TELUS

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2017 ANNUAL REPORT

Management's discussion and analysis

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 any statements that do not refer to historical facts. They include, but are not limited to, statements relating to our objectives and our strategies to achieve those objectives, our targets, outlook, updates, and our multi-year dividend growth program. 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*, *could*, *expect*, *intend*, *may*, *plan*, *predict*, *seek*, *should*, *strive* and *will*.

By their nature, forward-looking statements are subject to inherent risks and uncertainties and are based on assumptions, including assumptions about future economic conditions and courses of action. These assumptions may ultimately prove to have been inaccurate and, as a result, our actual results or events may differ materially from expectations expressed in or implied by the forward-looking statements. Our general outlook and assumptions for 2018 are presented in *Section 9 General trends, outlook and assumptions* in this Management's discussion and analysis (MD&A).

Risks and uncertainties that could cause actual performance or events 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: our ability to continue to retain customers through an enhanced customer service experience, including through the deployment and operation of evolving wireless and wireline networks; the ability of industry competitors to successfully launch their respective platforms and to combine a mix of residential local voice over Internet protocol (VoIP), long distance, high-speed Internet access (HSIA) and, in some cases, wireless services under one bundled and/or discounted monthly rate, along with their existing broadcast or satellite-based TV services; the success of new products, new services and supporting systems, such as Internet of Things (IoT) services for Internet-connected devices; 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 current and future average revenue per subscriber unit per month (ARPU), cost of acquisition, cost of retention and churn rate for all services, as do customer usage patterns, flat-rate pricing trends for voice and data, inclusive rate plans for voice and data and availability of Wi-Fi networks for data; mergers and acquisitions of industry competitors; pressures on high-speed Internet and TV ARPU and churn rate resulting from market conditions, government actions and customer usage patterns; residential and business network access line (NAL) losses; subscriber additions and retention volumes, and associated costs for wireless, TV and high-speed Internet services; 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, a declining overall market for paid TV services, including as a result of content piracy and signal theft and as a result of a rise in OTT direct to consumer video offerings and virtual multichannel video programming distribution platforms; the increasing number of households that have only wireless and/or Internet-based telephone services; potential wireless ARPU declines as a result of, among other factors, substitution to messaging and OTT applications; substitution to increasingly available Wi-Fi services; and disruptive technologies such as OTT IP services, including Network as a Service in the business market, that may displace or re-rate our existing data services.
- Technology including: subscriber demand for data that may challenge wireless networks and spectrum capacity levels in the future and may be accompanied by increases in delivery cost; our reliance on information technology and our need to streamline our legacy systems; technology options, evolution paths and roll-out plans for video distribution platforms and telecommunications 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, which have facilitated our deployment of wireless technologies; choice of suppliers and those suppliers' ability to maintain and service their product lines, which could affect the success of upgrades to, and evolution of, technology that we offer; supplier concentration and market power for network equipment, TELUS TV and wireless handsets; the performance of 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 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; self-learning tools and automation that may change the way we interact with customers; and uncertainties around our strategy to replace certain legacy wireline networks, systems and services to reduce operating costs.
- Capital expenditure levels and potential outlays for spectrum licences in spectrum auctions or from third parties, due to: our broadband initiatives, including connecting more homes and businesses directly to fibre; our ongoing deployment of newer wireless technologies, including wireless small cells to improve coverage and capacity and prepare for a more efficient and timely evolution to 5G wireless services; utilizing 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: the potential of government intervention to further increase wireless competition; the 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 charged to wireless service providers (WSPs); the Governor in Council's order to the CRTC to reconsider whether Wi-Fi networks should be considered a home network for WSPs seeking mandated roaming; future spectrum auctions and spectrum policy determinations, including the recently announced repurposing of 600 MHz spectrum (and including limitations on established wireless providers, proposed 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 impact of the CRTC's wireline wholesale services review, with a formal review of rates for wholesale FTTP access still to be commenced for TELUS; disputes with certain municipalities regarding rights-of-way

bylaws; and other potential threats to unitary federal regulatory authority over telecommunications, including provincial wireless legislation; the potential impacts of the CRTC's decision to require pro-rated refunds when customers terminate their services; the CRTC's proposed phase-out of the local service subsidy regime and corresponding establishment of a broadband funding regime to support the enhancement of high-speed Internet services focusing on underserved areas in Canada; the impact of the review of the Minister of Canadian Heritage's new Creative Canada policy framework announced on September 28, 2017; the CRTC's consultation and report on distribution models of the future; vertical integration in the broadcasting industry resulting in competitors owning broadcast content services, and timely and effective enforcement of related regulatory safeguards; the review of the *Copyright Act* scheduled to begin in early 2018; the federal government's stated intention to review the *Broadcasting Act* and *Telecommunications Act* as announced in the March 22, 2017 federal budget; TELUS' applications for renewal of its broadcasting distribution licences; the North American Free Trade Agreement renegotiation; and restrictions on non-Canadian ownership and control of TELUS Common Shares and the ongoing monitoring and compliance with such restrictions.

- Human resource matters including: recruitment, retention and appropriate training in a highly competitive industry, and the level of employee engagement.
- Operational performance and business combination risks including: our reliance on legacy systems and ability to implement and support new products and services and business operations in a timely manner; our ability to implement effective change management for system replacements and upgrades, process redesigns and business integrations (such as our ability to successfully integrate acquisitions, complete divestitures or establish partnerships in a timely manner, and realize expected strategic benefits, including those following compliance with any regulatory orders); the 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.
- 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 cyberattacks and equipment failures that could cause various degrees of network outages; supply chain disruptions; natural disaster threats; epidemics; pandemics; political instability in certain international locations; and the completeness and effectiveness of business continuity and disaster recovery plans and responses.
- 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. Examples of these initiatives are: our operating efficiency and effectiveness program to drive improvements in financial results, including the future benefits of the immediately vesting transformative compensation initiative; business integrations; business product simplification; business process outsourcing; offshoring and reorganizations, including any full-time equivalent (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.
- Financing and debt requirements including: our ability to carry out financing activities, and our ability to maintain investment grade credit ratings in the range of BBB+ or the equivalent.
- Ability to sustain our dividend growth program through 2019. This program 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, acquisitions, the management of our capital structure, 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. Shares may be purchased under our normal course issuer bid (NCIB) when and if we consider it opportunistic, based on the Company's financial position and outlook, and the market price of TELUS shares. There can be no assurance that our dividend growth program or any NCIB will be maintained, not changed and/or completed through 2019.
- Taxation matters including: interpretation of complex domestic and foreign tax laws by the tax authorities that may differ from our interpretations; the timing of income and deductions, such as tax depreciation and operating expenses; changes in tax laws, including tax rates; tax expenses being materially different than anticipated, including the taxability of income and deductibility of tax attributes; elimination of income tax deferrals through the use of different tax year-ends for operating partnerships and corporate partners; and tax authorities adopting more aggressive auditing practices, for example, tax reassessments or adverse court decisions impacting the tax payable by us.
- Litigation and legal matters including: our ability to successfully respond to investigations and regulatory proceedings; our ability to defend against existing and potential claims and lawsuits, including 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, including compliance with anti-bribery and foreign corrupt practices laws.
- Health, safety and the environment including: lost employee work time resulting from illness or injury, public concerns related to radio frequency emissions, environmental issues affecting our business including climate change, waste and waste recycling, risks relating to fuel systems on our properties, and changing government and public expectations regarding environmental matters and our responses.
- 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 potential outcomes of yet unknown policies and actions of foreign governments; future interest rates; inflation; unemployment levels; effects of fluctuating oil prices; effects of low business spending (such as reducing investments and cost structure); pension investment returns, funding and discount rates; and Canadian dollar: U.S. dollar exchange rates.

