TELEPHONE & DATA SYSTEMS INC /DE/ Form 10-Q November 02, 2018

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Washington, D.C	C. 20549			
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TELEPHONE A	ND DATA S	YSTEM	IS, INC.	
(Exact name of F	Registrant as s	specified	l in its charter)	
Delaware	C		,	36-2669023
	risdiction of i	incorpor	ation or organization)	(IRS Employer Identification No.)
· · · · ·			C /	
30 North LaSalle	e Street, Suite	4000, C	Chicago, Illinois 60602	
(Address of prine			•	
	-			
Registrant's telep	phone number	r, includ	ing area code: (312) 63	0-1900
-	•	Yes	No	
Indicate by check	k mark [x]	[]	
whether the regis	strant (1)			
has filed all repo	rts required			

to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of [x] Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

[]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. Accelerated [] Large accelerated filer [x] Smaller Non-accelerated filer [] reporting [] company Emerging growth [] company If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for [] complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. Indicate by check mark [] [X] whether the registrant is a

shell company (as defined in Rule 12b-2 of the Exchange Act). Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date. Outstanding at ClaSceptember 30, 2018 Common Shares, \$0.005,6B2r#\$6 par value Series Α Common Sha7e38 \$100res \$0.01 par

value

Telephone and Data Systems, Inc.

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Telephone and Data Systems, Inc. Management's Discussion and Analysis of Financial Condition and Results of Operations Executive Overview

The following discussion and analysis compares Telephone and Data Systems, Inc.'s (TDS) financial results for the three and nine months ended September 30, 2018, to the three and nine months ended September 30, 2017. It should be read in conjunction with TDS' interim consolidated financial statements and notes included herein, and with the description of TDS' business, its audited consolidated financial statements and Management's Discussion and Analysis (MD&A) of Financial Condition and Results of Operations included in TDS' Annual Report on Form 10-K (Form 10-K) for the year ended December 31, 2017. Certain numbers included herein are rounded to millions for ease of presentation; however, certain calculated amounts and percentages are determined using the unrounded numbers.

This report contains statements that are not based on historical facts, including the words "believes," "anticipates," "estimates," "expects," "plans," "intends," "projects," and similar expressions. These statements constitute and represent "forward looking statements" as this term is defined in the Private Securities Litigation Reform Act of 1995. Such forward looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, events or developments to be significantly different from any future results, events or developments expressed or implied by such forward looking statements. See Private Securities Litigation Reform Act of 1995 Safe Harbor Cautionary Statement for additional information.

TDS uses certain "non-GAAP financial measures" and each such measure is identified in the MD&A. A discussion of the reason TDS determines these metrics to be useful and a reconciliation of these measures to their most directly comparable measures determined in accordance with accounting principles generally accepted in the United States of America (GAAP) are included in the Supplemental Information Relating to Non-GAAP Financial Measures section within the MD&A of this Form 10-Q Report.

General

TDS is a diversified telecommunications company that provides high-quality communications services to approximately 6 million connections nationwide. TDS provides wireless services through its 82%-owned subsidiary, United States Cellular Corporation (U.S. Cellular). TDS also provides wireline and cable services through its wholly-owned subsidiary, TDS Telecommunications LLC (TDS Telecom). See Note 12 — Business Segment Information in the Notes to Consolidated Financial Statements for summary financial information on each business segment.

TDS re-evaluated internal reporting roles with regard to its hosted and managed services (HMS) business unit and, as a result, changed its reportable segments. Effective January 1, 2018, HMS was considered a non-reportable segment and is no longer being reported under TDS Telecom. Prior periods have been recast to conform to this revised presentation.

TDS Mission and Strategy

TDS' mission is to provide outstanding communications services to its customers and meet the needs of its shareholders, its people, and its communities. In pursuing this mission, TDS seeks to grow its businesses, create opportunities for its associates and employees, and build value over the long-term for its shareholders. Across all of its businesses, TDS is focused on providing exceptional customer experiences through best-in-class services and products and superior customer service.

TDS' long-term strategy calls for the majority of its capital to be reinvested in its operating businesses to strengthen their competitive positions and financial performance, while also returning value to TDS shareholders through the payment of a regular quarterly cash dividend and share repurchases.

In 2018, TDS is working to build shareholder value by continuing to execute on its strategies to build strong, competitive businesses providing high-quality, data-focused services and products. Strategic efforts include:

U.S. Cellular continues to offer economical and competitively priced service plans and devices to its customers, and is focused on increasing revenues from sales of related products such as accessories and device protection plans and from new services such as fixed wireless broadband. In addition, U.S. Cellular is focused on expanding its solutions available to business and government customers, including a growing suite of connected machine-to-machine solutions and software applications across various categories.

U.S. Cellular continues to devote efforts to enhance its network capabilities. VoLTE technology has been launched successfully in California, Iowa, Oregon, Washington and Wisconsin, and deployments in several additional operating markets will occur in early 2019. VoLTE technology allows customers to utilize a 4G LTE network for both voice and data services, and offers enhanced services such as high definition voice and simultaneous voice and data sessions. In addition, the deployment of VoLTE technology expands U.S. Cellular's ability to offer roaming services to other wireless carriers.

U.S. Cellular is committed to continuous technology innovation as demonstrated by its ongoing evaluation of 5G technology. U.S. Cellular continues to be engaged in efforts related to the development of 5G standards and identifying potential use cases for the technology. In addition, U.S. Cellular has successfully tested 5G technology in both indoor and outdoor environments and plans to conduct a trial utilizing 5G standards and equipment on its core LTE network commencing in the fourth quarter of 2018. When deployed commercially, 5G technology is expected to help address customers' growing demand for data services as well as create opportunities for new services requiring high speed and reliability as well as low latency.

U.S. Cellular assesses its existing wireless interests on an ongoing basis with a goal of improving the competitiveness of its operations and maximizing its long-term return on capital. As part of this strategy, U.S. Cellular actively seeks attractive opportunities to acquire wireless spectrum, including pursuant to FCC auctions.

TDS Telecom's Wireline business continues to focus on driving growth in its video, broadband, and managedIP services by investing in fiber inside existing markets and in new out-of-territory markets. With support from the FCC's A-CAM program, Wireline will deploy higher speed broadband services to more rural areas.

TDS Telecom's Cable business continues to make network capacity investments and offer more advanced services in its markets in line with its strategy to increase broadband penetration.

TDS Telecom's Wireline and Cable businesses are investing in a Cloud TV platform to enhance video services.

Terms Used by TDS

The following is a list of definitions of certain industry terms that are used throughout this document:

4G LTE – fourth generation Long-Term Evolution which is a wireless broadband technology.

5G - fifth generation wireless broadband technology.

Account – represents an individual or business financially responsible for one or multiple associated connections. An account may include a variety of types of connections such as handsets and connected devices.

Auctions 1000, 1001, and 1002 – Auction 1000 is an FCC auction of 600 MHz spectrum licenses that started in 2016 and concluded in 2017 involving: (1) a "reverse auction" in which broadcast television licensees submitted bids to voluntarily relinquish spectrum usage rights in exchange for payments (referred to as Auction 1001); (2) a "repacking" of the broadcast television bands in order to free up certain broadcast spectrum for other uses; and (3) a "forward auction" of licenses for spectrum cleared through this process to be used for wireless communications (referred to as Auction 1002).

Alternative Connect America Cost Model (A-CAM) – a USF support mechanism for rate-of-return carriers, which provides revenue support annually for ten years beginning in 2017. This support comes with an obligation to build defined broadband speeds to a certain number of locations.

ASU 2014-09 – the Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) 2014-09, Revenue from Contracts with Customers, including any subsequent modifications to such guidance. This ASU replaces existing revenue recognition rules with a single comprehensive model to use in accounting for revenue arising from contracts with customers.

Broadband Connections – refers to the number of Wireline customers provided high-capacity data circuits via various technologies, including DSL and dedicated internet circuit technologies or the Cable billable number of lines into a building for high-speed data services.

Churn Rate – represents the percentage of the connections that disconnect service each month. These rates represent the average monthly churn rate for each respective period.

Connected Devices – non-handset devices that connect directly to the U.S. Cellular network. Connected devices include products such as tablets, watches, modems, and hotspots.

DOCSIS – Data Over Cable Service Interface Specification is an international telecommunications standard that permits the addition of high-bandwidth data transfer to an existing cable TV (CATV) system. DOCSIS 3.1 is a system specification that increases data transmission rates.

EBITDA – refers to earnings before interest, taxes, depreciation, amortization and accretion and is used in the non-GAAP metric Adjusted EBITDA throughout this document. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.

