrating legacy customers onto IP-based platforms while striving to satisfy CRTC commitments and customer expectations. Our ongoing investments in advanced broadband network technologies, including FTTP, should enable a smoother future evolution of IP-based telephony. We are also working with manufacturers to optimize the operations, cost structure and life expectancy of analogue systems and solutions so that some of this infrastructure evolves to a point where it can form part of the overall evolution towards IP. Additionally, IP-based solutions that we are currently deploying are capable of supporting a wide range of customers and services, which helps limit our exposure to any one market segment. Going forward, as our wireless services evolve, we will continue to assess the opportunity to further consolidate separate technologies into a single voice service environment. One example is the consolidation of our new IP-based consumer VoIP solution into the same platform that supports wireless telephony. We are looking at opportunities to rationalize our existing legacy voice infrastructure in order to manage costs. We are also working with our vendors and partners to reduce the cost structure of VoIP deployments.

Convergence in a common IP-based application environment for telephony, Internet and video is complex

The convergence of wireless and wireline services in a common IP-based application environment, carried over a common IP-based network, provides opportunities for cost savings and for the rapid development of more advanced services that are also more flexible and easier to use. However, the transformation from separate systems to a common environment is very complex and could be accompanied by implementation errors, design issues and system instability.

Risk mitigation: We mitigate implementation risk through modular architectures, lab investments, employee trials, partnering with system integrators where appropriate, using hardware that is common to most other North American IP-based technology deployments and introducing virtualization technologies, where feasible. We are also active in a number of standards bodies, such as the Metro Ethernet Forum and IP Sphere, to help influence a new IP infrastructure strategy that leverages standards-based functionality, which could further simplify our networks.

Delivery of fibre-based facilities leveraged by IP telephony solutions is expensive and complex, with long implementation schedules

The delivery of fibre-based facilities to new communities and regions requires significant investment and planning and involves long implementation schedules. This may rule it out as a viable alternative in a community where the legacy voice equipment requires immediate replacement. It may not be cost effective to deliver fibre-optic network access to customers who subscribe only to home phone services, which

would prevent full migration away from legacy technologies.

Risk mitigation: We mitigate schedule risk by continuing to maintain our legacy switching environments and striving to maintain the necessary technological expertise, access to replacement hardware and regular maintenance programs. We support delivery of IP telephony through a copper-based access facility by deploying line access gateway technology that connects our customers' generic equipment with the IP telephony platforms, which gives us a more cost-effective way to provide those customers with the reliability and enhanced capabilities of these solutions.

The emergence of OTT services presents challenges to network capacity and conventional business models

OTT services are a category of services being delivered over the Internet, which compete directly with traditional pay-TV, video, as well as wireless and wireline voice and messaging services. OTT video services, in particular, have rapidly become the largest source of traffic on the North American Internet backbone. OTT service providers do not invest in, or own, networks and growth in their services presents Internet service providers (ISPs) and network owners with the challenge of preventing network congestion. While we have designed an IP network that has not experienced significant congestion problems through 2015, there can be no assurance that we will not experience such congestion in the future.

Risk mitigation: We have seen some congestion spots on our legacy ADSL network that we are addressing with both short-term and long-term solutions. As additional OTT providers launch services and offer higher-resolution video over the Internet, we continue to make investments in our network to support greater capacity, and we are also developing new responses, such as more flexible data plans, to the challenges posed by the OTT providers. These investments include the ongoing build-out of our fibre-optic network, with multi-year investments announced in 2015 to connect homes and businesses in Vancouver and Edmonton to our gigabit-capable network.

10.4 Regulatory matters

Our telecommunications, broadcasting and radiocommunications services are regulated under federal laws by the CRTC, the Minister of Innovation, Science and Economic Development and the Minister of Canadian Heritage. These laws and accompanying regulations relate to, among other matters, rates, terms and conditions for the provision of telecommunications services, licensing of broadcast services, licensing of spectrum and radio apparatus, and restrictions on ownership and control by non-Canadians. The outcome of regulatory proceedings, reviews, appeals, policy announcements, court cases and other developments could have a material impact on our operating procedures and profitability.

Following the federal election in Canada in October 2015, the new government announced that the responsibilities of the former Industry Canada would fall under the new Department of Innovation, Science and Economic Development.

Radiocommunication licences and wireless roaming and tower sharing requirements

Recent court ruling — White c. Châteauguay (Ville de)

On May 30, 2014, the Quebec Court of Appeal (the Court) held that a municipality can determine the location of a radiocommunication system (including communications antennae). The Court also held that there was no judicial authority establishing that a municipal determination of the location of a radiocommunication system would be contrary to federal jurisdiction over radiocommunications and telecommunications. This ruling could affect a wireless carrier's ability to locate and place towers and to operate its network both within the province of Quebec and beyond. Leave to appeal

the decision to the Supreme Court of Canada was granted on January 29, 2015, and the Supreme Court heard the appeal on October 9, 2015. A decision is not expected prior to mid-2016.

Framework for wireless spectrum transfers

On June 28, 2013, the Department of Innovation, Science and Economic Development issued its *Framework Relating to Transfers, Divisions and Subordinate Licensing of Spectrum Licences for Commercial Mobile Spectrum*. Under this framework, all licence transfers involving commercial mobile spectrum require ministerial approval. This includes prospective transfers, deemed transfers and actual licence transfers from one licensee to another. As a result, transfers of spectrum licences may face additional timing and approval hurdles.

AWS-4 spectrum licensing framework

On May 21, 2014, the Department of Innovation, Science and Economic Development opened a consultation, and on December 18, 2014, issued *Decision on a Policy, Technical and Licensing Framework for Mobile Satellite Service and Advanced Wireless Service (AWS-4) in the Bands 2000 — 2020 MHz and 2180 — 2200 MHz*. Half of the spectrum, 20 MHz, which has never been auctioned, is currently licensed for both satellite-based and terrestrial-based networks across the country, but has never been deployed. On April 1, 2015, the Minister of Industry extended the spectrum assigned in the existing 2 GHz mobile satellite service (MSS) licences and the ancillary terrestrial component (ATC) authorization to 40 MHz from 20 MHz. The Ministry also provided licensees with the flexibility to select the duplex direction of the band 2000 — 2020 MHz for terrestrial use, and the requirement for dual-mode handsets has been removed.

Policy changes in the 3500 MHz band

On August 19, 2014, the Department of Innovation, Science and Economic Development opened a consultation, and on December 18, 2014,

issued *Decisions Regarding Policy Changes in the 3500 MHz Band (3475 — 3650 MHz) and a New Licensing Process* as a followup to its November 2013 *Decisions Concerning the Renewal of 2300 MHz and 3500 MHz Licences*. The Minister of Innovation, Science and Economic Development is reallocating spectrum in the 3500 MHz band to allow mobile services access to spectrum across the band. As part of this fundamental reallocation and following further consultation, all fixed-use wireless access systems will be subject to an eventual transition to a new flexible-use band plan. Until such time, all licences in the 3500 MHz band will remain fixed-only licences. On January 5, 2016, we submitted a transfer application to the Ministry requesting a spectrum swap between TELUS and a leading broadband Internet provider involving our fixed-only 3500 MHz licences in secondary and tertiary markets for the Internet provider's WCS mobile spectrum licences in similar markets. Prior to the Ministry approval of this proposed transaction, we hold 124 fixed-only 3500 MHz licences for which we paid a total of $6.5 million in the 2004 and 2005 auctions.

600 MHz spectrum repurposing decision released

On August 14, 2015, the Department of Innovation, Science and Economic Development published *Decision on Repurposing the 600 MHz Band*, *SLPB-004-15*. In its decision, the department announced its intention to jointly repack the 600 MHz band in line with the United States, and adopt the mobile band plan arising from the Federal Communications Commission (FCC) Incentive Auction set to begin on March 29, 2016. It is expected that the Minister of Innovation, Science and Economic Development will consult on a licensing framework (including auction rules) in due course following the completion of the U.S. auction. An auction of 600 MHz spectrum in Canada is therefore unlikely in 2016. There is a risk that certain carriers may receive favourable treatment. TELUS will advocate strongly that all carriers are treated equally at the auction.

Compliance with radio authorization conditions and telecommunications regulations

The Department of Innovation, Science and Economic Development regulates, among other matters, the allocation and use of radio spectrum in Canada and licenses radio apparatus, frequency bands and/or radio channels within various frequency bands to service providers and private users. The department also establishes the terms and conditions attaching to such radio authorizations, including restrictions on licence transfers, coverage obligations, research and development obligations, annual reporting, and obligations concerning mandated roaming and antenna site sharing with competitors.

While we believe that we are substantially in compliance with our radio authorization conditions, there can be no assurance that we will be found to comply with all radio authorization conditions, or if found not to be compliant, that a waiver will be granted or that the costs to be incurred to achieve compliance will not be significant. Any failure to comply with the radio authorization conditions could result in the revocation of our licences and/or the imposition of fines.

On December 16, 2014, Bill C-43, *Economic Action Plan 2014 Act, No. 2,* received royal assent and the provisions governing administrative monetary penalties (AMPs) in both the *Telecommunications Act* and the *Radiocommunication Act* are now in effect. The generalized AMPs amendment to the *Telecommunications Act* applies to contraventions of provisions of the Act or any decision or regulation made by the CRTC under that Act. The amendment allows the CRTC to impose an administrative monetary penalty on a corporation in an amount not to exceed $10 million for a first contravention and up to $15 million for a subsequent contravention. The *Radiocommunication Act* AMPs amendment is

more focused, applying to unauthorized operation of a radio apparatus, contraventions of new requirements concerning jammers and contraventions of auction rules, standards and procedures. On March 27, 2015, the CRTC issued *Compliance and Enforcement and Telecom Information Bulletin CRTC 2015-111*, *Guidelines regarding the general administrative monetary penalties regime under the Telecommunications Act,* in which it outlined its approach to compliance and enforcement, as well as how it intends to use its new powers to impose AMPs.

Risk mitigation: We continue to strive to comply with all licence and renewal conditions and plan to participate in future wireless spectrum auctions. We have advocated to the federal government for a level playing field in respect of spectrum auction rules, such that long-standing wireless companies like TELUS can bid on an equal footing with others for spectrum blocks available at auction or are able to purchase spectrum licences available for sale from entrants. Entrants are now part of established and well-financed groups and we will strongly advocate that preferential treatment is not required.

We are reviewing and enhancing our compliance programs, practices and procedures in view of the broadened AMPs under the *Telecommunications Act* and the *Radiocommunication Act* that are now in effect.

Regulatory and federal government reviews

The CRTC has held public proceedings to review, among other issues, wireline wholesale services (including the appropriateness of mandating competitor access to our FTTP facilities), wireless wholesale services and the regulatory framework relating to television broadcasting. It has also initiated a proceeding on basic telecommunications services (including the national contribution mechanism).

Wireline wholesale services review

On July 22, 2015, the CRTC released *Review of wholesale wireline services and associated policies, Telecom Regulatory Policy CRTC 2015-326*. This decision updates the Commission's framework for the provision of regulated wireline wholesale services and will remain in place for a minimum of five years. The decision substantially preserves the *status quo* established in the Commission's 2008 wireline wholesale services framework, with two key exceptions. First, the Commission has ordered the introduction of a disaggregated wholesale high-speed Internet access service for ISP competitors. This will include access to FTTP facilities. This requirement is being phased in geographically beginning in

the largest markets in Ontario and Quebec (i.e. in the serving territories of Bell Aliant, Bell Canada, Cogeco, Rogers and Videotron). The Commission has initiated a followup proceeding to determine the appropriate costs and wholesale cost-based rates in those regions where the disaggregation of wholesale high-speed Internet access service was allowed. The Commission has not established a timeline for the application of the new requirements in TELUS' traditional serving territories in Alberta, British Columbia or Quebec. The implementation of this new service will ultimately depend on demand for the service in any given location. Second, the Commission determined that the provision of access to unbundled local loops to competitors will no longer be mandated and will be phased out over a three-year transition period. Unbundled local loops are the copper lines connecting homes and businesses to the central offices in TELUS' network. Competitors use these lines to provide voice services or low-speed Internet services to their retail customers.

On October 20, 2015, Bell Canada filed a review and vary application with the CRTC to amend certain aspects of *Telecom Regulatory Policy CRTC 2015-326* and also filed a petition with the Governor in Council (the Federal Cabinet) to overturn the findings that would mandate wholesale access to FTTP facilities for both incumbent local exchange companies and cable-TV companies. TELUS intervened in these applications to limit the mandated wholesale provision of access to its FTTP networks. There have also been two separate applications to the CRTC filed by Allstream Inc. and MNSi Internet Inc. to review and vary the phase-out framework for access to unbundled local loops, such that continued provision of these services would be extended beyond the stated three-year phase-out period. TELUS opposed the applications by Allstream Inc. and MNSi Internet Inc.

TELUS anticipates no material adverse impact from the CRTC's decision or the various followup applications to review the decision in the short term. Given the phased implementation of the mandated wholesale provision of access to our FTTP networks, it is too early to determine what impact this decision will have on TELUS in the longer term. The determination that the provision of access to unbundled local loops to competitors will no longer be mandated and will be phased out over a three-year transition period is not expected to have a material impact on TELUS' operations.

Wireless wholesale services review

On May 5, 2015, the CRTC issued its decision at the conclusion of its wireless wholesale services review. The main determination was that the CRTC will regulate the wholesale GSM-based domestic roaming rates that TELUS, Rogers and Bell charge new entrant wireless carriers. Interim tariffs were filed by TELUS, Rogers and Bell on June 4, 2015, based on the maximum rate each carrier respectively charged at that time for wholesale GSM-based domestic roaming, and the proposed final tariff rates were filed by TELUS, Rogers and Bell on November 23, 2015, based on the CRTC's Phase II costing approach. The CRTC is in the process of reviewing these tariff filings, with the announcement of the final rates expected in the latter part of 2016. While TELUS does not currently expect that the decision will have a

material impact on its operations, the impact will be assessed once the final wholesale roaming rates have been approved.

In August 2015, the Canadian Network Operators Consortium Inc. (CNOC) filed an application with the CRTC asking the Commission to mandate wholesale services for mobile virtual network operators and to regulate rates for tower sharing. TELUS, along with other interested parties, has filed a response to oppose this application. A decision on CNOC's application is expected in the first half of 2016.

Basic telecommunications services

On April 9, 2015, the CRTC issued *Telecom Notice of Consultation CRTC 2015-134,* announcing a two-phase proceeding to determine what telecommunications services (e.g. voice and broadband) are required by all Canadians in order to participate in the digital economy. The first phase of the review is an information-gathering phase in which the CRTC will review its policies on basic telecommunications services and gather information to better understand which telecommunications services are being offered across Canada and whether any areas are underserved or unserved. In the second phase, the CRTC will hold further consultations to collect comments from Canadians regarding the issues identified. Following the second phase, a public hearing will be held commencing April 11, 2016. Among other things, the CRTC will review whether broadband Internet service should be a basic telecommunications service and whether there should be changes to the National Contribution Fund from which subsidies are provided for voice service in high-cost serving areas (and video relay service expected in 2016). While supportive of the inclusion of broadband service as a part of basic telecommunications service at a 5 Mbps download and 1 Mbps upload speed, TELUS opposes any new regulatory requirements pertaining to the provision of broadband service and any new subsidies for broadband from the National Contribution Fund. We expect the Commission to issue a decision as a result of this proceeding, however, it is too early to determine what impact the outcome of this proceeding will have on TELUS.

9-1-1 networks

On July 9, 2015, the CRTC issued *Telecom Notice of Consultation CRTC 2015-305*, *Matters related to the reliability and resiliency of the 9-1-1 networks*. The CRTC announced this proceeding as a preventative measure and will be reviewing the reliability and resiliency of 9-1-1 networks, quality of service standards and other matters to determine whether it is necessary to establish new regulatory measures. TELUS has filed its comments on this proceeding, for which a determination has yet to be issued. It is not expected that the CRTC's review will have a material impact on TELUS' operations.

Public consultation on television broadcasting and distribution (Let's Talk TV review)

In September 2014, the CRTC concluded a review of the regulatory framework relating to television broadcasting. A number of issues were discussed in this proceeding, including the CRTC's proposal to increase the ability for consumers to choose to subscribe to programming services on a service-by-service basis, whether to require contribution payments from currently exempted content providers and how to set

wholesale rates for programming services in an environment that promotes greater choice for consumers. The CRTC has now released all of the policy decisions related to this consultation, as well as a new Wholesale Code announced in *Broadcasting Regulatory Policy CRTC 2015-438*, which is expected to assist TELUS in ensuring content costs are in keeping with consumer demand. TELUS believes its approach to television is very similar to that outlined in these policy decisions and does not expect them to have a material impact on our operations. Bell Canada was granted leave to appeal the CRTC's decision relating to the new Wholesale Code on December 22, 2015.

In January 2016, the CRTC released *Broadcasting Regulatory Policy CRTC 2016-1,* which announced a new Television Services Provider Code. This new Code will ensure that television consumers have information with which to make informed choices about television services, and addresses matters such as: the use of clear language, setting out of all charges, promotion of packaging options, promptness of service calls and rebates during service outages. As well, it contains provisions that require a clear summary of critical information, setting out the channels selected by a customer, all charges, and information about how to complain and seek recourse. In an associated development, on June 4, 2015, the CRTC released *Broadcasting and Telecom Notice of Consultation CRTC 2015-239* to review the mandate for the office of the Commissioner for Complaints for Telecommunications Services (CCTS), including any changes to the CCTS' governance and procedures that might be required so that it could review complaints under a consumer code for television services. A hearing was held in November 2015 and a decision is expected in 2016.