These risks are described in additional detail in *Section 9 General trends, outlook and assumptions* and *Section 10 Risks and risk management* in this MD&A. Those descriptions are incorporated by reference in this cautionary statement but are not intended to be a complete list of the risks that could affect the Company.

Many of these factors are beyond our control or our current expectations or knowledge. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also have a material adverse effect on our financial position, financial performance, cash flows, business or reputation. Except as otherwise indicated in this document, the forward-looking statements made herein do not reflect the potential impact of any non-recurring or special items or any mergers, acquisitions, dispositions or other business combinations or transactions that may be announced or that may occur after the date of this document.

Readers are cautioned not to place undue reliance on forward-looking statements. Forward-looking statements in this document describe our expectations and are based on our assumptions as at the date of this document and are subject to change after this date. Except as required by law, we disclaim any intention or obligation to update or revise any forward-looking statements.

This cautionary statement qualifies all of the forward-looking statements in this MD&A.

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 in 2017. The adoption of IFRS 15, *Revenue from Contracts with Customers*, required the implementation of new accounting processes, which changed the Company's internal controls over revenue recognition, contract acquisition costs and financial reporting. We have completed the design of these controls and they have been implemented as of December 31, 2017. We do not expect significant changes to our internal control over financial reporting due to the adoption of the new standard.

5 Discussion of operations

This section contains forward-looking statements, including those with respect to average revenue per subscriber unit (ARPU) growth, wireless loading and retention spending, high-speed Internet subscriber growth, and various future trends. There can be no assurance that we have accurately identified these trends based on past results, or that these trends will continue. See *Caution regarding forward-looking statements* at the beginning of this MD&A.

5.1 General

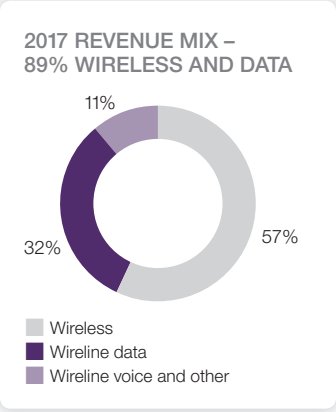
A significant judgment we make is in respect of distinguishing between our wireless and wireline operations and cash flows (and this extends to allocations of both direct and indirect expenses and capital expenditures). The clarity of such distinction has been increasingly affected by the convergence and integration of our wireless and wireline telecommunications infrastructure technology and operations. The continued build-out of our technology-agnostic fibre-optic infrastructure, in combination with converged edge technology, has significantly affected this judgment, as has the commercialization of fixed-wireless telecommunications solutions. It has become increasingly impractical and difficult to objectively and clearly distinguish between our wireless and wireline operations and cash flows, and the assets from which those cash flows arise. As at December 31, 2017, we do not currently aggregate operating segments, and thus our reportable segments as at December 31, 2017, are also wireless and wireline. Segmented information in *Note 5* of the Consolidated financial statements is regularly reported to our Chief Executive Officer (CEO) (our chief operating decision-maker).

Selected annual information

Years ended December 31 ($ in millions, except per share amounts)	**2017**	2016	2015
Operating revenues	**13,304**	12,799	12,502
Net income	**1,479**	1,236	1,382
Net income attributable to Common Shares	**1,460**	1,223	1,382
Net income per Common Share			
Basic earnings per share (basic EPS)	**2.46**	2.06	2.29
Diluted	**2.46**	2.06	2.29
Cash dividends declared per Common Share	**1.97**	1.84	1.68

At December 31 ($ millions)	**2017**	2016	2015
Total assets	**29,548**	27,729	26,406
Current maturities of long-term debt	**1,404**	1,327	856
Non-current financial liabilities[1]			
Provisions	**152**	57	55
Long-term debt	**12,256**	11,604	11,182
Other long-term financial liabilities	**224**	166	150
Total non-current financial liabilities	**12,632**	11,827	11,387
Deferred income taxes	**2,500**	2,107	2,155
Common equity	**8,221**	7,917	7,672

1 In our specific current instance, financial liabilities do not include liabilities that are excluded by definition (e.g. employee benefits and share-based compensation liabilities) or liabilities that do not involve a future outlay of economic resources (e.g. deferred recognition of customer activation and connection fees; deferred gains on sale-leaseback of buildings).



Operating revenues: Combined wireless revenue and wireline data revenue represented approximately 89% of consolidated revenues in 2017 (87% in 2016 and 86% in 2015).

Total assets: Growth in Total assets includes increases in Property, plant and equipment and Intangible assets, which increased by a combined $1,198 million in 2017 and a combined $1,107 million in 2016. These increases resulted primarily from our ongoing investments in broadband networks, business acquisitions and purchases of wireless spectrum licences. See *Section 7.3 Cash used by investing activities*.

For changes in **Long-term debt**, see *Section 6 Changes in financial position* and *Section 7.4 Cash used by financing activities*.

