

August 5, 2016

TELUS reports strong results for second quarter 2016

Strong customer loading in all key segments with 92,000 net new postpaid wireless, Internet and TELUS TV customer additions

Industry-leading wireless monthly postpaid churn of 0.90 per cent, ARPU growth of 1.4 per cent and best-in-class lifetime revenue per client at \$5,600

Consolidated operating revenue up 1.5 per cent and EBITDA up 4.3 per cent

\$1 billion returned to shareholders year-to-date

Vancouver, B.C. – TELUS Corporation’s consolidated operating revenue grew 1.5 per cent to \$3.1 billion in the second quarter of 2016 from a year earlier, driven by continued higher data revenue and subscriber additions in both wireless and wireline operations. Earnings before interest, income taxes, depreciation and amortization (EBITDA)¹ increased by 10 per cent to \$1.2 billion. When excluding gains from the exchange of wireless spectrum licences and net gains and equity income related to real estate joint venture developments in the second quarter of 2016, as well as restructuring and other costs from both reporting periods, adjusted EBITDA was up 4.3 per cent to \$1.2 billion. This growth reflects higher wireless and wireline revenue, as well as execution on operational efficiency and effectiveness initiatives.

“TELUS’ strong second quarter results and improved outlook reflect the effectiveness of our company’s industry-leading customer service and the robustness of our multi-tenet growth strategy,” said Darren Entwistle, President and CEO. “Impressively, our team continues to deliver strong subscriber, revenue and EBITDA growth in both our wireless and wireline businesses despite the economic challenges in Alberta.”

“Importantly, our strong financial performance further demonstrates TELUS’ ability to fund simultaneously our strategic growth investments as well as the TSX and NYSE’s only multi-year dividend growth and discretionary share purchase programs now running through 2019. Our consistent track record in this regard is unequivocal, as reflected by TELUS having returned \$13.3 billion to shareholders, including \$8.2 billion in dividends and \$5.2 billion in share purchases, representing over \$22 per share between 2004 and July 2016,” Mr. Entwistle added.

Doug French, TELUS Executive Vice-President and CFO said, “Our second quarter results are reflective of our team’s commitment to delivering growth, driving our efficiency and effectiveness initiatives, as well as continually putting our customers first. As we deliver on these key priorities, we also remain firmly committed to maintaining our balance sheet strength during this unique investment cycle, where we are making the critical network investments that are essential to driving customer satisfaction, delivering balanced long-term growth, and supporting our shareholder friendly initiatives.”

In wireless, data revenue was driven by continued subscriber growth, a larger proportion of higher-rate two-year plans in the revenue mix, a more favourable postpaid subscriber mix, and increased data usage from the continued adoption of smartphones and other data-centric wireless devices, as well as greater use of applications and the expansion of TELUS’ LTE network. Wireline data revenue growth was generated by growth in business process outsourcing revenues, an increase in Internet and enhanced data service revenues from continued high-speed Internet subscriber growth and higher revenue per customer, and continued TELUS TV subscriber growth.

In the quarter, TELUS attracted 92,000 net wireless postpaid, high-speed Internet and TV customers, up 61,000 from the first quarter of 2016. Net additions in the quarter included 61,000 wireless postpaid customers, 18,000 high-speed Internet subscribers, and 13,000 TELUS TV customers. These gains were

partially offset by the ongoing loss of traditional telephone network access lines and a decline in wireless prepaid customers. TELUS' total wireless subscriber base is up 0.9 per cent from a year ago to 8.4 million, reflecting a 2.1 per cent increase in the postpaid subscriber base to 7.4 million. TELUS' high-speed Internet connections have increased 6.4 per cent to 1.6 million, while TELUS TV subscribers are higher by 7.9 per cent to over 1 million.

TELUS' continued focus on customer service excellence was evident once again this quarter by delivering industry-leading wireless customer churn on a national basis with a monthly postpaid churn rate of 0.90 per cent. This is the eleventh quarter in the past 12 quarters that TELUS' postpaid churn rate was below 1 per cent, despite competitive pressures from the coterminous expirations of two-year and three-year contracts commencing in June 2015. Blended churn of 1.15 per cent in the second quarter of 2016 is among TELUS' lowest quarterly churn rates since becoming a national carrier 16 years ago. This result exemplifies the success of TELUS' differentiated customers first culture and its ongoing focus on delivering outstanding customer service, coupled with attractive new products and services.

CONSOLIDATED FINANCIAL HIGHLIGHTS

C\$ and in millions, except per share amounts (unaudited)	Three months ended June 30		Per cent change
	2016	2015	
Operating revenues	3,148	3,102	1.5
Operating expenses before depreciation and amortization	1,959	2,021	(3.1)
EBITDA ⁽¹⁾	1,189	1,081	10.1
EBITDA excluding restructuring and other costs ⁽¹⁾⁽²⁾	1,212	1,140	6.3
Adjusted EBITDA ⁽¹⁾⁽²⁾⁽³⁾	1,188	1,140	4.3
Net income	416	341	22.0
Adjusted net income ⁽⁴⁾	415	406	2.2
Basic earnings per share (EPS)	0.70	0.56	25.0
Adjusted basic EPS ⁽⁴⁾	0.70	0.66	6.1
Capital expenditures	769	664	15.8
Free cash flow ⁽⁵⁾	126	300	(58.0)
Total subscriber connections ⁽⁶⁾	12.494	12.342	1.2

- (1) EBITDA is a non-GAAP measure and does not have any standardized meaning prescribed by IFRS-IASB. TELUS issues guidance on and reports EBITDA because it is a key measure used to evaluate performance at a consolidated and segmented level. For further definition and explanation of this measure, see Section 11.1 in the accompanying 2016 second quarter Management's discussion and analysis.
- (2) For the second quarter of 2016 and 2015, restructuring and other costs were \$23 million and \$59 million respectively.
- (3) Adjusted EBITDA for the second quarter of 2016 excludes: 1) a \$15 million gain from the exchange of wireless spectrum licences; 2) net gains and equity income of \$9 million related to real estate joint venture developments; and 3) restructuring and other costs of \$23 million.
- (4) Adjusted net income and Adjusted basic EPS are non-GAAP measures and do not have any standardized meaning prescribed by IFRS-IASB. These terms are defined in this news release as excluding (after income taxes), 1) Gain on the exchange of wireless spectrum licences in the second quarter of 2016; 2) net gains and equity income from real estate joint venture developments in the second quarter of 2016; 3) restructuring and other costs in the second quarter of 2016 and 2015; 4) unfavourable income tax-related adjustments in the second quarter of 2015; and 4) asset retirement from planned closure of Black's Photography in the second quarter of 2015. For further analysis of Adjusted net income and Adjusted basic EPS see Section 1.3 in the accompanying 2016 second quarter Management's discussion and analysis.
- (5) Free cash flow is a non-GAAP measure and does not have any standardized meaning prescribed by IFRS-IASB. For definition and explanation of this measure, see Section 11.1 in the accompanying 2016 second quarter Management's discussion and analysis.
- (6) The sum of active wireless subscribers, residential network access lines (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. Our January 1, 2015 opening reported subscriber balance has been retrospectively adjusted to exclude 1,613,000 business NALs due to its diminishing relevance as a key performance indicator. Subsequent to a review of our subscriber base, TELUS' Q1 2016 beginning of period postpaid wireless subscriber base was reduced by 45,000 and its Q1 2016 beginning of period high-speed Internet subscriber base was increased by 21,000.

Net income of \$416 million and basic earnings per share (EPS) of \$0.70 were higher year-over-year by 22 and 25 per cent respectively, reflecting EBITDA growth and lower income tax expense partly offset by higher depreciation and amortization expenses and higher financing costs. When excluding the second quarter 2016 gains from the exchange of wireless spectrum licenses and net gains and equity income related to real estate joint venture developments, as well as restructuring and other costs from both reporting periods, unfavourable income tax-related adjustments and the asset retirement from the planned closure of Black's Photography in the second quarter of 2015, net income of \$415 million and EPS of \$0.70 for the second quarter of 2016 were higher by 2.2 and 6.1 per cent respectively.

Free cash flow⁵ of \$126 million in the second quarter was lower by \$174 million from a year ago, primarily due to higher capital expenditures, an increase in income tax payments, and higher restructuring disbursements partially offset by adjusted EBITDA growth.

In the second quarter of 2016, TELUS returned \$322 million to shareholders including \$261 million in dividends paid and \$61 million in share purchases under its 2016 normal course issuer bid (NCIB) program. Through the end of July TELUS has returned \$909 million to shareholders this year, including \$798 million in dividends paid and the purchase of three million shares for \$111 million.

TELUS is updating five elements of its 2016 targets to reflect improved performance in its wireless and wireline businesses, and the ongoing positive environment for its generational capital investments in broadband infrastructure.

Consolidated revenue: The Company is increasing the lower end of its consolidated revenue range by \$25 million to \$12.775 billion. The Company's new 2016 guidance is \$12.775 to \$12.875 billion, improving the targeted growth range for 2016 to 2.2 to 3.0 per cent.

The Company is increasing the lower end of its wireline revenue range by \$25 million to \$5.705 billion. The Company's new 2016 guidance is \$5.705 to \$5.735 billion, improving the targeted growth range for 2016 to 2.4 to 3.0 per cent.

Consolidated EBITDA excluding restructuring and other costs: The Company is increasing the lower end of its consolidated EBITDA excluding restructuring and other costs range by \$25 million to \$4.650 billion. The Company's new 2016 guidance is \$4.650 to \$4.755 billion, improving the targeted growth range for 2016 to 3.6 to 6.0 per cent.

The Company is increasing the lower end of its wireless EBITDA excluding restructuring and other costs range by \$25 million to \$3.0 billion. The Company's new 2016 guidance is \$3.0 to \$3.060 billion, improving the targeted growth range for 2016 to 3.9 to 6.0 per cent.

Consolidated capital expenditures: The Company anticipates full year consolidated capital expenditures to be approximately \$2.85 billion as compared to its previously estimated 2016 target of 'approximately \$2.65 billion'. The increase in capital investments reflects TELUS' continued focus on investing in broadband infrastructure to support the increasing demand for data services and higher network speeds, including connecting more homes and businesses to its fibre-optic network. TELUS also intends to continue investing in its wireless network for 4G LTE expansion and upgrades as well as in fibre to support its wireless small cell strategy in preparation for a more efficient and timely evolution to 5G.

The Company's original 2016 targets can be found in TELUS' fourth quarter 2015 results and 2016 financial target news release issued on February 11, 2016.

The preceding disclosure with respect to TELUS' 2016 financial targets, guidance and assumptions contains forward-looking information and is fully qualified by the 'Caution regarding forward-looking statements' at the beginning of the accompanying Management's discussion and analysis for the second quarter of 2016 and are based on management's expectations and assumptions as set out in TELUS' fourth quarter 2015 results and 2016 financial target news release and in Section 9 entitled 'General trends, outlook and assumptions' in TELUS' 2015 annual MD&A, as updated in TELUS' first quarter 2016 MD&A.

Dividend Declaration

The TELUS Board of Directors has declared a quarterly dividend of 46 cents (\$0.46) Canadian per share on the issued and outstanding Common Shares of the Company payable on October 3, 2016 to holders of record at the close of business on September 9, 2016.

This third quarter dividend represents a four cent increase from the \$0.42 quarterly dividend paid on October 1, 2015.

This news release contains statements about financial and operating performance of TELUS (the Company) and future events, including with respect to future dividend increases and normal course issuer bids through 2019, the 2016 annual targets and guidance that are forward-looking. By their nature, forward-looking statements require the Company to make assumptions and predictions and are subject to inherent risks and uncertainties. There is significant risk that the forward-looking statements will not prove to be accurate. The forward-looking statements contained in this news release describe our expectations at the date of this news release and, accordingly, are subject to change after such date. Readers are cautioned not to place undue reliance on forward-looking statements as a number of factors could cause actual future performance and events to differ materially from those expressed in the forward-looking statements. Accordingly, this news release is subject to the disclaimer and qualified by the assumptions (including assumptions for the 2016 annual targets and guidance, semi-annual dividend increases through 2019 and our ability to sustain and complete our multi-year share purchase program through 2019), qualifications and risk factors referred to in the accompanying second quarter Management's discussion and analysis and in the 2015 annual report, and in other TELUS public disclosure documents and filings with securities commissions in Canada (on SEDAR at sedar.com) and in the United States (on EDGAR at sec.gov). Except as required by law, TELUS disclaims any intention or obligation to update or revise forward-looking statements, and reserves the right to change, at any time at its sole discretion, its current practice of updating annual targets and guidance.

Second Quarter 2016 Operating Highlights

TELUS wireless

- Wireless network revenues increased by \$40 million or 2.6 per cent to \$1.6 billion in the second quarter of 2016, when compared to the same period a year ago. This growth was driven by an increase in data revenue due to subscriber growth, a larger proportion of higher-rate two-year plans in the revenue mix, a more favourable postpaid subscriber mix, and increased data usage from the continued adoption of smartphones and other data-centric wireless devices, as well as greater use of applications and the expansion of TELUS' LTE network. This growth was partially offset by the ongoing decline in voice revenue from increased adoption of unlimited nationwide voice plans and continued but moderating substitution to data services.
- Blended ARPU increased by 1.4 per cent to \$64.38, TELUS' twenty-third consecutive quarter of year-over-year growth.
- Monthly postpaid subscriber churn of 0.90 per cent increased four basis points year-over-year. The increase reflects competitive intensity resulting from two-year and three-year customer contracts expiring simultaneously starting in June 2015, as well as the effects of the economic slowdown, particularly in Alberta. Blended monthly churn improved two basis points to 1.15 per cent reflecting improvements in the prepaid churn rates and TELUS' continued focus on customers first initiatives and retention programs.
- Postpaid net additions of 61,000 were lower year over year by 15,000 due to lower gross additions resulting primarily from the economic slowdown, particularly in Alberta, competitive intensity, and the effect of higher handset prices on customer demand as well as higher monthly churn. Total wireless net additions were 40,000 compared to net additions of 63,000 a year ago reflecting lower postpaid net additions and higher prepaid losses of 21,000
- Adjusted wireless EBITDA (EBITDA excluding the gain on the exchange of wireless spectrum licences, the net gains and equity income from real estate joint venture developments, as well as restructuring and other costs) increased by \$28 million or 3.6 per cent over last year to \$783 million. The growth reflects network revenue growth driven by higher ARPU and a larger customer base, as well as ongoing operational efficiency and effectiveness initiatives, partly offset by higher retention spend and increased external labour and distribution channel expenses. Retention costs as a percentage of network revenue were 12.9 per cent, reflecting a \$17 million increase over the same period a year ago, as higher subsidy costs reflecting the continued customer preference for more expensive smartphone devices were partly offset by lower retention volumes.
- Wireless EBITDA less capital expenditures increased year over year by \$43 million to \$535 million as higher EBITDA was partially offset by higher capital expenditures. Capital expenditures increased over the same period a year ago due to ongoing investments in TELUS' fibre-optic network to support its small-cell technology strategy to improve coverage and prepare for a more efficient and timely evolution to 5G.

TELUS wireline

- External wireline revenues increased by \$14 million or 1.0 per cent to \$1.4 billion in the second quarter of 2016, when compared with the same period a year ago. This growth was generated primarily by higher data service and equipment revenue.
- Data service and equipment revenues increased by \$62 million or 6.7 per cent, due to growth in business process outsourcing services, higher Internet and enhanced data revenues from continued high-speed Internet subscriber growth and higher revenue per customer, and higher TELUS TV revenues from continued subscriber growth.
- High-speed Internet net additions of 18,000 were down 4,000 from the same quarter a year ago, reflecting increased competitive intensity, the impact of the economic slowdown leading to a higher customer churn rate, partly offset by the ongoing expansion of TELUS' high-speed broadband footprint in urban and rural communities, including fibre to the premises, and the pull-through effect of bundling with Optik TV.
- Total TV net additions of 13,000 were lower by 4,000 over the same quarter a year ago, reflecting a higher customer churn rate and a decline in satellite subscribers, as the effects of slower subscriber growth for paid TV services and increased competitive intensity, including OTT services, were partly offset by ongoing expansion of TELUS addressable high-speed broadband footprint and increasing broadband speeds.
- Residential network access lines (NALs) declined by 20,000 in the quarter, consistent with the decline in the same quarter a year ago. Residential NAL losses continue to reflect the ongoing trend of wireless and Internet substitution, partly mitigated by the success of TELUS' bundling strategy.
- Adjusted wireline EBITDA (EBITDA excluding the net gains and equity income from real estate joint venture developments as well as restructuring and other costs) increased by \$20 million or 5.5 per cent over last year

to \$405 million. The improvement reflects execution on operating efficiency and effectiveness initiatives, as well as improving margins in data services, including Internet, business process outsourcing services, TELUS TV, and TELUS Health.