On September 14, 2015, the CRTC released *Broadcasting Notice of Consultation CRTC 2015-421* to review the policy framework for local and community television programming, and on October 20, 2015, launched *Broadcasting Notice of Consultation CRTC 2015-467* to review its policies relating to Certified Independent Production Funds, both of which will examine the funding of these initiatives. Neither of these two proceedings is expected to have a material impact on TELUS' operations.

Risk mitigation: We are participating in followup CRTC proceedings for the implementation of the new disaggregated wholesale high-speed Internet access service for ISP competitors in Ontario and Quebec (including issues related to

service configuration, tariff-related costing, mark-up and cost recovery) in order to influence the implementation of the service in our serving territories, if and when the service is phased in.

We participated in the wireless wholesale services review proceeding to demonstrate that the wireless marketplace is competitive and there is no need for additional CRTC regulation in respect of wireless wholesale services, including roaming rates and rates for access to wireless towers and sites. We have filed Phase II cost studies to support a proposed tariff containing final wireless roaming rates that would be available to new wireless entrants.

We are participating in the basic telecommunications services review, and we are opposing any new industry-funded subsidies for broadband or other services.

We participated in the review of 9-1-1 networks to ensure effective access to emergency services critical to the health and safety of Canadians.

We participated in the CRTC's consultation to amend the regulatory framework applicable to television and supported the CRTC's goal to make greater choice available to our TV customers. We focused on changes to the regulatory framework needed to address concerns related to vertical integration in the broadcasting sector and artificially high wholesale prices for programming services maintained through the sale of services in large packages (which does not reflect consumer demand for any specific service in such large packages). Our approach to television services is very much aligned with the recent CRTC policy decisions that are described above. These decisions should assist us in dealing with concerns related to vertical integration in the broadcasting industry.

The CRTC's national Wireless Code / Provincial consumer protection legislation

On June 3, 2013, the CRTC issued *The Wireless Code, Telecom Regulatory Policy CRTC 2013-271*, which established a mandatory code of conduct for providers of retail mobile wireless voice and data services to individuals and small businesses.

Although the Wireless Code went into effect on December 2, 2013, and applies to mobile wireless service contracts signed, amended, renewed or extended after that date, the CRTC also stated that the Wireless Code would apply to all wireless contracts, no matter when they were entered into, as of June 3, 2015. This meant that, as of June 3, 2015, the Wireless Code applied retrospectively to all retail mobile wireless service contracts with individuals and small businesses, including those in place prior to December 2, 2013. Contracts that had a device balance that would have been reduced over a period greater than 24 months, which was the case for any three-year mobile wireless service contracts that had not yet expired by June 3, 2015, did not comply with the Wireless Code and accordingly, we eliminated the device balance for the three-year contracts that had been entered into prior to June 3, 2013.

Several provinces, including Ontario and Quebec, have passed consumer protection legislation relating to wireless services. Of note, Nova Scotia repealed its wireless contract legislation in mid-2015 on the basis that the CRTC's Wireless Code applies to all consumer wireless service contracts. Since the federal and provincial rules are not fully harmonized, compliance can be costly, complex and difficult to implement across all jurisdictions and there can be no assurance that we will be found to comply with all rules.

Risk mitigation: We support the CRTC's national Wireless Code requirements to standardize the terms and conditions of service and to reduce compliance costs. The Code went into effect on December 2, 2013, and we adjusted our practices as necessary to achieve compliance with the Code's requirements by the effective date. Because we are subject to federal laws and regulations like the Wireless Code, there may be

occasions where compliance with provincial legislation is not required. In such cases, we manage our compliance costs by carefully assessing whether compliance with provincial legislation promotes our customers first philosophy and aligns with the federal standards we must follow.

Restrictions on foreign ownership

Foreign ownership restrictions applicable to TELUS

We are subject to the foreign ownership and control restrictions, including restrictions on the ownership of our Common Shares by non-Canadians, imposed by the *Canadian Telecommunications Common Carrier Ownership and Control Regulations* and the *Telecommunications Act* (collectively, the Telecommunications Regulations) and the *Broadcasting Act* and associated regulations. Although we believe that we are in compliance with the relevant legislation, there can be no assurance that a future CRTC or Canadian Heritage determination, or events beyond our control, will not result in us ceasing to be in compliance with the relevant legislation. If such a development were to occur, the ability of our subsidiaries to operate as Canadian carriers under the *Telecommunications Act* or to maintain, renew or secure licences under the *Radiocommunication Act* and the *Broadcasting Act* could be jeopardized and our business could be materially adversely affected.

Specifically, to maintain our eligibility to operate certain of our subsidiaries that are deemed to be Canadian carriers under these laws, among other requirements, the level of non-Canadian ownership of TELUS Common Shares cannot exceed $33^{1}/_{3}$% and we must not otherwise be controlled by non-Canadians.

Risk mitigation: The Telecommunications Regulations give TELUS, which is a holding corporation of Canadian carriers, certain powers to monitor and control the level of non-Canadian ownership of our Common Shares. These powers have been incorporated into TELUS' Articles and were extended to ensure compliance under both the *Broadcasting Act* and the *Radiocommunication Act* (under which the requirements for Canadian ownership and control were subsequently cross-referenced to the *Telecommunications Act*). These powers include the right to: (i) refuse to register a transfer of Common Shares to a non-Canadian; (ii) require a non-Canadian to sell any Common Shares; and (iii) suspend the voting rights attached to the Common Shares held by non-Canadians in inverse order of registration. We have reasonable controls in place to monitor foreign ownership levels through a reservation and declaration system.

Foreign ownership restrictions for small common carriers

In 2012, the Canadian federal government amended the *Telecommunications Act* to lift restrictions on foreign ownership for telecommunications common carriers whose annual revenues from the provision of telecommunications services in Canada represent less than 10% of the total related annual revenues, as determined by the CRTC. This gives small wireless and wireline carriers, which can be significantly influenced, owned or controlled by very large foreign entities, the opportunity to raise foreign capital to fund their network construction, operating losses and bids in spectrum auctions, as well as the ability to take advantage of any special rules for small wireless carriers in spectrum auctions.

Risk mitigation: In respect of restrictions on foreign ownership, we continue to advocate for and encourage the Canadian federal government to level the playing field by expeditiously eliminating foreign ownership restrictions for both telecommunications carriers and broadcast distribution companies.

Broadcasting distribution undertakings

We hold licences from the CRTC to operate terrestrial broadcasting distribution undertakings to serve various communities in B.C. and Alberta (renewed in 2009 for a second full seven-year term), and in Eastern Quebec (renewed in 2011 for a second full seven-year term). We also hold a licence to operate a national video-on-demand undertaking (renewed until August 31, 2016). In July 2014, the CRTC approved our application for a licence to operate a national pay-per-view service (scheduled to expire on August 31, 2020).

Enforcement of vertical integration framework

In September 2011, the CRTC announced a policy framework to address concerns relating to the potential incentive for anti-competitive behaviour by companies that own both programming services and distribution networks (vertically integrated broadcasting companies). The CRTC subsequently introduced a new code of conduct through amendments to the various broadcasting regulations and exemption orders. Following the CRTC's *Let's Talk TV* proceeding discussed above, the CRTC further expanded its ability to deal with anti-competitive conduct by replacing the code of conduct with a new Wholesale Code that will be made enforceable by regulation. This new Wholesale Code includes many new provisions to address abusive practices by vertically integrated broadcasting companies regarding the carriage of their programming services. Bell Canada was granted leave to appeal the CRTC's decision relating to the new Wholesale Code on December 22, 2015.

In *Broadcasting and Telecom Decision CRTC 2015-26: Complaint against Bell Mobility Inc. and Quebecor Media Inc., Videotron Ltd. and Videotron G.P. alleging undue and unreasonable preference and disadvantage in regard to the billing practices for their mobile TV services Bell Mobile TV and illico.tv*, the CRTC directed Bell Mobility and Videotron to stop giving their mobile television services an unfair advantage in the marketplace, to the disadvantage of other Internet content providers, by exempting their own mobile television services from their standard monthly data charges. Bell Mobility has sought and been granted leave to appeal this decision at the Federal Court of Appeal.

Without timely and strict enforcement of the vertical integration safeguards, there is a risk that vertically integrated competitors could unfairly raise programming costs for non-vertically integrated companies such as TELUS, and/or attempt to withhold content on digital media platforms, such as Internet and mobile platforms, or otherwise disadvantage us in our ability to attract and retain wireless or Optik TV customers.

Risk mitigation: Our strategy is to aggregate, integrate and make accessible content and applications for customers' enjoyment. We do not believe it is necessary to own content in order to make it accessible to customers on an economically attractive basis, provided there is timely and strict enforcement of the CRTC's regulatory vertical integration safeguards to prevent the exercise of undue preference by vertically integrated competitors.

We support a regime under the *Broadcasting Act* that ensures all Canadian consumers continue to have equitable access to broadcast content irrespective of the distributor or platform they choose. We continue to advocate for the timely and strict enforcement of the CRTC vertical integration safeguards and for further meaningful safeguards, as required.

10.5 Human resources

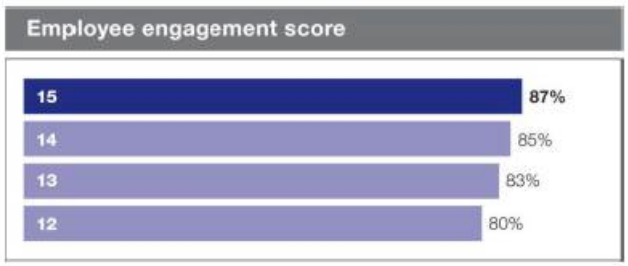
Employee retention, recruitment and engagement

Our success depends on the abilities, experience and engagement of our team members. The loss of key employees through attrition and retirement — or any deterioration in overall employee morale and engagement resulting from organizational changes, unresolved collective agreements or ongoing cost reduction initiatives — could have an adverse impact on our growth, business and profitability, and on our efforts to enhance the customer experience.

***Risk mitigation*:** We aim to attract and retain key employees through both monetary and non-monetary approaches, and we strive to protect and improve engagement levels. Our compensation and benefits program is designed to support our high-performance culture and is both market-driven and performance-based. We also have a succession planning process to identify and develop employees for key management positions.

Where required, we continue to implement targeted retention solutions for employees with talents that are scarce in the marketplace. As well, a benefits program is offered to team members that allows tailoring of personal health, wellness, lifestyle and retirement choices to suit individual and family needs.

The measure of employee engagement at TELUS, as determined by a third-party survey, was 87% in 2015, a full two percentage points higher than last year. We believe that our strong employee engagement score is influenced by our continuing focus on the customer experience and our success in the marketplace. We plan to continue our focus on other non-monetary factors that are clearly aligned with engagement, including performance management, career opportunities, training and development, recognition and our work styles program (e.g. facilitating working remotely from home or other alternative work locations).



Collective bargaining

Negotiations to renew the collective agreement between TELUS and the Telecommunications Workers Union (TWU), United Steel Workers Local Union 1944 began in early December 2015, with meeting dates scheduled into the second quarter of 2016. This agreement, which expired on December 31, 2015, covers 10,560 employees across Canada in call centre, clerical support and technical occupations — the largest group of unionized employees at TELUS.

In any set of labour negotiations, there can be no assurance that the negotiated compensation expenses or changes in operating efficiency will be as planned, and they may result in unanticipated increases in costs and/or lower productivity. In addition, there can be no assurance that lower productivity and work disruptions will not occur during the course of collective bargaining prior to settlement and ratification of a collective agreement. Nor can there be any assurance that all potential issues have been planned for or that the contingencies planned for will manifest in exactly the same fashion as tested. As a result, there is a risk that we may still experience disruptions and/or cost increases.

Risk mitigation: TELUS maintains respectful and professional relationships with the unions representing unionized employees. A governance model is in place to ensure the financial and operating impacts of any proposed terms of settlement are assessed and determined to be aligned with TELUS' strategic direction. Any potential need to continue operations in response to work disruptions will be addressed in accordance with contingency and emergency operations plans.

Ethical compliance

We rely on our employees to demonstrate behaviour consistent with legal and ethical standards in all jurisdictions within which we operate.

Risk mitigation: (See the risk and risk mitigation discussion in *Legal and ethical compliance* in *Section 10.9*.)

10.6 Process risks

Systems and processes

We have numerous complex systems and process change initiatives underway. There can be no assurance that the full complement of our various systems and process change initiatives, including those required to improve delivery of customer services and support management decision-making, will be successfully implemented or that funding and sufficiently skilled resources will be available to complete all key initiatives planned. There is risk that certain projects may be deferred or cancelled and the expected benefits of such projects may be deferred or unrealized. Moreover, any ineffectiveness in the change management required to protect our complex systems and restrict service disruptions could adversely impact our customer service, operating performance and financial results.

Risk mitigation: TELUS has change management policies, processes and controls in place, based upon industry best practices. In general, we strive to ensure that system development and process change are prioritized, and we apply a project management approach to such changes, which include reasonable risk identification and contingency planning, scope and change control, and resource and quality management. We also generally complete reasonable functional, performance and revenue assurance testing, as well as capture and use any lessons learned. Where a change involves major system and process conversions, we often move our business continuity planning and emergency management operations centre to a heightened state of readiness in advance of the change.

Reorganizations, integration of acquisitions and implementation of large enterprise deals

We carry out a number of operational consolidation and rationalization initiatives each year that are aimed at improving our productivity and competitiveness. We may record significant cash and non-cash restructuring and other costs for such initiatives, which could adversely impact our operating results. There can be no assurance that all planned initiatives will be completed, or that such initiatives will provide the expected benefits or will not have a negative impact on customer service, work processes, employee engagement, operating performance and financial results.

Post-acquisition activities include the review and alignment of accounting policies, corporate policies such as ethics and privacy policies, employee transfers and moves, information systems integration, optimization of service offerings and establishment of control over new operations. Such activities may not be conducted efficiently and effectively, which may negatively impact service levels, competitive position and expected financial results.

Large enterprise deals may be characterized by the need to anticipate, understand and respond to complex and multi-faceted customer-specific enterprise requirements, including customized systems and reporting requirements, service credits that lower revenues, and significant upfront expenses and capital expenditures required to implement the contracts. There can be no assurance that service implementation will proceed as planned and expected efficiencies will be achieved, which may impact return on investment or projected margins. We may also be constrained by available staff and system resources and the level of co-operation from other service providers, which may limit the number of large contracts that can be implemented concurrently in a given period and/or increase our costs related to such implementations.

Risk mitigation: We focus on and manage organizational changes through a formalized business transformation function by leveraging the expertise, key learnings and sound and effective practices developed in implementing large enterprise deals, as well as mergers, business integrations and efficiency-related reorganizations in recent years.

We have a post-merger integration (PMI) team that applies an integration model, based on learnings from previous post-acquisition integrations, which enhances and accelerates the standardization of our business processes and strives to preserve the unique qualities of each acquired operation.

We have also gained experience implementing numerous large enterprise deals over a number of years, and we expect to continue to focus on successfully implementing recent large enterprise contract wins, as well as on developing more shared systems and processes. We expect to continue being selective as to which new large contracts we will bid on and we continue to focus our efforts on the SMB market. We have a sales and bid governance process in place, which involves preparation, review and signoff of bids, related due diligence and authorizations.

We follow industry-standard practices for project management, including executive (senior) level governance and project oversight, commitment of appropriate project resources, tools and supporting processes, and proactive project-specific risk assessments and risk mitigation planning. We also conduct independent project reviews and internal audits to help monitor progress and identify areas that may require additional focus, and to identify systemic issues and learnings in project implementations, which may be shared among other future projects.

During the year ended December 31, 2015, no significant acquisitions occurred.

Data protection

We operate data centres and collect and manage data in our business and on behalf of our customers. Some of our efficiency initiatives rely on the offshoring of internal functions to our offshore personnel or outsourcing to partners located in Canada and abroad. To be effective, these arrangements require us to allow offshore personnel and domestic and foreign partners to have access to this data.

TELUS or its partners may be subject to software, equipment or other system malfunctions, or thefts or other unlawful acts that result in the unauthorized access, change, loss or destruction of our data. There is a risk that such malfunctions or unlawful acts compromise the privacy of individuals, including our customers, employees and suppliers. Despite our efforts to implement controls in domestic and offshore operations and at our partners' operations, unauthorized access to data could lead to data being lost, compromised or used for inappropriate purposes that could, in turn, result in financial loss (loss of subscribers or damage our ability to attract new ones), harm our brand and reputation, expose us to claims of damages by customers and employees, and impact our customers' ability to maintain

normal business operations and deliver critical services. Also see *Legal and ethical compliance* in *Section 10.9 Litigation and legal matters* and *Security* in *Section 10.11 Human-caused and natural threats*.

Risk mitigation: Certain newer TELUS information technology systems undergo a security and privacy assessment early in their development life cycle, pursuant to which data that will be used and/or collected is reviewed and classified, and design features are recommended, when applicable or possible, such as audit, logging, encryption and access control restrictions. As part of TELUS' systems and software development life cycle and quality assurance processes, privacy and security controls are also tested, before new systems are fully deployed.

Our IDCs have security threat detection and mitigation capabilities, and certain data centres and networks undergo yearly external independent third-party audits. A core component of that audit certification process is the assessment of TELUS' logical, physical and policy-based security and privacy controls. Further, we have a vulnerability management program that monitors both our Internet-facing and internal network and systems to track and mitigate any vulnerability that may be detected.

To ensure the security of our customers' credit card transactions, we use security technologies such as encryption and segmentation, and adherence to the principle of least privilege. We maintain these practices and review their effectiveness on a regular basis, giving consideration to industry standards and constantly evolving changes in the threat landscape.