5.2 Summary of consolidated quarterly results, trends and fourth quarter recap

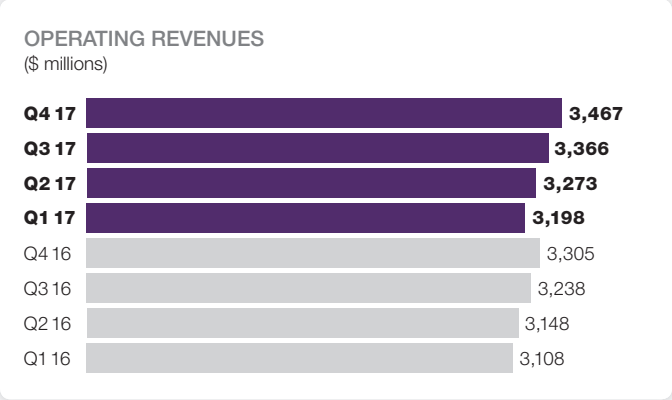
Summary of quarterly results

($ millions, except per share amounts)	**2017 Q4**	**2017 Q3**	**2017 Q2**	**2017 Q1**	2016 Q4	2016 Q3	2016 Q2	2016 Q1
Operating revenues	**3,467**	**3,366**	**3,273**	**3,198**	3,305	3,238	3,148	3,108
Operating expenses								
Goods and services purchased[1]	**1,658**	**1,531**	**1,433**	**1,313**	1,574	1,426	1,331	1,300
Employee benefits expense[1]	**686**	**639**	**646**	**624**	962	681	628	668
Depreciation and amortization	**564**	**547**	**526**	**532**	533	515	499	500
Total operating expenses	**2,908**	**2,717**	**2,605**	**2,469**	3,069	2,622	2,458	2,468
Operating income	**559**	**649**	**668**	**729**	236	616	690	640
Financing costs	**144**	**149**	**142**	**138**	134	129	134	123
Income before income taxes	**415**	**500**	**526**	**591**	102	487	556	517
Income taxes	**133**	**130**	**140**	**150**	15	132	140	139
Net income	**282**	**370**	**386**	**441**	87	355	416	378
Net income attributable to Common Shares	**281**	**367**	**379**	**433**	81	348	416	378
Net income per Common Share:								
Basic earnings per share (EPS)	**0.47**	**0.62**	**0.64**	**0.73**	0.14	0.59	0.70	0.64
Adjusted basic EPS[2]	**0.55**	**0.66**	**0.68**	**0.74**	0.53	0.65	0.70	0.70
Diluted EPS	**0.47**	**0.62**	**0.64**	**0.73**	0.14	0.59	0.70	0.64
Dividends declared per Common Share	**0.5050**	**0.4925**	**0.4925**	**0.48**	0.48	0.46	0.46	0.44
Additional information:								
EBITDA[2]	**1,123**	**1,196**	**1,194**	**1,261**	769	1,131	1,189	1,140
Restructuring and other costs[2]	**60**	**36**	**39**	**4**	348	60	23	48
Gains on the exchange of wireless spectrum licences	**–**	**–**	**–**	**–**	–	–	15	–
(Net losses and equity losses) net gains and equity income from real estate joint venture developments	**(2)**	**–**	**3**	**–**	7	10	9	–
MTS net recovery	**21**	**–**	**–**	**–**	–	–	–	–
Adjusted EBITDA[2]	**1,164**	**1,232**	**1,230**	**1,265**	1,110	1,181	1,188	1,188
Cash provided by operating activities	**979**	**1,133**	**1,126**	**709**	732	1,032	892	563
Free cash flow[2]	**274**	**215**	**260**	**217**	(191)	98	126	108

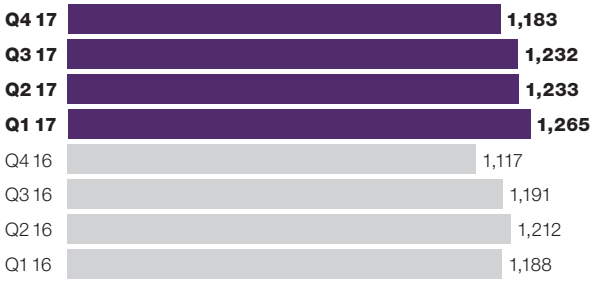
1 Goods and services purchased and Employee benefits expense amounts include restructuring and other costs.
2 See *Section 11.1 Non-GAAP and other financial measures*.

Trends

The trend of year-over-year increases in consolidated revenue reflects: (i) wireless network revenue generated from growth in both our ARPU and subscriber base; and (ii) wireline data service revenue, driven by Internet and enhanced data, business process outsourcing, TELUS Health, and TELUS TV services revenues. Increased Internet and TV service revenues are being generated by subscriber growth and higher Internet revenue per customer. Consolidated revenue growth was partially offset by the continued decline in wireline voice revenues. Wireless equipment revenues vary with per-unit subsidies resulting from both postpaid gross subscriber additions and retention volumes. For additional information on wireless and wireline revenue and subscriber trends, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*.

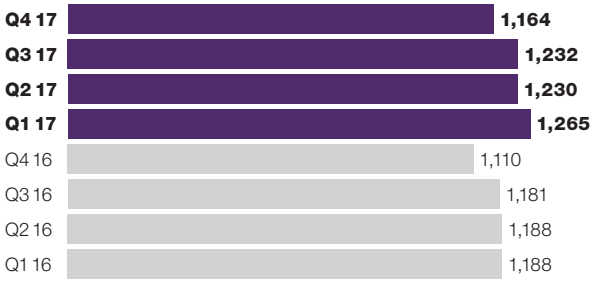


EBITDA – EXCLUDING RESTRUCTURING AND OTHER COSTS
($ millions)



EBITDA is a non-GAAP measure.

ADJUSTED EBITDA
($ millions)



Adjusted EBITDA is a non-GAAP measure.

The trend of year-over-year increases in Goods and services purchased expense reflects higher equipment expenses associated with increased postpaid gross additions and retention volumes, as well as increasing per-unit device costs including higher-value smartphones in the sales mix; increasing wireless and wireline customer service, roaming, and external labour expenses to support growth in our subscriber base; and increased wireline TV costs of sales associated with a growing subscriber base. These were partly offset by lower wireline equipment costs.

The general trend of year-over-year decreases in net Employee benefits expense reflects moderating wages and salaries resulting from reductions in the number of full-time equivalent (FTE) domestic employees associated with cost efficiency and effectiveness programs and the impact of benefits from certain contract concessions associated with our immediately vesting transformative compensation (recorded in the fourth quarter of 2016) that are yielding efficiency improvements and continue to support our customer service focus. This was partly offset by increases in the number of employees resulting from acquisitions to support business process outsourcing revenue growth and expand our TELUS Health offerings.

The trend of year-over-year increases in Depreciation and amortization reflects increases due to growth in capital assets, which is supporting the expansion of our broadband footprint and enhanced long-term evolution (LTE) network coverage, and growth in business acquisitions, as well as the present impact of our continuing program of asset life studies. The investments in our fibre-optic network also support our small-cell technology strategy to improve coverage and capacity while preparing for a more efficient and timely evolution to 5G.

The trend of year-over-year increases in Financing costs reflects an increase in long-term debt outstanding, mainly associated with our generational investments in fibre to homes and businesses and our wireless network, and the significant investments in wireless spectrum licences acquired during auctions in 2014 and 2015. Financing costs are net of capitalized interest, which was related to spectrum licences acquired during the wireless spectrum licence auctions. Capitalization of interest ceased in the first quarter of 2017, as cell sites are now capable of utilizing those spectrum frequencies. Financing costs also include Employee defined benefit plans net interest expense. Additionally, for the eight periods shown, Financing costs include varying amounts of foreign exchange gains or losses and varying amounts of interest income.

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 periods for income taxes of prior periods, including any related after-tax interest on reassessments. Historically, the trend in basic EPS has also been impacted by share purchases under our normal course issuer bid programs. However, there have been no such repurchases in 2017.