- Wireline EBITDA less capital expenditures decreased by \$40 million to \$(115) million as higher EBITDA was more than offset by higher capital expenditures that support TELUS' long-term growth. Capital expenditures increased over the same period a year ago due to continued strategic investments in broadband network infrastructure, including connecting more homes and businesses directly to TELUS' fibre optic network and investments in system and network resiliency and reliability.

Corporate Highlights

TELUS makes significant contributions and investments in the communities where team members live, work and serve and to the Canadian economy on behalf of customers, shareholders and team members by:

- Paying, collecting and remitting a total of approximately \$1.3 billion in taxes during the first six months of 2016 to federal, provincial and municipal governments in Canada consisting of corporate income taxes, sales taxes, property taxes, employer portion of payroll taxes and various regulatory fees. Since 2000, the Company has remitted more than \$19 billion in these taxes.
- Disbursing spectrum renewal fees of \$53 million to Innovation, Science and Economic Development Canada (formerly Industry Canada) during the first six months of 2016. Since 2002, TELUS' total tax and spectrum remittances to federal, provincial and municipal governments in Canada have totaled more than \$24 billion.
- Investing \$1.4 billion in capital expenditures primarily in communities across Canada in the first six months of 2016 and more than \$30 billion since 2000.
- Spending \$3.7 billion in total operating expenses in the first six months of 2016, including goods and service purchased of \$2.5 billion. Since 2000, TELUS has spent \$95 billion and \$62 billion respectively in these areas.
- Generating a total team member payroll of \$1.4 billion in the first six months of 2016, including payroll taxes of \$91 million. Since 2000, total team member payroll totals \$38 billion.
- Paying \$798 million in dividends in 2016 through the end of July to individual shareholders, mutual fund owners, pensioners and institutional investors, and purchasing approximately 3 million shares for \$111 million on behalf of shareholders under TELUS' multi-year share purchase program.
- Returning \$13.3 billion to shareholders through TELUS' dividend and share purchase programs from 2004 to the end of July 2016, including \$8.2 billion in dividends and \$5.2 billion in share buybacks, representing over \$22 per share.

About TELUS

TELUS (TSX: T, NYSE: TU) is Canada's fastest-growing national telecommunications company, with \$12.6 billion of annual revenue and 12.5 million subscriber connections, including 8.4 million wireless subscribers, 1.6 million high-speed Internet subscribers, 1.4 million residential network access lines and 1.0 million TELUS TV customers. TELUS provides a wide range of communications products and services, including wireless, data, Internet protocol (IP), voice, television, entertainment and video, and is Canada's largest healthcare IT provider.

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 more than 6.8 million hours of service to local communities since 2000. Created in 2005 by President and CEO Darren Entwistle, TELUS' 11 Canadian community boards and 4 International boards have led the Company's support of grassroots charities and have contributed more than \$54 million in support of over 4,900 local charitable projects, enriching the lives of more than 2 million children and youth, annually. TELUS was honoured to be named the most outstanding philanthropic corporation globally for 2010 by the Association of Fundraising Professionals, becoming the first Canadian company to receive this prestigious international recognition.

For more information about TELUS, please visit telus.com.

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Access to Quarterly results information

Interested investors, the media and others may review this quarterly earnings news release, management's discussion and analysis, quarterly results slides, audio and transcript of the investor webcast call, supplementary financial information, and our full 2015 annual report at telus.com/investors.

TELUS' second quarter 2016 **conference call is scheduled for August 5, 2016 at 11:00am ET (8:00am PT)** and will feature a presentation followed by a question and answer period with investment analysts. Interested parties can access the webcast at telus.com/investors. A telephone playback will be available on August 5 until September 15, 2016 at 1-855-201-2300. Please use reference number 1201840# and access code 77377#. An archive of the webcast will also be available at telus.com/investors and a transcript will be posted on the website within a few business days.

TELUS CORPORATION

Management's discussion and analysis

2016 Q2

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. An update to our assumptions for 2016 is presented in *Section 9 Update to 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; 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 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; the potential entry of new competitors; 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 wireless and wireline networks (including broadband initiatives, such as fibre-to-the-premises (FTTP), wireless small-cell deployment, 5G wireless and availability of resources and ability to build out adequate broadband capacity); 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; network reliability and change management; 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.
- **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 operating efficiency and effectiveness program to drive improvements in earnings before interest, income taxes, depreciation and amortization (EBITDA), including the reduction of approximately 1,500 full-time equivalent (FTE) positions announced in November 2015; business integrations; business process outsourcing; offshoring and reorganizations, including any FTE employee reduction programs; procurement initiatives; and real estate rationalization. Additional revenue and cost efficiency and effectiveness initiatives will continue to be assessed and implemented, as required.
- **Economic growth and fluctuations** including: the state of the economy in Canada, which may be influenced by economic and other developments outside of Canada, including the United Kingdom’s withdrawal from the European Union; 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 Canadian: U.S. dollar exchange rates.
- **Capital expenditure levels and potential outlays for spectrum licences in spectrum auctions or from third parties**, due to: our wireline broadband initiatives, including connecting more homes and businesses directly to fibre; our ongoing deployment of wireless long-term evolution (LTE) and future technologies such as 5G; utilizing newly acquired spectrum; 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 Innovation, Science and Economic Development Canada (ISED). Our capital expenditure levels could be impacted if we do not achieve our targeted operational and financial results.

- 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 that favours 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; the potential impacts from the CRTC’s decision to require pro-rated refunds when customers terminate their services and the CRTC’s examination of differential pricing practices related to Internet data plans; 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 possible regulation on the quality, availability and affordability of residential Internet service; 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; and modification, interpretation and application of tower sharing and roaming rules.
- Ability to sustain our dividend growth program through 2019 and our ability to sustain and complete our multi-year share purchase program through 2019. These programs may be affected by factors such as the competitive environment, economic performance in Canada, our earnings and free cash flow, our levels of capital expenditures and spectrum licence purchases, and regulatory decisions and developments. Quarterly dividend decisions are subject to assessment and determination by our Board of Directors (Board) based on the Company’s financial position and outlook, and the market price of TELUS shares. 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 2019.
- 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.
- 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.
- Litigation and legal matters including: our ability to defend successfully against investigations, regulatory proceedings, claims and lawsuits, including intellectual property infringement claims and class actions pending against us, as well as possible proceedings, intellectual property infringement claims and class actions based on consumer claims, data, privacy or security breaches and secondary market liability; and the complexity of legal compliance in domestic and foreign jurisdictions.
- 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.
- 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; pandemics; and the completeness and effectiveness of business continuity and disaster recovery plans and responses.
- Partnerships, acquisitions or divestitures including: our ability to successfully integrate acquisitions, complete divestitures or establish partnerships 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 our 2015 annual MD&A, our 2016 Q1 MD&A and this MD&A are incorporated by reference in this cautionary statement.

Management’s discussion and analysis

August 5, 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 this 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 three-month and six-month periods ended June 30, 2016, and should be read together with TELUS’ June 30, 2016, unaudited condensed interim consolidated financial statements (subsequently referred to as the interim 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 interim consolidated financial statements comply with IFRS-IASB and Canadian GAAP and have been prepared in accordance with International Accounting Standard 34, *Interim Financial Reporting*. 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 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. This MD&A and the interim consolidated financial statements were reviewed by TELUS’ Audit Committee and authorized by the Board of Directors for issuance on August 5, 2016.

1.2 The environment in which we operate

Economic growth

We currently estimate that economic growth in Canada will be approximately 1.3% in 2016 and a range of 1.8 to 2.2% in 2017, 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 will be approximately 2.9% in 2016 and in the range of 2.3% to 2.8% in 2017, and that economic growth (contraction) in Alberta will be approximately (2.0)% in 2016 (in part due to the Fort McMurray wildfires and lower oil prices in 2016) and in the range of 2.0 to 2.5% in 2017. The Bank of Canada’s July 2016 Monetary Policy Report estimated economic growth for Canada at 1.3% in 2016 and 2.2% in 2017. In respect of the national unemployment rate, Statistics Canada’s Labour Force Survey reported a rate of 6.8% for June 2016 (7.1% reported for December 2015 and 6.8% reported for June 2015).

Regulatory developments

There were a number of regulatory developments in the second quarter of 2016. (See *Section 10.1 Regulatory matters.*)

1.3 Consolidated highlights

Leadership changes

Effective May 16, 2016, we announced the appointment of Doug French as Executive Vice-President and Chief Financial Officer of TELUS. Doug has 30 years of financial management experience and 20 years of career progression within TELUS, including key roles as Controller for our largest business units in the business and consumer divisions, and more recently as Senior Vice-President, Corporate Controller.

Investment in TELUS International (Cda) Inc. (TI)

In June 2016, we announced the completion of the previously announced agreement with Baring Private Equity Asia, an Asian-based investment firm which advises funds that manage over \$13 billion (U.S. \$10 billion) in assets, for it to acquire a 35% non-controlling interest in TELUS International (Cda) Inc., a global provider of customer service, information technology (IT) and business process outsourcing services. The agreement values TI at \$1.2 billion. Through this collaboration, TI is well positioned to leverage Baring Private Equity Asia’s deep Asian markets presence and worldwide experience, and tap into its global network in order to further expand TI’s operations. In connection with the transaction, we have also arranged an incremental U.S.\$330 million in bank financing, which is secured by assets of TI and its subsidiaries, expires in 2021 and is non-recourse to TELUS Corporation.

Consolidated highlights

(\$ millions, unless otherwise noted)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Consolidated statements of income						
Operating revenues	3,148	3,102	1.5 %	6,256	6,130	2.1 %
Operating income	690	617	11.8 %	1,330	1,296	2.6 %
Income before income taxes	556	507	9.7 %	1,073	1,069	0.4 %
Net income	416	341	22.0 %	794	756	5.0 %
Net income per Common Share						
Basic earnings per share (basic EPS) (\$)	0.70	0.56	25.0 %	1.34	1.25	7.2 %
Adjusted basic EPS ¹ (\$)	0.70	0.66	6.1 %	1.39	1.37	1.5 %
Diluted (\$)	0.70	0.56	25.0 %	1.34	1.24	8.1 %
Dividends declared per Common Share (\$)	0.46	0.42	9.5 %	0.90	0.82	9.8 %
Basic weighted-average Common Shares outstanding (millions)						
	593	605	(2.0)%	593	606	(2.2)%
Consolidated statements of cash flows						
Cash provided by operating activities	892	943	(5.4)%	1,455	1,661	(12.4)%
Cash used by investing activities	(735)	(2,377)	69.1 %	(1,395)	(3,303)	57.8 %
Capital expenditures (excluding spectrum licences) ²	(769)	(664)	(15.8)%	(1,387)	(1,299)	(6.8)%
Cash provided (used) by financing activities	(207)	(68)	n/m	145	1,659	(91.3)%
Other highlights						
Subscriber connections ³ (thousands)				12,494	12,342	1.2 %
EBITDA ¹	1,189	1,081	10.0 %	2,329	2,216	5.1 %
Restructuring and other costs ¹	23	59	(61.0)%	71	76	(6.6)%
EBITDA excluding restructuring and other costs	1,212	1,140	6.3 %	2,400	2,292	4.7 %
Adjusted EBITDA ^{1,4}	1,188	1,140	4.3 %	2,376	2,292	3.7 %
Adjusted EBITDA margin ⁵	38.0	36.8	1.2 pts.	38.1	37.4	0.7 pts.
Free cash flow ¹	126	300	(58.0)%	234	571	(59.0)%
Net debt to EBITDA – excluding restructuring and other costs ¹ (times)				2.67	2.67	—

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) include assets purchased, but not yet paid for, and consequently differ from Cash payments for capital assets, excluding spectrum licences, as reported on the condensed interim consolidated statements of cash flows.
3. The sum of active wireless subscribers, residential network access lines (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. Our January 1, 2015, our opening reported subscriber balance has been retrospectively adjusted to exclude 1,613,000 business NALs due to its diminishing relevance as a key performance indicator. In addition, subsequent to a review of our subscriber base during the first quarter of 2016, our 2016 opening postpaid wireless subscriber base was reduced by 45,000 and our 2016 opening high-speed Internet subscriber base was increased by 21,000.
4. Adjusted EBITDA for the second quarter and first six months of 2016 excludes: (i) a \$15 million gain in the second quarter of 2016, from the exchange of wireless spectrum licences; (ii) net gains and equity income of \$9 million in the second quarter of 2016, related to real estate joint venture developments; and (iii) restructuring and other costs.
5. Adjusted EBITDA margin is Adjusted EBITDA divided by Operating revenues. The calculation of the Operating revenues excludes the net gains and equity income related to real estate joint venture developments, as well as the gain on exchanged wireless spectrum licences. Adjusted EBITDA excludes the same items noted above in Operating revenues, as well as restructuring and other costs.

Operating highlights

- **Consolidated operating revenues** increased year over year by \$46 million in the second quarter of 2016 and \$126 million in the first six months of 2016.

Service revenues increased year over year by \$68 million in the second quarter of 2016 and \$163 million in the first six months of 2016, mainly due to growth in wireless network revenue and wireline data revenue. Wireless network revenue grew year over year by \$40 million in the second quarter and by \$78 million in the first six months of 2016 from growth in both our blended average revenue per subscriber unit per month (ARPU) and in our wireless subscriber base. Wireline data service revenues increased year over year by \$73 million in the second quarter and \$162 million in the first six months due to: growth in business process outsourcing revenues; increased Internet and enhanced data revenues; increased TELUS TV revenues; and for the six-month period, increased TELUS Health services revenue. Partly offsetting wireline data revenue growth was the ongoing decline in legacy wireline voice revenue from technological substitution and continued competitive pressures. (See *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*.)

Equipment revenues decreased year over year by \$44 million in the second quarter of 2016 and \$54 million in the first six months of 2016. Wireless equipment revenue declined year over year by \$27 million in the quarter and \$35 million in the first six months from lower gross additions, lower retention volumes and discontinuance of Black’s Photography revenue resulting from the closure of stores in August 2015, partly offset by higher-priced smartphones in the sales mix. Wireline data and voice equipment revenues decreased year over year by \$17 million in second quarter and \$19 million in the six-month period, primarily due to lower sales activity in the business market, in part due to the economic slowdown.

Other operating income increased year over year by \$22 million in the second quarter of 2016 and \$17 million in the first six months of 2016. The increases were primarily due to gains from the exchange of wireless spectrum licences in the second quarter of 2016 and net gains and equity income associated with real estate joint venture developments in the second quarter of 2016, as well as the sale of property, plant and equipment in the first six months of 2016. These increases were partly offset by a decrease in amounts recognized from the regulatory price cap deferral account for provisioning broadband Internet services to eligible rural and remote communities, as well as an increase in provisions on certain investments.

- At June 30, 2016, our total **subscriber connections** were 12.5 million, reflecting an increase of 152,000 subscribers during the 12-month period ended June 30, 2016. This reflects 12-month increases in wireless subscribers of 0.9%, TELUS TV subscribers of 7.9% and high-speed Internet subscribers of 6.4%, partly offset by a 6.3% decline in residential network access lines (NALs).

Our postpaid wireless subscriber net additions were 61,000 in the second quarter of 2016 and 69,000 in the first six months of 2016, representing decreases of 15,000 and 44,000, respectively, from the same periods in 2015. The decreases reflect lower gross additions due to the economic slowdown, particularly in Alberta, competitive intensity and the effect of higher handset prices on customer demand, as well as an increase in our postpaid subscriber churn rate. Our monthly postpaid subscriber churn rate was 0.90% in the second quarter of 2016 and 0.93% in the first six months of 2016, as compared to 0.86% in the second quarter of 2015 and 0.88% in the first six months of 2015. (See *Section 5.4 Wireless segment* for additional details.)

Our wireline subscriber net additions were 11,000 in the second quarter of 2016 and 8,000 in the first six months of 2016, as compared to net additions of 19,000 and 43,000, respectively, in the same periods in 2015. Net additions of high-speed Internet subscribers were 18,000 in the second quarter of 2016 and 30,000 in the first six months of 2016, year-over-year decreases of 4,000 and 15,000, respectively, driven by competitive intensity, the impact of the economic slowdown and a higher customer churn rate, partly offset by the expansion of our broadband footprint, the pull-through impact from the continued bundling with Optik TV and our customers first initiatives. Net additions of TELUS TV subscribers were 13,000 in the second quarter of 2016 and 24,000 in the first six months of 2016, reflecting year-over-year decreases of 4,000 and 14,000, respectively, from the same periods in 2015. The lower TELUS TV net additions reflect a higher customer churn rate and satellite-TV subscriber losses, as the effects of slower subscriber growth for paid TV services, the economic slowdown and a high overall market-penetration rate for TV services and increased competition, including over-the-top (OTT) services, were partly offset by demand from expansion of our broadband footprint and our customers first initiatives. Residential NAL losses were 20,000 in the second quarter of 2016 and 46,000 in the first six months of 2016, as compared to 20,000 and 40,000, respectively, in the same periods in 2015, reflecting the economic slowdown and the ongoing trend of substitution to wireless and Internet-based services. (See *Section 5.5 Wireline segment* for additional details.)