Eligible Telecommunications Carrier (ETC) – designation by states for providing specified services in "high cost" areas which enables participation in universal service support mechanisms.

Free Cash Flow – non-GAAP metric defined as Cash flows from operating activities less Cash paid for additions to property, plant and equipment. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.

Gross Additions – represents the total number of new connections added during the period, without regard to connections that were terminated during that period.

IPTV Connections – represents the number of Wireline customers provided video services using IP networking technology.

Machine-to-Machine or M2M – technology that involves the transmission of data between networked devices, as well as the performance of actions by devices without human intervention. U.S. Cellular sells and supports M2M solutions to customers, provides connectivity for M2M solutions via the U.S. Cellular network, and has agreements with device manufacturers and software developers which offer M2M solutions.

ManagedIP Connections – refers to the number of telephone handsets, data lines and IP trunks providing communications using IP networking technology.

Net Additions – represents the total number of new connections added during the period, net of connections that were terminated during that period.

OIBDA – refers to operating income before depreciation, amortization and accretion and is used in the non-GAAP metric Adjusted OIBDA throughout this document. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.

Partial Economic Areas - service areas of certain FCC licenses based on geography.

Postpaid Average Billings per Account (Postpaid ABPA) – non-GAAP metric which is calculated by dividing total postpaid service revenues plus equipment installment plan billings by the average number of postpaid accounts and by the number of months in the period. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.

Postpaid Average Billings per User (Postpaid ABPU) – non-GAAP metric which is calculated by dividing total postpaid service revenues plus equipment installment plan billings by the average number of postpaid connections and by the number of months in the period. See Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for additional information.

Postpaid Average Revenue per Account (Postpaid ARPA) – metric which is calculated by dividing total postpaid service revenues by the average number of postpaid accounts and by the number of months in the period.

Postpaid Average Revenue per User (Postpaid ARPU) – metric which is calculated by dividing total postpaid service revenues by the average number of postpaid connections and by the number of months in the period.

Retail Connections – the sum of U.S. Cellular postpaid connections and U.S. Cellular prepaid connections.

Tax Act – refers to comprehensive federal tax legislation enacted on December 22, 2017, which made broad changes to the U.S. tax code. Now titled H.R.1, the Tax Act was originally identified as the Tax Cuts and Jobs Act of 2017.

Universal Service Fund (USF) – a system of telecommunications collected fees and support payments managed by the FCC intended to promote universal access to telecommunications services in the United States.

U.S. Cellular Connections – individual lines of service associated with each device activated by a customer. Connections include all types of devices that connect directly to the U.S. Cellular network.

Video Connections – generally, a home or business receiving video programming counts as one video connection. In counting bulk residential or commercial connections, such as an apartment building or a hotel, connections are counted based on the number of units/rooms within the building receiving service.

Voice Connections – refers to the individual circuits connecting a customer to Wireline's central office facilities or the Cable billable number of lines into a building for voice services.

VoLTE – Voice over Long-Term Evolution is a technology specification that defines the standards and procedures for delivering voice communications and related services over 4G LTE networks.

Wireline Residential Revenue per Connection – is calculated by dividing total Wireline residential revenue by the average number of Wireline residential connections and by the number of months in the period.

Results of Operations - TDS Consolidated

	Three Months Ended September 30,				Nine Mo Septemb	ded		
	-	2018		-		201	8	
	2018 ¹	2017	vs.		20181	2017	vs.	
			2017	7			201	7
(Dollars in millions)								
Operating revenues	.	\$ 0.6 0		~	**	* * • • • •		~
U.S. Cellular	\$1,001	\$963	4		\$2,916	\$2,862	2	%
TDS Telecom	234	230	2		695	690	1	%
All other ²	62	58	6		166	184	(10	
Total operating revenues	1,297	1,251	4	%	3,777	3,736	1	%
Operating expenses								
U.S. Cellular	967	1,323	(27	·	2,761	3,163	(13	
TDS Telecom	206	203	2		624	601	4	%
All other ^{2, 3}	73	(42)	N/M	[200	97	N/N	1
Total operating expenses	1,246	1,484	(16)%	3,585	3,861	(7)%
Operating income (loss)								
U.S. Cellular	34	(360)	N/M	[155	(301) N/N	/1
TDS Telecom	28	27	1	%	71	88	(20)%
All other ^{2, 3}	(11) 100	N/M	[(34)	88	N/N	/1
Total operating income (loss)	51	(233)	N/M	[192	(125) N/N	/1
Investment and other income (expense)								
Equity in earnings of unconsolidated entities	42	35	19	%	121	101	20	%
Interest and dividend income	6	4	56	%	18	12	51	%
Interest expense	(43) (43)	_		(129)	(128) (1)%
Other, net	2	1	N/M	[1	3)%
Total investment and other income (expense)	7	(3)	N/M	[11	(12) N/N	-
Income (loss) before income taxes	58	(236)	N/M	[203	(137) N/N	Л
Income tax expense (benefit)	5		N/M		48	39	24	%
Net income (loss)	53	(231)	N/M	ſ	155	(176) N/N	Л
Less: Net income (loss) attributable to noncontrolling interests,								
net of tax	7	(50)	N/M	[36	(42) N/N	Λ
Net income (loss) attributable to TDS shareholders	\$46	\$(181)	N/M	[\$119	\$(134)) N/N	1
Adjusted OIBDA (Non-GAAP) ⁴	\$271	\$243	11	%	\$839	\$765	10	%
Adjusted EBITDA (Non-GAAP) ⁴	\$321	\$283	13		\$979	\$881	11	%
Capital expenditures	\$177	\$203 \$172	3		\$430	\$402	7	%
N/M - Percentage change not meaningful	ψ1//	Ψ1/2	5	10	Ψτυυ	ΨτυΔ	,	10
1 vivi - 1 oroentage enange not meaningful								

As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the new accounting standard is applied only to the most recent period presented. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

² Consists of corporate and other operations and intercompany eliminations.

During the three months ended September 30, 2017, U.S. Cellular recorded a goodwill impairment of \$370 million while TDS recorded a goodwill impairment of the U.S. Cellular reporting unit of \$227 million. Prior to 2009, TDS accounted for U.S. Cellular's share repurchases as step acquisitions, allocating a portion of the share repurchase value to TDS' Goodwill. Further, goodwill of the U.S. Cellular reporting unit was impaired at the TDS level in 2003 but not at U.S. Cellular. Consequently, U.S. Cellular's goodwill on a stand-alone basis and any resulting impairments of goodwill does not equal the TDS consolidated goodwill related to U.S. Cellular. The TDS adjustment of \$143 million is included in "All other". During the three months ended September 30, 2017, TDS also recorded a goodwill impairment of \$35 million related to its HMS operations, included in "All other".

⁴ Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

Refer to individual segment discussions in this MD&A for additional details on operating revenues and expenses at the segment level.

Equity in earnings of unconsolidated entities

Equity in earnings of unconsolidated entities represents TDS' share of net income from entities in which it has a noncontrolling interest and that are accounted for by the equity method. TDS' investment in the Los Angeles SMSA Limited Partnership (LA Partnership) contributed \$20 million and \$17 million for the three months ended September 30, 2018 and 2017, respectively, and \$58 million and \$50 million for the nine months ended September 30, 2018 and 2017, respectively, to Equity in earnings of unconsolidated entities. See Note 8 — Investments in Unconsolidated Entities in the Notes to Consolidated Financial Statements for additional information.

Income tax expense

See Note 5 — Income Taxes in the Notes to Consolidated Financial Statements for additional information related to income taxes. The bonus depreciation provision of the Tax Act is expected to substantially reduce TDS' current federal income tax liability in 2018.

Net income (loss) attributable to noncontrolling interests, net of tax

iter meetine (1055) autoratione to noncontrolling interests, net of tax		
	Three	Nine
	Months	Months
	Ended	Ended
	September	September
	30,	30,
	201&017	20182017
(Dollars in millions)		
U.S. Cellular noncontrolling public shareholders'	\$6 \$(50)	\$22 \$(44)
Noncontrolling shareholders' or partners'	1 —	14 2
Net income (loss) attributable to noncontrolling interests, net of tax	\$7 \$(50)	\$36 \$(42)

Net income (loss) attributable to noncontrolling interests, net of tax includes the noncontrolling public shareholders' share of U.S. Cellular's net income (loss) and the noncontrolling shareholders' or partners' share of certain U.S. Cellular subsidiaries' net income (loss).