Another component of our strategy is that data generally resides in our facilities in Canada, with the deployment of infrastructure that supports partner connectivity to view our systems. We require partners and service providers to comply with privacy and security measures, including the reporting of any possible data-related threats. Offshore personnel are provided with remote views of authorized data only and, where applicable, without the data being stored on local systems. These personnel are also required to comply with physical and process restrictions and participate in training designed to help prevent and detect unauthorized access to or use of our data.

There can be no assurance that our controls will prove effective in all instances.

Foreign operations

Maintaining our international operations presents unique risks, including: country-specific risks (such as differences in political, legal and regulatory regimes and cultural values); lack of diversity in geographical locations; concentration of customers; different taxation regimes; infrastructure and security challenges; differences in exposure to and frequency of natural disasters; foreign currency exchange fluctuations; and the requirement for system processes that work across multiple time zones, cultures, languages and countries. There can be no assurance that international initiatives and risk mitigation efforts will provide the benefits and efficiencies expected, or that there will not be significant difficulties in combining different management and cultures, which could have a negative impact on operating and financial results.

Risk mitigation: Our strategy is to improve the diversity and geographic distribution of our operations, customers and business process outsourcing activities. Our international operations are located in the Philippines, Europe, Central America and the United States. Diverse international operations provide us with greater geographic diversity, more broadly distributed political risk and the ability to serve customers in multiple languages and in multiple time zones. They also provide us with network redundancy and contingency planning opportunities, and the ability to divert operations in emergency situations. We continue to work with our international operations to extend sound and effective operational practices, including the application of our privacy, ethics and anti-bribery policies, share best practices between international and domestic Canadian operations, as appropriate, and ensure that internal controls are implemented, tested, monitored and maintained. See also *Legal and ethical compliance* in *Section 10.9 Litigation and legal matters.* We also utilize foreign currency forward contracts, as well as hedge accounting on a limited basis, to mitigate currency risks (see *Currency risk* in *Section 7.9 Financial instruments, commitments and contingent liabilities*).

Real estate joint ventures (TELUS Garden and TELUS Sky)

Risks associated with our real estate joint ventures include possible construction-related cost overruns, financing risks, reputational risks and the uncertainty of future demand, especially during market downturns, and occupancy and rental rates for high-quality commercial office space in Vancouver and Calgary, as well as for residential rental units in Calgary. There can be no assurance that the real estate joint ventures will be completed on budget or on time or will obtain lease commitments as planned. Accordingly, we are exposed to the risk of loss on investment and loan amounts should a project's business plan not be successfully realized, and risks to our reputation should the planned leadership in energy and environmental design (LEED) standard quality of a project not be realized.

Risk mitigation: We have established joint ventures with partners experienced in large commercial and residential real estate projects to develop TELUS Garden (Westbank) in Vancouver and TELUS Sky (Westbank and Allied REIT) in Calgary. The TELUS Garden residential condominium project was substantially pre-sold prior to the commencement of construction and additional deposits have been received as construction proceeded. At the end of 2015, lease commitments for the TELUS Garden commercial project represented 98% of leasable space and construction was

completed. For projects in progress, budget-overrun risks have been mitigated with fixed-price supply contracts (69% of TELUS Sky and 83% of the TELUS Garden residential building have had tenders approved and contracts awarded), expert project management oversight and insurance for certain risks. Costs for the TELUS Garden commercial and residential projects and TELUS Sky are consistent with the approved budget plan. We are applying the knowledge and experience gained on the TELUS Garden project to streamline and improve the cost effectiveness of TELUS Sky.

10.7 Financing and debt requirements

Our business plans and growth could be negatively affected if existing financing is not sufficient to cover funding requirements

Risk factors such as disruptions in capital markets, regulatory requirements for an increase in bank capitalization, a reduction in lending activity in general, or a reduction in the number of Canadian chartered banks as a result of reduced activity or consolidation, could reduce the availability of capital or increase the cost of such capital for investment grade corporate issuers, such as TELUS. External capital market conditions could potentially affect our ability to make strategic investments and fund ongoing capital investment requirements.

Risk mitigation: We may finance future capital requirements with internally generated funds, borrowings under the unutilized portion of our bank credit facility, use of securitized trade receivables, use of commercial paper and/or the issuance of debt or equity securities. We have a shelf prospectus available until December 2016, under which we can offer up to $250 million of debt or equity securities as of the date of this MD&A. We believe that our investment grade credit ratings, coupled with our efforts to maintain a constructive relationship with banks, investors and credit rating agencies, continue to provide reasonable access to capital markets.

To enable us to meet our financial objective of generally maintaining $1 billion of available liquidity, we have a $2.25 billion credit facility that expires on May 31, 2019 ($2.0 billion available at December 31, 2015), as well as availability under other bank credit facilities (see *Section 7.6 Credit facilities*). In addition, TELUS Communications Inc. (TCI) has an agreement with an arm's-length securitization trust under which it is able to sell an interest in certain of its trade receivables up to a maximum of $500 million, of which $400 million was available at December 31, 2015 (see *Section 7.7 Sale of trade receivables*).

Ability to refinance maturing debt

At December 31, 2015, our long-term debt was $11.8 billion with maturities in certain years from 2016 to 2046 (see the *Long-term debt principal maturities* chart in *Section 4.3*). We operate a commercial paper program (maximum of $1.4 billion) that permits access to currently low-cost funding. At December 31, 2015, we had $256 million of commercial paper outstanding, all of which was denominated in U.S. dollars. When we issue commercial paper, it must be refinanced on an ongoing basis to enable the cost savings to be realized relative to borrowing on the $2.25 billion credit facility. Capital market conditions may prohibit the rolling of commercial paper at low rates.

***Risk mitigation*:** We completed a number of debt transactions in 2014 and 2015 (see *Section 7.4*) that extended the average term to maturity of our long-term debt (excluding commercial paper) to 11.1 years at December 31, 2015 (10.9 years at December 31, 2014). Foreign currency forward contracts are used to manage currency risk arising from issuing commercial paper denominated in U.S. dollars. Our commercial paper program is fully backstopped by our $2.25 billion credit facility.

A reduction in TELUS credit ratings could affect our cost of capital and access to capital

Our cost of capital could increase and access to capital could be affected by a reduction in the credit ratings of TELUS and/or TCI. There can be no assurance that we will maintain or improve current credit ratings.

Risk mitigation: We manage our capital structure and make adjustments to it in light of changes in economic conditions and the risk characteristics of our telecommunications infrastructure. We have financial policies in place that are reviewed annually and established to help maintain our existing investment grade credit ratings. We seek to maintain debt credit ratings in the range of BBB+, or the equivalent. The four credit rating agencies that rate TELUS currently have ratings that are in line with this target. A reduction in our ratings from the current BBB+ or equivalent to BBB could result in a modest increase in our funding cost but would not be expected to impact our ability to access the public debt markets. We also maintain a $2.25 billion credit facility to which we would continue to have access, even if our ratings were reduced to below BBB+.

Lower than planned free cash flow could constrain our ability to invest in operations, reduce debt or maintain multi-year dividend growth and share purchase programs

While anticipated free cash flow and sources of capital are expected to be sufficient to meet current requirements, our intention to return capital to shareholders could constrain our ability to invest in our operations for future growth. Funding of future spectrum licence purchases, funding of defined benefit pension plans and any increases in corporate income tax rates will reduce the after-tax cash flow otherwise available to return as capital to our shareholders. Should actual results differ from our expectations, there can be no assurance that we will not change our financing plans, including our

intention to pay dividends according to our payout policy guideline, maintain our dividend growth program or complete our 2016 normal course issuer bid (NCIB) and/or renew the NCIB program thereafter.

Risk mitigation: Our Board of Directors reviews the dividend each quarter, based on a number of factors, including our financial situation and outlook. These reviews resulted in 10 semi-annual dividend increases from 2011 to 2015, with annual increases of more than 10%. In May 2013, we announced our intention to continue to target ongoing semi-annual dividend increases through 2016, with an annual increase of circa 10%. The increases are to be normally declared in May and November and are not necessarily indicative of dividend increases beyond 2016. Based on dividends announced as of February 11, 2016, and 594 million shares outstanding at December 31, 2015, dividend payments would total approximately $1.0 billion in 2016, before taking into account any Common Shares purchased and cancelled under our 2016 NCIB. Our multi-year share purchase program may be affected by any change in our intention to purchase shares, changes in the price of our Common Shares, or the assessment and determination of our Board of Directors from time to time in light of capital requirements or other considerations.

Financial instruments

Our financial instruments, and the nature of credit risks, liquidity risks and market risks that they may be subject to, are described in *Section 7.9*.

10.8 Taxation matters

We are subject to the risk that income and commodity tax amounts, including tax expense, may be materially different than anticipated, and a general tendency by tax collection authorities to adopt more aggressive auditing practices could adversely affect our financial condition and operating results

We collect and pay significant amounts of commodity taxes, such as goods and services taxes, harmonized sales taxes, provincial sales taxes, sales and use taxes and value-added taxes, to various tax authorities. As our operations are complex and the related tax interpretations, regulations and legislation that pertain to our activities are subject to continual change and evolving interpretation, the final tax outcome of many transactions is uncertain. Moreover, the implementation of new legislation in itself has its own complexities, including those of execution where multiple systems are involved, and interpretation of new rules as they apply to specific transactions, products and services.

We have significant current and deferred income tax liabilities, income tax expenses and cash tax payments. Income tax amounts are based on our estimates, using accounting principles that recognize the benefit of income tax positions when it is more likely than not that the ultimate determination of the tax treatment of a position will result in the related benefit being realized. The assessment of the likelihood and amount of income tax benefits, as well as the timing of realization of such amounts, can materially affect the determination of net income or cash flows. We expect the income taxes computed at applicable statutory rates to range between 26.3% and 26.8% in 2016. These expectations can change as a result of changes in interpretations, regulations, legislation or jurisprudence.

The timing concerning the monetization of deferred income tax accounts is uncertain, as it is dependent on our future earnings and other events. The amounts of deferred income tax liabilities are also uncertain, as the amounts are based upon substantively enacted future income tax rates in effect at the time, which can be changed by tax authorities. The amounts of cash tax payments and current and deferred income tax liabilities are also based upon our anticipated mix of revenues among the jurisdictions in which we operate, which is also subject to change.

The audit and review activities of tax authorities affect the ultimate determination of the actual amounts of commodity taxes payable or receivable, income taxes payable or receivable, deferred income tax liabilities and income tax expense. Therefore, there can be no assurance that taxes will be payable as anticipated and/or that the amount and timing of receipt or use of the tax-related assets will be as currently expected.

In order to provide comprehensive solutions to our customers operating in foreign jurisdictions, we have a presence in certain foreign jurisdictions, including the United States, United Kingdom, the Philippines, Guatemala, El Salvador, Barbados, Romania and Bulgaria, which increases our exposure to multiple forms of taxation.

Generally, each foreign jurisdiction has taxation peculiarities in the forms of taxation imposed (e.g. value-added tax, gross receipts tax, stamp and transfer tax, and income tax), legislation and tax treaties, where applicable, as well as currency and language differences. In addition, the telecommunications industry has unique issues that lead to uncertainty in the application or division of tax between domestic and foreign jurisdictions. Furthermore, there has been increased political, media and tax authority focus on international taxation, with a view to enhance tax transparency and to address perceived tax abuses. Accordingly, our foreign expansion activities have increased our exposure to tax risks, from both a financial and a reputational perspective.

Risk mitigation: We follow a comprehensive tax conduct and risk management policy that has been adopted by our Board of Directors. This policy outlines the principles underlying and guiding the roles of team members, their responsibilities and personal conduct, the method of conducting business in relation to tax law and the approaches to

working relationships with external taxation authorities and external advisors. This policy recognizes the requirement to comply with all relevant tax laws. The components necessary for control and mitigation of tax risk are outlined in the policy, as well as the delegation of authority to management on tax matters in accordance with Board and Audit Committee communication guidelines.

In giving effect to this policy, we maintain an internal Taxation department composed of professionals who stay current on domestic and foreign tax obligations, supplemented where appropriate with external advisors. This team reviews systems and process changes for compliance with applicable domestic and international taxation laws and regulations. They are also responsible for the specialized accounting required for income taxes.

Material transactions are reviewed by our Taxation department so that transactions of an unusual or non-recurring nature are assessed from multiple risk-based perspectives. Tax-related transaction risks are regularly communicated to and reassessed by our Taxation department as a check to initial exposure assessments. As a matter of regular practice, large and international transactions are reviewed by external tax advisors, while other third-party advisors may also be engaged to express their views as to the potential for tax liability. We continue to review and monitor our foreign expansion activities so we can take action to comply with any related regulatory, legal and tax obligations. In some cases, we also engage external advisors to review TELUS' systems and processes for tax-related compliance. The advice and returns provided by such advisors and counsel are reviewed for reasonableness by our internal Taxation team.

10.9 Litigation and legal matters

Investigations, claims and lawsuits

Given TELUS' size, investigations, claims and lawsuits seeking damages and other relief are regularly threatened or pending against us. It is not currently possible for us to predict the outcome of such matters due to various factors, including: the preliminary nature of some claims; unproven damage theories and demands; incomplete factual records; the uncertain nature of legal theories and procedures and their resolution by the courts, at both the trial and the appellate levels; and the unpredictable nature of opposing parties and their demands. There can be no assurance that financial or operating results will not be negatively impacted by any of these factors.

Subject to the foregoing limitations, management is of the opinion, based upon legal assessments and information presently available, that it is unlikely that any liability, to the extent not provided for through insurance or otherwise, would have a material effect in relation to our financial position and the results of our operations, excepting the items disclosed herein and in *Note 23(c)* of the Consolidated financial statements.

Risk mitigation: We believe that we have in place reasonable policies and processes designed to enable compliance with legal and contractual obligations and reduce our exposure to and the effect on us of legal claims. We also maintain a team of legal professionals who advise and manage risks related to claims and possible claims. See other risk mitigation steps discussed below.

Class actions

We are defendants in a number of certified and uncertified class actions. Over the past decade or more, we have observed a willingness on the part of claimants to launch class actions whereby a representative plaintiff seeks to pursue a legal claim on behalf of a large group of persons. The number of class actions filed against us has varied from year to year, with claimants continually looking to expand the matters in respect of which they file class actions. The adoption by governments of increasingly stringent consumer protection legislation may increase the number of class actions by creating new causes of action, or may decrease the number of class actions by improving clarity in the area of consumer marketing and contracting. A successful class action lawsuit, by its nature, could result in a sizable damage award that could negatively affect a defendant's financial or operating results.

Certified class actions

Certified class actions against us include:

- A 2004 class action brought in Saskatchewan against a number of past and present wireless service providers, which alleged breach of contract, misrepresentation, unjust enrichment and violation of competition, trade practices and consumer protection legislation across Canada in connection with the collection of system access fees. In September 2007, a national class was certified by the Saskatchewan Court of Queen's Bench in relation to the unjust enrichment claim only; all appeals of this decision have now been exhausted.

- A 2008 class action brought in Ontario that alleged breach of contract, breach of the Ontario *Consumer Protection Act*, breach of the *Competition Act* and unjust enrichment, in connection with our practice of "rounding up" wireless airtime to the nearest minute and charging for the full minute. In November 2014, an Ontario class was certified by the Ontario Superior Court of Justice in relation to the breach of contract, breach of the *Consumer Protection Act* and unjust enrichment claims; all appeals of this decision have now been exhausted.

- A 2012 class action brought in Quebec alleging that we improperly unilaterally amended customer contracts to increase various wireless rates for optional services, contrary to the Quebec *Consumer Protection Act* and the *Civil Code of Quebec*. On June 13, 2013, the Superior Court of Quebec authorized this matter as a class action. This class action follows on a non-material 2008 class action brought in Quebec alleging that we improperly unilaterally amended customer contracts to charge for incoming SMS messages. On April 8, 2014, judgment was granted in part against TELUS in the 2008 class action. We had appealed that judgment, but have now settled both the 2008 and 2012 class actions. This settlement is subject to court approval.

- A 2005 class action brought against us in British Columbia alleging that we have engaged in deceptive trade practices in charging for incoming calls from the moment the caller connects to the network, and not from the moment the incoming call is connected to the recipient.

Uncertified class actions

Uncertified class actions against us include:

- A 2005 class action brought against us in Alberta alleging that we have engaged in deceptive trade practices in charging incoming calls from the moment the caller connects to the network, and not from the moment the incoming call is connected to the recipient. This is a

companion class action to the certified 2005 British Columbia claim referenced above.

- A 2008 class action brought in Saskatchewan against us and other telecommunications carriers alleging, among other matters, that we failed to provide proper notice of 9-1-1 charges to the public and have been deceitfully passing them off as government charges. A virtually identical class action was filed in Alberta at the same time but the Alberta Court of Queen's Bench has declared that that class action expired as of 2009.

- A 2013 class action brought in B.C. against us, other telecommunications carriers and cellular telephone manufacturers alleging that prolonged usage of cellular telephones causes adverse health effects.

- A 2015 class action brought in Quebec against us, other telecommunications carriers, and various other defendants alleging that electromagnetic field radiation causes adverse health effects, creates a nuisance and constitutes an abuse of right pursuant to Quebec laws.

- Class actions brought in 2014 against us in Quebec and Ontario on behalf of Public Mobile's customers, alleging that changes to the technology, services and rate plans made by us contravene our statutory and common law obligations.

- A number of class actions against Canadian telecommunications carriers alleging various causes of action in connection with the collection of system access fees. (See *Note 23(c)* of the Consolidated financial statements.)