The general trend of year-over-year increases in Cash provided by operating activities reflects generally higher consolidated Adjusted EBITDA. It also reflects increased interest payments arising from increases in debt outstanding, offset by lower fixed-term interest rates. Income tax payments increased in 2016 and have decreased in 2017, as described in *Assumptions for 2017 targets and results* in *Section 1.4*. The trend in free cash flow reflects the factors affecting Cash provided by operating activities, as well as increases in capital expenditures. For further discussion on these trends, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*.

Fourth quarter recap

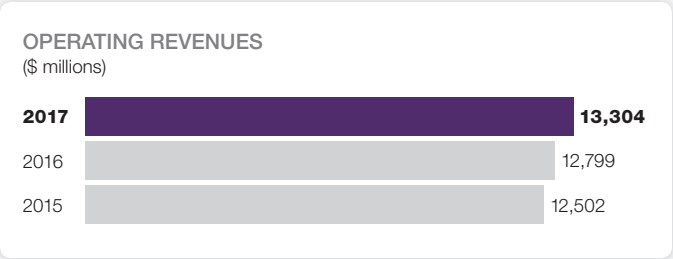
Results for the fourth quarter of 2017 were discussed in Management's review of operations attached to our February 8, 2018 news release.

- Consolidated operating revenues increased by $162 million or 4.9% in the fourth quarter of 2017 when compared to the fourth quarter of 2016, primarily reflecting growth in wireless network revenue and wireline data services, which includes increased Internet and enhanced data service, growth in business process outsourcing revenues, inclusive of recent acquisitions, TELUS Health and TELUS TV revenues. These increases were partly offset by the continuing decline in wireline voice revenues, consistent with the results for the full year, discussed in the following sections.
- Consolidated EBITDA increased by $354 million or 45.9% in the fourth quarter of 2017 when compared to the fourth quarter of 2016. The increase reflects: (i) growth in wireless network revenues and increased wireline data revenues, partially offset by increased costs associated with higher wireless gross loading and retention volumes; and (ii) lower restructuring and other costs, which included the 2016 transformative compensation expense, partly offset by costs associated with the migration and servicing of subscribers acquired from MTS.
- Adjusted EBITDA, which excludes restructuring and other costs, net gains and equity income or net losses and equity losses related to real estate joint venture developments, a gain from the exchange of wireless spectrum licences recorded in the second quarter of 2016 and the MTS net recovery, increased by $54 million or 4.7% in the fourth quarter of 2017.

- **Net income attributable to Common Shares** increased by $200 million in the fourth quarter of 2017 when compared to the fourth quarter of 2016, largely due to the transformative compensation expense recorded in 2016, partly offset by increased depreciation, amortization of intangible assets, financing costs and income taxes, the increase in income taxes primarily being driven by increased income before income taxes and the revaluation of the deferred tax liability for the increase in the B.C. income tax rate. **Basic EPS** increased by $0.33 in the fourth quarter of 2017 when compared to the same period in 2016. When excluding restructuring and other costs, income tax-related adjustments, net gains and equity income or net losses and equity losses related to real estate joint venture developments, and the MTS net recovery, adjusted Net income increased by $12 million in the fourth quarter of 2017, while adjusted basic EPS increased by $0.02.
- **Cash provided by operating activities** increased by $247 million in the fourth quarter of 2017 when compared to the same period in 2016. The increase was mainly due to higher EBITDA, resulting from the $305 million transformative compensation expense that was incurred in the fourth quarter of 2016, partly offset by changes in operating working capital.
- **Cash used by investing activities** decreased by $114 million in the fourth quarter of 2017 when compared to the same period in 2016, mainly due to decreased capital expenditures and changes in working capital amounts related to acquisitions in current and prior periods.
- **Cash used by financing activities** was $224 million in the fourth quarter of 2017 compared to cash provided by financing activities of $138 million in the fourth quarter of 2016. The net change of $362 million was primarily due to the larger amount of long-term debt issued in the fourth quarter of 2016.
- **Free cash flow** increased by $465 million in the fourth quarter of 2017 when compared to the same period in 2016, resulting from increased EBITDA, including the impact of the 2016 transformative compensation expense, and lower capital expenditures. (See calculation in *Section 11.1 Non-GAAP and other financial measures*.)

5.3 Consolidated operations

The following is a discussion of our consolidated financial performance. Segment information in *Note 5* of the Consolidated financial statements is regularly reported to our CEO. We discuss the performance of our segments in *Section 5.4 Wireless segment*, *Section 5.5 Wireline segment* and *Section 7.3 Cash used by investing activities*.



Operating revenues

Years ended December 31 ($ millions)	2017	2016	Change
Service	**12,478**	12,000	4.0%
Equipment	**724**	725	(0.1)%
Revenues arising from contracts with customers	**13,202**	12,725	3.7%
Other operating income	**102**	74	37.8%
	13,304	12,799	3.9%

Consolidated operating revenues increased by $505 million in 2017.

- **Service revenues** increased by $478 million in 2017, primarily reflecting growth in wireless network revenue and wireline data services, partly offset by the continuing decline in wireline voice revenues. Wireless network revenue reflects growth in blended ARPU and a growing wireless subscriber base and, to a lesser extent, revenues related to postpaid subscribers we acquired from the MTS acquisition. Wireline data service revenue reflects increases in Internet and enhanced data service, growth in business process outsourcing revenues, inclusive of recent acquisitions and foreign exchange impacts on foreign operations, TELUS Health, and TELUS TV revenues. Higher TELUS Health revenues were driven by organic growth through additional professional services and support revenue, and through acquisitions. Internet and TV revenues increased due to subscriber growth, as well as higher Internet revenue per customer.
- **Equipment revenues** were $724 million in 2017 and were relatively flat compared to 2016.
- **Other operating income** increased by $28 million in 2017, primarily due to higher net gains in the current period than in the comparable period. These changes include the MTS contingent consideration recovery and recognition of a gain on sale of a security consulting business. The remaining are other net gains offset by lower government assistance, the non-recurrence of 2016 wireless spectrum gains and lower gains from the real estate joint venture.

Operating expenses

Years ended December 31 ($ millions)	2017	2016	Change
Goods and services purchased	**5,935**	5,631	5.4%
Employee benefits expense	**2,595**	2,939	(11.7)%
Depreciation	**1,617**	1,564	3.4%
Amortization of intangible assets	**552**	483	14.3%
	10,699	10,617	0.8%

Consolidated operating expenses increased by $82 million in 2017.

- **Goods and services purchased** increased by $304 million in 2017, reflecting increased costs associated with higher wireless gross loading, higher handset costs, increased roaming costs, higher non-labour restructuring and other costs, including those associated with the migration and servicing of subscribers from MTS, increased external labour to support a growing subscriber base, increased advertising and promotion expense, higher TV content costs, and higher customer support costs related to acquired MTS subscribers during migration.
- **Employee benefits expense** decreased by $344 million in 2017 due to the non-recurrence of labour-related restructuring and other expenses from 2016, and the benefits from certain contract concessions associated with our transformative compensation that are yielding efficiency improvements and continue to support our customer service focus.