- Consolidated **EBITDA**, which in second quarter of 2016 includes a gain from the exchange of wireless spectrum licences, as well as gains and equity income related to real estate joint venture developments, increased year over

year by \$108 million in the second quarter of 2016 and \$113 million in the first six months of 2016, reflecting growth in wireless network revenues and wireline data revenues; improvements in Internet, business process outsourcing, TELUS TV and TELUS Health margins; growth in other operating income noted above; executing on our operational efficiency and effectiveness initiatives; and lower restructuring and other costs. This growth was partly offset by higher wireless retention costs, continued declines in legacy wireline voice revenues and approximately \$5 million of costs and revenue impacts, predominately in the wireline segment, related to the severe wildfires in northern Alberta. **Adjusted EBITDA** increased year over year by \$48 million and \$84 million, respectively, in the second quarter and first six months of 2016. Adjusted EBITDA in the second quarter and first six months of 2016 excludes a gain from the exchange of wireless spectrum licences, net gains and equity income related to the real estate joint venture developments, and restructuring and other costs. (See *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment* for additional details.)

- **Operating income** increased year over year by \$73 million in the second quarter of 2016 and \$34 million in the first six months of 2016, reflecting growth in **EBITDA** noted above, partly offset by increases in total depreciation and amortization expenses from a higher asset base and the impact of our continuing program of asset life studies.
- **Income before income taxes** increased year over year by \$49 million in the second quarter of 2016 and \$4 million in the first six months of 2016, reflecting higher operating income, partly offset by an increase in financing costs. The increase in financing costs resulted from higher interest costs from the increase in average long-term debt outstanding, higher foreign exchange losses and a decrease in interest income due to the recognition of \$20 million interest income in the second quarter of 2015 related to the settlement of prior years’ income tax-related items, partly offset by higher capitalized long-term debt interest costs and a lower weighted average cost of long-term debt.
- **Income taxes** decreased year over year by \$26 million in the second quarter of 2016 and \$34 million in the first six months of 2016. The decreases reflect a \$48 million non-cash adjustment in the second quarter of 2015 to revalue deferred income tax liabilities as a result of an increase to the Alberta provincial corporate income tax rate, partly offset by a \$19 million recovery in the second quarter of 2015 from the settlement of prior years’ income tax-related matters and higher income before income taxes in 2016. (See *Section 5.3 Consolidated operations*.)
- **Net income** increased year over year by \$75 million in the second quarter of 2016 and \$38 million in the first six months of 2016, reflecting growth in EBITDA and lower income tax expense, partly offset by higher depreciation and amortization expenses, and higher financing costs. Excluding the effects of the gain on the exchange of wireless spectrum licences, net gains and equity income from the real estate joint venture developments, restructuring and other costs, income tax-related adjustments and asset retirement from the closure of Black’s Photography retail stores, net income increased year over year by \$9 million or 2.2% in the second quarter of 2016 and declined year over year by \$4 million in the first six months of 2016.

Analysis of Net income

(\$)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Net income	416	341	75	794	756	38
Add back (deduct):						
Gain on the exchange of wireless spectrum licences, after income taxes	(13)	—	(13)	(13)	—	(13)
Net gains and equity income from real estate joint venture developments, after income taxes	(5)	—	(5)	(5)	—	(5)
Restructuring and other costs, after income taxes	17	44	(27)	52	56	(4)
Unfavourable (favourable) income tax-related adjustments	—	15	(15)	1	15	(14)
Asset retirement from planned closure of Black’s, after income taxes	—	6	(6)	—	6	(6)
Adjusted net income	415	406	9	829	833	(4)

- **Basic earnings per share (basic EPS)** increased year over year by \$0.14 in the second quarter of 2016 and \$0.09 in the first six months of 2016. The reduction in the number of shares outstanding, as a result of our normal course issuer bid (NCIB) program, net of share option exercises, contributed positively to basic EPS by approximately \$0.01 and \$0.03, respectively, in the second quarter and first six months of 2016. Excluding the effects of the gain on the exchange of wireless spectrum licences, net gains and equity income from the real estate joint venture developments, restructuring and other costs, income tax-related adjustments and asset retirement from the closure of Black’s Photography retail stores, basic EPS increased year over year by \$0.04 or 6.1% in the second quarter of 2016 and \$0.02 or 1.5% in the first six months of 2016.

Analysis of basic EPS

(\$)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Basic EPS	0.70	0.56	0.14	1.34	1.25	0.09
Add back (deduct):						
Gain on the exchange of wireless spectrum licences, after income taxes, per share	(0.02)	—	(0.02)	(0.02)	—	(0.02)
Net gains and equity income from real estate joint venture developments, after income taxes, per share	(0.01)	—	(0.01)	(0.01)	—	(0.01)
Restructuring and other costs, after income taxes, per share	0.03	0.07	(0.04)	0.08	0.09	(0.01)
Unfavourable (favourable) income tax-related adjustments, per share	—	0.02	(0.02)	—	0.02	(0.02)
Asset retirement from planned closure of Black’s, after income taxes, per share	—	0.01	(0.01)	—	0.01	(0.01)
Adjusted basic EPS	0.70	0.66	0.04	1.39	1.37	0.02

- **Dividends declared per Common Share** were \$0.46 in the second quarter of 2016 and \$0.90 in the first six months of 2016, reflecting an increase of 9.5% from the second quarter of 2015 and 9.8% from the first six months of 2015, consistent with our multi-year dividend growth program described in *Section 4.3*. On August 4, 2016, the Board declared a third quarter dividend of \$0.46 per share on the issued and outstanding Common Shares, payable on October 3, 2016, to shareholders of record at the close of business on September 9, 2016. The third quarter dividend reflects a cumulative increase of \$0.04 per share or 9.5% from the \$0.42 per share dividend declared one year earlier.

Liquidity and capital resource highlights

- **Net debt to EBITDA – excluding restructuring and other costs** was 2.67 times at both June 30, 2016, and June 30, 2015, as the year-over-year increase in net debt was offset by growth in EBITDA – excluding restructuring and other costs. (See *Section 4.3 Liquidity and capital resources* and *Section 7.5 Liquidity and capital resource measures*.)
- **Cash provided by operating activities** decreased year over year by \$51 million in the second quarter of 2016 and \$206 million in the first six months of 2016, resulting from increases in income taxes paid, interest paid and restructuring disbursements, partly offset by EBITDA growth, and for the six-month period, lower share-based compensation payments. (See *Section 7.2 Cash provided by operating activities*.)
- **Cash used by investing activities** decreased year over year by more than \$1.6 billion in the second quarter of 2016 and \$1.9 billion in the first six months of 2016, mainly due to higher cash payments for spectrum licences made in comparative periods in 2015. **Capital expenditures – excluding spectrum licences** increased year over year by \$105 million in the second quarter and \$88 million in the first six months, mainly due to our continued focus on investing in our wireline and wireless broadband infrastructure, including connecting more homes and businesses directly to our fibre-optic network and deploying wireless spectrum licences. (See *Section 7.3 Cash used by investing activities*.)
- In the second quarter of 2016, net **Cash used by financing activities** increased year over year by \$139 million, mainly due to an increase in Short-term borrowings in the comparative period of 2015, partly offset by an issue of shares by a subsidiary to Baring Private Equity Asia for it to acquire a 35% non-controlling interest in TELUS International (Cda) Inc. in the second quarter of 2016. In the first six months of 2016, **Cash provided by financing activities** decreased year over year by \$1.5 billion, primarily due to a March 2015 debt offering of \$1.75 billion in senior unsecured notes, a \$400 million increase in Short-term borrowings in the second quarter of 2015, as well as increased dividend payments in 2016 under our dividend growth program, partly offset by an issue of shares by a subsidiary to Baring Private Equity Asia for it to acquire a 35% non-controlling interest in TELUS International (Cda) Inc., and lower purchases of shares under our NCIB program. (See *Section 7.4 Cash provided (used) by financing activities*.)
- **Free cash flow** decreased year over year by \$174 million in the second quarter of 2016 and \$337 million in the first six months of 2016, reflecting increases in income taxes paid, capital expenditures – excluding spectrum licences, interest paid, and restructuring disbursements, partly offset by adjusted EBITDA growth, and for the six-month period, lower share-based compensation payments. (See calculation in *Section 11.1*.)

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 this MD&A.

Our core business was described in our 2015 annual MD&A. The following are business updates grouped under the applicable strategic imperatives.

Focusing relentlessly on growth markets of data, IP and wireless

External wireless revenues and wireline data revenues totalled \$5.4 billion in the first six months of 2016, up by \$214 million or 4.1% from the same period in 2015, while wireline voice and other revenues and wireline Other operating income totalled \$817 million in the first six months of 2016, down \$88 million or 9.7% from the same period in 2015. Wireless revenues and wireline data revenues in total represented 87% of TELUS’ consolidated revenues for the first six months of 2016, as compared to 85% in the same period in 2015.

Building national capabilities across data, IP, voice and wireless

During the second quarter of 2016, in accordance with an asset transfer agreement with Bell Mobility Inc. (Bell) and consistent with our network optimization strategy, we exchanged certain wireless telecommunication tower sites. The exchange entailed the assignment of existing lease agreements for each tower site, as well as the transfer of all rights, titles and interests on the construction on the leased premises, including tower structures, antennae and cabling. The exchange benefits both parties as the location of the tower sites are well-positioned for utilization within each party’s respective 4G long-term evolution (LTE) network footprints. It is expected that additional transfers of assets will occur in multiple tranches throughout 2016 and subsequent periods.

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

As discussed in *Section 1.3*, in June 2016, we announced the completion of the previously announced agreement with Baring Private Equity Asia, an Asian-based investment firm, for it to acquire a 35% non-controlling interest in TELUS International (Cda) Inc., a global provider of customer service, IT and business process outsourcing services.

In June 2016, in partnership with Westbank Projects Corp, we officially opened the TELUS Garden™ residential condominium tower, built to leadership in energy and environmental design (LEED) gold standards. The opening of the 53-storey residential building follows the opening of the LEED platinum-certified TELUS Garden office tower in September 2015, reinforcing TELUS’ commitment to technological innovation and environmental stewardship. With the opening of the residential tower, the TELUS Garden real estate joint venture has commenced the transfer of ownership to the condominium unit owners, as well as the recognition of associated sales revenue. We expect the recognition of condominium sales to continue throughout 2016, as the joint venture completes the transfer of ownership, as well as the repatriation of funds from the joint venture including the repayment of the construction credit facility.

In June 2016, in conjunction with QHR Technologies (QHR), a leading electronic medical record provider, we announced our intention to collaborate to improve communications among healthcare providers across Canada. TELUS and QHR intend to create a national, secure, standards-based, and open communication solution that will allow the more than 23,000 Canadian physicians on the companies’ electronic medical record platforms to communicate more effectively.

In June 2016, we submitted a notification and advance ruling request to the Competition Bureau regarding our previously announced agreement with BCE Inc., pursuant to which we would acquire approximately one-third of Manitoba Telecom Services Inc.’s (MTS) postpaid wireless subscribers and be assigned one-third of MTS’ dealer locations in Manitoba, dependent on the successful completion of BCE Inc.’s acquisition of MTS. (See *Section 4.1 Principal markets addressed and competition*.)

3. Corporate priorities for 2016

Our corporate priorities for 2016 were listed in our 2015 annual MD&A.

4. Capabilities

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of this MD&A.

4.1 Principal markets addressed and competition

For a full discussion of our principal markets and an overview of competition, please refer to Section 4.1 of our 2015 annual MD&A and updates in our 2016 Q1 MD&A.

On June 23, 2016, Manitoba Telecom Services Inc. (MTS) announced that a significant majority of its shareholders had approved the previously announced agreement in which BCE Inc. will acquire all issued and outstanding common shares of MTS. On June 29, 2016, the Manitoba Court of Queen’s Bench approved the transaction. The transaction is still subject to regulatory approvals and other customary closing conditions, and is expected to close in late 2016 or early 2017.

4.2 Operational resources

For a full discussion of our Operational resources, please refer to Section 4.2 of our 2015 annual MD&A and updates in our 2016 Q1 MD&A.

Wireless segment

In the second quarter of 2016, we continued to deliver leading blended customer churn on a national basis. Our monthly blended churn rate of 1.15% in the second quarter of 2016 is among our lowest quarterly churn rates since we became a national carrier 16 years ago. This further exemplifies the success of our differentiated customers first culture, our ongoing focus on delivering outstanding customer service, coupled with attractive new products and services, and our retention programs. Our monthly postpaid churn rate was 0.90% in the second quarter of 2016, representing the 11th quarter in the past 12 quarters that our postpaid churn rate was below 1%, despite increasing competitive pressures from the coterminous expirations of two-year and three-year contracts commencing in June 2015, and economic pressures resulting in customers purchasing fewer phones.

During the first six months of 2016, we continued our deployment of 700 MHz and 2500 MHz wireless spectrum licences acquired during Innovation, Science and Economic Development Canada’s (ISED) wireless spectrum auctions, which we have begun to operationalize for the benefit of our customers. Since the middle of 2013, we have invested more than \$3.6 billion to acquire wireless spectrum licences in 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. Wireless data consumption has been increasing rapidly and we have responded by investing to extend the capacity of our network to support the additional data consumption and growth in our wireless customer base.

As at June 30, 2016, our 4G long-term evolution (LTE) network covered 97% of Canada’s population, up from 95% of the population covered at June 30, 2015. Furthermore, we continue to invest in our LTE advanced network roll-out, which covered 55% of Canada’s population at June 30, 2016. Outside of LTE advanced and LTE coverage areas, the LTE devices we offer also operate on our HSPA+ network, which covered 99% of Canada’s population at June 30, 2016.

Wireline segment

We continue to invest in urban and rural communities with commitments to deliver broadband network capabilities to as many Canadians as possible. We are expanding our fibre footprint by connecting more homes and businesses directly to fibre. Throughout 2015 and 2016, we have made announcements regarding multi-billion dollar investments to bring our fibre-optic network to cities across B.C., Alberta and Eastern Quebec. We have also increased broadband Internet speeds, expanded our IP TV video-on-demand library and high-definition content, including the launch of 4K TV, and enhanced marketing of data products and bundles. As well, we have continued to invest in our state-of-the art Internet data centres (IDCs), creating an advanced and regionally diverse computing infrastructure in Canada.

As at June 30, 2016, our high-speed broadband coverage reached approximately 2.9 million households and businesses in B.C., Alberta and Eastern Quebec, including approximately 0.83 million homes and businesses covered by fibre-optic cable, which now provides these premises with immediate access to our gigabit-capable fibre-optic network.

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 to it in light of changes in economic conditions and the risk characteristics of our telecommunications infrastructure. 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 bids (NCIBs), 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 by utilizing a number of measures, including the net debt to EBITDA – excluding restructuring and other costs ratio and the dividend payout ratios. (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 2016, we announced an intention to target ongoing semi-annual dividend increases, with the annual increase in the range of 7 to 10% from 2017 through to the end of 2019, thereby extending the policy first announced in May 2011. Notwithstanding this target, 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. Our long-term dividend payout ratio guideline is 65 to 75% of prospective net earnings per share. There can be no assurance that we will maintain a dividend growth program through 2019. (See *Caution regarding forward-looking statements – Ability to sustain our dividend growth program per annum through 2019*.)
- On August 4, 2016, a third quarter dividend of \$0.46 per share was declared on our issued and outstanding common shares, payable on October 3, 2016, to shareholders of record at the close of business on September 9, 2016. The third quarter dividend for 2016 reflects a cumulative increase of \$0.04 per share or 9.5% from the \$0.42 per share dividend paid in October 2015.