Net income (loss) attributable to noncontrolling interests, net of tax increased during the nine months ended September 30, 2018, due primarily to an out-of-period adjustment recorded in the first quarter of 2018. TDS determined that this adjustment was not material to any of the periods impacted. See Note 10 — Variable Interest Entities in the Notes to Consolidated Financial Statements for additional information.

Earnings (Dollars in millions)

Three and Nine Months Ended

Net income (loss) increased due primarily to the recognition of a loss on impairment related to the U.S. Cellular reporting unit and HMS business recognized in the third quarter of 2017. Adjusted EBITDA increased due primarily to increased Operating revenues at U.S. Cellular. The loss on impairment of goodwill in the third quarter of 2017 was not included as a component of Adjusted EBITDA.

*Represents a non-GAAP financial measure. Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

U.S. CELLULAR OPERATIONS

Business Overview

U.S. Cellular owns, operates, and invests in wireless markets throughout the United States. U.S. Cellular is an 82%-owned subsidiary of TDS. U.S. Cellular's strategy is to attract and retain wireless customers through a value proposition comprised of a high-quality network, outstanding customer service, and competitive devices, plans, and pricing, all provided with a local focus.

OPERATIONS

Serves customers with approximately 5.1 million connections including 4.5 million postpaid, 0.5 million prepaid and 0.1 million reseller and other connections

Operates in 22 states

Employs approximately 5,700 associates

6,506 cell sites including 4,119 owned towers in service

Operational Overview

As of September2018 2017 30, Retail Connections – End of Period Postpaid 4,466,000 4,513,000 Prepaid 528,000 515,000 Total 4,994,000 5,028,000

	Q3 2018	;	Q3 2017	,	YTD 2018	8	YTD 2017	7
Postpaid Activity and Churn								
Gross Additions								
Handsets	133,000		139,000		340,000		357,000	
Connected Devices	39,000		52,000		107,000		154,000	
Total Gross Additions	172,000		191,000		447,000		511,000	
Net Additions (Losses)								
Handsets	15,000		29,000		3,000		20,000	
Connected Devices	(16,000)	6,000		(55,000)	11,000	
Total Net Additions (Losses)	(1,000)	35,000		(52,000)	31,000	
Churn	1.29	%	1.16	%	1.24	%	1.19	%

Postpaid net additions decreased for the three and nine months ended September 30, 2018, when compared to the same period last year, due to lower gross additions, as well as an increase in tablet churn. U.S. Cellular believes lower gross additions resulted from aggressive, industry-wide promotional activity on handsets and, in part, reflects U.S. Cellular's decision to curtail promotions of heavily discounted tablets.

Postpaid Revenue

	Three M	Ionths	Nine Mo	onths	
	Ended		Ended		
	Septeml	ber 30,	September 30,		
	2018	2017	2018	2017	
Average Revenue Per User (ARPU)	\$45.31	\$43.41	\$44.79	\$44.46	
Average Billings Per User (ABPU) ¹	\$59.41	\$54.71	\$58.07	\$55.21	

Average Revenue Per Account (ARPA) \$119.42 \$116.36 \$118.71 \$119.26

Average Billings Per Account (ABPA)¹ \$156.57 \$146.65 \$153.92 \$148.12

¹ Postpaid ABPU and Postpaid ABPA are non-GAAP financial measures. Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of these measures.

On January 1, 2018, U.S. Cellular adopted the provisions of ASU 2014-09, using a modified retrospective method. Under this method, the new accounting standard is applied only to the most recent period presented, recognizing the cumulative effect of the accounting change as an adjustment to retained earnings at January 1, 2018. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional details.

Postpaid ARPU and Postpaid ARPA increased for the three months ended September 30, 2018, when compared to the same period last year, due to several factors including: having proportionately more handset connections, which on a per-unit basis contribute more revenue than connected device connections; a shift in mix to higher-priced service plans; and increases in device protection plan and regulatory recovery revenues. Such factors were partially offset by the impact of adopting the provisions of ASU 2014-09. Application of the new accounting standard had the impact of reducing ARPU and ARPA for the three months ended September 30, 2018, by \$0.23 and \$0.61, respectively.

Postpaid ARPU increased for the nine months ended September 30, 2018, when compared to the same period last year, due to the reasons mentioned above. Postpaid ARPA slightly decreased for the nine months ended September 30, 2018, due primarily to a decrease in postpaid connections per account driven by higher tablet churn. Application of the new accounting standard had the impact of reducing ARPU and ARPA for the nine months ended September 30, 2018, by \$0.39 and \$1.03, respectively.

Under equipment installment plans, customers pay for their wireless devices in installments over a period of time. In order to show the trend in estimated cash collections from postpaid customer billings for service and equipment, U.S. Cellular has presented Postpaid ABPU and Postpaid ABPA, which are calculated as Postpaid ARPU and Postpaid ARPA plus average monthly installment plan billings per connection and account, respectively.

Postpaid ABPU and ABPA increased for the three and nine months ended September 30, 2018, due primarily to (i) an increase in equipment installment plan billings driven by increased penetration of equipment installment plans and (ii) a higher average cost per device sold.

Financial Overview - U.S. Cellular

	Three Months Ended September 30,				Nine Mo Septemb	led					
	1	2018		I	,	201	8				
	20181	2017	vs.		2018 ¹	2017	vs.				
			2017				201	7			
(Dollars in millions)											
Retail service	\$659	\$636	4	%	\$1,960	\$1,940	1	%			
Inbound roaming	50	37	35	%	116	94	23	%			
Other	50	64	(22)%	148	189	(22)%			
Service revenues	759	737	3	%	2,224	2,223	_				
Equipment sales	242	226	7	%	692	639	8	%			
Total operating revenues	1,001	963	4	%	2,916	2,862	2	%			
System operations (excluding Depreciation, amortization and	200	185	8	%	566	549	3	%			
accretion reported below)											
Cost of equipment sold	258	261	(1	·	716	749	(4)%			
Selling, general and administrative	346	350	(1		1,014	1,041	(2)%			
Depreciation, amortization and accretion	160	153	4		478	460	4	%			
Loss on impairment of goodwill		370	N/M			370	N/M	1			
(Gain) loss on asset disposals, net	3	5	(36	/	5	14	(61	/			
(Gain) loss on sale of business and other exit costs, net	—	(1)	N/M			· ,	N/M	1			
(Gain) loss on license sales and exchanges, net			N/M	[(18)	(19)	6	%			
Total operating expenses	967	1,323	(27)%	2,761	3,163	(13)%			
Operating income (loss)	\$34	\$(360)	N/M	ſ	\$155	\$(301)	N/M	1			
operating meetine (1999)	φ υ ι	φ(200)	1 (/ 1/)	-	<i><i>ψ</i>100</i>	¢(501)	1 (/ 1)	•			
Net income (loss)	\$37	\$(298)	N/M	[\$143	\$(259)	N/M	1			
Adjusted OIBDA (Non-GAAP) ²	\$197	\$167	18	%	\$620	\$523	18	%			
Adjusted EBITDA (Non-GAAP) ²	\$243	\$204	19	%	\$750	\$631	19	%			
Capital expenditures	\$118	\$112	6	%	\$274	\$257	7	%			
N/M - Percentage change not meaningful											

N/M - Percentage change not meaningful

As of January 1, 2018, U.S. Cellular adopted ASU 2014-09 using a modified retrospective approach. Under this method, the new accounting standard is applied only to the most recent period presented. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

² Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

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Operating Revenues Three Months Ended September 30, 2018 and 2017 (Dollars in millions)

Operating Revenues Nine Months Ended September 30, 2018 and 2017 (Dollars in millions) Service revenues consist of:

Retail Service - Charges for access, airtime, recovery of regulatory costs and value added services, including data services and products

Inbound Roaming - Charges to other wireless carriers whose customers use U.S. Cellular's wireless systems when roaming

Other Service - Amounts received from the Federal USF and tower rental revenues. Imputed interest on equipment installment plan contracts is included in 2017; however, it is not included in 2018 due to the impact of adopting the provisions of ASU 2014-09

Equipment revenues consist of:

Sales of wireless devices and related accessories to new and existing customers, agents, and third-party distributors

Key components of changes in the statement of operations line items were as follows:

Total operating revenues

Retail service revenues increased for the three and nine months ended September 30, 2018, primarily as a result of the changes in Postpaid ARPU as previously discussed in the Operational Overview section. In the nine months comparison, an increase in the average number of connections also was a factor.

Inbound roaming revenues increased for the three and nine months ended September 30, 2018, primarily driven by higher data usage, partially offset by lower rates.