Excluding the transformative compensation expense, Employee benefits expense reflects a decrease of $39 million for 2017. The decrease resulted mainly from lower employee-related restructuring and other costs, realizing the benefits from certain contract concessions associated with our transformative compensation, lower compensation and benefit costs from a decrease in the number of domestic FTEs, excluding acquisitions and higher capitalized labour costs, partly offset by an increase in the number of employees and related compensation resulting from acquisitions supporting growing TELUS Health and business process outsourcing revenue.

- Depreciation increased by $53 million in 2017 due to increased expenditures associated with capital assets, including those arising from our fibre investment and business acquisitions, as well as the impact of our continuing program of asset life studies.
- Amortization of intangible assets increased by $69 million in 2017, reflecting increased expenditures associated with the intangible asset base, including those arising from business acquisitions.

Operating income

Years ended December 31 ($ millions)	2017	2016	Change
Wireless EBITDA (see *Section 5.4*)	**3,099**	2,906	6.6%
Wireline EBITDA (see *Section 5.5*)	**1,675**	1,323	26.6%
EBITDA	**4,774**	4,229	12.9%
Depreciation and amortization (discussed above)	**(2,169)**	(2,047)	6.0%
	2,605	2,182	19.4%

Operating income increased by $423 million, while EBITDA increased by $545 million in 2017. These increases reflect wireless network revenue growth driven by higher ARPU and a larger customer base, in addition to growth in data service margins, partly offset by increased depreciation arising from our fibre investment capital expenditures. Excluding the effects of the $305 million transformative compensation expense recorded in the fourth quarter of 2016, Operating income increased by $118 million or 4.7% in 2017, while EBITDA increased by $240 million or 5.3%.

Financing costs

Years ended December 31 ($ millions)	2017	2016	Change
Gross interest expense	**579**	554	4.5%
Capitalized long-term debt interest	**–**	(52)	n/m
Interest expense	**579**	502	15.3%
Employee defined benefit plans net interest	**6**	6	–%
Interest income	**(7)**	(3)	133.3%
Foreign exchange (gains) losses	**(5)**	15	(133.3)%
	573	520	10.2%

Financing costs increased by $53 million in 2017, mainly due to the following factors:

- Gross interest expense, prior to capitalization of long-term debt interest, increased by $25 million in 2017, primarily due to the increase in average long-term debt balances outstanding, 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 4.18% at December 31, 2017, as compared to 4.22% 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 deploy in our existing network. Capitalization of long-term debt interest occurs 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. The capitalization of interest ceased in the first quarter of 2017.
- Employee defined benefit plans net interest was flat in 2017 compared to 2016.
- Interest income increased in 2017 due to the settlement of prior years' income-tax related matters.
- Foreign exchange (gains) losses have fluctuated as a result of the strengthening of the Canadian dollar relative to the U.S. dollar in 2017.

INTEREST EXPENSE
($ millions)

Income taxes

Years ended December 31 ($ millions, except tax rates)	2017	2016	Change
Income taxes computed at applicable statutory rates	**541**	444	21.8%
Adjustments recognized in the current period for income taxes of prior periods	**(4)**	(12)	66.7%
Revaluation of deferred income tax liability to reflect future statutory income tax rates	**28**	(4)	n/m
Other	**(12)**	(2)	n/m
	553	426	29.8%
Income taxes computed at applicable statutory rates (%)	**26.6**	26.7	(0.1) pts.
Effective tax rates (%)	**27.2**	25.6	1.6 pts.

Total income tax expense increased by $127 million in 2017. The increase was primarily due to an increase in income before income taxes, and revaluation of the deferred tax liability for the increase in the B.C. income tax rate that was substantively enacted in the fourth quarter of 2017.

NET INCOME ATTRIBUTABLE TO COMMON SHARES
($ millions)

Comprehensive income

Years ended December 31 ($ millions)	2017	2016	Change
Net income	**1,479**	1,236	19.7%
Other comprehensive income (loss) (net of income taxes):			
Items that may be subsequently reclassified to income	**13**	(15)	n/m
Item never subsequently reclassified to income –			
Employee defined benefit plans re-measurements	**(172)**	–	n/m
Comprehensive income	**1,320**	1,221	8.1%

Comprehensive income increased by $99 million in 2017, primarily due to increases in Net income, partly offset by changes in employee defined benefit plans re-measurement amounts. 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

Postpaid subscribers
2017: 7,978,000
2016: 7,550,000 +5.7%

Postpaid churn
2017: 0.90%
2016: 0.95% (0.05) pts.

Prepaid subscribers
2017: 933,000
2016: 1,035,000 (9.9)%

Blended ARPU
2017: $67.05
2016: $65.10 +3.0%

Wireless trends and seasonality

The historical trend in wireless network revenue reflects growth in both ARPU and our subscriber base, driven by larger proportions of higher-rate plans in the revenue mix and higher data consumption. This growth, coupled with higher-value smartphones in the sales mix, was partially offset by the general decline in wireless equipment revenues. This general decline in wireless equipment revenues reflects higher per-unit subsidies, including devices on Premium Plus plans, partly offset by increased gross additions. The general trend of year-over-year increases in subscriber net additions resulted from the success of our promotions, including marketing efforts focused on higher-value postpaid and smartphone loading, coupled with the effects of market growth arising from a growing population, changing population demographics and an increasing number of customers with multiple activated devices. Although there have historically been significant third and fourth quarter seasonal effects that result in increased loading, competitive intensity in both the consumer and business markets may impact subscriber addition results and trends for future periods.

The wireless ARPU growth trend increased in 2017 due to an emphasis on marketing and increased mix of higher-rate plans, including the Premium Plus plans launched in June 2016, and a higher mix of higher-rate data share plans. This was partly offset by competitive pressures driving larger allotments of data provided in rate plans, including data sharing and international data roaming features and plans, consumer behavioural response to increased frequency of customer data usage notifications, and offloading of data traffic to Wi-Fi hotspots. ARPU is expected to continue to increase, as a result of the continued growth in data consumption and the ongoing shift in our subscriber base towards higher-value postpaid customers. However, the level of ARPU is highly dependent on competition, as competitive pressures, including promotional activity and resulting reactions to those pressures and promotions, have the potential to compress ARPU in future periods. The economic environment, consumer behaviour, the regulatory environment, device selection and other factors also impact ARPU, and, as a consequence, there cannot be assurance that ARPU growth will continue to materialize. In terms of seasonality, wireless ARPU has historically experienced seasonal sequential increases in the second and third quarters, reflecting higher levels of usage and roaming in the spring and summer, followed by historical seasonal sequential declines in the fourth and first quarters. This seasonal effect on ARPU has moderated, as unlimited nationwide voice plans have become more prevalent and chargeable voice and long distance usage spikes have become less pronounced. In addition, customers are opting for higher-capacity data plans with higher base prices and benefiting from flexible data top-up features, resulting in less variability in chargeable data usage but higher monthly recurring revenue.