Purchase Common Shares under our multi-year NCIB

- On September 11, 2015, we received approval from the Toronto Stock Exchange (TSX) for a new NCIB program (2016 NCIB) to purchase and cancel up to 16 million of our Common Shares with a value of up to \$500 million over a 12-month period, commencing September 15, 2015. This represents the repurchase and cancellation of up to 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), alternative trading platforms or otherwise as may be permitted by applicable securities laws and regulations. The 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.
- The 2016 NCIB represents the final year of our share purchase program announced in May 2013. On May 5, 2016, we announced our intention to renew our NCIB program in each of the next three years in order to permit purchases for up to \$250 million in each calendar year. There can be no assurance that we will complete our 2016 NCIB or that we will renew and complete our NCIB program in each of the next three years as the decisions to purchase shares depend on the assessment and determination of our Board from time to time on the basis of the Company’s financial position and outlook, and the market price of TELUS shares. (See *Caution regarding forward-looking statements – Ability to sustain and complete multi-year share purchase program through 2019*.)

Use proceeds from securitized trade receivables (Short-term borrowings), bank facilities, commercial paper and cash retained through dividend reinvestment, as needed, to supplement free cash flow and meet other cash requirements

- Our issued and outstanding commercial paper was \$975 million at June 30, 2016, all of which was denominated in U.S. dollars (U.S.\$755 million), compared to \$256 million at December 31, 2015 and \$NIL at June 30, 2015.
- Proceeds from securitized trade receivables were \$100 million at June 30, 2016, compared to \$500 million at June 30, 2015 and \$100 million at December 31, 2015.

Report on financing and capital structure management plans

Maintain compliance with financial objectives

Except for the Net debt to EBITDA – excluding restructuring and other costs ratio, we comply with our objectives:

- Maintain investment grade credit ratings in the range of BBB+ or the equivalent – On August 5, 2016, investment grade credit ratings from the four rating agencies that cover TELUS were in the desired range. (See *Section 7.8 Credit ratings.*)
- Net debt to EBITDA – excluding restructuring and other costs ratio of 2.00 to 2.50 times – As measured at June 30, 2016, this ratio was outside of the range primarily due to the funding of spectrum licences acquired in ISED’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 net earnings per share on a prospective basis – The disclosed dividend payout ratio is a historical measure utilizing the last four quarters of dividends declared and earnings per share, and is presented for illustrative purposes in evaluating our target guideline. As at June 30, 2016, this historical ratio was in the desired range. (See *Section 7.5 Liquidity and capital resource measures.*)
- Generally maintain a minimum \$1 billion in unutilized liquidity – As at June 30, 2016, our unutilized liquidity was greater than \$1 billion. (See *Section 7.6 Credit facilities.*)

4.4 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 this MD&A.

5.1 General

Our operating segments and reportable segments are wireless and wireline. Segmented information in *Note 5* of the interim consolidated financial statements is regularly reported to our Chief Executive Officer (CEO) (the chief operating decision-maker).

5.2 Summary of consolidated quarterly results and trends

Summary of quarterly results

(\$ millions, except per share amounts)	2016 Q2	2016 Q1	2015 Q4	2015 Q3	2015 Q2	2015 Q1	2014 Q4	2014 Q3
Operating revenues	3,148	3,108	3,217	3,155	3,102	3,028	3,128	3,028
Operating expenses								
Goods and services purchased ¹	1,331	1,300	1,482	1,394	1,372	1,284	1,476	1,333
Employee benefits expense ¹	628	668	757	693	649	609	651	630
Depreciation and amortization	499	500	518	471	464	456	468	459
Total operating expenses	2,458	2,468	2,757	2,558	2,485	2,349	2,595	2,422
Operating income	690	640	460	597	617	679	533	606
Financing costs	134	123	114	106	110	117	115	124
Income before income taxes	556	517	346	491	507	562	418	482
Income taxes	140	139	85	126	166	147	106	127
Net income attributable to Common Shares	416	378	261	365	341	415	312	355
Net income per Common Share:								
Basic earnings per share (Basic EPS)	0.70	0.64	0.44	0.61	0.56	0.68	0.51	0.58
Adjusted basic EPS ²	0.70	0.70	0.54	0.66	0.66	0.70	0.53	0.64
Diluted	0.70	0.64	0.44	0.61	0.56	0.68	0.51	0.58
Dividends declared per Common Share	0.46	0.44	0.44	0.42	0.42	0.40	0.40	0.38
Additional information:								
EBITDA ²	1,189	1,140	978	1,068	1,081	1,135	1,001	1,065
Restructuring and other costs ²	23	48	99	51	59	17	26	30
EBITDA – excluding restructuring and other costs ²	1,212	1,188	1,077	1,119	1,140	1,152	1,027	1,095
Cash provided by operating activities	892	563	863	1,018	943	718	917	1,037
Free cash flow ²	126	108	197	310	300	271	337	219

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 growth in both our average revenue per subscriber unit per month (ARPU) and subscriber base; and (ii) growth in wireline data revenues, driven by business process outsourcing, Internet, enhanced data services, TELUS TV and TELUS Health services. This growth was partially offset by: (i) the continued declines in both wireless and wireline voice revenues due to technological substitution and greater use of inclusive long distance and unlimited nationwide voice plans; and (ii) the year-over-year decline in wireless equipment revenue during the first six-months of 2016, reflecting lower gross additions and lower retention volumes, partly offset by higher-value smartphones in the sales mix. Retention volumes declined due to (i) significant activity in 2015 relating to the coterminous expiration of two-year and three-year contracts; (ii) the effects on contract renewals of higher handset prices; (iii) and economic pressures resulting in customers purchasing fewer phones.

The wireless subscriber base growth trend has moderated due to the impacts of the economic slowdown, particularly in Alberta, competitive intensity and the effects of higher handset prices, partly offset by our customers first initiatives and retention programs. As noted in *Section 1.2*, we expect the Alberta economy to post modest growth in 2017. The wireless ARPU growth trend has also moderated due to competitive pressures driving larger allotments of data provided in rate plans, including data sharing and international data roaming features and plans, increased frequency of customer data usage notifications and offloading of data traffic to increasingly available Wi-Fi hotspots.

ARPU is expected to continue to increase modestly over time, as a result of the continued growth in 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 environment, consumer behaviour, regulatory environment, device selection and other factors, and, as a consequence, there cannot be any assurance that ARPU growth will continue to materialize.

Retention spending as a percentage of network revenue has increased year over year from 12.1% in the first six months of 2015 to 13.2% in the first six months of 2016, mainly from an increase in the sales mix of higher-subsidy smartphones and moderating growth in wireless network revenue. In addition, due to the coterminous expiration of two-year and three-year contracts beginning on June 3, 2015, there are a greater number of customers renewing contracts at any given time, which has impacted acquisition and retention trends. We have generally experienced a higher volume of contract renewals than previously experienced prior to 2015. We expect this trend to continue. We also expect to experience continuing pressure on our postpaid subscriber churn if competitive intensity continues, in part due to an increase in customers on expired contracts, as well as customers bringing their own devices and therefore not entering into term contracts. 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 in those quarters. These impacts can be more pronounced around popular device launches and seasonal events such as back to school, Black Friday and Christmas. The costs associated with higher seasonal loading volumes have typically resulted in sequential decreases in wireless EBITDA from the second quarter through to the fourth quarter, typically followed by sequential increases in wireless EBITDA from the fourth quarter through to the second quarter. Subscriber additions have generally been lowest in the first quarter. Historically, 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 reflecting a larger high-speed Internet subscriber base (up 6.4% in the 12-month period ended June 30, 2016), continued expansion of our broadband footprint, including fibre-optic cable, and increased pricing; growth in business process outsourcing supported by customer demand in all regions; the continuing but moderating expansion of our TELUS TV subscriber base (up 7.9% in the 12-month period ended June 30, 2016) and increased pricing; and growth in TELUS Health solutions. A general trend of declining wireline voice revenues is due to competition from voice over IP (VoIP) service providers (including cable-TV competitors) and resellers, as well as technological substitution to wireless and IP-based services and applications, continuing 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 high-speed Internet subscriber base growth trend has declined year over year during the first six months of 2016, primarily from the impact of the economic slowdown and competitive intensity, however, we expect the subscriber growth to improve as the economy gradually recovers and from our continued investments in expanding our fibre-optic network. The TELUS TV subscriber base growth is moderating due to the effects of slower subscriber growth for paid TV services, the economic slowdown, the high rate of market penetration and increased competition, including over-the-top (OTT) services. Residential network access line (NAL) losses continue to reflect the economic slowdown, the ongoing trend of substitution to wireless and Internet-based services, as noted above.

The trend in Goods and services purchased expense generally reflects increasing wireless equipment expenses associated with higher-value smartphones in the sales mix, increasing wireless customer service, administrative, external labour and distribution channel expenses to support moderating growth in our subscriber base, and higher non-labour restructuring and other costs in 2015 mainly from real estate rationalization, partly offset by lower transit and termination costs and wireline equipment costs.

The trend in Employee benefits expense reflects increases in compensation and employee-related restructuring costs, as well as a higher number of employees to support increased business process outsourcing revenues, partly offset by a lower number of domestic employees (in part due to the reduction of full-time equivalent (FTE) positions announced in November 2015) and lower defined benefit plan pension expenses.

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 long-term evolution (LTE) network coverage.

The general trend in Financing costs reflects an increase in long-term debt outstanding associated with significant investments in wireless spectrum licences acquired during wireless spectrum licence auctions in 2014 and 2015. Financing costs also include the Employee defined benefit plans net interest expense that has decreased for 2016,

primarily due to the decrease in the defined benefit plan deficit at December 31, 2015, as compared to one year earlier, partly offset by an increase in the discount rate. Moreover, Financing costs are net of capitalized interest related to spectrum licences acquired during the wireless spectrum licence auctions, which we expect to deploy into our existing network in future periods (capitalized long-term debt interest was \$28 million in the first six months of 2016, as compared to \$9 million in the six months of 2015 and \$45 million during fiscal year 2015). Capitalization of long-term debt interest is expected to moderate beginning in the third quarter of 2016, as cell sites become ready to be put into service. Financing costs for the eight periods shown included 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 higher restructuring and other disbursements, higher income tax payments and increased interest payments, partly offset by growth in consolidated EBITDA. 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).

5.3 Consolidated operations

The following is a discussion of our consolidated financial performance. Segmented information in *Note 5* of the interim consolidated financial statements is regularly reported to our 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 in capital expenditures in *Section 7.3 Cash used by investing activities*.

Operating revenues

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Service	2,952	2,884	2.4 %	5,876	5,713	2.9 %
Equipment	164	208	(21.2)%	336	390	(13.8)%
Revenues arising from contracts with customers	3,116	3,092	0.8 %	6,212	6,103	1.8 %
Other operating income	32	10	n/m %	44	27	63.0 %
	3,148	3,102	1.5 %	6,256	6,130	2.1 %

- **Service revenue** increased year over year by \$68 million in the second quarter of 2016 and \$163 million in the first six months of 2016. The increase reflects growth in wireless blended ARPU and the wireless subscriber base; increased wireline business process outsourcing revenue; higher wireline Internet and enhanced data revenue due to subscriber growth and higher revenue per customer; TELUS TV revenue growth from continued expansion of our subscriber base; and for the six-month period, increased TELUS Health services revenue; all of which were partly offset by continuing declines in wireless and wireline voice revenues, as well as the impacts of the economic slowdown, particularly in Alberta.
- **Equipment revenue** decreased year over year by \$44 million in the second quarter of 2016 and \$54 million in the first six months of 2016, reflecting a decline in wireless equipment revenue of \$27 million for the second quarter and \$35 million for the first six months from lower gross additions and retention volumes, and discontinuance of Black’s Photography revenue from the closure of stores in August 2015, partly offset by higher-value smartphones in the sales mix. Wireline equipment revenue decreased by \$17 million for the second quarter and \$19 million for the six-month period primarily from lower sales activity in the business market in part from the economic slowdown.
- **Other operating income** increased year over year by \$22 million in the second quarter of 2016 and \$17 million in the first six months of 2016, primarily due to gains from the exchange of wireless spectrum licences and the sale of property, plant and equipment, as well as net gains and equity income related to real estate joint venture developments. These increases were partly offset by a decrease in amounts recognized from the regulatory price cap deferral account for provisioning broadband Internet services to eligible rural and remote communities, an increase in provisions on certain investments.

Operating expenses

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Goods and services purchased	1,331	1,372	(3.0)%	2,631	2,656	(0.9)%
Employee benefits expense	628	649	(3.1)%	1,296	1,258	3.0 %
Depreciation	385	361	6.6 %	770	708	8.8 %
Amortization of intangible assets	114	103	10.7 %	229	212	8.0 %
	2,458	2,485	(1.1)%	4,926	4,834	1.9 %

- **Goods and services purchased** decreased year over year by \$41 million in the second quarter of 2016 and \$25 million in the first six months of 2016. This reflects lower non-labour restructuring and other costs mainly from provisions for the closure of Black’s Photography retail stores during the second quarter of 2015, as well as declining transit and termination costs and lower wireline product costs related to declining equipment revenue. This reduction in costs was partly offset by increased administrative costs to support our growing subscriber base.
- **Employee benefits expense** decreased year over year by \$21 million in the second quarter of 2016, mainly from a decline in labour-related restructuring costs, lower defined benefit pension plan and share-based compensation expenses, and lower compensation and benefits costs resulting from a decrease in domestic employees under our ongoing operational efficiency and effectiveness initiatives. This decline was partly offset by growth in the number of TELUS International employees to support increased business process outsourcing revenue and inflationary compensation increases. For the six-month period, employee benefits expense increased year over year by \$38 million, primarily due to growth in the number of TELUS International employees to support increased business process outsourcing revenue, inflationary compensation increases, higher labour-related restructuring costs from efficiency initiatives, largely from the reduction of full-time equivalent (FTE) positions announced in late 2015, partially offset by lower compensation and benefits costs from a decrease in domestic employees, as well as lower defined benefit pension plan and share-based compensation expenses.
- **Depreciation** increased year over year by \$24 million in the second quarter of 2016 and \$62 million in the first six months of 2016, due to growth in capital assets (such as the broadband network and the wireless LTE network), as well as the impact of our continuing program of asset life studies, partly offset by asset retirements of \$9 million in 2015 relating to the closure of Black’s Photography retail stores.
- **Amortization of intangible assets** increased year over year by \$11 million in the second quarter of 2016 and \$17 million in the first six months of 2016, 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

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Wireless EBITDA (See Section 5.4)	793	719	10.4 %	1,549	1,463	5.9 %
Wireline EBITDA (See Section 5.5)	396	362	9.6 %	780	753	3.6 %
Depreciation and amortization (discussed above)	(499)	(464)	(7.5)%	(999)	(920)	(8.6)%
	690	617	11.8 %	1,330	1,296	2.6 %

Operating income increased year over year by \$73 million in the second quarter of 2016 and \$34 million in the first six months of 2016, reflecting growth in EBITDA that was partly offset by increases in Depreciation and amortization expenses.

Financing costs

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Gross interest expenses	138	132	4.5 %	275	249	10.4 %
Capitalized long-term debt interest	(11)	(9)	(22.2)%	(28)	(9)	n/m
Employee defined benefit plans net interest	1	6	(83.3)%	2	13	(84.6)%
Interest (income)	(1)	(21)	95.2 %	(1)	(21)	95.2 %
Foreign exchange losses (gains)	7	2	n/m	9	(5)	n/m
	134	110	21.8 %	257	227	13.2 %

- **Gross interest expenses**, prior to capitalization of long-term debt interest, increased year over year by \$6 million in the second quarter of 2016 and \$26 million in the first six months of 2016, primarily due to the increase in average long-term debt balances outstanding, which arose mainly from the purchase of spectrum licences, partly offset by a reduction in the effective interest rate. Our weighted average interest rate on long-term debt (excluding commercial paper and the revolving component of the TELUS International (Cda.) Inc. credit facility) was 4.32% at June 30, 2016, as compared to 4.42% one year earlier. (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 Innovation, Science and Economic Development Canada (ISED), which we expect to deploy in our existing network in future periods. Capitalization of long-term debt interest will continue until substantially all of the activities necessary to prepare the spectrum for its intended use are complete; effectively when cell sites are ready to be put into service.
- **Employee defined benefit plans net interest** decreased year over year by \$5 million in the second quarter of 2016 and \$11 million in the first six months of 2016, mainly from the decrease in the defined benefit plan deficit at December 31, 2015, to \$53 million from \$598 million one year earlier, partly offset by a higher discount rate.
- **Interest income** in the second quarter and first six months of the comparative periods in 2015 was derived primarily from \$20 million interest income related to the settlement of prior years’ income-tax related matters.
- **Foreign exchange losses (gains)** fluctuate from period to period resulting from currency contracts for the U.S. dollar.