Other service revenues decreased for the three and nine months ended September 30, 2018, reflecting the exclusion of imputed interest income in 2018 due to the impact of adopting the provisions of ASU 2014-09. The impact of imputed interest income was \$19 million and \$52 million for the three and nine months ended September 30, 2017. Federal USF revenues remained flat at \$23 million and \$69 million for the three and nine months ended September 30, 2018. See the Regulatory Matters section in this MD&A for a description of the Phase II Connect America Mobility Fund (MF2 Order) and its expected impacts on U.S. Cellular's current Federal USF support.

Equipment sales revenues increased for the three and nine months ended September 30, 2018, due to the impact of adopting the provisions of ASU 2014-09, an increase in the average revenue per device sold, and a mix shift from feature phones and connected devices to higher end smartphone devices. Such factors were partially offset by a decrease in the number of devices sold and a reduction in guarantee liability amortization for equipment installment contracts as a result of changes in plan offerings.

See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional details on the financial statement impact of ASU 2014-09.

System operations expenses

System operations expenses increased for the three and nine months ended September 30, 2018, due to an increase in roaming expenses primarily driven by higher data roaming usage, partially offset by lower rates. Also contributing to the increase were higher maintenance, utility and cell site expenses largely reflecting the growth in cell sites and other network facilities as U.S. Cellular continues to add capacity, enhance quality, and deploy new technologies.

Cost of equipment sold

Cost of equipment sold decreased for the three and nine months ended September 30, 2018, due primarily to a decrease in the number of devices sold, as well as the impact of adopting the provisions of ASU 2014-09. Such factors were partially offset by increases due to a higher average cost per device sold as well as a mix shift from feature phones and connected devices to higher cost smartphones.

Depreciation, amortization and accretion

Depreciation, amortization, and accretion increased for the three and nine months ended September 30, 2018, due to additional network assets being placed into service as well as an increase in amortization expense related to billing system upgrades.

Loss on impairment of goodwill

During the third quarter of 2017, U.S. Cellular recorded a \$370 million loss on impairment of goodwill.

(Gain) loss on asset disposals, net

Loss on asset disposals, net decreased primarily as a result of fewer disposals of certain network assets.

(Gain) loss on license sales and exchanges, net

Net gains in 2018 and 2017 were due to gains recognized on license sale and exchange transactions with various third parties.

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TDS TELECOM OPERATIONS Business Overview

TDS Telecom operates in two reportable segments: Wireline and Cable. TDS Telecom's business objective is to provide a wide range of communication services to both residential and commercial customers, focused on high-quality broadband and video products.

OPERATIONS

TDS Telecom provides broadband, video and voice services to approximately 1.2 million connections in 31 states.

Employs approximately 2,600 employees.

Wireline operates incumbent local exchange carriers (ILEC) and competitive local exchange carriers (CLEC) in 27 states.

Cable operates primarily in Colorado, New Mexico, Texas, Utah, and Oregon.

Financial Overview — TDS Telecom

	Endee	Mont 1 mber 3	Nine Months Ended September 30,					
	•		2018	•		2018		
	20181	2017	vs. 2017	20181	2017	vs. 201		
(Dollars in millions)			2017			201	.,	
Operating revenues								
Wireline	\$177	\$179	(1)%	\$526	\$538	(2)%	
Cable	58	52	11~%	170	152	12	%	
TDS Telecom operating revenues	234	230	2 %	695	690	1	%	
Operating expenses								
Wireline	149	153	(3)%	451	457	(1)%	
Cable	58	50	$16\ \%$	174	145	20	%	
TDS Telecom operating expenses	206	203	2 %	624	601	4	%	
TDS Telecom operating income	\$28	\$27	1 %	\$71	\$88	(20)%	
Net income	\$36	\$18	94 %	\$73	\$58	25	%	
Adjusted OIBDA (Non-GAAP) ²	\$77	\$77	_	\$229	\$236	(3)%	
Adjusted EBITDA (Non-GAAP) ²	\$80	\$79	1 %	\$236	\$243	(3)%	
Capital expenditures	\$54	\$56	(3)%	\$140	\$127	11	%	
Numbers may not foot due to roun	nding.							

As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the ¹ new accounting standard is applied only to the most recent period presented. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

² Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

Operating Revenues (Dollars in millions)

Total operating revenues

Operating revenues increased for the three and nine months ended September 30, 2018. Price increases, Cable broadband and Cable and Wireline video connection growth, and higher Wireline support revenue provided through the A-CAM program increased revenues. Wireline wholesale access revenue and legacy voice and commercial

products revenues decreased.

Total operating expenses

Operating expenses increased for the three and nine months ended September 30, 2018, due primarily to higher Wireline and Cable video programming costs and Wireline network maintenance. Operating expenses also increased due to amortization of Cable franchise rights. See Note 1 - Basis of Presentation in the Notes to Consolidated Financial Statements for additional information related to Cable franchise rights. In addition, operating expenses increased due to the impacts of adopting the provisions of ASU 2014-09. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information. Capital expenditures

Capital spending increased for the nine months ended September 30, 2018, to support strategic build-outs including market expansions, A-CAM and Cloud TV.

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WIRELINE OPERATIONS Business Overview

TDS Telecom's Wireline business provides broadband, video and voice services. These services are provided to residential, commercial, and wholesale customers in a mix of rural, small town and suburban markets, with the largest concentration of its customers in the Upper Midwest and the Southeast. TDS Telecom's strategy is to offer its residential customers broadband, video, and voice services through value-added bundling. In its commercial business, TDS Telecom's focus is on small- to medium-sized businesses and its sales efforts emphasize advanced IP-based data and voice services.

Operational Overview

ILEC Residential Broadband Connections by Speeds As of September 30,

Residential broadband customers are increasingly choosing higher speeds in ILEC markets with 61% choosing speeds of 10 Mbps or greater and 30% choosing speeds of 50 Mbps or greater.

Wireline Residential Revenue per Connection

Increases in broadband speeds, video connection growth, and price increases drove increases in average residential revenue per connection.

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Residential Connections As of September 30,

Total residential connections decreased by 1% as declines in voice connections outpaced the growth in video and broadband connections.

Commercial Connections As of September 30,

Total connections decreased by 7% due primarily to a 9% decrease in voice connections, mostly in CLEC markets.

Financial Overview — Wireline

	Three Months Ended September 30,				Nine M Septer	s Ended 0,		
	2018 2018 ¹ 2017 vs. 2017				20181	2017	201 vs. 201	
(Dollars in millions)								
Residential	\$81	\$ 80	1	%	\$241	\$240	1	%
Commercial	46	50	(8)%	140	151	(7)%
Wholesale	50	49	2	%	144	147	(2)%
Service revenues	176	178	(1)%	524	537	(2)%
Equipment and product sales			15	%	1	1	31	%
Total operating revenues	177	179	(1)%	526	538	(2)%
Cost of services (excluding Depreciation, amortization and accretion reported below)	68	66	4	%	200	194	3	%
Cost of equipment and products			(35)%	1	2	(33)%
Selling, general and administrative	49	49	(1)%	146	147	(1)%
Depreciation, amortization and accretion	35	38	(6)%	108	114	(5)%
(Gain) loss on asset disposals, net	(4)) —	N/N	1	(3)	1	N/N	1
Total operating expenses	149	153	(3)%	451	457	(1)%
Operating income	\$28	\$ 25	9	%	\$75	\$81	(8)%
Income before income taxes	\$31	\$ 28	10	%	\$83	\$88	(6)%
Adjusted OIBDA (Non-GAAP) ²	\$59	\$63	(7)%	\$179	\$196	(9)%
Adjusted EBITDA (Non-GAAP) ²	\$61	\$66	(6)%	\$186	\$202	(8)%
Capital expenditures	\$41	\$41	(1)%	\$103	\$91	13	%

Numbers may not foot due to rounding. N/M - Percentage change not meaningful

As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the ¹ new accounting standard is applied only to the most recent period presented. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

² Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

Operating Revenues (Dollars in millions)

Residential revenues consist of:

Broadband services, including fiber-based and other digital, premium and enhanced data services Video and satellite video services Voice services

Commercial revenues consist of:

TDS managedIP voice and data services High-speed and dedicated business internet services Voice services

Wholesale revenues consist of:

Network access services primarily to interexchange and wireless carriers for carrying data and voice traffic on TDS Telecom's network and special access services to carriers and others Federal and State USF support

Key components of changes in the statement of operations items were as follows:

Total operating revenues

Residential revenues increased for the three and nine months ended September 30, 2018, due primarily to growth in video and broadband connections and price increases, partially offset by declines in voice connections. Average voice connections declined 7% while average video connections grew 12%.

Commercial revenues decreased for the three and nine months ended September 30, 2018, due to declining connections and services mostly in CLEC markets.