Historically, the third and fourth quarter seasonal effects described above have reflected higher wireless subscriber additions, an increase in related acquisition costs and equipment sales, and higher retention costs due to contract renewals in those quarters. Retention costs have historically increased during periods of heightened marketing activity and also coinciding with the maturation of contracts that reflect seasonal subscriber additions and renewals in previous periods. These impacts can be more pronounced around popular device launches and seasonal promotional events, such as back to school, Black Friday and the Christmas holiday season. 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, and are usually followed by sequential increases in wireless EBITDA from the fourth quarter through to the second quarter. The fourth quarter of 2016 included the immediately vesting transformative compensation expense. Subscriber additions have generally been lowest in the first quarter.

The trend of year-over-year improvements in our average monthly postpaid subscriber churn reflects our efforts to put customers first and our retention programs. We may experience pressure on our postpaid subscriber churn if the level of competitive intensity increases, in part due to increased promotional activity, and an increase in customers on expired contracts, as well as customers bringing their own devices and therefore not entering into new contracts. Accordingly, our wireless segment historical operating results and trends may not be reflective of results and trends for future periods.

The trends in revenue and revenue-based operating metrics will be impacted by our adoption of IFRS 15, *Revenue from Contracts with Customers*, as discussed further in *Section 8.2 Accounting policy developments*.

Wireless operating indicators

At December 31	2017	2016	Change
Subscribers (000s):			
Postpaid	**7,978**	7,550	5.7%
Prepaid	**933**	1,035	(9.9)%
Total	**8,911**	8,585	3.8%
Postpaid proportion of subscriber base (%)	**89.5**	87.9	1.6 pts.
HSPA+ population coverage[1] (millions)	**36.7**	35.7	2.8%
LTE population coverage[1] (millions)	**36.6**	35.2	4.0%
Years ended December 31	**2017**	2016	Change
Subscriber gross additions (000s):			
Postpaid	**1,140**	1,039	9.7%
Prepaid	**320**	360	(11.1)%
Total	**1,460**	1,399	4.4%
Subscriber net additions (000s):			
Postpaid	**379**	243	56.0%
Prepaid	**(83)**	(70)	(18.6)%
Total	**296**	173	71.1%
Blended ARPU, per month[2] ($)	**67.05**	65.10	3.0%
Churn, per month[2] (%)			
Blended	**1.11**	1.21	(0.10) pts.
Postpaid	**0.90**	0.95	(0.05) pts.

1 Including network access agreements with other Canadian carriers.
2 See *Section 11.2 Operating indicators*. These are industry measures useful in assessing operating performance of a wireless company, but are not measures defined under IFRS-IASB.
3 Effective April 1, 2017, postpaid subscribers, total subscribers and associated operating statistics (gross additions, net additions, ARPU and churn) have been adjusted to include an estimated migration of 85,000 MTS subscribers in the opening subscriber balances. Subsequent to this, on October 1, 2017, total subscribers and associated operating statistics have been adjusted to reduce estimated migrations of MTS subscribers down by 11,000 to 74,000. Cumulative subscriber connections also include an April 1, 2017 adjustment to remove approximately 19,000 prepaid and 25,000 postpaid subscriptions from the respective subscriber bases, primarily due to our national CDMA network shutdown.

Operating revenues – Wireless segment

Years ended December 31 ($ in millions)	2017	2016	Change
Network revenue	**6,964**	6,541	6.5%
Equipment and other service revenues	**535**	537	(0.4)%
Revenues arising from contracts with customers	**7,499**	7,078	5.9%
Other operating income	**36**	37	(2.7)%
External operating revenues	**7,535**	7,115	5.9%
Intersegment revenues	**43**	58	(25.9)%
Wireless operating revenues	**7,578**	7,173	5.6%

Total wireless operating revenues increased by $405 million in 2017.

WIRELESS NETWORK REVENUE
($ millions)

Network revenue from external customers increased by $423 million in 2017. Network revenue increased by 6.5%, reflecting: (i) growth in the subscriber base, including subscribers we acquired from MTS; (ii) a larger proportion of higher-rate plans in the revenue mix, including the Premium Plus plans launched in June 2016; (iii) a larger proportion of customers selecting plans with larger data buckets or periodically topping up their data buckets; (iv) a higher postpaid subscriber mix; (v) a higher smartphone mix; and (vi) higher roaming revenues.

- Monthly blended ARPU was $67.05 in 2017, reflecting an increase of $1.95 or 3.0%. The increase was primarily driven by the effects of higher network revenue (as described above).
- Gross subscriber additions were 1,460,000 in 2017, reflecting an increase of 61,000 for the year. Postpaid gross additions increased by 101,000 due to the success of promotions and our marketing efforts focused on higher-value postpaid and smartphone loading, higher demand for tablet devices, demographic shifts as the Canadian population grows, and in the fourth quarter, our successful response to aggressive holiday offers. Prepaid gross activations decreased by 40,000 resulting mainly from competitive intensity, and our marketing efforts focused on higher-value postpaid loading.
- Our average monthly postpaid subscriber churn rate was 0.90% in 2017, as compared to 0.95% in 2016. The continuing low postpaid subscriber churn rate during 2017 reflects our focus on executing customers first initiatives and retention programs, partly offset by incremental deactivations from aggressive holiday offers. Our blended monthly subscriber churn rate was 1.11% in 2017, as compared to 1.21% in 2016. The improvement in our blended subscriber churn rate in 2017 reflects the changes in the postpaid churn rate and improvements in prepaid churn rates, as well as an increase in the mix of postpaid subscribers versus prepaid subscribers in our subscriber base.
- Net subscriber additions reflect postpaid net additions of 379,000 in 2017, compared to 243,000 in 2016, attributed to the factors affecting gross subscriber additions as described above. Prepaid subscribers decreased by 83,000 in 2017, reflecting our focus on higher-value postpaid loading. Net subscriber additions were 296,000 in 2017, reflecting a year-over-year improvement of 123,000 due to lower blended monthly churn and higher postpaid gross additions. The 74,000 MTS subscribers acquired are not part of net subscriber additions, as they were added to the subscriber base.

Equipment and other service revenues decreased by $2 million in 2017 mainly due to a combination of higher per-unit subsidies combined with competitive intensity and a higher mix of bring-your-own-device loading, partly offset by increased postpaid gross additions, higher retention volumes and increased handset device balance payments from subscribers.

Other operating income was relatively flat in 2017 compared to 2016. The MTS contingent consideration recovery was partially offset by the non-recurrence of 2016 gains from the exchange of wireless spectrum licences and lower gains from sales of property, plant and equipment.

Intersegment revenues represent network services that are eliminated upon consolidation along with the associated wireline expenses.