Income taxes

(\$ millions, except tax rates)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Income tax computed at applicable statutory rates	148	134	10.4 %	285	282	1.1 %
Revaluation of deferred income tax liability to reflect future statutory income tax rates	—	48	(100.0)%	1	48	(97.9)%
Adjustments recognized in the current period for income taxes of prior periods	—	(19)	100.0 %	—	(19)	100.0 %
Other	(8)	3	n/m	(7)	2	n/m
Income taxes	140	166	(15.7)%	279	313	(10.9)%
Income taxes computed at applicable statutory rates (%)	26.5	26.6	(0.1) pts.	26.6	26.5	0.1 pts.
Effective tax rate (%)	25.2	32.7	(7.5) pts.	26.0	29.3	(3.3) pts.

Total income tax expense decreased by \$26 million in the second quarter of 2016 and \$34 million in the first six months of 2016 when compared to the same periods in 2015. The decreases were primarily due to a \$48 million non-cash adjustment in the second quarter of 2015 to revalue deferred income tax liabilities arising from an increase in the Alberta provincial corporate tax rate, net of higher income before income taxes in 2016, and a \$19 million recovery recorded in the second quarter of 2015 related to the settlement of prior years’ income tax-related matters (excluding related interest income).

Comprehensive income

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Net income	416	341	22.0%	794	756	5.0%
Other comprehensive income (loss) (net of income taxes):						
Items that may be subsequently reclassified to income	4	(3)	n/m	(10)	—	n/m
Item never subsequently reclassified to income						
– Employee defined benefit plans re-measurements	94	(122)	n/m	17	115	(85.2)%
Comprehensive income	514	216	138.0 %	801	871	(8.0)%

Comprehensive income increased year over year by \$298 million in the second quarter of 2016, primarily due to increases in employee defined benefit plan re-measurement amounts and growth in Net income. For the six-month period, Comprehensive income decreased year over year by \$70 million, mainly from a decrease in employee defined benefit plan re-measurement amounts, partly offset by growth 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**

As at June 30	2016	2015	Change			
Subscribers (000s):						
Postpaid ¹	7,376	7,221	2.1 %			
Prepaid	1,051	1,131	(7.1)%			
Total	8,427	8,352	0.9 %			
Postpaid proportion of subscriber base (%)	87.5	86.5	1.0 pts.			
HSPA+ population coverage ² (millions)	35.7	35.7	— %			
LTE population coverage ² (millions)	35.1	33.9	3.5 %			
	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Subscriber gross additions (000s):						
Postpaid	247	249	(0.8)%	459	472	(2.8)%
Prepaid	84	106	(20.8)%	163	210	(22.4)%
Total	331	355	(6.8)%	622	682	(8.8)%
Subscriber net additions (losses) (000s):						
Postpaid	61	76	(19.7)%	69	113	(38.9)%
Prepaid	(21)	(13)	(61.5)%	(54)	(42)	(28.6)%
Total	40	63	(36.5)%	15	71	(78.9)%
Blended ARPU, per month ³ (\$)	64.38	63.48	1.4 %	63.73	62.91	1.3 %
Churn, per month ³ (%)						
Blended	1.15	1.17	(0.02) pts.	1.21	1.23	(0.02) pts.
Postpaid	0.90	0.86	0.04 pts.	0.93	0.88	0.05 pts.
Cost of acquisition (COA) per gross subscriber addition ³ (\$)	442	404	9.4 %	439	398	10.3 %
Retention spend to network revenue ³ (%)	12.9	12.1	0.8 pts.	13.2	12.1	1.1 pts.

1. Subsequent to a review of our subscriber base during the first quarter of 2016, our 2016 opening postpaid subscriber base was reduced by 45,000.
2. Including network access agreements with other Canadian carriers.
3. These are industry measures useful in assessing operating performance of a wireless company, but are not measures defined under IFRS. (See Section 11.2 Operating indicators.)

Operating revenues – Wireless segment

(\$ millions, except ratios)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Network revenues	1,608	1,568	2.6 %	3,181	3,103	2.5 %
Equipment and other services	123	156	(21.2)%	247	291	(15.1)%
Revenues arising from contracts with customers	1,731	1,724	0.4 %	3,428	3,394	1.0 %
Other operating income (loss)	23	(2)	n/m	28	—	n/m
External operating revenues	1,754	1,722	1.9 %	3,456	3,394	1.8 %
Intersegment network revenue	14	14	— %	28	28	— %
Total operating revenues	1,768	1,736	1.8 %	3,484	3,422	1.8 %

Network revenues from external customers increased year over year by \$40 million in the second quarter of 2016 and \$78 million in the first six months of 2016. Data network revenue increased year over year by 7.5% in the second quarter of 2016 and 7.9% in the first six months of 2016, reflecting growth in the subscriber base, a larger proportion of higher-rate two-year plans in the revenue mix, a higher postpaid subscriber mix, and increasing data usage from the continued adoption of smartphones and other data-centric wireless devices, as well as greater use of applications and the expansion of our LTE network coverage. Voice network revenue decreased year over year by 3.4% in the second quarter of 2016 and 3.8% in the first six months of 2016 due to the increased adoption of unlimited nationwide voice plans and continued but moderating substitution to data services, partly offset by growth in the subscriber base.

- **Monthly blended ARPU** was \$64.38 in the second quarter and \$63.73 in the first six months of 2016, reflecting year-over-year increases of \$0.90 for the quarter and \$0.82 for the six-month period. The increases were primarily due to the effects of higher-rate two-year plans, a more favourable postpaid subscriber mix and growth in data usage (as described above), partly offset by continued declines in voice revenue and the effects of higher data allotments in our service plans, increased frequency of customer data usage notifications and the economic slowdown, particularly in Alberta.
- **Gross subscriber additions** were 331,000 in the second quarter of 2016 and 622,000 in the first six months of 2016, reflecting year-over-year decreases of 24,000 for the quarter and 60,000 for the six-month period. Postpaid gross additions were 247,000 in the second quarter of 2016 and 459,000 in the first six months of 2016, down 2,000 and 13,000, respectively, from the same periods in 2015. The declines in subscriber additions were due to the economic slowdown, particularly in Alberta, competitive intensity and the effects of higher handset prices on customer demand. Prepaid gross additions were 84,000 in the second quarter of 2016 and 163,000 in the first six months of 2016, reflecting year-over-year decreases of 22,000 and 47,000, respectively, from the comparable periods in 2015, mainly from competitive intensity and our focused marketing efforts on higher-value postpaid loading.
- **Net subscriber additions** were 40,000 in the second quarter of 2016 and 15,000 in the first six months of 2016, reflecting year-over-year declines of 23,000 in the quarter and 56,000 in the six-month period due to lower gross additions, partly offset by an improvement in blended monthly churn rates. Postpaid net additions were 61,000 in the second quarter of 2016 and 69,000 in the first six months of 2016, down 15,000 and 44,000, respectively, from the comparable periods in 2015 due to the factors affecting gross subscriber additions described above, as well as increases in our postpaid churn rates. Prepaid subscribers decreased by 21,000 in the second quarter of 2016 and 54,000 in the first six months of 2016, as compared to decreases of 13,000 and 42,000, respectively, in the same periods of 2015. Prepaid losses reflect conversions to postpaid services (due to our marketing efforts focused on higher-value postpaid loading) and increased competition for prepaid services.
- Our **average monthly postpaid subscriber churn rate** was 0.90% in the second quarter of 2016 and 0.93% in the first six months of 2016, as compared to 0.86% and 0.88%, respectively, in the comparable periods of 2015. Our blended monthly subscriber churn rate was 1.15% in the second quarter of 2016 and 1.21% in the first six months of 2016, as compared to 1.17% and 1.23%, respectively, in the same periods of 2015. The year-over-year increases in postpaid subscriber churn rates during the quarter and six-month period of 2016 were primarily due to competitive intensity, in part from the simultaneous expiration of two-year and three-year customer contracts starting in June 2015, as well as the effects of the economic slowdown, particularly in Alberta. The year-over-year improvements in our blended subscriber churn rates during the quarter and six-month period of 2016 were due to improvements in our prepaid churn rates and our continued focus on customers first initiatives, our clear and simple approach and retention programs, partly offset by the factors affecting postpaid subscriber churn described above.

Equipment and other services decreased year over year by \$33 million in the second quarter of 2016 and \$44 million in the first six months of 2016, mainly from lower gross additions and retention volumes, competitive intensity and discontinuance of Black’s Photography revenue from the closure of stores in August 2015, partly offset by higher-value smartphones in the sales mix.

Other operating income increased year over year by \$25 million in the second quarter of 2016 and \$28 million in the first six months of 2016, mainly due to gains from the exchange of wireless spectrum licences and the sale of property, plant and equipment, as well as net gains and equity income related to real estate joint venture developments.

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

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Goods and services purchased:						
Equipment sales expenses	371	370	0.3 %	734	718	2.2 %
Network operating expenses	188	188	— %	373	372	0.3 %
Marketing expenses	97	104	(6.7)%	188	194	(3.1)%
Other ¹	161	178	(9.6)%	316	336	(6.0)%
Employee benefits expense ¹	158	177	(10.7)%	324	339	(4.4)%
Total operating expenses	975	1,017	(4.1)%	1,935	1,959	(1.2)%

¹ Includes restructuring and other costs. (See Section 11.1 Non-GAAP and other financial measures.)

Equipment sales expense was slightly higher year over year in the second quarter of 2016 and increased by \$16 million in the first six months of 2016, reflecting an increase in higher-value smartphones in the sales mix and increasing handset costs, partly offset by lower gross additions and retention volumes, 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 12.9% in the second quarter of 2016 and 13.2% in the first six months of 2016, as compared to 12.1% in both the second quarter and first six months of 2015. The increases were driven by growing retention costs from higher per-unit subsidy costs, partly offset by lower retention volumes, as well as moderating growth in network revenue. The higher per-unit subsidy costs were primarily from continued customer preference for higher-value smartphones, competitive intensity and lower device upgrade fees.
- **COA per gross subscriber addition** was \$442 in the second quarter of 2016 and \$439 in the first six months of 2016, reflecting year-over-year increases of \$38 for the quarter and \$41 for the six-month period. These increases resulted mainly from higher per-unit subsidy costs that reflected competitive intensity and a greater proportion of higher-value smartphones in the sales mix, partly offset by lower advertising and promotional costs.

Network operating expenses were relatively flat year over year in the second quarter and first six months of 2016, as higher maintenance costs were offset by network rationalization initiatives.

Marketing expenses declined year over year by \$7 million in the second quarter of 2016 and \$6 million in the first six months of 2016, primarily due to lower advertising and promotions expenses and lower commission expenses driven by lower gross additions and retention volumes.

Other goods and services purchased decreased year over year by \$17 million in the second quarter of 2016 and \$20 million in the first six months of 2016, primarily due to lower non-labour restructuring and other costs, mainly from provisions for the closure of Black’s Photography retail stores during the second quarter of 2015, partly offset by higher administrative costs.

Employee benefits expense decreased year over year by \$19 million in the second quarter of 2016 and \$15 million in the first six months of 2016, reflecting lower salaries and wages driven by a reduction in FTEs from our ongoing operational efficiency and effectiveness initiatives, lower share-based compensation expenses, and, for the quarter, lower labour-related restructuring costs, partly offset by inflationary compensation increases.

EBITDA – Wireless segment

(\$ millions, except margins)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
EBITDA	793	719	10.4 %	1,549	1,463	5.9 %
Add back restructuring and other costs	9	36	(75.0)%	18	42	(57.1)%
EBITDA – excluding restructuring and other costs	802	755	6.2 %	1,567	1,505	4.1 %
Deduct gain on the exchange of wireless spectrum licences	(15)	—	n/m	(15)	—	n/m
Deduct net gains and equity income from real estate joint venture developments	(4)	—	n/m	(4)	—	n/m
Adjusted EBITDA	783	755	3.6 %	1,548	1,505	2.8 %
EBITDA margin (%)	44.9	41.4	3.5 pts.	44.5	42.8	1.7 pts.
Adjusted EBITDA margin ¹ (%)	44.8	43.5	1.3 pts.	44.7	44.0	0.7 pts.

1 The calculation of the Adjusted EBITDA margin excludes the net gains and equity income from real estate joint venture developments, as well as the gain on the exchange of wireless spectrum licences from both EBITDA and Operating revenues, and excludes restructuring and other costs from EBITDA

Wireless EBITDA increased by \$74 million in the second quarter of 2016 and \$86 million in the first six months of 2016 when compared to the same periods in 2015, including gains, as detailed in the table above, and lower restructuring and other costs. Wireless adjusted EBITDA increased year over year by \$28 million in the second quarter of 2016 and \$43 million in the first six months of 2016, reflecting network revenue growth driven by higher ARPU and a larger customer base, as well as ongoing operational efficiency and effectiveness initiatives, partly offset by higher retention spending.

5.5 Wireline segment
Wireline operating indicators

At June 30 (000s)	2016	2015	Change			
Subscriber connections:						
High-speed Internet subscribers ¹	1,617	1,520	6.4 %			
TELUS TV subscribers	1,029	954	7.9 %			
Residential NALs	1,421	1,516	(6.3)%			
Total wireline subscriber connections¹	4,067	3,990	1.9 %			
	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Subscriber net additions (losses):						
High-speed Internet	18	22	(18.2)%	30	45	(33.3)%
TELUS TV	13	17	(23.5)%	24	38	(36.8)%
Residential NALs	(20)	(20)	— %	(46)	(40)	(15.0)%
Total wireline subscriber connections net additions (losses)	11	19	(42.1)%	8	43	(81.4)%

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, and as such our January 1, 2015, opening reported subscriber balance has been retrospectively adjusted to exclude 1,613,000 business NALs. In addition, subsequent to a review of our subscriber base during the first quarter of 2016, our 2016 opening high-speed Internet subscriber base was increased by 21,000.

Operating revenues – Wireline segment

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Data service and equipment	990	928	6.7 %	1,983	1,831	8.3 %
Voice service	340	383	(11.2)%	688	765	(10.1)%
Other services and equipment	55	57	(3.5)%	113	113	— %
Revenues arising from contracts with customers	1,385	1,368	1.2 %	2,784	2,709	2.8 %
Other operating income	9	12	(25.0)%	16	27	(40.7)%
External operating revenues	1,394	1,380	1.0 %	2,800	2,736	2.3 %
Intersegment revenue	48	43	11.6 %	95	86	10.5 %
Total operating revenues	1,442	1,423	1.3 %	2,895	2,822	2.6 %

- **Data service and equipment revenues** increased year over year by \$62 million in the second quarter of 2016 and \$152 million in the first six months of 2016, primarily due to: (i) growth in business process outsourcing revenues; (ii) increased Internet and enhanced data service revenues resulting from a 6.4% increase in our high-speed Internet subscribers over 12 months, higher revenue per customer from upgrades to faster Internet speeds and larger usage rate Internet plans, subscribers coming off of promotional offers, the phased-in introduction of usage-based billing in 2015 and certain rate increases; (iii) increased TELUS TV revenues resulting from an 7.9% subscriber growth over 12 months; and (iv) for the six-month period, increased TELUS Health service revenue. This growth was partly offset by a decline in data equipment revenues related to the economic slowdown.
- **Voice service revenues** decreased year over year by \$43 million in the second quarter of 2016 and \$77 million in the first six months of 2016. The decreases reflect the ongoing decline in legacy revenues from technological substitution, the economic slowdown, 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 6.3% decline in residential NALs in the 12-month period ended June 30, 2016.
- **Wireline subscriber connections net additions** were 11,000 in the second quarter of 2016 and 8,000 in the first six months of 2016, reflecting year-over-year decreases of 8,000 and 35,000, respectively, from the comparable periods in 2015.
 - **Net additions** of high-speed Internet subscribers were 18,000 in the second quarter of 2016 and 30,000 in the first six months of 2016, reflecting year-over-year declines of 4,000 in the quarter and 15,000 in the six-month period. The decreases resulted from the effects of competitive intensity and the impact of the economic slowdown, leading to a higher customer churn rate, partly offset by the continued expansion of our high-speed broadband footprint in urban and rural communities, as well as the pull-through impact from the continued adoption of Optik TV. Net additions of TELUS TV subscribers were 13,000 in the second quarter of 2016 and 24,000 in the first six months of 2016, down 4,000 and 14,000, respectively, from additions in the same periods in 2015. The decreases reflected a higher customer churn rate and a decline in satellite subscribers as the effects of slower subscriber growth for paid TV services, the economic slowdown, a high rate of market penetration for TV services and competitive intensity, including OTT services, were partly offset by the ongoing expansion of our addressable high-speed broadband footprint and increasing broadband speeds. Continued focus on expanding our addressable high-speed Internet and Optik TV footprint, connecting more homes and business directly to fibre, and bundling these services together, resulted in combined Internet and TV subscriber growth of 172,000 or 7.0% over the last 12 months.
 - **Residential NAL losses** were 20,000 in the second quarter of 2016 and 46,000 in the first six months of 2016, as compared to NAL losses of 20,000 and 40,000, respectively, in the same periods of 2015. The residential NAL losses continue to reflect the economic slowdown, the ongoing trend of substitution to wireless and Internet-based services, and increased competition, partially mitigated by the success of our bundled service offerings and our customers first initiatives.
- **Other services and equipment** was relatively flat year over year in both the second quarter of 2016 and the first six months of 2016.