Assessment of class actions

We believe that we have good defences to each of these certified and uncertified class actions. Should the ultimate resolution of these actions differ from management's assessments and assumptions, a material adjustment to our financial position and the results of our operations could result. Management's assessments and assumptions include that reliable estimates of the exposure cannot be made for the majority of these class actions considering continued uncertainty relating to the causes of action that may ultimately be pursued by the plaintiffs and certified by the courts and the nature of the damages that will be sought by the plaintiffs.

Risk mitigation: We are vigorously defending each of the class actions brought against TELUS or pursuing settlements when deemed beneficial to us. This includes opposing certification of uncertified class actions. Certification is a procedural step that determines whether a particular lawsuit may be prosecuted by a representative plaintiff on behalf of a class of individuals. Certification of a class action does not determine the merits of the claim, so that, if we were unsuccessful in defeating certification, the plaintiffs would still be required to prove the merits of their claims. We regularly assess our business practices and actively monitor class action developments in Canada and the United States in order to identify and minimize the risk of further class actions against us.

Civil liability in the secondary market

Like other Canadian public companies, we are subject to civil liability for misrepresentations in written disclosure and oral statements, and liability for fraud and market manipulation. Such legislation has been adopted in most provinces and territories.

Risk mitigation: We monitor legal developments and annually re-evaluate our disclosure practices and procedures. In addition, we periodically consult external advisors to review our disclosure practices and procedures and the extent to which they are documented. We have a corporate disclosure policy that restricts the role of Company spokespersons to specifically designated senior management, provides a protocol for dealing with analysts and oral presentations, and outlines the communication approach to issues, and our disclosure committee reviews and determines disclosure of material information.

Legal and ethical compliance

We rely on our employees, officers, Board of Directors, key suppliers and other business partners to demonstrate behaviour consistent with applicable legal and ethical standards in all jurisdictions within which we operate. Situations might occur where individuals intentionally or inadvertently do not adhere to our policies, applicable laws and regulations or contractual obligations. For instance, there could be cases where personal information of a TELUS customer or employee is collected, used or disclosed in a manner that is not fully compliant with legislation, contractual obligations or TELUS policies. In the case of TELUS Health, personal information includes sensitive health information of individuals who are our customers or healthcare providers' end customers. In addition, there could be situations where compliance programs may not be fully adhered to or parties may have a different interpretation of the requirements of particular legislative provisions. These various situations may expose us to litigation and the possibility of damages, sanctions and fines, or of being disqualified from bidding on contracts, and may negatively affect our financial or operating results and reputation.

We continue to expand our activities into the United States and other countries. When operating in foreign jurisdictions, we are required to comply with local laws and regulations, which may differ substantially from Canadian laws and add to the regulatory, legal and tax exposures that we face.

Risk mitigation: Although we cannot predict outcomes with certainty, we believe that we have reasonable policies, controls and processes in place, and sufficient levels of awareness for proper compliance, and that these programs are having a positive effect on reducing risks. We have a comprehensive code of ethics and conduct for our employees, including officers and directors, and mandatory annual integrity training for employees, officers and identified contractors, as well as a toll-free EthicsLine for anonymous reporting by anyone who has issues or complaints. In early 2012, we implemented our supplier code of conduct. In 2013, a specific anti-bribery and corruption policy was approved by the Board of Directors and communicated to team members. Training was rolled out to targeted team members to provide further clarity and guidance in the

first quarter of 2014 and continued in 2015 with further targeted training planned for 2016. We have a designated Chief Data and Trust Officer, whose role is to work across the enterprise to ensure that the business has appropriate processes and controls in place to facilitate legal compliance and report on compliance to the Audit Committee. For example, as a proactive measure on privacy compliance, we require a privacy impact assessment to be carried out in the development stage for major projects involving the use of customer or team member personal information.

We have an established review process to ensure that regulatory, legal and tax requirements are considered when pursuing opportunities outside of Canada. We review on an ongoing basis our international structure, systems and processes to ensure that we mitigate regulatory, legal and tax risks, as our business activities expand outside Canada. Finally, we engage external counsel and advisors qualified in the relevant foreign jurisdictions to provide regulatory, legal and tax advice, as appropriate.

Defects in software and failures in data or transaction processing

We provide certain applications and managed services to our customers that involve the processing and/or storing of data, including sensitive personal medical records, and the transfer of funds. Software defects or failures in data or transaction processing could lead to substantial damage claims (including privacy and medical claims). For instance, a defect in a TELUS Health application could lead to personal injury or unauthorized access to personal information, while a failure in transaction processing could result in the transfer of funds to the wrong recipient.

Risk mitigation: We believe that we have in place reasonable policies, controls, processes (such as quality assurance programs in software development procedures) and contractual arrangements (such as disclaimers, indemnities and limitations of liability in most cases), as well as insurance coverage, to reduce our exposure to these types of legal claims. However, there can be no assurance that our processes will be followed by all team members at all times and that we have indemnities and limitations of liability covering all cases.

Intellectual property and proprietary rights

Technology evolution also brings additional legal risks and uncertainties. The intellectual property and proprietary rights of owners and developers of hardware, software, business processes and other technologies may be protected under statute, such as patent, copyright and industrial design legislation, or under common law, such as trade secrets. With the growth and development of technology-based industries, the value of these intellectual property and proprietary rights has increased. Significant damages may be awarded in intellectual property infringement claims advanced by rights holders. In addition, defendants may incur significant costs to defend such claims and that possibility may prompt defendants to settle claims more readily, in part to mitigate those costs. Both of these factors may encourage intellectual property rights holders to pursue infringement claims more aggressively.

Given the vast array of technologies and systems that we use to deliver products and services, and the rapid change and complexity of such technologies, disputes over intellectual property and proprietary rights can reasonably be expected to increase. As a user of technology, we receive communications from time to time, ranging from solicitations to

demands and legal actions from third parties claiming ownership rights over intellectual property used by us and asking for settlement payments or licensing fees for the continued use of such intellectual property. This includes notice of one claim that certain wireless products used on our networks infringe two third-party patents. The potential for liability and magnitude of potential loss associated with this potential claim, which has not yet been filed with the courts despite the passage of several years, cannot be readily determined at this time. Should this claim ultimately be determined against us, a material adjustment to our financial position and results of operations could result.

There can be no assurance that we will not be faced with other significant claims based on the alleged infringement of intellectual property rights, whether such claims are based on a legitimate dispute over the validity of the intellectual property rights or their infringement, or whether such claims are advanced for the primary purpose of extracting a settlement. We may incur significant costs in defending infringement claims, may suffer significant damages and could lose the right to use technologies that are essential to our operations should any infringement claim prove successful. As a developer of technology, TELUS Health depends on its ability to protect the proprietary aspects of its technology. The failure to do so adequately could materially affect our business. However, policing unauthorized use of our intellectual property may be difficult and costly.

Risk mitigation: We incorporate many technologies into our products and services. However, except for TELUS Health, we are not primarily in the business of creating or inventing technology. In acquiring products and services from suppliers, it is our practice to seek and obtain contractual protections consistent with industry practices to help mitigate the risks of intellectual property infringements. It is the practice of TELUS Health to protect its intellectual property rights vigorously through litigation and other means.

10.10 Health, safety and environment

Team member health, wellness and safety

Lost work time resulting from team member illness or injury can negatively affect organizational productivity and employee benefit costs.

Risk mitigation: To minimize absenteeism in the workplace, we support a holistic and proactive approach to team member health by providing reasonable wellness, disability, ergonomic and employee assistance programs. Our wellness strategy includes support and training for managers, workplace team support programs and access to short-term and long-term counselling for individual team members. To promote safe work practices, we have training and orientation programs for team members, contractors and suppliers who access our facilities. There can be no assurance that these health, wellness and safety programs and practices will be effective in all situations.

Concerns related to radio frequency emissions from mobile phones and wireless towers

TELUS understands there are public concerns over potential health effects associated with low levels of non-ionizing radio frequency (RF) emissions from mobile phones and cell towers. We look to recognized experts, peer-reviewed findings and government agencies to provide guidance on any such potential risks. While a small number of epidemiological studies have indicated that exposure to RF fields might be linked to certain cancers, other studies have not supported this association. Furthermore, animal cancer and laboratory studies have found no evidence that RF fields are carcinogenic to laboratory rodents or cause damage to DNA.

In May 2011, the International Agency for Research on Cancer (IARC) noted that a positive association has been observed between long-term, heavy use of mobile phones and certain brain cancers for which a causal interpretation is considered credible, but that chance or bias could not be ruled out with reasonable confidence. The IARC classified RF electromagnetic fields from wireless phones as possibly carcinogenic to humans — a classification that includes 288 items, such as chloroform, coffee and nickel. The IARC also called for additional research into long-term, heavy use of mobile phones.

In October 2011, Health Canada updated its Safety of Cell Phones and Cell Phone Towers advisory, noting that the link between exposure to RF emissions and cancer risk is far from conclusive and more research is needed. The IARC and Health Canada have advised mobile phone users that they can take practical measures to reduce their exposure to RF emissions, such as limiting the length of cell phone calls, using hands-free devices and replacing cell phone calls with text messages. In addition, Health Canada encourages parents to take these same measures in order to reduce their children's exposure to RF emissions, since children are typically more sensitive to a variety of environmental agents.

There can be no assurance that future studies, government regulations or public concerns about the health effects of RF emissions will not have an adverse effect on our business and prospects. For example, public concerns or government action could reduce subscriber growth and usage, and costs could increase as a result of modifying handsets, relocating wireless towers and addressing any incremental legal requirements and product liability lawsuits that might arise or have arisen. See *Class actions* in *Section 10.9 Litigation and legal matters*.

Risk mitigation: Canada's federal government is responsible for establishing safe limits for signal levels of radio devices. We are confident that the handsets and devices we sell, and our wireless towers and other associated devices, comply, in all material respects, with all applicable Canadian and U.S. government safety standards. We continue to monitor new published studies, government regulations and public concerns about the health impacts of RF exposure.

Concerns related to the environment

A detailed report of our environmental risk mitigation activities can be found in our annual sustainability report at **sustainability.telus.com**. Environmental issues affecting our business include:

Climate change

Rising greenhouse gas emissions and failure of climate change adaptation are identified as two of the largest risks in terms of likelihood and impact, according to the World Economic Forum 2015 report on global risks. These risks could affect our business operations, for example through disruption of our operations and damage to our infrastructure caused by events such as those described in *Section 10.11 Human-caused and natural threats.*

Electronic waste (e-waste) and waste recycling; water consumption

We have a responsibility to help ensure that the materials and electronic equipment we use or sell are handled appropriately during their life cycle. Waste and e-waste may be sent to landfills or disposed of improperly, which can have health and environmental impacts. We also have a responsibility to manage our water use.

Fuel systems

We own or lease a large number of properties. We have fuel systems for backup power generation at some of these properties that enable us to provide reliable service, but they also pose an environmental risk. Because spills or releases from these systems are infrequent, a significant portion of this risk is associated with sites contaminated by our historic practices or by previous owners.

Risk mitigation: Our climate change strategy includes a mitigation component focusing on absolute energy use and carbon dioxide emission (CO_2e) equivalent reduction; an adaptation component focusing on business continuity planning and readiness for the potential effects of a changing climate on our operations (see *Section 10.11 Human-caused and natural threats*); and an innovation component to help customers realize their climate change targets through technological product and service solutions. Our target is a 25% reduction in CO_2e emissions over 2010 levels by 2020 and a 10% reduction in energy use over the same period. We are working to achieve these targets through a comprehensive energy management program focused on real estate transformation and consolidation (including LEED standards certification), as well as network efficiency and technology upgrades, such as turndown of legacy equipment and improvements in the efficiency of power and cooling systems. Additionally, making greater use of video-conferencing and teleconferencing solutions in lieu of travel, decreasing the size and improving the efficiency of our fleet, and educating our team members help us reach our goals. We have also implemented several renewable energy (solar) solutions at various network facilities and at our new TELUS Garden office tower in Vancouver.

We have an e-waste management program that specifies approved recycling channels for both our external and internal electronic products. We regularly examine our waste streams to identify new ways of reducing our impact on the environment through the diversion of waste from landfills. In 2015, we set new corporate waste diversion targets, focused on significantly reducing our landfilled waste over the next five years.

In 2015, we finalized a water stewardship plan and continued to implement water reduction programs at our top water-consuming buildings, including the installation of additional metering to enhance data capture for analysis and strategy development. We continue to raise awareness and provide education for behaviour-oriented conservation initiatives.

Fuel system risk is being addressed through a program to install containment and monitoring equipment at sites with systems of qualifying size. All of our remote sites, which rely on diesel generators for 24/7 power, have now been fully upgraded with industry-leading spill containment. We are also leveraging our wireless network and using M2M technology to remotely monitor these sites. We have an ongoing program to assess and remediate contamination issues relating to historical activities and we disclose and report on these issues to regulatory bodies, as appropriate.

10.11 Human-caused and natural threats

Natural disasters and intentional threats to our infrastructure and business operations

We are a key provider of essential telecommunications infrastructure in Canada, and we have business operations located in North America, Central America, Asia and Europe. Our networks, information technology, physical assets, team members, business functions, supply chain and business results may be materially impacted by exogenous threats, including:

- Fire, flooding, power loss and telecommunications failures

- Natural disasters, including seismic events, weather-related events and solar storms
- Intentional threats, such as sabotage, terrorism, labour disputes, and political and civil unrest
- Disruptions of critical infrastructure (e.g. electrical utilities)
- Cyber attacks and physical intrusions
- Public health threats, such as pandemics.

We recognize that global climate change may increase the risk associated with some of these threats, including the frequency and severity of weather-related events.

Although we have business continuity planning processes in place, there can be no assurance that specific events or a combination of events will not disrupt our operations or materially affect our financial results.

Risk mitigation: Our business continuity commitment focuses on the following priorities: ensuring the safety of our team members, minimizing the impacts of a threat to our facilities and business operations, maintaining service to our customers and keeping our communities connected. These priorities have been demonstrated in a number of disruptive events.

Our commitment is supported by an enterprise-wide business continuity program that includes plans to develop, maintain and improve our business continuity capabilities. The program encompasses mitigation, preparedness, response and recovery. It also leverages the resiliency afforded by our national and international geographic diversity and by ongoing initiatives to add to the redundancy of our operations, IT network and telecom infrastructure.

We take an impact-based approach to continuity planning, focusing on the impacts of a disruption to our facilities, workforce, technology and supply chain. Our business continuity management system aligns with current standards and industry practices, and encompasses an Emergency Operations Centre, participation by all business units in our Canadian and international operations, and trained and exercised response and recovery teams.

The ongoing optimization of our disaster recovery capability for our IT and telecommunications network assets is a key and continued focus for preventing outages and reducing their durations for our critical technology, as well as for driving closer alignment of IT and network recovery capability with business demands. While disaster recovery is a focus for TELUS, not all of our systems have recovery and continuity capabilities.

Security

We have a number of assets that are subject to vandalism and/or theft, including distributive copper cable, corporate stores, and network and telephone switch centres. We also operate IT systems and networks that are subject to cyber attacks, which are intentional attempts to gain unauthorized access to our information systems and networks for unlawful or improper purposes. Cyber attacks or other breaches of network or IT systems security may cause disruptions to our operations.

Cyber attackers may use a range of techniques, from manipulating people to using sophisticated malicious software and hardware on a single or distributed basis. Some cyber attacks use a combination of techniques in their attempt to evade safeguards, such as the firewalls, intrusion prevention systems and antivirus software found in our systems and networks. The risk and consequences of cyber attacks can surpass traditional physical security risk due to the rapidly evolving scope and sophistication of these threats.

A successful attack on our systems, networks and infrastructure, or those belonging to our suppliers or other companies, may prevent us

from providing reliable service, may allow for the unauthorized interception, destruction, use or dissemination of our information or our customers' information, and may prevent us from operating our networks. Such events could cause us to lose customers, lose revenue, incur expenses, and suffer reputational and goodwill damages, and could subject us to litigation or governmental investigation and sanction. The costs of such events could include liability for information loss, as well as the costs of repairs to infrastructure and systems and any incentives offered to customers and business partners to retain their business. Our insurance may not cover, or be adequate to fully reimburse us for, these costs and losses.

Risk mitigation: We have implemented measures and processes that mitigate the risk of physical and cyber attacks. We have policies, controls and monitoring systems that protect our assets and our team members, considering such factors as asset importance, exposure risks and potential costs incurred should a particular asset be damaged or stolen. We also use cyber threat intelligence, testing, intrusion prevention/detection and incident response capabilities to help identify possible cyber threats, and we adjust our security measures accordingly. As an additional level of risk management, we have a security team that centralizes responsibility for physical and cyber security and works with law enforcement and other agencies. This security team encourages legislative changes to address the ongoing threat of cyber attacks. While TELUS has reasonable physical security and cyber security programs in place, there can be no assurance that specific security threats will not materially affect our operations and financial results.

10.12 Economic growth and fluctuations

Slow or uneven economic growth and low oil prices may adversely affect us

We estimate economic growth in Canada will be approximately 1.7% in 2016 (see *Section 1.2*), but the relative strength and persistence of this growth may be influenced by economic developments outside of Canada. In addition, macroeconomic risks in Canada include concerns about low oil prices and high levels of consumer and mortgage debt, which may cause consumers to reduce discretionary spending, even in a growing economy.

Economic uncertainty may cause consumers and business customers to delay new service purchases, reduce volumes of use, discontinue use of services or seek lower-priced alternatives from competitors. Further weakness in the extractive energy sector skews the balance of risk of an economic downturn towards Western Canada, including lower levels of investment and employment. This may be partially mitigated by declining costs in non-extractive industries, such as manufacturing. A prolonged economic downturn or recession in Western Canada could adversely impact our customer growth, revenue, profitability and free cash flow, and could potentially require us to record impairments to the carrying value of our assets, including, but not limited to, our intangible assets with indefinite lives (spectrum licences and goodwill). Impairments to the carrying value of our assets would result in a charge to earnings and a reduction in owners' equity, but would not affect cash flow.