Operating expenses – Wireless segment

Years ended December 31 ($ in millions)	2017	2016	Change
Goods and services purchased:			
Equipment sales expenses	**1,782**	1,684	5.8%
Network operating expenses	**826**	773	6.9%
Marketing expenses	**433**	420	3.1%
Other[1]	**792**	667	18.7%
Employee benefits expense[1,2]	**646**	723	(10.7)%
Wireless operating expenses	**4,479**	4,267	5.0%

1 Includes restructuring and other costs. See *Section 11.1 Non-GAAP and other financial measures*.
2 Includes transformative compensation expense of $70 million recorded in other costs in the fourth quarter of 2016.

Wireless expenses increased by $212 million in 2017.

Equipment sales expenses increased by $98 million in 2017, reflecting an increase in postpaid gross additions, an increase in higher-value smartphones in the sales mix, including premium devices on Premium Plus plans, increasing handset costs, and an increase in retention volumes.

Network operating expenses increased by $53 million in 2017, mainly due to increased roaming expenses.

Marketing expenses increased by $13 million in 2017, primarily due to higher advertising and promotions expenses, as well as higher commission expense driven by higher gross additions and an increase in retention volumes.

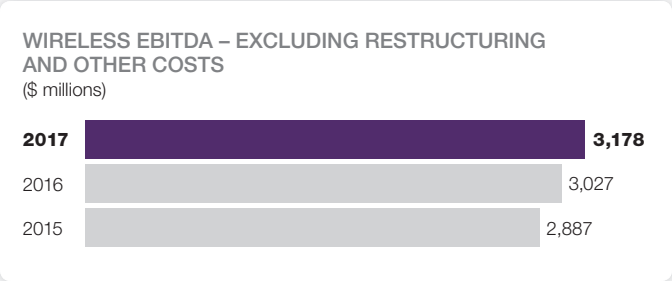
Other goods and services purchased increased by $125 million in 2017, primarily due to an increase in external labour, largely because of higher non-labour restructuring and other costs, including those associated with the migration and servicing of subscribers from MTS, customer support costs related to acquired MTS subscribers during migration, an increase in external labour and higher administrative costs supporting the higher customer base.

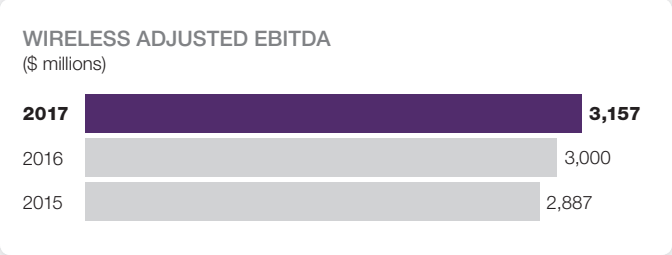
Employee benefits expense decreased by $77 million in 2017, primarily due to the non-recurrence of significant labour-related restructuring and other costs from efficiency initiatives in 2016. Excluding the transformative compensation expense, employee benefits expense decreased by $7 million. This decrease was primarily due to lower capitalized labour costs.

EBITDA – Wireless segment

Years ended December 31 ($ in millions, except margins)	2017	2016	Change
EBITDA	**3,099**	2,906	6.6%
Add back restructuring and other costs included in EBITDA[1]	**79**	121	(34.7)%
Deduct gain on the exchange of wireless spectrum licences	**–**	(15)	n/m
Deduct net gains and equity income from real estate joint venture developments	**–**	(12)	n/m
Deduct MTS net recovery	**(21)**	–	n/m
Adjusted EBITDA[2]	**3,157**	3,000	5.2%
EBITDA margin (%)	**40.9**	40.5	0.4 pts.
Adjusted EBITDA margin[3] (%)	**41.8**	42.0	(0.2) pts.

1 Includes transformative compensation expense of $70 million recorded in other costs in the fourth quarter of 2016.
2 See description under *EBITDA* in *Section 11.1 Non-GAAP and other financial measures*.
3 Adjusted EBITDA margin is Adjusted EBITDA divided by Operating revenues, where the calculation of the Operating revenues excludes the net gains and equity income from real estate joint venture developments, the gain on the exchange of wireless spectrum licences as well as the MTS net recovery.





Wireless EBITDA increased by $193 million or 6.6% in 2017. Wireless Adjusted EBITDA increased by $157 million or 5.2% in 2017, reflecting network revenue growth driven by higher ARPU and a larger customer base, including the subscribers we acquired from MTS, partly offset by increased equipment sales expenses, increased network operating expenses, higher administrative costs and increased customer support costs due to growth in the subscriber base.

5.5 Wireline segment

High-speed Internet subscribers

2017: 1,743,000
2016: 1,655,000 +5.3%

TELUS TV subscribers

2017: 1,098,000
2016: 1,059,000 +3.7%

Residential NALs

2017: 1,298,000
2016: 1,374,000 (5.5)%

Total wireline subscribers

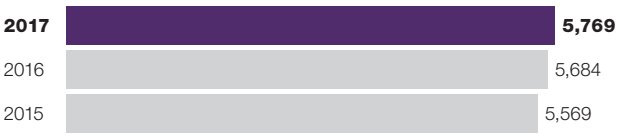
2017: 4,139,000
2016: 4,088,000 +1.2%

Wireline trends

The trend of increasing wireline service revenue reflects growth in high-speed Internet and enhanced data services, business process outsourcing services, TELUS Health revenues, and TELUS TV revenues, and is partly offset by declining wireline voice revenues and equipment revenues. The increases in Internet and TV service revenues are being generated by subscriber growth and higher Internet revenue per customer resulting from upgrades to faster speeds and larger data usage rate plans. The trend of increasing TELUS Health revenues has been driven by organic growth and through acquisitions. Growth rates of business process outsourcing services reflect acquisition growth and moderating organic growth. The trend of declining wireline voice revenues is due to technological substitution, greater use of inclusive long distance coupled with lower long distance minutes used, and continuing intensification of competition in the small and medium-sized business market, as well as impacts of the economic slowdown in previous quarters, particularly in Alberta, which were more prominent in the business markets for voice.

We expect continued high-speed Internet subscriber base growth as the economy grows and as we continue our investments in expanding our fibre-optic network. TELUS TV subscriber base growth has moderated due to a declining overall market for paid TV services resulting from the high rate of market penetration and increased competitive intensity, including from over-the-top (OTT) services. Residential network access line (NAL) losses continue to reflect the ongoing trend of substitution to wireless and Internet-based services.