Wholesale revenues increased for the three months ended September 30, 2018, due to \$5 million of increased support received from the A-CAM program, including \$4 million of retroactive funding from January 1, 2017 to June 30, 2018. The additional funding increased Wireline's broadband speed deployment obligations under the existing FCC A-CAM program. Wholesale revenues decreased for the nine months ended September 30, 2018, due primarily to decreases in network access and special access services. Cost of services

Cost of services increased for the three and nine months ended September 30, 2018, due to higher programming charges related to growth in video and contractor charges, partially offset by a decrease in the costs of purchasing unbundled network elements, provisioning circuits and providing long-distance services.

Depreciation, amortization and accretion

Depreciation, amortization and accretion decreased as certain assets became fully depreciated.

(Gain) loss on asset disposals, net

A gain was recorded during the three months ended September 30, 2018, related to the sale of certain tower assets.

CABLE OPERATIONS Business Overview

TDS Telecom's Cable strategy is to expand its broadband services and leverage that growth by bundling with video and voice services. TDS Telecom seeks to be the leading provider of broadband services in its targeted markets by leveraging its core competencies in network management and customer focus.

Operational Overview

Cable Connections As of September 30,

Cable connections, which include two small tuck-in acquisitions completed in the fourth quarter of 2017, grew 10% due primarily to a 14% increase in broadband connections.

Financial Overview — Cable

Financial Overview — Cable	Three Months Ended September 30,				Nine I Septer	0,		
	201	82017	2018 7 vs. 2017		20181	2017	2013 vs. 2017	
(Dollars in millions)								
Residential	\$47	\$43	11	%	\$140	\$125	12	%
Commercial	10	9	14	%	30	27	11	%
Total operating revenues	58	52	11	%	170	152	12	%
Cost of services (excluding Depreciation, amortization and accretion reported below)	26	25	2	%	78	73	7	%
Selling, general and administrative	14	13	7	%	42	39	9	%
Depreciation, amortization and accretion	17	11	56	%	52	32	63	%
(Gain) loss on asset disposals, net	1	1	16	%	1	1	(9)%
Total operating expenses	58	50	16	%	174	145	20	%
Operating income (loss)	\$—	\$2	N/M		\$(4)\$7		N/M	1
Income (loss) before income taxes Adjusted OIBDA (Non-GAAP) ² Adjusted EBITDA (Non-GAAP) ² Capital expenditures	\$18 \$18	\$ 2 \$ 13 \$ 14 \$ 14	33 35	% %	\$(3) \$50 \$50 \$37	\$7 \$40 \$41 \$35	N/M 23 24 6	1 % % %

Numbers may not foot due to rounding. N/M - Percentage change not meaningful

As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the ¹ new accounting standard is applied only to the most recent period presented. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

² Refer to Supplemental Information Relating to Non-GAAP Financial Measures within this MD&A for a reconciliation of this measure.

Operating Revenues (Dollars in millions)

Residential and Commercial revenues consist of:

Broadband services, including high-speed internet, security and support services Video services, including premium programming in HD, multi-room and TV Everywhere offerings Voice services

Key components of changes in the statement of operations items were as follows:

Commentary

Total operating revenues

Residential revenues increased for the three and nine months ended September 30, 2018, due to tuck-in acquisitions, growth in connections and price increases.

Commercial revenues increased for the three and nine months ended September 30, 2018, due primarily to video price increases and increased advertising sales.

Cost of services

Cost of services increased for the three and nine months ended September 30, 2018, due primarily to increases in video programming fees and circuits expense.

Selling, general and administrative

Selling, general and administrative expenses increased for the three and nine months ended September 30, 2018, due to increased employee related expenses and higher property and other taxes. In addition, IT-related expenses from a billing conversion and support increased expenses for the nine months ended September 30, 2018.

Depreciation, amortization and accretion

Depreciation, amortization and accretion increased in 2018 due to the amortization of franchise rights, a reduction in depreciable lives of customer premise equipment, and increases in plant. Effective January 1, 2018, Cable changed its estimated useful life for video franchise rights from indefinite-lived to 15 years due primarily to the effects of

increasing competition and advancements in technology for delivering and consuming video programming, resulting in an additional \$13 million in depreciation in the nine months ended September 30, 2018. See Note 1 — Basis of Presentation in the Notes to Consolidated Financial Statements for additional information on franchise rights.

Liquidity and Capital Resources

Sources of Liquidity

TDS and its subsidiaries operate capital-intensive businesses. Historically, TDS has used internally-generated funds and also has obtained substantial funds from external sources for general corporate purposes. In the past, TDS' existing cash and investment balances, funds available under its revolving credit agreements, funds from other financing sources, including a term loan and other long-term debt, and cash flows from operating and certain investing and financing activities, including sales of assets or businesses, provided sufficient liquidity and financial flexibility for TDS to meet its normal day-to-day operating needs and debt service requirements, to finance the build-out and enhancement of markets and to fund acquisitions. There is no assurance that this will be the case in the future. See Market Risk for additional information regarding maturities of long-term debt.

Although TDS currently has a significant cash balance, TDS has incurred negative free cash flow at times in the past and this could occur in the future. However, TDS believes that existing cash and investment balances, funds available under its revolving credit agreements, receivables securitization agreement and expected cash flows from operating and investing activities will provide sufficient liquidity for TDS to meet its normal day-to-day operating needs and debt service requirements for the coming year.

TDS may require substantial additional capital for, among other uses, funding day-to-day operating needs including working capital, acquisitions of providers of cable, wireless or wireline telecommunications services, IT services or other businesses, spectrum license or system acquisitions, capital expenditures, debt service requirements, the repurchase of shares, the payment of dividends, or making additional investments. TDS, through U.S. Cellular, plans to participate in spectrum auctions in 2019 (see Regulatory Matters - Millimeter Wave Spectrum Auctions), as well as expects capital expenditures to increase in 2019 relative to 2018 levels, due primarily to continued fiber investments at TDS Telecom, and investments at U.S. Cellular to enhance network capacity and begin deploying 5G. It may be necessary from time to time to increase the size of the existing revolving credit agreements, to put in place new credit agreements, or to obtain other forms of financing in order to fund potential expenditures. TDS' liquidity would be adversely affected if, among other things, TDS is unable to obtain short or long-term financing on acceptable terms, TDS makes significant spectrum license purchases, TDS makes significant business acquisitions, the LA Partnership discontinues or reduces distributions compared to historical levels, or Federal USF and/or other regulatory support payments decline. In addition, although sales of assets or businesses by TDS have been an important source of liquidity in prior periods, TDS does not expect a similar level of such sales in the future.

TDS' credit rating currently is sub-investment grade. There can be no assurance that sufficient funds will continue to be available to TDS or its subsidiaries on terms or at prices acceptable to TDS. Insufficient cash flows from operating activities, changes in its credit ratings, defaults of the terms of debt or credit agreements, uncertainty of access to capital, deterioration in the capital markets, reduced regulatory capital at banks which in turn limits their ability to borrow and lend, other changes in the performance of TDS or in market conditions or other factors could limit or restrict the availability of financing on terms and prices acceptable to TDS, which could require TDS to reduce its acquisition, capital expenditure and business development programs, reduce the acquisition of spectrum licenses, and/or reduce or cease share repurchases and/or the payment of dividends. TDS cannot provide assurance that circumstances that could have a material adverse effect on its liquidity or capital resources will not occur. Any of the foregoing would have an adverse impact on TDS' businesses, financial condition or results of operations.

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Cash and Cash Equivalents

Cash and cash equivalents include cash and money market investments. The primary objective of TDS' Cash and cash equivalents investment activities is to preserve principal. Cash held by U.S. Cellular is for its operational needs and acquisition, capital expenditure and business development programs. TDS does not have direct access to U.S. Cellular cash unless U.S. Cellular pays a dividend on its common stock. U.S. Cellular has no current intention to pay a dividend to its shareholders.

Cash and Cash Equivalents (Dollars in millions)

At September 30, 2018, TDS' consolidated Cash and cash equivalents totaled \$1,062 million compared to \$619 million at December 31, 2017.

The majority of TDS' Cash and cash equivalents was held in bank deposit accounts and in money market funds that purchase only debt issued by the U.S. Treasury or U.S. government agencies across a range of eligible money market investments that may include, but are not limited to, government agency repurchase agreements, government agency debt, U.S. Treasury repurchase agreements, U.S. Treasury debt, and other securities collateralized by U.S. government obligations. TDS monitors the financial viability of the money market funds and direct investments in which it invests and believes that the credit risk associated with these investments is low.