In 2015, lower oil prices contributed to the weakening of the Canadian dollar relative to the U.S. dollar. Persistently lower oil prices, as well as certain U.S. monetary policy changes, may put further downward pressure on the Canadian dollar relative to the U.S. dollar in 2016. Certain of our revenues, capital asset acquisitions and operating costs, including inventory purchases, are denominated in U.S. dollars. Therefore, a continuing weakness in the Canadian dollar to U.S. dollar exchange rate may negatively impact our financial and operating results. Additionally, certain capital asset acquisitions and inventory purchases from outside Canada, although priced in Canadian dollars, may be negatively impacted by a continuing weakness in the Canadian dollar to U.S. dollar exchange rate.

Risk mitigation: While economic risks cannot be completely mitigated, our top priority is putting customers first and pursuing global leadership in the likelihood of our clients to recommend our products, services and people. We will also support customers negatively affected by lower oil prices through cost-effective solutions that help them realize efficiencies in their operations, and we will continue to pursue cost reduction and efficiency initiatives in our own business (see discussions in *Section 2.2 Strategic imperatives* and *Section 3 Corporate priorities for 2016* and *Progress on 2015 corporate priorities*). See *Section 4.3 Liquidity and capital resources* for our capital structure financial policies and plans. Our foreign currency exchange risk management includes the use of foreign currency forward contracts and currency options to fix the exchange rates on short-term U.S. dollar denominated transactions, commitments and commercial paper.

Pension funding

Economic and capital market fluctuations could adversely affect the investment performance, funding and expense associated with the defined benefit pension plans that we sponsor. Our pension funding obligations are based on certain actuarial assumptions relating to expected plan asset returns, salary escalation, retirement ages, life expectancy, the performance of the financial markets and future interest rates.

The employee defined benefit pension plans, in aggregate, were in a $53 million deficit position at December 31, 2015 (2014 — $598 million deficit position). Our solvency position, as determined under the *Pension Benefits Standards Act, 1985*, was estimated to be a surplus of $429 million (2014 — an updated estimate to be a deficit of $69 million). There can be no assurance that our pension expense and funding of our defined benefit pension plans will not increase in the future and thereby negatively impact earnings and/or cash flow. Defined benefit funding risks may arise if total pension liabilities exceed the total value of the respective plan assets in trust funds. Unfunded differences may arise from lower than expected investment returns, changes to mortality and other assumptions, reductions in the discount rate used to value pension liabilities, changes to statutory funding requirements and actuarial losses. While employee defined benefit pension plan re-measurements will cause fluctuations in other comprehensive income, these re-measurements will never be subsequently reclassified to income.

Risk mitigation: We seek to mitigate this risk through the application of policies and procedures designed to control investment risk and through ongoing monitoring of our funding position. Our best estimate of cash contributions to our defined benefit pension plans is $57 million in 2016 ($94 million in 2015).

11. Definitions and reconciliations

11.1 Non-GAAP and other financial measures

We have issued guidance on and report certain non-GAAP measures that are used to evaluate the performance of TELUS and its segments, as well as to determine compliance with debt covenants and to manage our capital structure. As non-GAAP measures generally do not have a standardized meaning, they may not be comparable to similar measures presented by other issuers. Securities regulations require such measures to be clearly defined, qualified and reconciled with their nearest GAAP measure.

Adjusted basic earnings per share: This measure is used to evaluate performance at a consolidated level and excludes items that may distort the underlying trends in business performance. This measure should not be considered an alternative to Basic earnings per share in measuring TELUS' performance. Items that may, in management's view, obfuscate the underlying trends in business performance include significant gains or losses on real estate redevelopment partnerships, restructuring and other costs, long-term debt prepayment premiums, income-tax related adjustments and asset retirements related to restructuring activities (see *Section 1.3*).

Capital intensity: This measure is calculated as capital expenditures (excluding spectrum licences and non-monetary transactions) divided by total operating revenues. This measure provides a basis for comparing the level of capital expenditures to those of other companies of varying size within the same industry.

Dividend payout ratio: This is a historical measure calculated as the sum of the last four quarterly dividends declared per Common Share, as reported in the Consolidated financial statements, divided by the sum of basic earnings per share for the most recent four quarters for interim reporting periods (divided by annual basic earnings per share for fiscal years). Our policy guideline for the annual dividend payout ratio is on a prospective basis, rather than on a trailing basis, and is 65 to 75% of sustainable earnings on a prospective basis.

Calculation of Dividend payout ratio

Years ended December 31 ($)	2015	2014
Numerator — sum of the last four quarterly dividends declared per Common Share [1]	**1.68**	1.52
Denominator — Net income per Common Share	**2.29**	2.32
Ratio (%)	**73**	66

(1) For the year ended December 31, 2015, the numerator period has been aligned with the denominator period; the comparative amounts have been restated.

Dividend payout ratio of adjusted net earnings: More representative of a sustainable calculation is the historical ratio based on reported earnings per share adjusted to exclude income tax-related adjustments, long-term debt prepayment premiums and items adjusted for in EBITDA. Our policy guideline for the annual dividend payout ratio is on a prospective basis, rather than on a trailing basis, and is 65 to 75% of sustainable earnings on a prospective basis (see *Section 7.5 for additional details on our ratio as at December 31, 2015*).

Calculation of Dividend payout ratio of adjusted net earnings

Years ended December 31 ($)	2015	2014
Numerator — sum of the last four quarterly dividends declared per Common Share [1]	**1.68**	1.52
Adjusted net earnings ($ millions):		
Net income attributable to Common Shares	**1,382**	1,425
Add back long-term debt prepayment premium after income taxes	**—**	10
Add back net unfavourable (deduct net favourable) income tax-related adjustments	**1**	(6)
	1,383	1,429
Denominator — Adjusted net earnings per Common Share	**2.29**	2.33
Adjusted ratio (%)	**73**	66

(1) For the year ended December 31, 2015, the numerator period has been aligned with the denominator period; the comparative amounts have been restated.

Earnings coverage: This measure is defined in the Canadian Securities Administrators' National Instrument 41-101 and related instruments, and is calculated as follows:

Calculation of Earnings coverage

Years ended December 31 ($ millions, except ratio)	2015	2014
Net income attributable to Common Shares	**1,382**	1,425
Income taxes	**524**	501
Borrowing costs (Interest on Long-term debt plus Interest on Short-term borrowings and other plus long-term debt prepayment premium, adding back capitalized interest)	**503**	451
Numerator	**2,409**	2,377
Denominator — Borrowing costs	**503**	451
Ratio (times)	**4.8**	5.3

EBITDA (earnings before interest, income taxes, depreciation and amortization): We have issued guidance on and report EBITDA because it is a key measure used to evaluate performance at a consolidated level and the contribution of our two segments. EBITDA is commonly reported and widely used by investors and lending institutions as an indicator of a company's operating performance and ability to incur and service debt, and as a valuation metric. EBITDA should not be considered an alternative to Net income in measuring TELUS' performance, nor should it be used as an exclusive measure of cash flow. EBITDA as calculated by TELUS is equivalent to Operating revenues less the total of Goods and services purchased expense and Employee benefits expense.

We may also calculate an adjusted EBITDA to exclude items of an unusual nature that do not reflect our ongoing operations and should not, in our opinion, be considered in a valuation metric, or should not be included in an assessment of our ability to service or incur debt. In respect of the TELUS Garden residential real estate partnership, which is included in the wireless and wireline segments, we do not anticipate retaining an ownership interest in the TELUS Garden residential condominium following completion of construction. For the TELUS Garden residential real estate partnership, gains net of equity losses were $NIL in 2015 and 2014.

EBITDA reconciliation

Years ended December 31 ($ millions)	2015	2014
Net income	**1,382**	1,425
Financing costs	**447**	456
Income taxes	**524**	501
Depreciation	**1,475**	1,423
Amortization of intangible assets	**434**	411
EBITDA	**4,262**	4,216

EBITDA — excluding restructuring and other costs: We report this measure as a supplementary indicator of our operating performance. It is also utilized in the calculation of **Net debt to EBITDA — excluding restructuring and other costs** and **EBITDA — excluding restructuring and other costs interest coverage**.

Calculation of EBITDA — excluding restructuring and other costs

Years ended December 31 ($ millions)	2015	2014
EBITDA	**4,262**	4,216
Restructuring and other costs included in EBITDA	**226**	75
EBITDA — excluding restructuring and other costs	**4,488**	4,291

EBITDA — excluding restructuring and other costs interest coverage: This measure is defined as EBITDA —excluding restructuring and other costs, divided by Net interest cost, calculated on a 12-month trailing basis. This measure is similar to the coverage ratio covenant in our credit facilities (see *Section 7.6*).

Free cash flow: We report this measure as a supplementary indicator of our operating performance. It should not be considered an alternative to the measures in the Consolidated statements of cash flows. Free cash flow excludes certain working capital changes (such as trade receivables and trade payables), proceeds from divested assets and other sources and uses of cash, as found in the Consolidated statements of cash flows. It provides an indication of how much cash generated by operations is available after capital expenditures (excluding purchases of spectrum licences) that may be used to, among other things, pay dividends, repay debt, purchase shares or make other investments. Free cash flow may be supplemented from time to time by proceeds from divested assets or financing activities.

Free cash flow calculation

Years ended December 31 ($ millions)	2015	2014
EBITDA	**4,262**	4,216
Restructuring costs net of disbursements	**97**	1
Items from the Consolidated statements of cash flows:		
Share-based compensation expense, net of payments	**(38)**	74
Net employee defined benefit plans expense	**118**	87
Employer contributions to employee defined benefit plans	**(94)**	(88)
Interest paid	**(458)**	(412)
Interest received	**24**	2

Capital expenditures (excluding spectrum licences)	**(2,577)**	(2,359)
Free cash flow before income taxes	**1,334**	1,521
Income taxes paid, net of refunds	**(256)**	(464)
Free cash flow	**1,078**	1,057

The following reconciles our definition of free cash flow with Cash provided by operating activities.

Free cash flow reconciliation with Cash provided by operating activities

Years ended December 31 ($ millions)	2015	2014
Free cash flow	**1,078**	1,057
Add (deduct):		
Capital expenditures (excluding spectrum licences)	**2,577**	2,359
Adjustments to reconcile to Cash provided by operating activities	**(113)**	(9)
Cash provided by operating activities	**3,542**	3,407

Net debt: We believe that net debt is a useful measure because it represents the amount of Short-term borrowings and long-term debt obligations that are not covered by available Cash and temporary investments. The nearest IFRS measure to net debt is Long-term debt, including Current maturities of Long-term debt. Net debt is a component of the **Net debt to EBITDA — excluding restructuring and other costs** ratio.

Calculation of Net debt

As at December 31 ($ millions)	2015	2014
Long-term debt including current maturities	**12,038**	9,310
Debt issuance costs netted against long-term debt	**52**	43
Derivative assets, net	**(14)**	—
Cash and temporary investments	**(223)**	(60)
Short-term borrowings	**100**	100
Net debt	**11,953**	9,393

Net debt to EBITDA — excluding restructuring and other costs: This measure is defined as net debt at the end of the period divided by 12-month trailing EBITDA — excluding restructuring and other costs. Our long-term policy guideline for this ratio is from 2.00 to 2.50 times. This measure is similar to the leverage ratio covenant in our credit facilities (see *Section 7.6*).

Net interest cost: This measure is the denominator in the calculation of **EBITDA — excluding restructuring and other costs interest coverage**. Net interest cost is defined as financing costs, excluding capitalized long-term debt interest, employee defined benefit plans net interest and recoveries on redemption and repayment of debt, calculated on a 12-month trailing basis. No recoveries on redemption and repayment of debt were recorded in 2015 and 2014. Expenses recorded for the long-term debt prepayment premium, if any, are included in net interest cost. Net interest cost was $465 million in 2015 and $453 million in 2014.

Restructuring and other costs: With the objective of reducing ongoing costs, we incur associated incremental, non-recurring restructuring costs. We may also incur atypical charges when undertaking major or transformational changes to our business or operating models. We include incremental external costs incurred in connection with business acquisition or disposition activity, as well as litigation costs, in the context of significant losses and settlements, in other costs (see *Investing in internal capabilities to build a high-performance culture and efficient operation* in *Section 2.2)*.

11.2 Operating indicators

The following measures are industry metrics that are useful in assessing the operating performance of a wireless and wireline telecommunications entity, but do not have a standardized meaning under IFRS-IASB.

Average revenue per subscriber unit per month (ARPU) is calculated as network revenue divided by the average number of subscriber units on the network during the period and is expressed as a rate per month.

Churn per month is calculated as the number of subscriber units deactivated during a given period divided by the average number of subscriber units on the network during the period and is expressed as a rate per month. A TELUS, Koodo or Public Mobile brand prepaid subscriber is deactivated when the subscriber has no usage for 90 days following expiry of the prepaid credits.

Cost of acquisition (COA) consists of the total of the device subsidy (the device cost to TELUS less the initial charge to the customer), commissions, and advertising and promotion expenses related to the initial subscriber acquisition during a given period. As defined, COA excludes costs to retain existing subscribers (retention spend).

COA per gross subscriber addition is calculated as cost of acquisition divided by gross subscriber activations during the period.

Retention spend to network revenue represents direct costs associated with marketing and promotional efforts (including device subsidies and commissions) aimed at the retention of the existing subscriber base, divided by network revenue.

Retention volume represents the number of subscriber units retained in the period through marketing and promotional efforts that result in client upgrades or contract renewals.

Wireless subscriber unit (subscriber) is defined as an active recurring revenue-generating unit (e.g. cellular phone, tablet or mobile Internet key) with a unique subscriber identifier (SIM or IMEI number) that has access to the wireless voice and/or data networks for communication. In addition, TELUS has a direct billing or support relationship with the user of each device. Subscriber units exclude machine-to-machine (M2M) devices (a subset of the Internet of Things), such as those used for asset tracking, remote control monitoring and meter readings, vending machines and wireless automated teller machines.

Wireline subscriber connection is defined as an active recurring revenue-generating unit that has access to stand-alone services, including Internet access, TELUS TV and residential network access lines (NALs). In addition, TELUS has a direct billing or support relationship with the user of each service. Reported subscriber units exclude business NALs as the impact of migrating from voice lines to IP services has led to business NAL losses without a similar decline in revenue, thus diminishing its relevance as a key performance indicator.

Exhibit 99.5:

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statement No. 333-199916 on Form F-10, Registration Statement No. 333-186874 on Form F-3 and Registration Statement No. 333-181463 on Form S-8 and to the use of our reports dated February 12, 2015 relating to the consolidated financial statements of TELUS Corporation and the effectiveness of TELUS Corporation's internal controls over financial reporting, appearing in this Annual Report on Form 40-F of TELUS Corporation for the year ended December 31, 2015.

"Deloitte LLP"
Chartered Professional Accountants
Vancouver, Canada
March 10, 2016

Exhibit 99.6:

Amended 2016 Code of Ethics and Conduct



TELUS Code of
Ethics & Conduct

February 2016

1

TELUS Code of Ethics & Conduct
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All TELUS team members:

At TELUS, we share a commitment to delivering on our brand promise of making the future friendly for all our stakeholders. We have built an award-winning, globally leading culture that is inclusive, transparent and supports our shared responsibility to hold ourselves and each other to an ethical standard that is individually and collectively above reproach. Our extended TELUS family, including our contractors, suppliers, vendors, community partners and members of our Board of Directors, is equally responsible for demonstrating this level of personal and professional integrity.

Our longstanding commitment to fostering a culture that values continuous learning has ensured that our Code of Ethics & Conduct supports educating our entire team as to the ethical standards expected of all team members. The Code covers an extensive range of topics from conflict of interest and the acceptance of gifts and benefits to the protection of company assets and information. Whilst comprehensive in nature, the Code is not exhaustive and it is our expectation that you will leverage the basic policies and standards within this guide to underpin your actions.

We encourage every member of our team to review this document carefully, integrating these guidelines into your everyday behaviours and actions when interacting with your fellow team members, our customers and our communities. You are the ambassadors of our brand and the keepers of our future friendly promise. Our culture of integrity relies on you demonstrating the grit and commitment required to embody our TELUS everyday values and embrace these ethical standards each and every day.

Darren Entwistle
President and Chief Executive Officer

John Gossling
Executive Vice-President and Chief Financial Officer

Sandy McIntosh
Executive Vice-President People & Culture and Chief Human Resources Officer

Introduction

Why do we have a Code?

Our Code outlines the behaviours that we must exhibit in order to meet and uphold TELUS' ethical and conduct standards.

TELUS' Code of Ethics & Conduct (the "Code") applies to TELUS Corporation and all of its subsidiaries ("TELUS" or the "Company"), and to all members of the Board of Directors ("Board"), officers and employees of TELUS (referred to as "team members"). The Code constitutes a term of the employment contract of all TELUS team members.

Team members are required to familiarize themselves with the Code and the standards within that apply to their role at TELUS. Each team member is required to take any required ethics and compliance courses in a timely manner. The Code cannot address every possible situation, so it is up to team members to use good judgment and seek help whenever they have questions or are not sure about the right course of action.

Team members are reminded that TELUS reserves the right to revoke or amend any terms of the Code if required by the needs of the business. TELUS will notify team members of any amendments to the Code prior to the changes becoming effective. Team members are required to periodically review this Code (at least annually) to remain familiar with its terms. To assist this review, team members are required to complete the Integrity training module each year.

This Code is available on the Company's intranet, and is publicly available at about.telus.com/governance/ethics.html.