WIRELINE EXTERNAL REVENUE
($ millions)



Wireline operating indicators

At December 31 (000s)	2017	2016	Change
Subscriber connections:			
High-speed Internet subscribers	**1,743**	1,655	5.3%
TELUS TV subscribers	**1,098**	1,059	3.7%
Residential NALs[1]	**1,298**	1,374	(5.5)%
Total wireline subscriber connections[1]	**4,139**	4,088	1.2%

Years ended December 31 (000s)	2017	2016	Change
Subscriber connection net additions (losses):			
High-speed Internet	**81**	68	19.1%
TELUS TV	**35**	54	(35.2)%
Residential NALs	**(76)**	(93)	18.3%
Total wireline subscriber connection net additions[1]	**40**	29	37.9%

1 In relation to an acquisition and a divestiture that were both undertaken during the first quarter of 2017, January 1, 2017 residential NALs, high-speed Internet and TELUS TV subscriber balances were increased by a net 1,000, 6,000 and 5,000, respectively.

Operating revenues – Wireline segment

Years ended December 31 ($ in millions)	2017	2016	Change
Data services and equipment	**4,261**	4,059	5.0%
Voice services	**1,230**	1,363	(9.8)%
Other services and equipment	**212**	225	(5.8)%
Revenues arising from contracts with customers	**5,703**	5,647	1.0%
Other operating income	**66**	37	78.4%
External operating revenues	**5,769**	5,684	1.5%
Intersegment revenue	**206**	194	6.2%
Total operating revenues	**5,975**	5,878	1.7%

Total wireline operating revenues increased by $97 million in 2017.

- Data services and equipment revenues increased by $202 million in 2017. The increase was primarily due to: (i) increased Internet and enhanced data service revenues resulting from a 5.3% increase in our high-speed Internet subscribers over the last 12 months, higher revenue per customer from upgrades to faster Internet speeds and larger data usage Internet rate plans, and certain rate increases; (ii) growth in business process outsourcing revenues, inclusive of recent acquisitions and foreign exchange impacts on foreign operations; (iii) increased TELUS Health revenues driven by organic growth through additional professional services and support revenue, and through acquisitions (professional services revenue increased largely due to being selected as the technology solution provider for PrescribeIT, and support revenue growth has arisen from additional physicians using our electronic medical records offering); and (iv) increased TELUS TV revenues resulting from 3.7% subscriber growth over the last 12 months. This growth was partly offset by the ongoing decline in legacy data services.
- Voice services revenues decreased by $133 million in 2017. The decrease reflects the ongoing decline in legacy revenues from technological substitution, increased competition, greater use of inclusive long distance plans and lower long distance minutes of use, including lower wholesale volumes and price plan changes. We experienced a 5.5% decline in residential NALs in the year.

- Wireline subscriber connection net additions were 40,000 in 2017, reflecting an increase of 11,000 from 2016.
  - Net additions of high-speed Internet subscribers increased by 13,000 in 2017, due to continued customer demand for our high-speed broadband services, including fibre to the premises, as well as the success of our innovative product offerings.
    Net additions of TELUS TV subscribers were 35,000 in 2017, a decrease of 19,000 compared to the net additions in 2016. This decrease reflects lower gross additions and higher satellite-TV subscriber losses due to a declining overall market for paid TV services resulting from the effects of heightened competitive intensity, including from OTT services, and a high rate of market penetration. These pressures were partly offset by the continued focus on connecting more homes and businesses directly to fibre (as we approach nearly 50% of our targeted coverage footprint), expanding and enhancing our addressable high-speed Internet and Optik TV footprint, and bundling these services together. This contributed to combined Internet and TV subscriber growth of 127,000 or 4.7% in the year.
  - Residential NAL losses were 76,000 in 2017, as compared to NAL losses of 93,000 in 2016. The residential NAL losses continue to reflect the trend of substitution to wireless and Internet-based services, as well as increased competition, partially mitigated by the success of our bundled service offerings and our customers first initiatives.
- Other services and equipment revenues decreased by $13 million in 2017, mainly due to declines in voice equipment sales.

Other operating income increased by $29 million in 2017, mainly due to gains on sales of certain assets, the non-recurrence of a 2016 provision related to written put options issued in a 2012 TELUS International (Cda) Inc. business combination, partly offset by lower net gains and equity income related to real estate joint venture developments.

Intersegment revenues represent services provided to the wireless segment. Such revenue is eliminated upon consolidation together with the associated expenses in wireless.

Operating expenses – Wireless segment

Years ended December 31 ($ millions)	2017	2016	Change
Goods and services purchased[1]	**2,351**	2,339	0.5%
Employee benefits expense[1,2]	**1,949**	2,216	(12.0)%
Wireline operating expenses	**4,300**	4,555	(5.6)%

1 Includes restructuring and other costs. See *Section 11.1 Non-GAAP and other financial measures*.
2 Includes transformative compensation expense of $235 million recorded in other costs in the fourth quarter of 2016.

Total wireline operating expenses decreased by $255 million in 2017, primarily due to the following factors:

- Goods and services purchased increased by $12 million in 2017, primarily due to increased external labour supporting the growing customer base, higher TV content costs mainly driven by higher numbers of TV subscribers, and higher non-labour restructuring and other costs.
- Employee benefits expense decreased by $267 million in 2017, mainly due to the non-recurrence of the $235 million transformative compensation expense recorded in the fourth quarter of 2016.

  Excluding the transformative compensation expense, employee benefits expense decreased by $32 million. The decrease was primarily due to the non-recurrence of significant labour-related restructuring and other costs from efficiency initiatives in 2016, benefits from certain contract concessions associated with our transformative compensation, lower compensation and benefit costs from a decrease in the number of domestic FTEs, excluding acquisitions, and higher capitalized labour costs. The decrease was partly offset by an increase in the number of employees and related compensation resulting from acquisitions supporting growing TELUS Health and business process outsourcing revenue, net of the effects of foreign exchange on foreign operations.

EBITDA – Wireline segment

Years ended December 31 ($ in millions, except margins)	2017	2016	Change
EBITDA	**1,675**	1,323	26.6%
Add back restructuring and other costs included in EBITDA[1]	**60**	358	(83.2)%
Deduct net gains and equity income from real estate joint venture developments	**(1)**	(14)	92.9%
Adjusted EBITDA[2]	**1,734**	1,667	4.0%
EBITDA margin (%)	**28.0**	22.5	5.5 pts.
Adjusted EBITDA margin[3] (%)	**29.0**	28.4	0.6 pts.

1 Includes transformative compensation expense of $235 million recorded in other costs in the fourth quarter of 2016.
2 See description under *EBITDA* in *Section 11.1 Non-GAAP and other financial measures*.
3 Adjusted EBITDA margin is Adjusted EBITDA divided by Operating revenues, where the calculation of the Operating revenues excludes the net gains and equity income from real estate joint venture developments.

WIRELINE EBITDA – EXCLUDING RESTRUCTURING AND OTHER COSTS
($ millions)

WIRELINE ADJUSTED EBITDA
($ millions)

Wireline EBITDA increased by $352 million or 26.6% in 2017. Wireline Adjusted EBITDA increased by $67 million or 4.0% in 2017 due to growth in data service margins (including Internet, TELUS Health services, and TELUS TV) and our execution of cost efficiency programs, partly offset by continued declines in legacy voice services and a decline in the contribution from business process outsourcing services.