Other operating income decreased year over year by \$3 million in the second quarter of 2016 and \$11 million in the first six months of 2016, mainly due to a decrease in amounts recognized from the regulatory price cap deferral account for provisioning broadband Internet services to eligible rural and remote communities, as well as an increase in the provisions on certain investments. Partly offsetting this decline was net gains and equity income on real estate joint venture developments.

Intersegment revenue represents services provided to the wireless segment. Such revenue is eliminated upon consolidation along with the associated expenses.

Operating expenses – Wireline segment

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Goods and services purchased ¹	576	589	(2.2)%	1,143	1,150	(0.6)%
Employee benefits expense ¹	470	472	(0.4)%	972	919	5.8 %
Total operating expenses	1,046	1,061	(1.4)%	2,115	2,069	2.2 %

¹ Includes restructuring and other costs. (See Section 11.1 Non-GAAP and other financial measures.)

- **Goods and services purchased** decreased year over year by \$13 million in the second quarter and \$7 million in the first six months of 2016, reflecting lower transit and termination costs and lower equipment costs related to declining equipment revenue, partly offset by increased network operating and administrative costs to support our growing subscriber base, and higher advertising and promotional expenses in support of bundled offerings.
- **Employee benefits expense** decreased year over year by \$2 million in the second quarter of 2016 mainly from a decline in labour-related restructuring costs, lower defined benefit pension plan and share-based compensation expenses, and lower compensation and benefits costs resulting from decrease in the number of domestic employees, in part due to the reduction of FTE positions announced in late 2015. This decline was partly offset by growth in the number of TELUS International employees to support increased business process outsourcing revenue and inflationary compensation increases.

For the six-month period, employee benefits expenses increased year over year by \$53 million, primarily due to growth in the number of TELUS International employees to support increased business process outsourcing revenue, inflationary compensation increases and higher labour-related restructuring costs from efficiency initiatives, including the announcement in late 2015 noted above. This was partially offset by lower compensation and benefits costs resulting from a decrease in domestic employees, as well as lower defined benefit pension plan and share-based compensation expenses.

EBITDA – Wireline segment

(\$ millions, except margins)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
EBITDA	396	362	9.6 %	780	753	3.6 %
Add back restructuring and other costs	14	23	(39.1)%	53	34	55.9 %
EBITDA – excluding restructuring and other costs	410	385	6.5 %	833	787	5.8 %
Deduct net gains and equity income from real estate joint venture developments	(5)	—	n/m	(5)	—	n/m
Adjusted EBITDA	405	385	5.5 %	828	787	5.3 %
EBITDA margin (%)	27.5	25.4	2.1 pts.	26.9	26.7	0.2 pts.
Adjusted EBITDA margin ¹ (%)	28.2	27.0	1.2 pts.	28.7	27.9	0.8 pts.

¹ The calculation of the Adjusted EBITDA margin excludes the net gains and equity income on real estate joint venture developments from both EBITDA and Operating revenues, and excludes restructuring and other costs from EBITDA

Wireline EBITDA increased year over year by \$34 million in the second quarter of 2016, primarily from growth in data service revenues, lower labour-related restructuring and other costs, declining transit and termination costs, as well as net revenue impacts from the real estate joint venture developments, partly offset by continued declines in legacy voice services and approximately \$3 million of costs and revenue impacts related to severe wildfires in northern Alberta in the second quarter of 2016. In the first six months of 2016, wireline EBITDA increased year over year by \$27 million due to similar factors as noted above for the second quarter, except for higher labour-related restructuring and other costs. Wireline adjusted EBITDA increased year over year by 5.5% and 5.3%, respectively, in the quarter and six-month period, as compared to operating revenue increases of 1.0% and 2.4%, respectively, excluding the net revenue impacts from the real estate joint venture developments. This reflects our execution on cost efficiency programs, as well as improving margins in data services, including Internet, business process outsourcing services, TELUS TV, and TELUS Health services.

6. Changes in financial position

Financial position at: (\$ millions)	June 30 2016	Dec. 31 2015	Change		Change includes:
Current assets					
Cash and temporary investments, net	428	223	205	92 %	See <i>Section 7 Liquidity and capital resources</i>
Accounts receivable	1,317	1,428	(111)	(8)%	Seasonal reduction in accounts receivable, including a decrease in wireless dealer receivables and a decrease in days outstanding in customer receivables
Income and other taxes receivable	21	1	20	n/m	n/m
Inventories	351	360	(9)	(3)%	Decrease in wireless handset inventory due to a seasonally lower volume of handsets on hand during the second quarter
Prepaid expenses	359	213	146	69 %	Prepaid expenses increased due to the annual prepayment of statutory employee benefits, annual wireless spectrum licence fees, property taxes and maintenance contracts made, net of amortization
Real estate joint venture advances	41	66	(25)	(38)%	Commencement of repayment of construction credit facility concurrent with commencement of closing of residential condominium unit sales
Current derivative assets	11	40	(29)	(73)%	Decrease in U.S. currency hedging items.
Current liabilities					
Short-term borrowings	103	100	3	3 %	See <i>Section 7.7 Sale of trade receivables</i>
Accounts payable and accrued liabilities	1,983	1,990	(7)	— %	Decrease in payroll and other employee-related liabilities due to payment of variable pay for 2015 made in the first quarter of 2016, partly offset by accrued liabilities related to our broadband infrastructure investments
Income and other taxes payable	28	108	(80)	(74)%	Decrease due to the final tax payment for the 2015 taxation year made in the first quarter of 2016
Dividends payable	274	263	11	4 %	n/m
Advance billings and customer deposits	749	760	(11)	(1)%	Decrease in advance billings arising from a seasonally lower number of wireless handsets shipped to external distribution channels during the second quarter
Provisions	170	197	(27)	(14)%	n/m
Current maturities of long-term debt	1,688	856	832	97 %	Increase in outstanding commercial paper of \$719 million, as well as amounts reclassified from long-term debt relating to upcoming maturity of \$700 million of our 4.95% Notes, Series CD in March 2017, offset by redemption of \$600 million of our 3.65% Notes, Series CI in May 2016
Current derivative liabilities	20	2	18	n/m	An increase in U.S. currency hedging items.
Working capital (Current assets subtracting Current liabilities)	(2,487)	(1,945)	(542)	(28)%	Working capital decreased in the second quarter of 2016 primarily as a result of an increase in our commercial paper.

Financial position at: (\$ millions)	June 30 2016	Dec. 31 2015	Change		Change includes:
Non-current assets					
Property, plant and equipment, net	10,043	9,736	307	3 %	See <i>Capital expenditures</i> in <i>Section 7.3 Cash used by investing activities</i> and <i>Depreciation</i> in <i>Section 5.3</i>
Intangible assets, net	10,250	9,985	265	3 %	See <i>Capital expenditures</i> in <i>Section 7.3 Cash used by investing activities</i> and <i>Amortization of intangible assets</i> in <i>Section 5.3</i>
Goodwill, net	3,761	3,761	—	— %	—
Other long-term assets	630	593	37	6 %	Pension and post-retirement assets increased due to positive returns earned on plan assets.
Non-current liabilities					
Provisions	418	433	(15)	(3)%	n/m
Long-term debt	10,834	11,182	(348)	(3)%	See <i>Section 7.4 Cash provided (used) by financing activities</i>
Other long-term liabilities	709	688	21	3 %	Other long-term liabilities increased due to an increase in the accrual for share-based compensation.
Deferred income taxes	2,155	2,155	—	— %	—
Owners’ equity					
Common equity	8,073	7,672	401	5 %	Net income of \$794 million, Other comprehensive income of \$3 million, impact on contributed surplus arising from subsidiary issuance of shares to non-controlling interest of \$240 million, net of dividend declarations of \$535 million, and share purchase activity under our normal course issuer bid program of \$101 million (see <i>Section 7.4 Cash provided (used) by financing activities</i>)
Non-controlling interest	8	—	8	n/m	Impact arising from subsidiary issuance of shares to non-controlling interest of \$4 million and Other comprehensive income attributable to the non-controlling interest of \$4 million (see <i>Section 7.4 Cash provided (used) by financing activities</i>).

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 this MD&A.

7.1 Overview

Our capital structure financial policies, financing plan and report on financing and capital structure management plans are described in *Section 4.3*.

Cash flows

(\$ millions)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Cash provided by operating activities	892	943	(5.4)%	1,455	1,661	(12.4)%
Cash used by investing activities	(735)	(2,377)	69.1 %	(1,395)	(3,303)	57.8 %
Cash provided (used) by financing activities	(207)	(68)	n/m	145	1,659	(91.3)%
Increase (decrease) in Cash and temporary investments, net	(50)	(1,502)	96.7 %	205	17	n/m
Cash and temporary investments, net, beginning of period	478	1,579	(69.7)%	223	60	n/m
Cash and temporary investments, net, end of period	428	77	n/m	428	77	n/m

7.2 Cash provided by operating activities

Cash provided by operating activities decreased year over year by \$51 million in the second quarter of 2016 and \$206 million in the first six months of 2016.

Analysis of changes in cash provided by operating activities

(\$ millions) month	Second quarter	Six-month period
Cash provided by operating activities, three- and six-month periods ended June 30, 2015	943	1,661
Year-over-year changes:		
Higher EBITDA (See <i>Section 5.4 Wireless segment</i> and <i>Section 5.5 Wireline segment</i>)	108	113
Lower (higher) share-based compensation cash outflows, net of expense	(3)	36
Higher (lower) employer contributions to defined benefits plans, net of expense	3	(1)
Higher restructuring disbursements, net of restructuring expenses	(53)	(74)
Higher interest paid, net of received	(5)	(43)
Higher income taxes paid, net of recoveries received	(87)	(245)
Other operating working capital changes	(14)	8
Cash provided by operating activities, three-month and six-month periods ended June 30, 2016	892	1,455

- Restructuring disbursements, net of expenses, increased year over year driven by various operational efficiency and effectiveness initiatives in 2015 and first quarter of 2016, including the reduction of full-time equivalent (FTE) positions announced in November 2015.
- Income taxes paid, net of refunds received, increased in the second quarter and the first six months of 2016. The increase in the quarter reflects higher required instalment payments, as well as higher refunds received in the comparative period in 2015. The increase for the six-month period also includes a higher final income tax payment for the 2015 income tax year than was required in the comparable period of 2015 for the 2014 income tax year, mainly due to the use of Public Mobile losses in 2014.

7.3 Cash used by investing activities

Cash used by investing activities decreased year over year by \$1,642 million in the second quarter of 2016 and \$1,908 million in the first six months of 2016. The changes included the following:

- A year-over-year decrease of \$60 million in Cash payments for capital assets (excluding spectrum licences) in the second quarter of 2016 and \$27 million in the first six months of 2016. This was composed of:
 - A year-over-year increase of \$105 million in capital expenditures in the second quarter of 2016 and \$88 million in the first six months of 2016 (see table and discussion below).

- Lower capital expenditure payments with respect to payment timing differences, as associated Accounts payable and accrued liabilities increased year over year by \$165 million in the second quarter of 2016 and \$115 million in the first six months of 2016.
- In the second quarter and first six months of 2016, cash payments for spectrum licences were \$145 million. Comparatively, we paid \$1,688 million in the second quarter of 2015 and \$1,990 million in the first six months of 2015 for the AWS-3 and 2500 MHz spectrum licences acquired in Innovation, Science and Economic Development Canada’s (ISED) wireless spectrum auctions.
- Receipts from real estate joint ventures, net of advances and contributions, were in the amount of \$30 million in the second quarter of 2016 and \$18 million in the first six months of 2016, mainly from a \$40 million repayment of construction financing from the TELUS Garden real estate joint venture. For the comparable periods in 2015, advances and contributions from the real estate joint ventures, net of receipts, were \$15 million and \$22 million, respectively, which primarily reflect advances under construction credit facilities commensurate with construction progress.

Capital expenditure measures

(\$ millions, except capital intensity)	Second quarters ended June 30			Six-month periods ended June 30		
	2016	2015	Change	2016	2015	Change
Capital expenditures excluding spectrum licences¹						
Wireless segment	258	227	13.7 %	438	475	(7.8)%
Wireline segment	511	437	16.9 %	949	824	15.2 %
Consolidated	769	664	15.8 %	1,387	1,299	6.8 %
Wireless segment capital intensity (%)	15	13	2 pts.	13	14	(1) pt.
Wireline segment capital intensity (%)	35	31	4 pts.	33	29	4 pts.
Consolidated capital intensity ² (%)	24	21	3 pts.	22	21	1 pt.

1 Capital expenditures include assets purchased, but not yet paid for, and therefore differ from Cash payments for capital assets, as presented on the interim 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 year over year by \$31 million in the second quarter of 2016, primarily due to continued investments in our fibre-optic network to support our small-cell technology strategy to improve coverage and prepare for a more efficient and timely evolution to 5G. For the first six months of 2016, wireless capital expenditures decreased year over year by \$37 million mainly from lower spending on the deployment of spectrum partly offset by the increased investments in our fibre-optic network. During the first six months of 2016, we continued our deployment of the 700 MHz spectrum and the 2500 MHz spectrum. We also continued to invest in system and network resiliency and reliability in support of our ongoing customers first initiatives and to ready the network and systems for future retirement of legacy assets.

Wireline segment capital expenditures increased year over year by \$74 million in the second quarter of 2016 and \$125 million in the first six months of 2016. The increases were due to continuing investments in our 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 our customers’ demand for faster Internet speeds, and extends the reach and functionality of our business and healthcare solutions. We also continued to make investments in system and network resiliency and reliability.

7.4 Cash provided (used) by financing activities

Net cash used by financing activities was \$207 million in the second quarter of 2016, as compared to \$68 million net cash used by financing activities in the second quarter of 2015. Net cash provided by financing activities was \$145 million in the first six months of 2016, as compared to \$1.7 billion in the first six months of 2015. Financing activities included the following:

Dividends paid to the holders of Common Shares

Dividends paid to the holders of Common Shares totalled \$261 million in the second quarter of 2016, an increase of \$18 million from the second quarter of 2015. Dividends paid for the first six months of 2016 were \$524 million, an increase of \$37 million from the first six months of 2015. The increases reflect higher dividend rates under our dividend growth program (see Section 4.3), partially offset by lower outstanding shares resulting from shares purchased and cancelled under our normal course issuer bid (NCIB) program. Subsequent to June 30, 2016, we paid dividends of \$274 million to the holders of Common Shares in July 2016.

Purchase of Common Shares for cancellation

Under the 2016 NCIB, we purchased approximately two million shares for \$61 million in the second quarter of 2016 and approximately three million shares for \$111 million in the first six months of 2016. See *Section 4.3* for details of our planned multi-year share purchase program. No shares were purchased in the month of July 2016.

Normal course issuer bid in 2016

Period	Common Shares purchased and cancelled (millions)	Average purchase price per share (\$)	Purchase costs (\$ millions)	Increase (decrease) in Accounts payable (\$ millions)	Cash outflow (\$ millions)
First quarter	1	37.77	50	(10)	60
Second quarter	2	38.43	61	—	61
Total	3	38.12	111	(10)	121

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*). Such proceeds were \$100 million at June 30, 2016, down \$400 million from the balance at June 30, 2015.

Long-term debt issues and repayments

Long-term debt repayments, net of issues, were \$173 million in the second quarter of 2016 primarily from the repayment of the Series CI Notes of \$600 million in May 2016. This was partly offset by amounts drawn on the TELUS International (Cda) Inc. (TI) credit facility of \$359 million at June 30, 2016, as well as an increase in commercial paper from \$891 million (U.S.\$686 million) at March 31, 2016, to \$975 million (U.S.\$755 million) at June 30, 2016. Long-term debt issues, net of repayments, were \$504 million in the first six months of 2016, which was primarily from an increase in commercial paper from \$256 million at December 31, 2015, as well as the amounts drawn on the TI credit facility, partly offset by the repayment of the Series CI Notes noted above.