Responsibilities

All TELUS Team Members

All team members are expected to act honestly in all their dealings, comply with the laws governing our businesses, and maintain an ethical

work environment**.** This standard requires that each member of our team understand and apply the guidelines in this Code to everyday actions and decisions.

At TELUS, we not only do things right, but we should strive to *do the right things*. Each team member must take responsibility for their actions including:

- Observance of the guidelines outlined in this and other Company policies wherever in the world we are working
- Compliance with applicable local laws
- Making a commitment by reading, understanding and abiding by the Code

All business activities should be able to stand up to any possible public scrutiny and further investigation if required.

The guidelines in this Code are based upon generally accepted standards of ethical business conduct and applicable laws. The absence of a guideline covering a particular situation does not relieve any of us from the responsibility for acting ethically and within the law.

Compliance/Exceptions

In situations where the right ethical behaviour is unclear, or where there may be the appearance of a contravention of these guidelines, we support each other in seeking advice and clarification. If you are unsure as to the ethical course of action to take in a particular situation, you should first discuss the situation with your leader (supporting manager) or the applicable department identified in this Code. Team members should retain all documentation and save a written record of the guidance provided by their leader or members of other departments and any decision made in the event there is a future investigation with respect to a possible violation of the Code.

If you become aware of a possible violation of the Code, you are required to report it to the Ethics Office. For more details, please refer to the TELUS EthicsLine section. Members of the TELUS Board may also advise the Chair of the Board of potential violations. The Chair will refer the matter to the Ethics Office for investigation, resolution and reporting. Possible violation of applicable laws will be directed to Legal Services for review and investigation.

Failure to act in accordance with the guidelines outlined in this Code may have consequences for the individual team members, may create potential harm to TELUS' reputation and brand, and may put TELUS at risk for civil or criminal liability. Individual consequences may include disciplinary action, up to and including dismissal for just cause, as well as civil and criminal penalties. Therefore, please regard the requirement to understand and to act in accordance with the TELUS' Code as a very serious obligation.

Waivers

It is not intended that there be <u>any</u> waivers to this Code. In the unlikely event that a waiver is considered and granted for an executive leadership team ("ELT") member or a member of the Board, it must receive prior written approval by the Board or its delegate. The delegate must be a Board committee member. In such circumstances, any waivers granted to an ELT member or member of the Board must be disclosed, subject to the TELUS Policy on Corporate Disclosure and Confidentiality of Information.

In the unlikely event that a waiver is considered for team members other than an ELT member or a member of the Board, prior written approval must be received from the Executive Vice President, Corporate Affairs, Chief Legal Officer & Corporate Secretary together with the Vice President Risk Management & Chief Internal Auditor and must be promptly reported to the Audit Committee of the Board.

Leaders

In addition to the aforementioned responsibilities, TELUS managers (referred to as leaders) have responsibility to:

- Be familiar with the Code and resolution procedures
- Promote and maintain a climate in which honest, ethical and legal business conduct is the norm
- Identify any risks of non-compliance with this Code within their area of responsibility and take appropriate steps to address such risks
- Encourage open discussion and resolution of all ethical and conduct concerns
- Maintain, without compromise, our ethical and other conduct standards in achieving goals and objectives, no matter how important the goal or objective may be
- Recognize team members whose behaviour and actions demonstrate strong ethical decision making

Team members with internal controls over financial reporting and disclosure control roles

In addition to the above responsibilities, team members who have roles regarding internal controls and financial reporting and disclosure controls have, as outlined in the Policy on Corporate Disclosure and Confidentiality of Information, the responsibility to make full, fair, accurate, timely and understandable disclosure in reports and documents that TELUS files with, or submits to, securities commissions and in other public communications made by TELUS.

Members of the TELUS Board of Directors

TELUS Board members have the responsibility to notify the Chairman of the Board of any potential or perceived conflict of interest or other Code issues which arise during the course of their Board service.

Team Members and Board Members who represent TELUS as directors on the boards of other organizations

In addition to the above responsibilities, TELUS team members and Board members who represent TELUS on the boards of other organizations have the responsibility to notify the Chairman of the Board (if they are a Board member) or the TELUS Integrity Work Group (if they are a team member) of any potential perceived conflict of interest or other Code issues which arise during the course of their service on another organizations' board. In providing such notice, Board members and team members should exercise due care to ensure that they act in compliance with their fiduciary and other obligations to the other organization and, for example, do not disclose that organization's confidential information to TELUS, without prior written approval of that organization.

Ethics Office

The Ethics Office is established to provide team members with a resource regarding ethical and conduct matters. This office oversees the Code, conducts investigations, provides advice on ethical issues and conduct matters and develops and administers training for TELUS' expected standards of business conduct. The office reports on its activities, including on breaches of the Code, to the President and Chief Executive Officer and financial officers (unless implicated) and to the Human Resources and Compensation Committee and the Audit Committee of the Board on a quarterly basis.

Integrity Work Group

An Integrity Work Group supports the Ethics Office in overseeing the Code and quarterly reporting to senior leadership and the Human Resources and Compensation Committee and the Audit Committee of the TELUS Board. Members of the Integrity Work Group include representatives from Risk Management, People & Culture (Human Resources), Labour Relations, Legal Services, the Compliance & Privacy Office, TELUS International and the Chief Security Office.

Ethical Decision Making

This Code reflects our commitment to high standards of integrity and ethical behaviour in our professional and business dealings. The Code is intended to support open and frank discussion and the satisfactory resolution of ethical dilemmas. We encourage "asking before acting."

Each of us is responsible for striving to ensure our behaviour is ethical and for taking steps to resolve ethical dilemmas. The guidelines in this Code are provided to assist with ethical decision-making. However, as business becomes increasingly complex, the Code cannot provide guidance for every possible situation.

If you have an ethical issue with which you would like help, follow the process below, stopping at the point at which your situation has been resolved.

1. Questions to Ask Yourself

Gather information and then determine if the situation you face is an ethical issue. The questions below may help to clarify your situation and ethical action.

- What is my immediate feeling about this?
- Does this comply with company policies and procedures?
- Is this legal?
- Is this an expected part of my job?
- How would others perceive this action?
- Would I or TELUS be embarrassed if this situation were discussed in the media?
- Would I be putting TELUS or myself at unnecessary risk?
- What impact would this have on my or the company's reputation?
- Is this taking revenue or customers away from TELUS?
- Does this affect my judgment to act in the best interests of TELUS?

We rely on all team members to use good judgment to guide behaviour and to ask questions in situations where the proper course of action may be unclear.

2. Talk to Your Leader

Often your leader is in the best position to help you work through the issue. Your leader is responsible for supporting open discussion, working through the ethical questions you have, and guiding your access to further assistance as required. In situations where you are uncomfortable talking with your leader, or your leader is unable to help, you should refer to the next level of leadership or seek expert assistance as detailed in the next section.

3. Expert Assistance

If you have tried the above steps but still have questions, assistance is available through designated subject matter experts in People & Culture (Human Resources), Legal Services, the Compliance & Privacy Office, the Chief Security Office, the Ethics Office, Regulatory Affairs and Corporate Accounting & Financial Reporting. Names and contact telephone numbers are listed on the company's internal website, under Ethics. TELUS International team members may contact their Senior Vice President for People & Culture (Human Resources).

4. TELUS EthicsLine

You may also contact the TELUS EthicsLine to request ethical guidance or make a good-faith report about misconduct or a perceived violation of this Code, another company policy or procedure, a law, questionable business practices, potential fraud or concerns or complaints with respect to any accounting, internal accounting controls or auditing matter. Reports may be made anonymously.

A good-faith report alleging misconduct must be made promptly after the occurrence of a violation or perceived violation, or after becoming aware of it. Failure to file a report promptly may negatively impact TELUS' ability to evaluate, investigate or resolve the alleged misconduct.

The EthicsLine is operated by an independent company and is staffed 24 hours a day, seven days a week, by live operators who are fluent in multiple languages. EthicsLine operators document and forward the report to the Ethics Office for review and handling

following each call or web contact. Where the report involves accounting, internal accounting controls or auditing matters, EthicsLine operators forward the report directly to the Executive Vice President, Corporate Affairs, Chief Legal Officer & Corporate Secretary, who will, as appropriate, review and assess the seriousness of such report with one or more of:

- the Executive Vice President & Chief Financial Officer,
- the Vice President Risk Management & Chief Internal Auditor,
- the Chief Data & Trust Officer, who oversees the Compliance and Privacy [Office and team], or
- the Audit Committee of the TELUS Board.

The Ethics Office forwards complaints regarding potential violation of laws to Legal Services for review and handling.

Phone toll free: 1-888-265-4112 in North America. See website for other international dialing instructions
Web: link from www.telus.ethicspoint.com or company intranet

How the Ethics Office handles Inquiries:

The Ethics Office will assist team members in ethical decision-making by providing guidance concerning the Code. The Ethics Office may also refer to other subject matter experts within TELUS for assistance.

How the Ethics Office handles Complaints:

- **Assessment of complaint**

  The Ethics Office will assess the nature of the complaint which will be reviewed under the direction of Legal Services in appropriate cases. The following matters for which other remedies exist will not be investigated by the Ethics Office and will be redirected as follows:

  - **Labour relations issues** - Labour Relations and immediate leader or other members of leadership
  - **Employment issues** such as promotions, remuneration, reprimands, suspensions, dismissals - People & Culture (Human Resources) and immediate leader or other members of leadership
  - **Respectful Workplace issues** such as harassment and discrimination -Respectful Workplace Office
  - **Customer service complaints** - Customer Care or Client Care

  With the exception of issues relating to collective agreements matters, the Ethics Office will track all complaints, including those that are redirected to other areas within TELUS for expert assistance, until they are resolved.

b) Investigation

All complaints to the Ethics Office are taken seriously and investigated in a timely manner. If substantiated, the complaint will be resolved through appropriate corrective action and/or discipline. If you make a complaint and choose to identify yourself, you will be notified when the Ethics Office has completed its review. Every effort will be made to maintain confidentiality for those who contact the Ethics Office

or who are accused of a breach of this Code (although disclosure may be necessary in some cases to effectively conduct an investigation, take corrective action or support legal proceedings or otherwise as required by law). It is expected that all reports to the Ethics Office will be made in good faith. Deliberately or recklessly making false complaints will result in disciplinary action up to and including dismissal for just cause.

c) Protection for Reporting

Retaliation or retribution against a team member for contacting the Ethics Office or for assisting or participating in an investigation of a complaint violates our ethical principles and will not be tolerated. If you feel you have been retaliated against, you should contact People & Culture (Human Resources) or the Ethics Office immediately.

d) Opportunity to Respond

If it has been found that a team member has breached or has likely breached this Code, the team member will be informed of the complaint in due course. He or she will be provided the opportunity to respond and, where appropriate, to contribute to the correction of the breach.

e) Reporting of Breaches

Any breach of this Code will be reported to senior leadership with recommendations for action. Ethical issues reported to the Ethics Office will be summarized quarterly and reported to the Human Resources and Compensation Committee and the Audit Committee of the Board, together with results of investigations, recommendations and action. The Executive Vice President, Executive Vice President, Corporate Affairs, Chief Legal Officer & Corporate Secretary will report significant complaints regarding accounting, internal accounting controls or auditing matters directly to the Chair of the Audit Committee of the Board.

f) File Documentation

Records of the report and investigation, including contents of meetings, interviews, results of investigations and other relevant material, will be maintained by the Ethics Office in a separate file, and managed in accordance with the TELUS Privacy Code and Record Retention Policy. Disclosure of information internally will be strictly limited to a need-to-know basis.

5. Last Resort Resolution

If an ethical issue remains unresolved, the Integrity Work Group is available as the body of last resort to discuss the issue and guide the resolution of any ethical issue brought forward. Every ethical issue referred to the Integrity Work Group will first be reviewed by a sub-committee of the Integrity Work Group to assess its merits and relevance. If the sub-committee determines, based upon a review of the evidence submitted, that the issue has not been reported in good faith but is frivolous and / or vexatious, or that it is made in bad faith, it may recommend to the Integrity Work Group that no further action be taken. The Integrity Work Group will review the recommendation from the sub-committee and make a decision whether to assess the merits of the issue or determine that no further action be taken. A decision that no further action be taken will be reported to the Human Resources and Compensation Committee and to the Audit Committee of the Board.

Ethical Guidelines

Information of Team TELUS and other Parties

Privacy of Communications

As a telecommunications service provider, we may have access to content of communications transmitted on our facilities. We protect the privacy of customer communications by taking reasonable steps to secure communications against tampering, intrusion or disclosure except as authorized by law. This includes appropriate safeguards to protect the content, nature and existence of telephone calls and data transmissions against improper release to third parties.

A team member may intercept a private communication only when such interception is necessary for the purpose of providing the service, for the purpose of quality control checks, to protect the company's facilities from fraudulent abuse, or when otherwise authorized by law.

If a team member comes across a suspected illegal activity (e.g. child pornography) in the course of their work, they should report it immediately to the Chief Security Office which will determine the appropriate course of action such as reporting to the appropriate authority.

In order to comply with privacy laws, protect confidential information and maintain a respectful workplace, team members must not record workplace conversations or take photographs or videos in the workplace with a recording device or camera (including, but not limited to, a smartphone) without either obtaining prior consent from all parties included in the recording, photograph or video or prior authorization from their leader or other TELUS management. Team members should contact their leader or the Ethics Office for further information on recording workplace conversations.

Confidentiality of Information

We respect and protect the confidentiality, security and integrity of the information of others whether it belongs to other team members, partners, suppliers, customers or competitors and we earn trust through effective and ethical management of their information.

The definition of "customer" includes our direct customers, customers who are also our competitors, third party customers (customers of our customers), and may include team members who are also our customers. All customer and team member personal information is confidential and may not be disclosed except as outlined in the TELUS Privacy Code and as permitted by law.

Access to team member, partner, supplier and customer personal information is strictly controlled on a "need-to-know" basis and is used for legitimate business purposes only.

The TELUS Privacy Code and related practices set out guidelines for managing customer, supplier and team member personal information. Various areas of the

company may have additional supporting management practices in place. Refer to your leader for more information.

Case Studies

Problem

My friend calls me at work in the Call Centre to ask me to look up the address and phone number of a TV personality since this information is not listed in the public directory. Should I look this up and provide the information?

Action

No. Unless you have a legitimate business reason to look up the information, you should not even access this customer's account and should certainly not provide the requested information to your friend.

Problem

My next-door neighbour is a good friend of the family of one of my former team members who now works for a different leader. My neighbour asks me how this team member is doing. I explain that he no longer works on my team and is away from the office on stress leave. Should I have discussed my former team member's status with a close family friend?

Action

No. It is not appropriate for you to discuss the status of your former team member even though you know your neighbour is a close family friend. Team members are reminded that, as a general rule, it is inappropriate to disclose personal information of our team members for non-work related purposes. Of particular concern is sensitive personal information such as health or financial information and information about disciplinary action. This is contrary to our Privacy Code.

Problem

Today I had a challenging experience with a customer and I could not make them happy. I have my own blog on our intranet and would like to post my experience so that I can get suggestions from my team members on how to handle similar situations. Should I post this?

Action

Soliciting feedback from your team members is an excellent idea; however, you should act cautiously. Even though you are posting this internally, you must protect the privacy of your customer. Review what you intend to post to ensure you are not identifying your customer and, if in doubt, discuss with your leader before posting.

Problem

My sister is in a marital dispute with her spouse. Is it acceptable to help her by looking up the calling and account details of her spouse?

Action

No. Unless you have a business reason to look up the information, you should not even access this customer's account and should certainly not provide the requested information to your sister.

Integrity

Personal and Corporate Integrity

Individually and collectively, our personal integrity supports the honest use of time, funds and property in ethical dealings with co-workers and others. Business needs must take priority in the allocation of our time at work. Use of company time and property is for business purposes only unless otherwise authorized by the appropriate leadership. While we respect the privacy and autonomy of our team members in their personal lives, their actions, both in the workplace and outside it, have the potential to negatively impact the reputation of our company.

Compliance with Laws

We comply with all applicable laws of the countries where we conduct business. Team members should understand and comply with the laws that relate to their work. It is the responsibility of leaders to ensure that members of their team are aware of their responsibilities in this regard and to seek advice from Legal Services, People & Culture (Human Resources), Regulatory Affairs or Taxation if they are unsure, especially for transactions that cross international borders or involve foreign laws.

Team members should be aware that many countries have laws that regulate the import and export of goods, services, software and technology for a variety of reasons, including national security and foreign policy.

Competing Ethically/Lawfully/Fairly

We consciously apply high standards of courtesy, professionalism, fairness and honesty when dealing with partners, suppliers, customers and competitors. We will report unethical practices by any other party to our leader or the TELUS EthicsLine. We do not support any form of dishonesty, including facilitation payments or other types of bribery, kickbacks and extortion, either directly or indirectly through an agent or third party. Local customs do not provide an exception to this requirement. Team members should be aware there are national and international laws

regarding bribery and corruption that apply to TELUS and that have significant potential civil and criminal penalties for violations. Team members should refer to the Anti-Bribery and Corruption Policy for further details.

Facilitation payments are typically small, unofficial payments made to secure or expedite the performance of a routine government action by a government employee or official. For example, a team member might be asked for a facilitation payment in order to obtain routine permits to do business, to process visas and work orders, to obtain mail or telephone services, or to expedite shipments through customs. Facilitation payments are bribes and are strictly prohibited, even where they may not be illegal in a particular jurisdiction. Further guidance on bribes may be found under Gifts and Benefits below and in the Anti-Bribery and Corruption Policy.