Financing

In May 2018, TDS entered into a new \$400 million revolving credit agreement with certain lenders and other parties and U.S. Cellular entered into a new \$300 million revolving credit agreement with certain lenders and other parties. Amounts under both of the new revolving credit agreements are available for general corporate purposes, including acquisitions, spectrum purchases and capital expenditures, and may be borrowed, repaid and reborrowed from time to time until maturity in May 2023. As a result of the new agreements, TDS' and U.S. Cellular's previous revolving credit agreements due to expire in June 2021 were terminated. As of September 30, 2018, there were no outstanding borrowings under the revolving credit agreements, except for letters of credit, and TDS' and U.S. Cellular's unused borrowing capacity was \$399 million and \$298 million, respectively. See Note 9 — Debt in the Notes to Consolidated Financial Statements for additional information.

In May 2018, U.S. Cellular also amended its senior term loan credit agreement in order to align with the new revolving credit agreement. There were no significant changes to the maturity date or other key terms of the agreement.

TDS and U.S. Cellular believe they were in compliance with all of the financial covenants and requirements set forth in their revolving credit agreements and the senior term loan credit agreement as of September 30, 2018. U.S. Cellular, through its subsidiaries, also has a receivables securitization agreement to permit securitized borrowings using its equipment installment plan receivables for general corporate purposes. The unused capacity under this agreement was \$200 million as of September 30, 2018, subject to sufficient collateral to satisfy the asset borrowing base provisions of the agreement. As of September 30, 2018, the USCC Master Note Trust (Trust) held \$48 million of

assets available to be pledged as collateral for the receivables securitization agreement. U.S. Cellular believes it was in compliance with all of the financial covenants and requirements set forth in its receivables securitization agreement as of that date.

TDS and U.S. Cellular have in place effective shelf registration statements on Form S-3 to issue senior or subordinated debt securities.

Long-term debt payments due for the remainder of 2018 and the next four years are \$215 million, which represent 9% of the total gross long-term debt obligation at September 30, 2018.

Capital Expenditures

Capital expenditures (i.e., additions to property, plant and equipment and system development expenditures), which include the effects of accruals and capitalized interest, for the nine months ended September 30, 2018 and 2017, were as follows:

Capital Expenditures (Dollars in millions)

U.S. Cellular's capital expenditures for the nine months ended September 30, 2018 and 2017, were \$274 million and \$257 million, respectively.

Capital expenditures for the full year 2018 are expected to be approximately \$500 million. These expenditures are expected to be used principally for the following purposes:

Enhance and maintain network coverage, including continuing to deploy VoLTE technology in certain markets and providing additional capacity to accommodate increased network usage, principally data usage, by current customers; and

Invest in information technology to support existing and new services and products.

TDS Telecom's capital expenditures for the nine months ended September 30, 2018 and 2017, were \$140 million and \$127 million, respectively.

Capital expenditures for the full year 2018 are expected to be approximately \$250 million. These expenditures are expected to be used principally for the following purposes:

Maintain and enhance existing infrastructure including build-out requirements to meet state broadband and Federal A-CAM programs;

Upgrade broadband capacity and speeds;

Support success-based spending to sustain IPTV, broadband, and Cable growth;

Build a Cloud TV platform; and

Expand fiber deployment, within and outside of current markets.

TDS plans to finance its capital expenditures program for 2018 using primarily Cash flows from operating activities, existing cash balances and, if required, its receivables securitization and/or revolving credit agreements.

Acquisitions, Divestitures and Exchanges

TDS may be engaged from time to time in negotiations (subject to all applicable regulations) relating to the acquisition, divestiture or exchange of companies, properties, wireless spectrum and other possible businesses. In general, TDS may not disclose such transactions until there is a definitive agreement. TDS assesses its business interests on an ongoing basis with a goal of improving the competitiveness of its operations and maximizing its long-term return on capital. As part of this strategy, TDS actively seeks attractive opportunities to acquire wireless spectrum, as well as telecommunications or cable markets, or other possible businesses. TDS also may seek to divest outright or include in exchanges for other interests those interests that are not strategic to its long-term success.

Variable Interest Entities

TDS consolidates certain "variable interest entities" as defined under GAAP. See Note 10 — Variable Interest Entities in the Notes to Consolidated Financial Statements for additional information related to these variable interest entities. TDS may elect to make additional capital contributions and/or advances to these variable interest entities in future periods in order to fund their operations.

Common Share Repurchase Programs

TDS and U.S. Cellular have repurchased and expect to continue to repurchase their Common Shares, in each case subject to any available repurchase program. However, there were no share repurchases made under these programs in the nine months ended September 30, 2018, or in the year ended December 31, 2017.

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As of September 30, 2018, the maximum dollar value of TDS Common Shares that may yet be purchased under TDS' program was \$199 million. For additional information related to the current TDS repurchase authorization, see Unregistered Sales of Equity Securities and Use of Proceeds.

U.S. Cellular also has a share repurchase authorization. As of September 30, 2018, the total cumulative amount of U.S. Cellular Common Shares authorized to be purchased is 5,900,849.

Contractual and Other Obligations

There were no material changes outside the ordinary course of business between December 31, 2017 and September 30, 2018, to the Contractual and Other Obligations disclosed in Management's Discussion and Analysis of Financial Condition and Results of Operations included in TDS' Form 10-K for the year ended December 31, 2017.

Off-Balance Sheet Arrangements

TDS had no transactions, agreements or other contractual arrangements with unconsolidated entities involving "off-balance sheet arrangements," as defined by SEC rules, that had or are reasonably likely to have a material current or future effect on its financial condition, results of operations, liquidity, capital expenditures or capital resources.

Consolidated Cash Flow Analysis

TDS operates a capital- and marketing-intensive business. TDS makes substantial investments to acquire wireless licenses and properties and to construct and upgrade communications networks and facilities as a basis for creating long-term value for shareholders. In recent years, rapid changes in technology and new opportunities have required substantial investments in potentially revenue enhancing and cost-reducing upgrades to TDS' networks. TDS utilizes cash on hand, cash from operating activities, cash proceeds from divestitures and dispositions of investments, and short-term and long-term debt financing to fund its acquisitions (including spectrum licenses), construction costs, operating expenses and share repurchases. Cash flows may fluctuate from quarter to quarter and year to year due to seasonality, the timing of acquisitions and divestitures, capital expenditures and other factors. The following discussion summarizes TDS' cash flow activities for the nine months ended September 30, 2018 and 2017.

2018 Commentary

TDS' Cash, cash equivalents and restricted cash increased \$445 million in 2018. Net cash provided by operating activities was \$812 million in 2018 due to net income of \$155 million plus non-cash items of \$668 million and distributions received from unconsolidated entities of \$91 million, including \$33 million in distributions from the LA Partnership. This was partially offset by changes in working capital items which decreased net cash by \$102 million. The working capital changes were primarily influenced by an increase in equipment installment plan receivables. The adoption of ASU 2014-09 on January 1, 2018, caused fluctuations in working capital items in the Consolidated Balance Sheet; however, the adoption of ASU 2014-09 had no impact on the Consolidated Statement of Cash Flows. Cash flows used for investing activities were \$325 million. Cash paid in 2018 for additions to property, plant and equipment totaled \$447 million. Cash paid for acquisitions and licenses was \$10 million. This was partially offset by cash received from the redemption of short-term Treasury bills of \$100 million and Cash received from divestitures and exchanges of \$28 million.

Cash flows used for financing activities were \$42 million, reflecting ordinary activity such as the payment of dividends and the scheduled repayments of debt, partially offset by cash proceeds from reissuance of Common Shares pursuant to stock-based compensation plans.

2017 Commentary

TDS' Cash, cash equivalents and restricted cash decreased \$116 million in 2017. Net cash provided by operating activities was \$621 million in 2017 due to net income adjusted for non-cash items of \$694 million and distributions received from unconsolidated entities of \$85 million, including \$30 million in distributions from the LA Partnership. The non-cash items included a \$262 million loss on impairment of goodwill. The increase was partially offset by changes in working capital items which decreased cash by \$158 million. The working capital changes were due to a \$164 million increase in equipment installment plan receivables.

Cash flows used for investing activities were \$678 million. Cash paid for additions to property, plant and equipment in 2017 totaled \$398 million. Cash paid for acquisitions and licenses was \$200 million which included the remaining \$186 million due to the FCC for licenses U.S. Cellular won in Auction 1002. Cash paid for investments was \$100 million which included the purchase of short-term Treasury bills. This was partially offset by Cash received from divestitures and exchanges of \$19 million.

Cash flows used for financing activities were \$59 million in 2017, reflecting ordinary activity such as the payment of dividends and the scheduled repayments of debt.