In comparison, Long-term debt repayments, net of issues, were \$119 million in the second quarter of 2015, whereas long-term debt issues, net of repayments, were \$2.0 billion in the first six months of 2015. These were composed of:

- A March 24, 2015, public issue of \$1.75 billion in senior unsecured notes in three series: 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 AWS-3 wireless spectrum licences and the remainder was used for general corporate purposes.
- A net decrease in commercial paper of \$519 million in the second quarter of 2015 and \$130 million in the first six months of 2015, to a balance of \$NIL as at June 30, 2015.
- A net increase in amounts drawn on our five-year revolving credit facility of \$400 million in the second quarter of 2015 and first six months of 2015.

Our average term to maturity of long-term debt (excluding commercial paper and the revolving component of the TI credit facility) has increased to approximately 11.0 years at June 30, 2016, compared to approximately 10.9 years at June 30, 2015. Additionally, our weighted average cost of long-term debt (excluding commercial paper and the revolving component of the TI credit facility) was 4.32% at June 30, 2016, as compared to 4.42% at June 30, 2015.

Issue of shares by subsidiary to non-controlling interest

In June 2016, a subsidiary issued shares to Baring Private Equity Asia for it to acquire a 35% non-controlling interest in TELUS International (Cda) Inc. (See *Section 1.3 Consolidated highlights*.) Cash proceeds net of issue costs currently paid were \$292 million in the second quarter of 2016.

7.5 Liquidity and capital resource measures

Net debt was \$12.3 billion at June 30, 2016, an increase of \$0.5 billion when compared to one year earlier, resulting mainly from incremental debt issued in the fourth quarter of 2015, in which the net proceeds were used to repay 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, with the balance to be used for general corporate purposes.

Fixed-rate debt as a proportion of total indebtedness was 89% at June 30, 2016, down from 92% one year earlier, mainly due to an increase in commercial paper, which emulates floating-rate debt.

Net debt to EBITDA – excluding restructuring and other costs ratio was 2.67 times, as measured for June 30, 2016, consistent with 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. As at June 30, 2016, 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, 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 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 12-month periods ended, June 30	2016	2015	Change
Components of debt and coverage ratios¹ (\$ millions)			
Net debt	12,257	11,795	462
EBITDA – excluding restructuring and other costs	4,596	4,414	182
Net interest cost	525	460	65
Debt ratios			
Fixed-rate debt as a proportion of total indebtedness (%)	89	92	(3) pts.
Average term to maturity of long-term debt (excluding commercial paper) (years)	11.0	10.9	0.1
Net debt to EBITDA – excluding restructuring and other costs ¹ (times)	2.67	2.67	—
Coverage ratios¹ (times)			
Earnings coverage	4.6	5.1	(0.5)
EBITDA – excluding restructuring and other costs interest coverage	8.8	9.6	(0.8)
Other measures (%)			
Dividend payout ratio of adjusted net earnings ¹	75	68	7 pts.
Dividend payout ratio ¹	74	69	5 pts.
1. See <i>Section 11.1 Non-GAAP and other financial measures</i> .			

Earnings coverage ratio for the 12-month period ended June 30, 2016, was 4.6 times, down from 5.1 times one year earlier. Higher borrowing costs reduced the ratio by 0.4, while lower 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 June 30, 2016, was 8.8 times, down from 9.6 times one year earlier. An increase in net interest costs reduced the ratio by 1.2, while growth in EBITDA – excluding restructuring and other costs increased the ratio by 0.4. (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 net earnings per share. 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 measures are presented for illustrative purposes in evaluating our target guideline, and for the 12-month period ended June 30, 2016, were consistent with the objective range.

7.6 Credit facilities

At June 30, 2016, we had available liquidity of approximately \$1.3 billion from unutilized credit facilities, including approximately \$55 million available liquidity from the TI credit facility, and \$119 million available from uncommitted letters of credit facilities, as well as \$400 million available under our trade receivables securitization program (see *Section 7.7 Sale of trade receivables*). This adheres to our objective of generally maintaining at least \$1.0 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 2016 and expires on May 31, 2021. The revolving credit facility is used for general corporate purposes, including the backstop of commercial paper, as required.

TELUS revolving credit facility at June 30, 2016

(\$ millions)	Expiry	Size	Drawn	Outstanding undrawn letters of credit	Backstop for commercial paper program	Available liquidity
Five-year revolving facility ¹	May 31, 2021	2,250	—	—	975	1,275
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 to be less than 2.00 to 1.00, at the end of any financial quarter. Our consolidated leverage ratio was approximately 2.67 to 1.00 as at June 30, 2016, and our consolidated coverage ratio was approximately 8.75 to 1.00 as at June 30, 2016. 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 June 30, 2016, 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

At June 30, 2016, we had \$219 million of letters of credit outstanding (December 31, 2015 - \$202 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 \$119 million at June 30, 2016.

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, 2018, and available liquidity was \$400 million as at June 30, 2016. (See *Note 19* of the interim 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 August 5, 2016.

7.8 Credit ratings

There were no changes to our investment grade credit ratings as of August 5, 2016.

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 were described in *Section 7.9* of our 2015 MD&A.

Liquidity risk

As a component of our capital structure financial policies, discussed in *Section 4.3 Liquidity and capital resources*, we manage liquidity risk and, therefore, our ability to meet current and future working capital requirements 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.

As of the date of this MD&A, we can offer up to \$3.0 billion of long-term debt or equity securities pursuant to a shelf prospectus that is effective until April 2018.

At June 30, 2016, we had available liquidity of \$1.3 billion from unutilized credit facilities and \$119 million from uncommitted letters of credit facilities (see *Section 7.6 Credit facilities*), as well as \$400 million available under our trade receivables securitization program (see *Section 7.7 Sale of trade receivables*). We also had \$428 million in cash and temporary investments at June 30, 2016. This adheres to our objective of generally maintaining at least \$1 billion of available liquidity. We believe that our investment grade credit ratings contribute to reasonable access to capital markets.

Commitments and contingent liabilities

Purchase obligations

As at June 30, 2016, our contractual commitments related to the acquisition of property, plant and equipment were \$461 million through to December 31, 2018, as compared to \$326 million over a period ending December 31, 2017, reported in our 2015 annual report, primarily driven by the increase in commitments related to broadband expansion.

Indemnification obligations

At June 30, 2016, we had no liability recorded in respect of indemnification obligations.

Claims and lawsuits

A number of claims and lawsuits (including class actions and intellectual property infringement claims) seeking damages and other relief are pending against us and, in some cases, numerous other wireless carriers and telecommunications service providers. As well, we have received notice of, or are aware of, certain possible claims (including intellectual property infringement claims) against us.

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, when it is determined in respect of a particular claim that payments to claimants are probable, we accrue an estimate of the liability.

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 *Note 23(a)* of the interim consolidated financial statements.

7.10 Outstanding share information

Outstanding shares (millions)	June 30, 2016	July 31, 2016
Common Shares	592	592
Common Share options – all exercisable	2	2

7.11 Transactions between related parties

Investments in significant controlled entities

As at June 30, 2016, 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, 2015.

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 \$9 million and \$25 million, respectively, in the second quarter and first six months of 2016, as compared to \$13 million and \$24 million, respectively, in the comparable periods of 2015. See *Note 24(a)* of the interim 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

In the first six months of 2016, we had transactions with real estate joint ventures, which are related parties to us, as set out in *Note 18* of our interim consolidated financial statements. In regard to the TELUS Garden real estate joint venture, commitments and contingent liabilities include construction-related contractual commitments through to 2016 (approximately \$9 million at June 30, 2016) and construction credit facilities (\$56 million with two Canadian financial institutions as 50% lender and TELUS as 50% lender). As at June 30, 2016, the proportion of space leased in the TELUS Garden office tower was approximately 98%. The sale of the TELUS Garden residential condominium units has begun and sale of the remaining residential condominium units are expected to be completed in the second half of 2016.

For the TELUS Sky™ real estate joint venture, commitments and contingent liabilities include construction-related contractual commitments through to 2018 (approximately \$128 million at June 30, 2016) and construction credit facilities (\$342 million with three Canadian financial institutions as 66-2/3% lender and TELUS as 33-1/3% lender).

8. Accounting matters

8.1 Critical accounting estimates

Our significant accounting policies are described in *Note 1* of the Consolidated financial statements dated December 31, 2015. Our critical accounting estimates and significant judgments are described in *Section 8.1* of our 2015 annual MD&A. The preparation of financial statements in conformity with IFRS 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.

8.2 Accounting policy developments

Our accounting policy developments were discussed in *Section 8.2 Accounting policy developments* of our 2015 annual MD&A, and updated in *Section 8.2* of our 2016 Q1 MD&A. See *Note 2* of the interim consolidated financial statements for additional details.

9. Update to assumptions

Our discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of this MD&A.

The assumptions for our 2016 outlook, as described in *Section 9 General trends, outlook and assumptions* of our 2015 annual MD&A, and updated in *Section 9 Update to assumptions* of our 2016 Q1 MD&A, remain the same, except as updated below.

- Our revised estimate for economic growth in Canada is approximately 1.3% in 2016 (previously 1.4%). For our incumbent local exchange carrier (ILEC) provinces in Western Canada, we estimate that economic growth in British Columbia will be approximately 2.9% in 2016 (previously 2.5%), and that economic contraction in Alberta will be approximately (2.0)% in 2016 (previously economic contraction in the range of (1.0)% to (1.5)%). (See *Section 1.2 The environment in which we operate*.)

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. Our principal risks and uncertainties that could affect our future business results and our associated risk mitigation activities were described in our 2015 annual MD&A and updated in our 2016 Q1 MD&A. Certain updates follow.

10.1 Regulatory matters

The following are updates to *Section 10.4 Regulatory matters* in our 2015 annual MD&A.

Our telecommunications, broadcasting and radiocommunication services are regulated under federal laws by the CRTC, the Minister of Innovation, Science and Economic Development Canada (ISED) 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.

Radiocommunication licences and wireless roaming and tower sharing requirements

Recent court ruling – Rogers Communications Inc. v. Chateauguay (City)

On June 16, 2016, the Supreme Court of Canada (the Court) confirmed that federal jurisdiction over radiocommunication infrastructure, including the siting of that infrastructure, is exclusive. The Court’s decision overturns the May 30, 2014, Quebec Court of Appeal ruling which held that a municipality can determine the location of a radiocommunication system including communications antennae. The effect of the Court’s decision is in fact broader, as it affirms exclusive federal authority over both wireless and wireline infrastructure, such as telephone poles and other support structures. The decision affirms that carriers are immune from the application of otherwise valid provincial legislation, such as land use laws, where such laws impact network infrastructure, including if, how and where to build such infrastructure. This decision is positive for TELUS because it confirms that the deployment of wireless (and wireline) infrastructure can proceed exclusively under federal authority.

3500 MHz spectrum licences

On April 21, 2016, we received approval from ISED on our transfer application with Xplornet Communications Inc., requesting a spectrum swap of our 3500 MHz fixed wireless access spectrum licences in secondary and tertiary regions for Xplornet’s 2300 MHz spectrum licences in similar regions (see *Section 2 Core business and strategy*).

Regulatory and federal government reviews

The CRTC has recently initiated public proceedings to review, among other issues, differential pricing practices related to Internet data plans that could affect TELUS’ business results. The CRTC is also conducting further followup related to past proceedings on wireline wholesale services (including the appropriateness of mandating competitor access to our fibre-to-the-premises (FTTP) facilities) and wireless wholesale services that could also impact TELUS. The CRTC’s decision to require pro-rated refunds, the recently concluded basic telecommunications services proceeding and the Commission’s future review of TELUS’ broadcasting licences are also reviewed below, as is the federal government’s ongoing cultural policy review.

Examination of differential pricing practices related to Internet data plans

On May 18, 2016, the CRTC issued *Telecom Notice of Consultation CRTC 2016-192* in which it announced its intention to examine differential pricing practices for Internet data plans. In general terms, differential pricing occurs when the same or a similar product or service is sold to customers at different prices. Differential pricing is a normal feature of competitive markets, including telecommunications markets. Examples of differential pricing practices include zero-rating (when an Internet service provider (ISP) exempts data traffic from a particular application or a set of applications from a monthly data plan, which is often sold to consumers at a fixed monthly price) and sponsored data (where companies sponsor the data usage for specific content allowing an ISP’s customers to access this content with no impact to monthly data plan allowances). The proceeding stems from a previous zero-rating complaint concerning Videotron’s pricing practices when offering its unlimited music service to its mobile wireless customers. The CRTC’s stated objective in this proceeding is to develop an overall approach to differential pricing for Internet data plans, as opposed to adjudicating complaints on a case-by-case basis. A public hearing is scheduled to commence on October 31, 2016. The potential impact of this decision on TELUS is unknown at this time.

CRTC decision to require pro-rated refunds

On May 5, 2016, the CRTC issued *TELUS Communications Company – Prohibition of 30-day cancellation policies – Application regarding liquidated damages, Telecom Decision CRTC 2016-170*, in which the Commission, among other

things, mandated that all service providers are to provide pro-rated refunds to customers who cancel telecommunications and broadcasting services. This decision was unexpected in that it is contradicted by guidance that TELUS and third parties had received from CRTC staff following a 2014 CRTC decision regarding prohibition of notice period for cancellation of services and in light of past decisions on the Wireless Code and notice of cancellation policies which had not required pro-rated refunds. The decision has major impacts on billing systems with no transition period provided to implement the required changes. On July 4, 2016, TELUS filed an application with the CRTC seeking guidance and clarification that the decision does not apply with respect to wireless services with a subsidized device, usage-based services and local telephone service in non-forborne exchanges. TELUS is also requesting an extension of time to implement the decision. Pending resolution of TELUS’ application, the potential impact of this decision is unknown at this time.

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. 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 negative material impact, the impact will be assessed once the final wholesale roaming rates have been approved.

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. 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. Both of these applications have now been denied.

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. On June 30, 2016, the CRTC denied the Allstream Inc. and MNSi Internet Inc. applications.

The net effect of the denial of the Bell, Allstream Inc. and MNSi Internet Inc. review and variance applications is to preserve the status quo concerning the Commission’s 2015 wireline wholesale regulatory framework.

Based on the CRTC’s most recent three-year work plan, the FTTP follow-up activities directed in *Telecom Policy CRTC 2015-326* remain ongoing. For the first phase, which involves the disaggregated FTTP wholesale services for Bell, Rogers, Videotron and Cogeco, the technical configuration proceedings are completed and awaiting a CRTC decision, which is expected in the fourth quarter of 2016. The associated tariff and cost study review is expected to begin in the first quarter of 2017. For the second phase, which involves FTTP wholesale services for the rest of Canada (including TELUS), a technical configuration proceeding is expected to commence in the fourth quarter of 2016. The associated cost study and tariff review will follow, which is expected to take place during the second quarter of 2017.

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 the ultimate 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.

TELUS broadcasting licence renewals

TELUS’ national licence to operate a video-on-demand undertaking was granted an administrative renewal to extend the licence term to August 31, 2017 (*Broadcasting Decision CRTC 2016-7* issued on January 12, 2016). This licence-term extension enables the CRTC to conduct a consultation on the standard conditions of licence of all video-on-demand licences (*Broadcasting Notice of Consultation CRTC 2016-195* issued on May 20, 2016). Also, TELUS’ regional licences to operate broadcasting distribution undertakings in Alberta and British Columbia were granted an administrative renewal to extend the licence term to August 31, 2017. TELUS’ regional broadcasting distribution licence to serve Quebec also expires in 2017. The CRTC intends to initiate a proceeding in 2017 to consider the full renewal of all broadcasting distribution licences expiring that year. None of the consultation processes related to these licence renewals are expected to have a material impact on TELUS’ operations.

Review of Canada’s cultural policies

On April 22, 2016, the Minister of Canadian Heritage announced a broad review of Canada’s cultural policies that is intended to strengthen the “creation, discovery and export of Canadian content in a digital world.” The Minister has indicated that “everything is on the table”, including amendments to the *Broadcasting Act* and the *Telecommunications Act*; changes to the mandates of institutions and agencies, such as the CRTC and the CBC, and the potential introduction of new laws and establishment of new agencies.

The review could also result in many other changes, such as amendments to the *Copyright Act*, and changes to the Canada Media Fund. The first phase of the public consultation was a pre-consultation by way of an online poll, which closed May 20, 2016. A panel of experts has been appointed to define the issues which will form the basis for consultation in public hearings that were initially announced to begin in the fourth quarter of 2016.