We are fair in what we say about others' products and services and do not improperly seek corporate trade secrets or confidential information belonging to others. If we receive unsolicited information that appears to be another party's corporate trade secrets or confidential information without the owner's consent, we will immediately inform our leader and not copy, distribute, or use it until we have obtained guidance from our leadership and/or Legal Services. Team members or contractors who have worked for a partner, supplier, customer or competitor will not be requested to provide confidential information about that party. This does not preclude gathering information with the owner's consent or from the public domain. Team members should refer to the TELUS Code of Conduct for Business Sales Activities for further details.

We are committed to lawful competition based upon the merits of our products and services and do not support any agreements or actions that restrict or impede fair competition in contravention of applicable law. Competition (anti-trust) law is complex, and global in reach, and its application depends on the facts of a particular case. Team members with sales, marketing and pricing responsibilities, as well as senior leadership, function in areas that tend to involve risks for violating competition laws, particularly matters that include:

- establishing terms and conditions as well as pricing and promotional strategies for TELUS products and services
- developing advertising materials for TELUS products and services
- negotiating, communicating or interacting with competitors
- handling or using data about competitors
- participating in trade associations that include competitors as participants, or
- selecting or negotiating with vendors

Team members performing these functions should consult with Legal Services to ensure they are appropriately educated and trained with respect to competition law, and that they receive appropriate advice and specific guidelines to address relevant competition law issues that are applicable to their situation. Team members are also required to report to Legal Services any contravention or suspected breach of competition law requirements. In addition, it is often essential to involve legal counsel early in the process of developing new commercial initiatives given the many uncertainties that can arise in the application of this area of law.

Dealing with Governments

TELUS values its relationships with governments at all levels. Team members dealing with governments must be aware of legal, regulatory and policy requirements in such areas as lobbying, gifts and benefits, conflict of interest, bribery and corruption, hiring ex-government employees and procurement processes. Team members should also refer to the TELUS Code of Conduct for Business Sales Activities and the Anti-Bribery and Corruption Policy for further details.

TELUS actively and openly communicates with all levels of governments and legislators, expressing views that affect our business and our industry. Team members or consultants acting on behalf of TELUS do not engage in lobbying activity unless they are registered as lobbyists and authorized to do so by TELUS' Government Relations. Team members having contact with elected officials, their staff, civil servants or crown corporations' employees should consult with the Government Relations team to ensure compliance with the appropriate lobbying regulations.

Team members should be aware of laws and regulations restricting or prohibiting government officials from accepting gifts or entertainment or from placing those officials in an actual or perceived conflict of interest with regard to their employer.

Team members should be aware of restrictions placed by governments on their former employees from accepting employment or work, or advising or accepting appointment to a board of directors of entities with which they had significant official dealings for a specified period of time after leaving government employment.

Political Activities

As private citizens, we are free to make personal contributions to causes, candidates or political parties of our choice. Unless expressly approved by TELUS, we will not associate TELUS with our personal political activities. TELUS will not reimburse personal political donations in any form. As a responsible corporate citizen, TELUS will occasionally make contributions to a political party, campaign or candidate in Canada, as a means of supporting the democratic process, but only where legally permitted and not to secure favours or preferential treatment. All political contributions, whether direct, sponsorship or in-kind, must be made through the Government Relations team. No political contributions are permitted in countries other than Canada.

Proprietary Rights and Assets of Others

We respect the proprietary rights and assets of others. These include both tangible properties and intangible assets such as those protected by

intellectual property rights. Intellectual property rights include trademarks, copyrights, patents, industrial designs, confidential information, know-how and trade secrets. Examples of assets containing intellectual property rights that we may come across in our work include, but are not limited to, written materials, logos, creative suggestions, pictures, audio and video products and computer software. We respect licenses and conditions of use that apply to the intellectual property of others. Copyright materials are not copied in whole or in part, or used in violation of any law or agreement with vendors, licensors or any other party. Software license conditions may be included in instruction manuals, in separate documents, or on the disk itself, and breaking the seal on a disk package may constitute acceptance of the stated agreement.

Human Rights

We are committed to treating all current, potential and past team members, and all partners, suppliers, shareholders, and customers (and others who deal with us) in a non-discriminatory and harassment free manner and to maintaining a work environment that supports the contribution, worth and human rights of all team members. We believe the diversity of our team is a significant competitive advantage and we believe diversity thrives when we honour the traditions, beliefs, lifestyles, abilities and perspectives of all members of our team.

Every team member has the right to a workplace that is free of unacceptable behaviours such as discrimination and harassment and has the obligation to treat others in the same manner. Unacceptable behaviours include discrimination and harassment based on race, national or ethnic origin, colour, religion, age, sex, sexual orientation, marital status, family status, disability and conviction for which a pardon has been granted or in respect of which a record suspension has been ordered.

It should be noted that the TELUS “work environment” and “workplace” is not limited to TELUS’ business premises and is not limited to normal business hours. These terms also encompass any activities or events that happen outside of normal business hours or off TELUS business premises, but are linked to the TELUS workplace and the team member’s employment with TELUS.

Though the spirit of the law is the same, the human rights legislation that TELUS companies are subject to may differ slightly, depending on which company is involved and which jurisdiction it is operating in. For example, some of the grounds for discrimination and harassment may differ slightly. Details are provided in the Respectful Workplace Policy to which team members are referred for more information.

Our commitment to inclusiveness includes the provision of workplace accommodation in accordance with the law to permit qualified persons who face some barrier (e.g. persons with disabilities) to do their jobs. Examples of accommodation may include physical or technical changes to work stations and changes to work duties. Details are provided in the Workplace Accommodation Policy to which Canadian team members are referred for more information.

Health and Safety

We are committed to having healthy and safe operations in all our locations to protect the lives and health of our team members, to protect our assets, to ensure business continuity and to engender public trust. When working on customer premises and public thoroughfares, we safeguard the rights and safety of the customer, the public and ourselves as outlined in the Health and Safety Policy.

We monitor progress towards our objective of preventing injuries, illnesses and incidents and continually assess and improve, where appropriate, our health and safety technologies and programs. We provide training to team members to help them understand and incorporate safe behaviour in their daily business activities. We have operating standards, practices, systems and resources to implement the Health and Safety Policy.

We are expected to report and to remain fit for work, without any limitation due to the effects of alcohol, illicit drugs, medication, or any other mood altering substance, so that our ability to perform our job is not weakened, diminished, or adversely affected in any way. Our actions with respect to the use of drugs, alcohol, and other mood altering substances not only reflect on us as individuals, but on TELUS as a whole. Team members are referred to the TELUS Alcohol and Drug Corporate Policy for further details.

We are committed to providing a safe and violence-free workplace for all team members. Workplace violence may include conduct such as bullying, teasing, abusive and other aggressive behaviours. Workplace violence is not only an employee health and safety issue, but also may be a criminal law issue. Consequently, workplace violence will not be tolerated and every incident will be investigated. Team members are referred to the Violence Prevention in the Workplace: Investigation and Reporting Policy for further details.

Involvement in a legal matter

If you are involved in a legal matter, whether of a civil, criminal or regulatory nature, that has the potential to affect your ability to perform your job or harm the reputation or interests of TELUS, you must immediately inform your leader.

Environment

TELUS is committed to being an environmental leader by meeting or surpassing applicable legal and regulatory requirements regarding the protection of the environment. We embrace this responsibility to all of our stakeholders by integrating environmental considerations into our business operations. We support sustainable development and offer innovative telecommunications solutions that include environmental benefits, and we look to minimize waste generation and energy consumption in all of our activities. Striving for continuous improvement guides our approach.

Detailed information on our commitment to the environment can be found in our Environmental Policy and the company’s internal website, under

Environment, where team members will find guidance on our environmental management system and all environmental procedures, including the immediate reporting of all spills and hazardous chemical releases.

Sustainability

In addition to being committed to doing business fairly, honestly, ethically and legally, we are committed to doing business in a sustainable manner. Team members are encouraged to consider economic, social and environmental factors in their day to day strategic planning, decision making and operations.

Detailed information on our Sustainability vision and focus areas can be found in our Sustainability report.

Improper Influence on the Conduct of Audits

Team members, or any person acting under the direction of a team member, are prohibited from directly or indirectly taking any action to improperly influence, coerce, manipulate or mislead the Company's external or internal auditors or their representatives.

Case Studies

Problem

We recently hired someone who held an executive position with one of our competitors. This person was deeply involved in planning the competitor's expansion strategy and has information that would be very valuable to us. Can we ask him to disclose confidential aspects of this information?

Action

No. The new team member has an obligation to protect his former company's confidential or proprietary information, just as you would be obliged to protect the confidential or proprietary information of TELUS if you were to leave the company. You must respect the team member's personal integrity as well as his obligation to his former employer.

Problem

I become aware that a team member is disclosing third party (competitors, suppliers, customers, etc.) confidential information to other TELUS team members. What should I do?

Action

Report this to your leader or to the EthicsLine immediately. TELUS' reputation could be significantly harmed by such disclosure, and this could also expose TELUS to potential legal action. Taking immediate steps to contain the confidential information is critical.

Problem

My leader frequently makes racist comments about one of my co-workers. This personally offends me but, because my leader is involved, I don't feel I can speak up. What should I do?

Action

Racist comments are unacceptable. You have a right to express your disapproval of such comments — without fear of reprisal. If you are uncomfortable approaching your leader, you should speak to the Respectful Workplace Office in People & Culture (Human Resources) or your leader's leader.

Problem

We use a contractor to dispose of hazardous materials such as lead. I know the contractor's crew chief and I get the feeling that they may not be disposing of the materials correctly, at least not according to the law. Should I care about this? After all, it is not my company and they are probably saving us money.

Action

Yes, you should care because what the contractor is doing may expose TELUS to liability. In addition, improper waste disposal is inconsistent with our commitment to sustainable practices and to reduce the environmental impact of our activities. If team members believe someone we work with is doing something wrong they should talk with their leader, the TELUS Environment department or call the EthicsLine.

Company Assets and Information

Company assets are both physical (e.g. equipment, real estate, supplies, tools, funds, communications networks) and non-physical (e.g. software, non-public information, electronic records, intellectual property, brand, goodwill, reputation). We take appropriate care to protect company assets and information against undue risks, exposures and liabilities.

Company Information

As team members of TELUS, we have access to information about our company that belongs to TELUS and is used by the company for its business. Unless specifically published for external use and public dissemination has occurred, all company records, information, reports, data, plans, processes and methods are considered company information and are prohibited from disclosure without proper authorization. Access should be limited to those team members with a legitimate business reason to know the information. Team members are referred to the Corporate Security policies for further details on the classification and safeguarding of TELUS' information assets.

Team members and past team members, must not use or disclose corporate trade secrets, competitive information or other confidential and/or proprietary information to benefit themselves or others. In situations where we would be willing to share information, Legal Services can assist in preparing a confidentiality agreement or license agreement to protect TELUS.

To protect the accuracy of our records, only approved software is to be used on TELUS equipment. No team member should knowingly install or use a software program or code that could damage TELUS' information assets. All team members are responsible for taking reasonable measures to ensure that software and data is clear of malicious code and safe for use in TELUS' electronic data processing environment.

Public Disclosure

TELUS is subject to strict securities rules regarding disclosure of financial and other material information to the public. Selective disclosure of confidential information by any team member can create liabilities for TELUS and for that team member. All discussions about TELUS in a public environment should comply with the Policy on Corporate Disclosure and Confidentiality of Information, to which team members are referred for further details.

Examples of situations that may lead to inappropriate public disclosure include:

- Participating in an investment-related discussion forum, social networking site, chat room, blog or bulletin board on the Internet. The team member must not discuss any confidential information about TELUS when participating in these activities.
- Contact with a member of the investment community or the media. All inquiries from these groups must be referred to those team members authorized to communicate on behalf of TELUS. For further information, contact Investor Relations or Corporate Communications.
- Presentations to business, educational, community groups or large internal TELUS audiences. Team members invited to make such presentations should receive approval from the Vice President Investor Relations prior to accepting the

invitation. In addition, all such public speeches and presentations must be provided in advance to Investor Relations for review where requested by them.

Business Records

Accurate, reliable records are essential for effective company management to enable us to meet our business, legal and financial obligations. We strive to ensure all reports (whether for external or internal use), records and other data are factual, complete, timely and understandable. Restricted and confidential information should be properly identified and respected as such.

Every business needs an orderly process for retaining and disposing of records and documents in order to comply with legal and regulatory requirements. Team members are referred to the Records Retention Policy for guidance on minimum and maximum retention periods, storage of records, and suspension of records destruction due to a potential or on-going litigation matter or investigation and where to obtain further information.

It is a violation of this Code as well as other TELUS policies to create false or misleading company records or documents (including, for example, contracts, orders, time sheets, benefit claims, adjustments and expense statements).

Financial Transactions

All team members are expected to understand their role and responsibility for the company's financial transactions and records and follow approved procedures to protect, report, control and accurately reflect these transactions. Team members are referred to the Signing Authority Policy and other Finance policies for further details.

It is a violation of the Corporate Credit Card Policy and /or Employee Expense Policy to misuse company-issued credit cards or make misrepresentations on expense statements. We do not tamper with the network to bypass billing and we do not make unauthorized charges or credits to customer accounts.

Team members whose duties involve authentication and approval are responsible for the close scrutiny and timely verification of all documents upon which monies are paid or received in compliance with TELUS policies.

Safeguarding Assets

We display pride of ownership on behalf of the TELUS team as we protect company facilities, equipment, tools, supplies, vehicles, funds,

communication networks and information systems against loss, theft, damage, vandalism, neglect, unauthorized use and unauthorized disposal.

Team members are expected to take reasonable measures to safeguard access controls such as passwords, identification cards, keys, cards and hand-held user authentication devices. We are careful not to compromise security of sites by leaving access doors open and unattended. It is also important that we not share our company-provided computer or other communication devices or their access passwords. Team members are the first line of defense in protecting TELUS assets.

Intellectual Property

Our intellectual property is a valuable TELUS asset. Intellectual property rights enable TELUS to be known and recognized in the market place and help distinguish our products and services from those of our competitors. Intellectual property rights also protect the valuable intangible assets generated or acquired by the TELUS team. At TELUS, we work together to protect our intellectual property just as we respect the proprietary rights of others as noted above.

Intellectual property rights include trademarks, copyrights, patents, industrial designs, confidential information, know-how and trade secrets. Examples of materials involving intellectual property rights that we may come across in our work include, but are not limited to, branding, logos, creative suggestions and ideas, pictures, audio and video products, written materials and computer software. When our team creates intellectual property — individually or as part of a team — this property is owned by TELUS and we work to document the ownership of such intellectual property.

Team members should contact Legal Services for further information about intellectual property matters or the Brand Office for information on use of our brand.

Personal Use of Communication Devices

In our future friendly world, communication devices (whether the company's or our own) are used for both business and personal purposes. Electronic communication may occur via a wide range of devices including, but not limited to, computers, telephones, smartphones, webcams and fax machines. This can take the form of emails, texting, Internet searches, photographs, videos, audio files, blogs, social networking, peer-to-peer file transfers and physical exchange of media (e.g., CD's, USB storage devices and devices such as iPods). As we communicate in any of these ways, we may identify ourselves as TELUS team members either by naming the company or by virtue of email or IP addresses.

While we permit team members to use TELUS-provided communications devices for personal purposes, such use should be limited, should not interfere with our duties or negatively impact TELUS in any way. We expect any such personal use to take place before or after the normal working day, or during reasonable permitted breaks from business work, subject to local leadership approval and the needs of the business.

Team members must comply with all TELUS policies when using TELUS-provided communication devices for personal use. We are responsible for all of our actions while using such devices. TELUS uses automated tools to log team member use of its networks (e.g. voice, email, messaging, Intranet and Internet) and related equipment and devices and to monitor traffic (including content) on its networks in order to detect security threats and other problems. Team members are referred to the Corporate Security policies for further details on the acceptable use of company-provided equipment and devices and to the Social Media Guidelines for more information on blogs, wikis and social networking. Improper use of the company's networks, equipment and devices may result in disciplinary action up to and including dismissal for just cause.

In our personal electronic communications using either TELUS-provided devices or personal devices where we are identified as a TELUS team member, we should:

- Remember that these communications provide a permanent record and we may be operating in a public space.
- Use common sense when offering our personal opinions to avoid subjecting either TELUS or ourselves to legal action. To help avoid confusion, add the following notice: "the views expressed on this website/weblog/email are mine alone and do not necessarily reflect the views of my employer".
- Not disclose information that is confidential to TELUS or provided in confidence to TELUS.
- Show respect towards other persons and organizations and avoid defamatory, discriminatory, harassing or sexual messages.
- Avoid offensive content of any kind, including pornography and materials promoting violence, discrimination or hatred.
- Not display the TELUS logo or brand images in personal communications without written permission from a senior leader or the Brand Office.
- Not disclose personal information about ourselves that we do not want the public to be aware of, nor disclose personal information about others.

Case Studies

Problem

I have a friend who is starting a new business and has asked me for a list of TELUS customers who might be interested in her services. Is it ok to provide a list of potential customers?

Action

No. Our customer lists are private and should never be shared with anyone outside TELUS (or with anyone inside TELUS who does not need the information to do his or her job)

Problem

I am a member of a team working on a part of the quarterly financial results. In the course of my work, I regularly see the draft package of all the results before they are approved for release. One evening, my neighbor asks me, “How is TELUS doing these days?” In this casual conversation, is it acceptable if I answer, “Well, I can tell you one thing: the results are really good this quarter.”

Action

No, this is not acceptable. This information is not yet public and therefore it should be regarded as confidential and/or proprietary company information. In addition, if this information is material (i.e. would reasonably be expected to have a significant effect on the value or price of TELUS shares), you would be engaging in “tipping” in violation of securities law and the Policy on Corporate Disclosure and Confidentiality of Information.