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Consolidated Balance Sheet Analysis

The following discussion addresses certain captions in the consolidated balance sheet and changes therein. This discussion is intended to highlight the significant changes and is not intended to fully reconcile the changes. Changes in financial condition during 2018 were as follows:

Cash and cash equivalents

See the Consolidated Cash Flow Analysis above for a discussion of cash and cash equivalents.

Short-term investments

Short-term investments decreased \$100 million due to the maturity of U.S. Treasury Bills with original maturities of six months.

Accounts receivable - Other

Accounts receivable — Other increased \$28 million due primarily to an increase in roaming revenue.

Assets held for sale

Assets held for sale increased \$32 million due primarily to the transfer of Licenses to Assets held for sale as a result of an exchange agreement that U.S. Cellular entered into in the third quarter of 2018. This exchange agreement is expected to close in 2019.

Other assets and deferred charges

Other assets and deferred charges increased \$172 million due primarily to the creation of contract assets and contract cost assets as a result of the adoption of ASU 2014-09. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

Customer deposits and deferred revenues

Customer deposits and deferred revenues decreased \$41 million due primarily to the reclassification of certain deferred revenues to Other current assets to reflect the net contract position for each customer contract on the Consolidated Balance Sheet as required by ASU 2014-09, which was adopted on January 1, 2018. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

Deferred income tax liability, net

Deferred income tax liability, net, increased \$90 million due primarily to the adoption of ASU 2014-09 increasing the net basis of assets on a U.S. GAAP basis without a corresponding increase in tax basis, as well as the impact of full expensing of qualified property additions following the enactment of the Tax Act.

Treasury shares

Treasury shares decreased \$106 million due primarily to restricted stock units vesting and the exercise of stock options.

Supplemental Information Relating to Non-GAAP Financial Measures

TDS sometimes uses information derived from consolidated financial information but not presented in its financial statements prepared in accordance with U.S. GAAP to evaluate the performance of its business. Certain of these measures are considered "non-GAAP financial measures" under U.S. Securities and Exchange Commission Rules. Specifically, TDS has referred to the following measures in this Form 10-Q Report:

EBITDA Adjusted EBITDA Adjusted OIBDA Free cash flow Postpaid ABPU Postpaid ABPA

Following are explanations of each of these measures.

EBITDA, Adjusted EBITDA and Adjusted OIBDA

EBITDA, Adjusted EBITDA and Adjusted OIBDA are defined as net income (loss) adjusted for the items set forth in the reconciliation below. EBITDA, Adjusted EBITDA and Adjusted OIBDA are not measures of financial performance under GAAP and should not be considered as alternatives to Net income (loss) or Cash flows from operating activities, as indicators of cash flows or as measures of liquidity. TDS does not intend to imply that any such items set forth in the reconciliation below are non-recurring, infrequent or unusual; such items may occur in the future.

Adjusted EBITDA is a segment measure reported to the chief operating decision maker for purposes of making decisions about allocating resources to the segments and assessing their performance. See Note 12 — Business Segment Information in the Notes to Consolidated Financial Statements for additional information.

Management uses Adjusted EBITDA and Adjusted OIBDA as measurements of profitability and, therefore, reconciliations to applicable GAAP income measures are deemed appropriate. Management believes Adjusted EBITDA and Adjusted OIBDA are useful measures of TDS' operating results before significant recurring non-cash charges, gains and losses, and other items as presented below as they provide additional relevant and useful information to investors and other users of TDS' financial data in evaluating the effectiveness of its operations and underlying business trends in a manner that is consistent with management's evaluation of business performance. Adjusted EBITDA shows adjusted earnings before interest, taxes, depreciation, amortization and accretion, and gains and losses, while Adjusted OIBDA reduces this measure further to exclude Equity in earnings of unconsolidated entities and Interest and dividend income in order to more effectively show the performance of operating activities excluding investment activities. The following table reconciles EBITDA, Adjusted EBITDA and Adjusted OIBDA to the corresponding GAAP measure, Net income or Income (loss) before income taxes. Income tax expense is not provided at the individual segment level for Wireline and Cable. TDS calculates income tax expense (benefit) for TDS Telecom in total.

	End	onths ded otember		Ended	line Months Inded eptember 30	
TDS - CONSOLIDATED		32017		20181	2017	
(Dollars in millions)						
Net income (loss) (GAAP)	\$53	\$(231)	\$155	\$(17	6)
Add back:		·	-			-
Income tax expense (benefit)	5	(5)	48	39	
Interest expense	43	43	-	129	128	
Depreciation, amortization and accretion	220	209		662	632	
EBITDA (Non-GAAP)	321	16		994	623	
Add back or deduct:						
Loss on impairment of goodwill		262			262	
(Gain) loss on asset disposals, net		6		3	16	
(Gain) loss on sale of business and other exit costs, net		(1)		(1)
(Gain) loss on license sales and exchanges, net				(18)	(19)
Adjusted EBITDA (Non-GAAP)	321	283		979	881	
Deduct:						
Equity in earnings of unconsolidated entities	42	35		121	101	
Interest and dividend income	6	4		18	12	
Other, net	2	1		1	3	
Adjusted OIBDA (Non-GAAP)	271	243		839	765	
Deduct:						
Depreciation, amortization and accretion	220	209		662	632	
Loss on impairment of goodwill		262			262	
(Gain) loss on asset disposals, net		6		3	16	
(Gain) loss on sale of business and other exit costs, net		(1)		(1)
(Gain) loss on license sales and exchanges, net				(18)	(19)
Operating income (loss) (GAAP)	\$51	\$(233)	\$192	\$(12	5)

	Three			
	Months	Nine Months		
	Ended	Ended		
	September	Septen	nber 30,	
	30,	-		
U.S. CELLULAR	20182017	2018 ¹	2017	
(Dollars in millions)				
Net income (loss) (GAAP)	\$37 \$(298)	\$143	\$(259)	
Add back:				
Income tax expense (benefit)	14 (53)	55	(19)	
Interest expense	29 28	87	85	
Depreciation, amortization and accretion	160 153	478	460	
EBITDA (Non-GAAP)	240 (170)	763	267	
Add back or deduct:				
Loss on impairment of goodwill	— 370		370	

(Gain) loss on asset disposals, net (Gain) loss on sale of business and other exit costs, net	3	5 (1)	5	14 (1)	
(Gain) loss on license sales and exchanges, net			` '	(19)	
Adjusted EBITDA (Non-GAAP)	243	204	750	631	
Deduct:					
Equity in earnings of unconsolidated entities	42	35	120	101	
Interest and dividend income	4	2	10	6	
Other, net				1	
Adjusted OIBDA (Non-GAAP)	197	167	620	523	
Deduct:					
Depreciation, amortization and accretion	160	153	478	460	
Loss on impairment of goodwill		370		370	
(Gain) loss on asset disposals, net	3	5	5	14	
(Gain) loss on sale of business and other exit costs, net		(1)		(1)	
(Gain) loss on license sales and exchanges, net			(18)	(19)	
Operating income (loss) (GAAP)	\$34	\$(360)	\$155	\$(301)	

	Three	;	Nine	
	Months		Months	
	Endee	ł	Ended	
	Septe	mber	Septe	mber
	30,		30,	
TDS TELECOM	20181	2017	20181	2017
(Dollars in millions)				
Net income (GAAP)	\$36	\$18	\$73	\$ 58
Add back:				
Income tax expense (benefit)	(5)	11	7	37
Interest expense	(1)		(1)	—
Depreciation, amortization and accretion	53	49	160	146
EBITDA (Non-GAAP)	83	78	238	241
Add back or deduct:				
(Gain) loss on asset disposals, net	(3)	1	(2)	2
Adjusted EBITDA (Non-GAAP)	80	79	236	243
Deduct:				
Interest and dividend income	2	2	5	4
Other, net	1	1	2	2
Adjusted OIBDA (Non-GAAP)	77	77	229	236
Deduct:				
Depreciation, amortization and accretion	53	49	160	146
(Gain) loss on asset disposals, net	(3)	1	(2)	2
Operating income (GAAP)	\$28	\$ 27	\$71	\$ 88

Numbers may not foot due to rounding.