Government of Quebec Bill C-74 – Blocking of certain websites associated with online gambling

Bill 74 was adopted on May 17, 2016, and assented to on May 18, 2016, by the National Assembly of Quebec. The provisions of this legislation, which will allow the Government of Quebec to require ISPs and wireless service providers operating in Quebec to block access to a prescribed list of gambling websites, are not yet in force (anticipated to occur in 2018). On July 8, 2016, the Public Interest Advocacy Centre filed an application with the CRTC seeking a declaration that: Bill 74 is unconstitutional; a declaration that any application by a carrier, to the CRTC, for website blocking pursuant to this legislation will be denied; and an interim injunction enjoining ISPs and wireless service providers operating in Quebec from actually blocking websites or taking steps preparatory to the implementation of Bill 74. It is too early to determine what impact this legislation may have on TELUS. In July 2016, the Canadian Wireless Telecommunications Association filed a constitutional challenge to Bill 74 in Quebec Superior Court.

Risk mitigation: TELUS is participating in the CRTC’s differential pricing of Internet data plans proceeding and arguing that differential pricing is generally pro-competitive, pro-consumer and a normal feature of competitive markets, including telecommunications markets. Differential pricing also benefits consumers by providing them with better bundles of services. While generally beneficial, TELUS is also arguing that differential pricing by vertically integrated communications companies for their affiliated broadcasting services might raise concerns, which can be dealt with by the CRTC pursuant to its powers under the *Broadcasting Act*.

TELUS has filed an application with the CRTC seeking to obtain guidance and clarification on interpreting and implementing the CRTC’s decision requiring pro-rated refunds to customers who cancel telecommunications and broadcasting services.

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 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, when the service is phased-in.

We participated in the basic telecommunications services review, opposing any new industry-funded subsidies for broadband or other services.

We participated in the first phase of the public consultation on the review of Canada’s cultural policies and will continue to actively participate in further phases of this consultation with the objective of ensuring favourable changes in the broadcasting system while preserving important regulatory constructs.

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, obscure the underlying trends in business performance include significant gains or losses associated with real estate development 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) 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 ratio is a historical measure calculated as the sum of the last four quarterly dividends declared per Common Share, as reported in the financial statements, divided by the sum of basic earnings per share for the most recent four quarters for interim reporting periods. For fiscal years, the denominator is annual basic earnings per share. 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 net earnings per share on a prospective basis. (See *Section 7.5*.)

Calculation of Dividend payout ratio

Twelve-month periods ended June 30 (\$)	2016	2015
Numerator – sum of the last four quarterly dividends declared per Common Share	1.76	1.60
Denominator – basic earnings per share	2.39	2.33
Ratio (%)	74	69

Dividend payout ratio of adjusted net earnings: This ratio is a historical measure calculated as the sum of the last four quarterly dividends declared per Common Share, as reported in the financial statements, divided by adjusted net earnings per share. Adjusted net earnings per share is basic earnings per share, as used in the **Dividend payout ratio**, adjusted to exclude the gain on the exchange of wireless spectrum licences, net gains and equity income from real estate joint venture developments, long-term debt prepayment premium and income tax-related adjustments.

Calculation of Dividend payout ratio of adjusted net earnings

Twelve-month periods ended June 30 (\$)	2016	2015
Numerator – sum of the last four quarterly dividends declared per Common Share	1.76	1.60
Adjusted net earnings (\$ millions):		
Net income attributable to Common Shares	1,420	1,423
Deduct gain on the exchange of wireless spectrum licences, after income taxes	(13)	—
Deduct net gains and equity income from real estate joint venture developments, after income taxes	(5)	—
Add back long-term debt prepayment premium after income taxes	—	10
Add back net unfavourable (deduct net favourable) income tax-related adjustments	(13)	11
	1,389	1,444
Denominator – adjusted net earnings per share	2.34	2.36
Adjusted ratio (%)	75	68

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

Twelve-month periods ended June 30 (\$ millions, except ratio)	2016	2015
Net income attributable to Common Shares	1,420	1,423
Income taxes (attributable to Common Shares)	490	546
Borrowing costs (attributable to Common Shares) ¹	527	483
Numerator	2,437	2,452
Denominator – Borrowing costs (from above)	527	483
Ratio (times)	4.6	5.1

1 Interest on Long-term debt plus Interest on short-term borrowings and other plus long-term debt prepayment premium, adding back capitalized interest and deducting borrowing costs attributable to non-controlling interests.

EBITDA (earnings before interest, income taxes, depreciation and amortization): We 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 that should not be included in an assessment of our ability to service or incur debt.

EBITDA reconciliation

(\$ millions)	Second quarters ended June 30		Six-month periods ended June 30	
	2016	2015	2016	2015
Net income	416	341	794	756
Financing costs	134	110	257	227
Income taxes	140	166	279	313
Depreciation	385	361	770	708
Amortization of intangible assets	114	103	229	212
EBITDA	1,189	1,081	2,329	2,216
Deduct gain on the exchange of wireless spectrum licences	(15)	—	(15)	—
Deduct net gains and equity income from real estate joint venture developments	(9)	—	(9)	—
Add back restructuring and other costs	23	59	71	76
Adjusted EBITDA	1,188	1,140	2,376	2,292

EBITDA – excluding restructuring and other costs: This measure is utilized in the calculation of **Net debt to EBITDA – excluding restructuring and other costs** and **EBITDA – excluding restructuring and other costs interest coverage**. (See *Consolidated highlights* table in *Section 1.3* and *Summary of quarterly results* table in *Section 5.2*.)

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 Credit facilities*.)

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 condensed interim 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 condensed interim 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

(\$ millions)	Second quarters ended June 30		Six-month periods ended June 30	
	2016	2015	2016	2015
EBITDA	1,189	1,081	2,329	2,216
Deduct gain on the exchange of wireless spectrum licences	(15)	—	(15)	—
Deduct net gains and equity income from real estate joint venture developments	(9)	—	(9)	—
Restructuring costs net of disbursements	(11)	42	(39)	35
Items from the interim consolidated statements of cash flows:				
Share-based compensation	22	25	38	2
Net employee defined benefit plans expense	22	26	44	54
Employer contributions to employee defined benefit plans	(14)	(21)	(39)	(48)
Interest paid	(132)	(129)	(255)	(214)
Interest received	1	3	1	3
Capital expenditures (excluding spectrum licences)	(769)	(664)	(1,387)	(1,299)
Other	(8)	—	(11)	—
Free cash flow before income taxes	276	363	657	749
Income taxes paid, net of refunds	(150)	(63)	(423)	(178)
Free cash flow	126	300	234	571

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

(\$ millions)	Second quarters ended June 30		Six-month periods ended June 30	
	2016	2015	2016	2015
Free cash flow	126	300	234	571
Add (deduct):				
Capital expenditures (excluding spectrum licences)	769	664	1,387	1,299
Adjustments to reconcile to Cash provided by operating activities	(3)	(21)	(166)	(209)
Cash provided by operating activities	892	943	1,455	1,661

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

At June 30 (\$ millions)	2016	2015
Long-term debt including current maturities	12,522	11,323
Debt issuance costs netted against long-term debt	59	49
Derivative liabilities, net	1	—
Cash and temporary investments	(428)	(77)
Short-term borrowings	103	500
Net debt	12,257	11,795

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 7.5 Liquidity and capital resource measures* and *Section 7.6 Credit facilities*.)

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 2016 and 2015. Expenses recorded for the long-term debt prepayment premium, if any, are included in net interest cost. Net interest cost was \$525 million in the 12-month period ended June 30, 2016, and \$460 million in the 12-month period ended June 30, 2015.

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.

Components of Restructuring and other costs

(\$ millions)	Second quarters ended June 30		Six-month periods ended June 30	
	2016	2015	2016	2015
Goods and services purchased	12	30	16	42
Employee benefits expense	11	29	55	34
Restructuring and other costs included in EBITDA	23	59	71	76

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.

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 the cost of acquisition divided by the 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.

condensed interim consolidated statements of income and
other comprehensive income

(unaudited)

Periods ended June 30 (millions except per share amounts)	Three months		Six months	
	2016	2015	2016	2015
OPERATING REVENUES				
Service	\$ 2,952	\$ 2,884	\$ 5,876	\$ 5,713
Equipment	164	208	336	390
Revenues arising from contracts with customers	3,116	3,092	6,212	6,103
Other operating income	32	10	44	27
	3,148	3,102	6,256	6,130
OPERATING EXPENSES				
Goods and services purchased	1,331	1,372	2,631	2,656
Employee benefits expense	628	649	1,296	1,258
Depreciation	385	361	770	708
Amortization of intangible assets	114	103	229	212
	2,458	2,485	4,926	4,834
OPERATING INCOME	690	617	1,330	1,296
Financing costs	134	110	257	227
INCOME BEFORE INCOME TAXES	556	507	1,073	1,069
Income taxes	140	166	279	313
NET INCOME	416	341	794	756
OTHER COMPREHENSIVE INCOME				
Items that may subsequently be reclassified to income				
Change in unrealized fair value of derivatives designated as cash flow hedges	1	2	(9)	(2)
Foreign currency translation adjustment arising from translating financial statements of foreign operations	6	(5)	2	5
Change in unrealized fair value of available-for-sale financial assets	(3)	—	(3)	(3)
	4	(3)	(10)	—
Item never subsequently reclassified to income				
Employee defined benefit plan re-measurements	94	(122)	17	115
	98	(125)	7	115
COMPREHENSIVE INCOME	\$ 514	\$ 216	\$ 801	\$ 871
NET INCOME ATTRIBUTABLE TO:				
Common Shares	\$ 416	\$ 341	\$ 794	\$ 756
Non-controlling interest	—	—	—	—
	\$ 416	\$ 341	\$ 794	\$ 756
COMPREHENSIVE INCOME ATTRIBUTABLE TO:				
Common Shares	\$ 510	\$ 216	\$ 797	\$ 871
Non-controlling interest	4	—	4	—
	\$ 514	\$ 216	\$ 801	\$ 871
NET INCOME PER COMMON SHARE				
Basic	\$ 0.70	\$ 0.56	\$ 1.34	\$ 1.25
Diluted	\$ 0.70	\$ 0.56	\$ 1.34	\$ 1.24
TOTAL WEIGHTED AVERAGE COMMON SHARES OUTSTANDING				
Basic	593	605	593	606
Diluted	594	606	594	608

As at (millions)	June 30, 2016	December 31, 2015
ASSETS		
Current assets		
Cash and temporary investments, net	\$ 428	\$ 223
Accounts receivable	1,317	1,428
Income and other taxes receivable	21	1
Inventories	351	360
Prepaid expenses	359	213
Real estate joint venture advances	41	66
Current derivative assets	11	40
	2,528	2,331
Non-current assets		
Property, plant and equipment, net	10,043	9,736
Intangible assets, net	10,250	9,985
Goodwill, net	3,761	3,761
Other long-term assets	630	593
	24,684	24,075
	\$ 27,212	\$ 26,406
LIABILITIES AND OWNERS' EQUITY		
Current liabilities		
Short-term borrowings	\$ 103	\$ 100
Accounts payable and accrued liabilities	1,983	1,990
Income and other taxes payable	28	108
Dividends payable	274	263
Advance billings and customer deposits	749	760
Provisions	170	197
Current maturities of long-term debt	1,688	856
Current derivative liabilities	20	2
	5,015	4,276
Non-current liabilities		
Provisions	418	433
Long-term debt	10,834	11,182
Other long-term liabilities	709	688
Deferred income taxes	2,155	2,155
	14,116	14,458
Liabilities	19,131	18,734
Owners' equity		
Common equity	8,073	7,672
Non-controlling interest	8	—
	8,081	7,672
	\$ 27,212	\$ 26,406

Periods ended June 30 (millions)	Three months		Six months	
	2016	2015	2016	2015
OPERATING ACTIVITIES				
Net income	\$ 416	\$ 341	\$ 794	\$ 756
Adjustments to reconcile net income to cash provided by operating activities:				
Depreciation and amortization	499	464	999	920
Deferred income taxes	32	119	1	46
Share-based compensation expense, net	22	25	38	2
Net employee defined benefit plans expense	22	26	44	54
Employer contributions to employee defined benefit plans	(14)	(21)	(39)	(48)
Other	(17)	18	(13)	14
Net change in non-cash operating working capital	(68)	(29)	(369)	(83)
Cash provided by operating activities	892	943	1,455	1,661
INVESTING ACTIVITIES				
Cash payments for capital assets, excluding spectrum licences	(614)	(674)	(1,260)	(1,287)
Cash payments for spectrum licences	(145)	(1,688)	(145)	(1,990)
Real estate joint ventures advances and contributions	(11)	(16)	(23)	(24)
Real estate joint venture receipts	41	1	41	2
Other	(6)	—	(8)	(4)
Cash used by investing activities	(735)	(2,377)	(1,395)	(3,303)
FINANCING ACTIVITIES				
Dividends paid to holders of Common Shares	(261)	(243)	(524)	(487)
Purchase of Common Shares for cancellation	(61)	(106)	(121)	(262)
Issuance and repayment of short-term borrowings	3	400	3	400
Long-term debt issued	2,041	447	3,287	3,294
Redemptions and repayment of long-term debt	(2,212)	(566)	(2,783)	(1,277)
Issue of shares by subsidiary to non-controlling interest	292	—	292	—
Other	(9)	—	(9)	(9)
Cash provided (used) by financing activities	(207)	(68)	145	1,659
CASH POSITION				
Increase (decrease) in cash and temporary investments, net	(50)	(1,502)	205	17
Cash and temporary investments, net, beginning of period	478	1,579	223	60
Cash and temporary investments, net, end of period	\$ 428	\$ 77	\$ 428	\$ 77
SUPPLEMENTAL DISCLOSURE OF OPERATING CASH FLOWS				
Interest paid	\$ (132)	\$ (129)	\$ (255)	\$ (214)
Interest received	\$ 1	\$ 3	\$ 1	\$ 3
Income taxes paid, net	\$ (150)	\$ (63)	\$ (423)	\$ (178)

Three-month periods ended June 30 (millions)	Wireless		Wireline		Eliminations		Consolidated		
	2016	2015	2016	2015	2016	2015	2016	2015	
Operating revenues									
External revenue	\$ 1,754	\$ 1,722	\$ 1,394	\$ 1,380	\$ —	\$ —	\$ 3,148	\$ 3,102	
Intersegment revenue	14	14	48	43	(62)	(57)	—	—	
	\$ 1,768	\$ 1,736	\$ 1,442	\$ 1,423	\$ (62)	\$ (57)	\$ 3,148	\$ 3,102	
EBITDA¹	\$ 793	\$ 719	\$ 396	\$ 362	\$ —	\$ —	\$ 1,189	\$ 1,081	
CAPEX, excluding spectrum licences ²	\$ 258	\$ 227	\$ 511	\$ 437	\$ —	\$ —	\$ 769	\$ 664	
							Operating revenues (above)	\$ 3,148	\$ 3,102
							Goods and services purchased	1,331	1,372
							Employee benefits expense	628	649
							EBITDA (above)	1,189	1,081
							Depreciation	385	361
							Amortization	114	103
							Operating income	690	617
							Financing costs	134	110
							Income before income taxes	\$ 556	\$ 507

Six-month periods ended June 30 (millions)	Wireless		Wireline		Eliminations		Consolidated		
	2016	2015	2016	2015	2016	2015	2016	2015	
Operating revenues									
External revenue	\$ 3,456	\$ 3,394	\$ 2,800	\$ 2,736	\$ —	\$ —	\$ 6,256	\$ 6,130	
Intersegment revenue	28	28	95	86	(123)	(114)	—	—	
	\$ 3,484	\$ 3,422	\$ 2,895	\$ 2,822	\$ (123)	\$ (114)	\$ 6,256	\$ 6,130	
EBITDA¹	\$ 1,549	\$ 1,463	\$ 780	\$ 753	\$ —	\$ —	\$ 2,329	\$ 2,216	
CAPEX, excluding spectrum licences ²	\$ 438	\$ 475	\$ 949	\$ 824	\$ —	\$ —	\$ 1,387	\$ 1,299	
							Operating revenues (above)	\$ 6,256	\$ 6,130
							Goods and services purchased	2,631	2,656
							Employee benefits expense	1,296	1,258
							EBITDA (above)	2,329	2,216
							Depreciation	770	708
							Amortization	229	212
							Operating income	1,330	1,296
							Financing costs	257	227
							Income before income taxes	\$ 1,073	\$ 1,069

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).



News Release

TELUS Corporation NOTICE OF CASH DIVIDEND

NOTICE IS HEREBY GIVEN that the Board of Directors has declared a quarterly dividend of forty-six cents (\$0.46) Canadian per share on the issued and outstanding Common shares payable on October 3, 2016 to holders of record at the close of business on September 9, 2016.

By order of the Board

Monique Mercier
EVP – Corporate Affairs, Chief Legal Officer and Corporate Secretary

Vancouver, British Columbia
August 4, 2016

Contact: Investor Relations
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