Problem

I would like to search for a new car on the Internet and compare notes with friends on a social networking site. Is this allowed from my workstation?

Action

It depends. Reasonable personal use of your TELUS-provided communication device to access the Internet is allowed provided it complies with our policies, is carried out on personal time, does not interfere with your work or negatively impact TELUS in any way. Remember that business needs must take priority in the allocation of our time at work.

Problem

While surfing the web, I came across a forum where people discuss TELUS products and services. I saw questions, praise and some criticism of TELUS. What should I do?

Action

Unless you are a specifically authorized TELUS spokesperson in this forum, we encourage you not to participate in discussions about TELUS on the Internet. You may open yourself and TELUS to unacceptable risk since you may inadvertently disclose confidential information about TELUS as you defend the company or be viewed as speaking on behalf of TELUS when you have not been authorized to do so.

If you do participate in such discussions in a personal capacity (i.e. not identified as a TELUS team member) you may not discuss confidential information about TELUS.

If you are providing a positive review of TELUS products and services, or endorsing or recommending TELUS products and services, you must identify that you work for TELUS. Best practice however is that you should refrain from reviewing or commenting on TELUS products or services in social media or public forum platforms altogether.

Conflict of Interest

As team members, our first business loyalty must be to TELUS. We must avoid situations or relationships that conflict with the interests of the company and our duties to TELUS. A conflict arises whenever we allow, or appear to allow, personal interests or relationships to impair our judgment and ability to make work related decisions with integrity and honesty. By thinking of ourselves first, we may act in a way that is damaging, or potentially damaging, to TELUS. We may also harm our personal reputation. In such circumstances, team members must take action to eliminate the conflict of interest or the perception of a conflict of interest.

We must disclose actual or potential conflicts of interest to our leader. Each situation must be considered individually and the potential for conflict of interest determined based on the parties involved, level of access to business information, decision-making authority, job duties/responsibilities, position within the organization and potential impact on others. If we are in a conflict or are unsure, we should complete a “Conflict of Interest Questionnaire” available on the company intranet and submit it to the Ethics Office.

The following is intended as a guide in those areas in which conflicts of interest most often arise. It is not intended to be definitive or all-inclusive, as guidelines cannot cover every situation that could give rise to a conflict of interest.

Personal Gain

Conflict of interest may occur when a team member or family member gains a personal benefit from: (a) a business relationship with TELUS, or (b) from an outside business with which TELUS has a relationship such as a partner, supplier, customer, competitor, contractor, consultant,

agent, or dealer. This personal benefit may take the form of an ownership interest in, or a role as a director, officer or employee of, an entity that is engaged in a business relationship with TELUS.

Team Members may not

- be involved in any negotiations or transactions on behalf of TELUS with partners, suppliers, customers, contractors, consultants, agents, or outside parties where the team member has a personal, commercial or financial interest in the outcome of the negotiations, or transactions unrelated to their role at TELUS.
- Access or make adjustments to their own TELUS accounts or services or those of their family or friends.

This guideline does not prohibit team members from holding publicly traded shares of an entity with which TELUS has a business relationship or a competitor provided that the team member does not have a significant investment in the entity and does not acquire the shares based on material undisclosed confidential information obtained as a result of employment with TELUS or by being a member of the Board of a TELUS company.

Family Members and Personal Relationships

A conflict of interest may occur when a team member has the ability to enhance or promote the interests of a family member.

Team members may not:

- participate in a decision to hire, transfer or promote a family member, or be in a position of direct or indirect influence over a family member as an employee or contractor. Team members recommending the hire of an employee or retainer of a contractor must disclose any current or past relationships, both professional and personal.
- supervise a family member nor have direct or indirect authority over employment or contract-related decisions that impact a family member such as pay, performance ratings, work assignments, discipline, training or termination.
- access or make adjustments to the accounts or services of family members, friends, co-workers or acquaintances without authorization from their leader. Team members in Customer Solutions Delivery may only do so if specifically authorized by trouble ticket or customer order and authorization is gained from their leader.

For the purposes of this part of the Code, “Family member” is defined as a spouse (including common-law spouse and same-sex partner), child, stepchild, parent, sibling, niece, nephew, aunt, uncle, cousin, grandparent, grandchild, in-law (including mother-in-law, father-in-law, son-in-law, daughter-in-law, sister-in-law and brother-in-law). It also includes close personal friendships and any person (other than domestic employees) residing in the same household as the TELUS team member.

Situations may arise where broader familial relationships, friendships and other close personal associations (e.g. persons residing in same household as the TELUS team member) cause real or perceived conflicts of interest or the possibility of real or perceived improper influence. Team members should be sensitive to these concerns and demonstrate good business judgment in the best interest of TELUS and in keeping with the spirit and intent of this Code. Any uncertainty should be discussed with the appropriate People & Culture (Human Resources) business partner or with the Ethics Office.

TELUS Board members must disclose any family or personal relationship with TELUS team members or with TELUS job applicants to the Chair of the Corporate Governance Committee of the Board in order that the Committee may determine whether the relationship impacts the Director’s independent status.

Board members, executives and senior leaders have a duty to disclose whether they have a relationship with the company’s external auditor.

Outside employment and other non-TELUS activities

We are free to engage in outside business activities on our own time. However, these activities must not conflict, or have the potential to conflict, with TELUS’ best interests or with our ability to perform our job for TELUS. As a general guideline, we may not work for, or be engaged in business activities for, enterprises that are competitors or suppliers of TELUS. A conflict may also arise if, for example, we use assets such as our corporate phone or laptop, or tools paid for or developed by TELUS when engaged in such outside business activities. If you are considering starting your own business or accepting a

second job, you are required to advise your leader to ensure there is no conflict of interest.

It is a conflict of interest to have an outside interest that demands so much time and energy that it interferes with the team member’s ability to do TELUS work. This could include any personal, community and charitable activities that require time and effort during normal working hours, except for situations where the individual is acting in a representative capacity at the request of TELUS with the explicit and written permission of his or her leader.

Future TELUS Business

Over time, TELUS may expand into new businesses or change its product lines or services. Team members are responsible for re-examining their individual situations on a regular basis to avoid becoming involved in a conflict of interest situation where no such conflict previously existed.

Information

Team members may not disclose or use for any personal reason, including personal gain, any confidential information (including competitive intelligence) obtained through employment with TELUS or by being a member of the Board of a TELUS company.

Insider Trading

As detailed in the TELUS Insider Trading Policy and summarized here, team members may not trade in shares or other securities of TELUS or any other company while in possession of undisclosed material information relative to the company whose securities are being traded. Nor may team members inform or tip any other person, including their family, of any undisclosed material information, other than in the "necessary course of business". The "necessary course of business" exception is a limited one and exists so as not to unduly interfere with a company's ordinary business activities. Please see the TELUS Insider Trading Policy for more information.

Material information in respect of a company is information that could reasonably be expected to have a significant effect on the market price or value of any securities of that company.

Gifts and Benefits

A gift can be anything of value. A gift may include tangible items such as cash, jewelry and art.

A benefit includes intangible items such as discounts, services, loans, favours, special privileges, preferential treatment, advantages, and rights that are not available to the general public. They include invitations to sporting, cultural, charitable or social events, or access to discounts and loyalty programs. While their value may sometimes be difficult to quantify in dollars, they may be highly valued by the intended recipient and therefore used to influence their behaviour.

It is important to remember that "anything of value" can also include things that benefit the recipient's family members or friends.

TELUS team members shall not authorize, offer or accept, directly or indirectly, gifts, or benefits to or from any organization or person having business dealings with TELUS other than as described below. These guidelines apply at all times and do not change during traditional giving events or seasons.

It is not a conflict of interest to authorize, offer or accept hospitality or entertainment or to offer a discount or gift certificate for TELUS products and services, provided it is reasonable, and is within the limits of responsible and generally accepted business practices. However, team members should not authorize, offer or accept gifts or benefits that are intended to influence, or appear to influence, a particular business decision.

Gifts of cash or cash equivalent (such as a gift card) should not be authorized, offered or accepted, regardless of the amount.

Reasonable gifts and entertainment are courtesies intended to engender goodwill and positive working relationships among business partners. We do not, however, want to use improper means to obtain business or gain any special advantage in a business relationship.

Gifts and benefits that are acceptable for TELUS team members to authorize, offer or accept in the normal course of business are typically less than $250 Canadian or the close equivalent in other currencies and include:

- Attendance at local sporting or cultural events
- Business lunches or dinners
- Transportation to or from the customer's or supplier's place of business
- Hospitality suites
- Small seasonal holiday gifts or prizes to be used in office draws and raffles

Business meals and entertainment provided by external parties must be unsolicited, infrequent with any particular business or person, in good taste, and undertaken for legitimate business reasons, including engendering goodwill. If the provider of the meal or entertainment is not in attendance, it is considered a gift and can only be of nominal value.

If you are not sure whether a gift or benefit is acceptable, ask yourself:

- Would the gift be considered customary given the nature of your role with TELUS?
- If the gift or benefit was reported in the media or to the TELUS President and CEO, would the perception be neutral or positive?
- Would the gift complement or enhance a business relationship?
- For offers of hospitality or entertainment, is the person extending the offer attending with you?

If the answers to these questions are "yes," and based on your good faith assessment, you may accept the gift.

If the answers to these questions are "no", you should politely decline the gifts or entertainment. If that would be difficult or embarrassing to the provider, ask your leader or contact the Ethics Office for advice.

It is important to remember that while something less than $250 is typically considered an acceptable value for a gift or benefit, in certain circumstances it may be considered a bribe (and therefore not permitted) since a bribe does not have a specific minimum value. A bribe is any payment, gift or benefit that is intended to influence the judgment or conduct of a person in a position of power, authority or trust to try to obtain a business advantage. It also includes a payment, gift or other benefit that is intended to reward a person for a business advantage that has already been given. As mentioned above in the context of facilitation payments, bribe amounts can often be relatively small. The determining element is the exchange of personal benefit for business advantage. Reasonable hospitality conferred with a view to engendering goodwill and without an expectation of a specific business advantage in return is not a bribe.

It may be appropriate to attend third-party paid seminars, conferences or vendor-hosted events if there is a clear benefit to TELUS for attending and the attendance is approved in advance by the team member's leader. To avoid a real or perceived conflict of interest, team members should consider having TELUS fund incremental expenses (e.g. airfare and hotel).

Team members with supplier selection, negotiation, purchasing or contract management roles within TELUS are subject to more stringent professional purchasing requirements regarding gifts and benefits and maintaining appropriate relationships with suppliers and should therefore not accept any gifts or benefits from suppliers or potential suppliers without the explicit and written permission of their leader. Where the value of any gift or benefit is $250 or greater, the leader must also provide a copy of his or her authorization of that particular gift or benefit to the Ethics Office at ethics@telus.com (including a description of the gift or benefit, approximate value, the name of the party conferring the gift or benefit and the reason).

Team members with supplier selection, negotiation, purchasing or contract management roles are not limited to team members within the Procurement and Supply Chain Management team, but include team members in any area of TELUS that have the ability to either make or influence decisions around matters including:

- the selection of suppliers, including service providers such as law firms, accounting firms, IT professionals, consultants, and suppliers of any type of hardware, software, equipment or other tangible items;
- the negotiation of contract terms with one or more supplier(s);
- the volume of goods or services to be purchased or acquired from one or more supplier(s); or
- the ongoing management of the relationship with one or more supplier(s), including decisions whether to renew or terminate any such relationship.

Case Studies

Problem

A vendor has offered me tickets to a local hockey game. Can I accept them?

Action

Possibly. If the vendor is inviting you to attend the game with a representative of the vendor, this may be acceptable business entertainment providing that it is:

· undertaken for business reasons, including engendering goodwill
· infrequent
· without intent of influencing business decisions
· consistent with our Code and values

If the vendor is not attending, then the tickets would be considered a gift and must comply with the Gifts and Benefits guidelines.

Problem

I work in a senior marketing position at TELUS and operate my own business after hours. Though I use my marketing skills, the business in no way competes with TELUS business and does not affect my ability to perform my duties at TELUS. I started small, working out of my basement, but my business is gradually generating more and more revenue. I am considering hiring a part-time manager, as I am not ready to leave my full-time employment. Once my own business can pay me as much as TELUS does, I will devote my full attention to it. I have the best of both worlds - a salary from TELUS and a blossoming business for future security. Is this a conflict of interest?

Action

No. If, however, TELUS decides in the future to enter the same line of business that your company is in, you will be in a conflict of interest position, even though you were in that business first. You must then decide which of your two interests, your own company or your employer's, will receive your full attention. Since TELUS is not currently in the same line of business as your company, you are operating ethically, as long as it remains an after-hours pursuit and does not interfere with your ability to perform your job for TELUS to the best of your abilities.

Problem

I recently married the owner of a local franchise selling a competitor's cellular phone service. We have agreed not to talk about our days at work. Recently, my leader advised me that I could be in a conflict of interest position. What should I do?

Action

You are in a situation that may leave the impression of a conflict of interest. Even though you and your new spouse have decided not to talk about your business lives, people outside the marriage—including your employer—may perceive you are in a conflict of interest position. You should discuss your situation further with your leader and the Ethics Office as necessary and identify the extent to which your access to TELUS' information could benefit your spouse's company and develop alternatives to avoid any appearance of a conflict of interest.

Problem

I install telecommunications inside wiring for TELUS small and medium-sized business customers. With the growth of communications services, demand for my expertise is booming. Can I take advantage of this opportunity and start up an installation business on my own time?

Action

No. You cannot engage in any outside activity that might take business away from TELUS or any of its subsidiaries.

Problem

Part of my job involves the selection of technology suppliers. One day, a technology supplier phoned me and offered me and my family free use of his luxury vacation condominium. He says he is not using it and it would be a shame to have it sit empty. Can I accept the offer to use the supplier's condominium?

Action

No. The supplier has made a very generous offer which could appear to be offered in exchange for future special treatment from you in your position with TELUS. You should decline the offer.

Problem

While at lunch, I overheard a conversation between two other TELUS team members regarding company plans to make a minority investment in a business that develops communications software. Can I buy shares in the software company or suggest to my spouse that she do so?

Action

No. Although you found out about TELUS' planned investment by accident, you are prohibited from buying shares by virtue of the fact that you are a member of the TELUS team. Your spouse is also prohibited, because she would be obtaining information about the proposed investment from you, a TELUS team member. However, you and your spouse will be able to buy shares when TELUS' investment in the software company becomes publicly disclosed.

Problem

As a network engineer with TELUS, I have significant influence over the selection of the company's suppliers. I have known the owner of one of TELUS' suppliers since we were kids and have always maintained a close personal relationship. I have no personal, commercial or financial interest in the supplier. Is there still an appearance of conflict?

Action

Yes. Although you may not have a personal, commercial or financial interest in the outcome of the business relationship with this person, there may still be an appearance of bias or preferential treatment towards their company. You must eliminate the perception of conflict of interest by removing yourself from any selection process involving that company or by having a second person (a superior or a peer) co-approve the supplier selection decision.

Problem

I am a customer service manager with TELUS and my nephew is seeking employment as an engineer with TELUS. Am I able to recommend him for employment?

Action

Yes. To avoid a conflict of interest, you should have no involvement in the selection decision. However, you may provide a written personal reference to the appropriate HR recruiter.

Problem

I am travelling abroad later this month and need to get a work visa quickly. The person processing my request at the embassy has said that they can speed up the process if I pay a small fee in cash. Is this okay?

Action

It depends. If it is an official fee that the embassy charges for published “fast-track” services, payment of this fee would be O.K. However, if it is a payment to the person processing the request, then it is a bribe and prohibited. You must ask for a receipt or other official documentation as proof that the fee is legitimate. If the person will not provide any official documentation for the payment and you are uncertain whether it is legitimate, you should first consult with your leader or the Compliance and Privacy Office.

Dealing with Suppliers

We value our relationship with suppliers (including contractors and consultants) and those acting on behalf of TELUS because they contribute to our overall success. We strive to ensure our business dealings with them are ethical and that they understand our expectations of them as outlined in our Supplier Code of Conduct.

Selecting Suppliers

- We strive to award business to suppliers who are in compliance with applicable laws in their business operations, including in their relationships with their employees, their communities and TELUS.
- We strive to select our suppliers based upon objective and fair criteria including, but not necessarily limited to, business need, price, service, quality, reputation for ethical conduct and health, safety and environmental business considerations.

Adherence to applicable TELUS policies

- We expect the suppliers with whom we do business to demonstrate values and standards similar to those in the applicable TELUS policies.
- We strive to ensure that our suppliers are made aware of TELUS policies that are applicable to the work for which they are being engaged.

Supplier-funded incentive programs

- Supplier-funded incentive programs, often offered to our sales team by suppliers seeking to sell their products and services, must be approved in advance by an authorized program administrator who does not work with the eligible team members.

Review Guidelines and Policies

If you need further assistance, consider the following additional policies as they may apply to your situation.

Alcohol and Drug Corporate Policy
Anti-Bribery and Corruption Policy
Attendance Policy
Code of Conduct for Business Sales Activities
Corporate Credit Card Policy
Policy on Corporate Disclosure and Confidentiality of Information
Corporate Security Policies and Corporate Security Manual
Employee Expense Policy
Environmental Policy
Insider Trading Policy
Policy on TELUS and the Charter of the French Language
Records Retention Policy
Respectful Workplace Policy
Signing Authority Policy
Social Media Guidelines
Supplier Code of Conduct
TELUS Health and Safety Policy
TELUS Privacy Code
Violence Prevention in the Workplace: Investigation and Reporting Policy
Workplace Accommodation Policy
Work Styles Policy