	Three	;	Nine	
	Mont	Months		hs
	Endee	ł	Ended	
	Septe	mber	Septe	mber
	30,		30,	
WIRELINE	20181	2017	20181	2017
(Dollars in millions)				
Income before income taxes (GAAP)	\$31	\$ 28	\$83	\$ 88
Add back:				
Interest expense	(1)	—	(1)	
Depreciation, amortization and accretion	35	38	108	114
EBITDA (Non-GAAP)	65	65	189	201
Add back or deduct:				
(Gain) loss on asset disposals, net	(4)		(3)	1
Adjusted EBITDA (Non-GAAP)	61	66	186	202
Deduct:				
Interest and dividend income	2		5	4
Other, net	1	1	2	3
Adjusted OIBDA (Non-GAAP)	59	63	179	196
Deduct:				
Depreciation, amortization and accretion	35	38	108	114

(Gain) loss on asset disposals, net(4)-(3)1Operating income (GAAP)\$28\$\$25\$\$75\$\$81

Numbers may not foot due to rounding.

	Three Months Ended September 30,		30,	nber
CABLE	201	82017	20181	2017
(Dollars in millions)				
Income (loss) before income taxes (GAAP)	\$ -	-\$2	\$(3)	\$7
Add back:				
Depreciation, amortization and accretion	17	11	52	32
EBITDA (Non-GAAP)	18	13	49	39
Add back or deduct:				
(Gain) loss on asset disposals, net	1	1	1	1
Adjusted EBITDA (Non-GAAP)	18	14	50	41
Deduct:				
Interest and dividend income			1	
Adjusted OIBDA (Non-GAAP)	18	13	50	40
Deduct:				
Depreciation, amortization and accretion	17	11	52	32
(Gain) loss on asset disposals, net	1	1	1	1
Operating income (loss) (GAAP)	\$ -	-\$2	\$(4)	\$ 7

Numbers may not foot due to rounding.

As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the ¹ new accounting standard is applied only to the most recent period presented. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

Free Cash Flow

The following table presents Free cash flow. Management uses Free cash flow as a liquidity measure and it is defined as Cash flows from operating activities less Cash paid for additions to property, plant and equipment. Free cash flow is a non-GAAP financial measure which TDS believes may be useful to investors and other users of its financial information in evaluating liquidity, specifically, the amount of net cash generated by business operations after deducting Cash paid for additions to property, plant and equipment.

	Nine
	Months
	Ended
	September
	30,
	2018 2017
(Dollars in millions)	
Cash flows from operating activities (GAAP)	\$812 \$621
Less: Cash paid for additions to property, plant and equipment	447 398
Free cash flow (Non-GAAP)	\$365 \$223

Postpaid ABPU and Postpaid ABPA

U.S. Cellular presents Postpaid ABPU and Postpaid ABPA to reflect estimated cash collections from postpaid customer billings for both service and equipment resulting from the increased adoption of equipment installment plans. Postpaid ABPU and Postpaid ABPA, as previously defined, are non-GAAP financial measures which U.S. Cellular believes are useful to investors and other users of its financial information in showing trends in both service and equipment and product sales revenues received from customers.

	Ended		Nine Mo Ended Septemb	
	20181	2017	20181	2017
(Dollars and connection counts in millions) Calculation of Postpaid ARPU				
Postpaid service revenues	\$607	\$586	\$1,806	\$1,791
Average number of postpaid connections	4.47	4.50	4.48	4.48
Number of months in period	3	3	9	9
Postpaid ARPU (GAAP metric)	\$45.31	\$43.41	\$44.79	\$44.46
Calculation of Postpaid ABPU				
Postpaid service revenues	\$607	\$586	\$1,806	\$1,791
Equipment installment plan billings	189	152	536	433
Total billings to postpaid connections	\$796	\$738	\$2,342	\$2,224
Average number of postpaid connections	4.47	4.50	4.48	4.48
Number of months in period	3	3	9	9
Postpaid ABPU (Non-GAAP metric)	\$59.41	\$54.71	\$58.07	\$55.21
Calculation of Postpaid ARPA				
Postpaid service revenues	\$607	\$586	\$1,806	\$1,791
Average number of postpaid accounts	1.70	1.68	1.69	1.67
Number of months in period	3	3	9	9
Postpaid ARPA (GAAP metric)	\$119.42	\$116.36	\$118.71	\$119.26
Calculation of Postpaid ABPA				
Postpaid service revenues	\$607	\$586	\$1,806	\$1,791
Equipment installment plan billings	189	152	536	433
Total billings to postpaid accounts	\$796	\$738	\$2,342	\$2,224
Average number of postpaid accounts	1.70	1.68	1.69	1.67
Number of months in period	3	3	9	9
Postpaid ABPA (Non-GAAP metric)	\$156.57	\$146.65	\$153.92	\$148.12

Numbers may not foot due to rounding.

As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the ¹ new accounting standard is applied only to the most recent period presented. See Note 2 — Revenue Recognition in the Notes to Consolidated Financial Statements for additional information.

Application of Critical Accounting Policies and Estimates

TDS prepares its consolidated financial statements in accordance with GAAP. TDS' significant accounting policies are discussed in detail in Note 1 — Summary of Significant Accounting Policies and Recent Accounting Pronouncements in the Notes to Consolidated Financial Statements and TDS' Application of Critical Accounting Policies and Estimates is discussed in detail in Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are included in TDS' Form 10-K for the year ended December 31, 2017.

Franchise Rights

Effective January 1, 2018, TDS prospectively changed its estimated useful life for cable video franchise rights from indefinite-lived to 15 years due primarily to the effects of increasing competition and advancements in technology for delivering and consuming video programming. Commensurate with this change, TDS reviewed its cable video franchise rights for impairment, and noted that no impairment existed as of January 1, 2018. See Note 1 — Basis of Presentation in the Notes to Consolidated Financial Statements for additional information regarding the impact of this change in estimate.

Recent Accounting Pronouncements

See Note 1 — Basis of Presentation in the Notes to Consolidated Financial Statements for information on recent accounting pronouncements.

Regulatory Matters

FCC Mobility Fund Phase II Order

In October 2011, the FCC adopted its USF/Intercarrier Compensation Transformation Order (USF Order). Pursuant to this order, U.S. Cellular's then current Federal USF support was to be phased down at the rate of 20% per year beginning July 1, 2012. The USF Order contemplated the establishment of a new mobile USF program and provided for a pause in the phase down if that program was not timely implemented by July 2014. The Phase II Connect America Mobility Fund (MF2) was not operational as of July 2014 and, therefore, as provided by the USF Order, the phase down was suspended at 60% of the baseline amount until such time as the FCC had taken steps to establish the MF2. In February 2017, the FCC adopted the MF2 Order addressing the framework for MF2 and the resumption of the phase down. The MF2 Order establishes a support fund of \$453 million annually for ten years to be distributed through a market-based, multi-round reverse auction. For areas that receive support under MF2, legacy support to MF2 Auction winners will terminate and be replaced with MF2 support effective the first day of the month following release of the public notice closing the auction. Legacy support in areas where the legacy support recipient is not an MF2 winner will be subject to phase down over two years unless there is no winner in a particular census block, in which case it will be continued for one legacy support recipient only. The MF2 Order further states that the phase down of legacy support for areas that were not eligible for support under MF2 will commence on the first day of the month following the completion of the auction and will conclude two years later.

In August 2017, the FCC adopted the MF2 Challenge Process Order, which laid out procedures for establishing areas that would be eligible for support under the MF2 program. This included a collection process to be followed by a challenge window, a challenge response window, and finally adjudication of any coverage disputes. In September 2017, the FCC issued a public notice initiating the collection of 4G LTE coverage data. Responses submitting the collected data were due on January 4, 2018.

On February 27, 2018, the FCC issued public notices providing detailed challenge procedures and a schedule for the challenge process. Pursuant to these notices, the challenge window began on March 29, 2018, and, including the effect of a ninety day extension, is scheduled to close on November 26, 2018. No earlier than thirty days after the FCC processes the challenges, it will open a thirty-day challenge response window. Following the challenge response window, the FCC will adjudicate any disputes. This entire process must be completed before an auction can be commenced.

U.S. Cellular cannot predict at this time when the MF2 auction will occur, when the phase down period for its existing legacy support from the Federal USF will commence, or whether the MF2 auction will provide opportunities to U.S. Cellular to offset any loss in existing support. U.S. Cellular currently expects that its legacy support will continue at the 2017 level through 2018.

FCC Connect America Fund

In March 2018, the FCC approved an order authorizing additional funding for companies that elected Alternative Connect America Model (A-CAM) support. On May 7, 2018, as directed within the order, the Wireline Competition Bureau (the Bureau) released a public notice offering TDS Telecom an additional \$3 million per year for 10 years in support amounts along with corresponding buildout obligations which TDS Telecom accepted. On July 20, 2018 the Bureau authorized and directed the Universal Service Administrative Company to obligate and disburse the annual support amounts over a 10-year term for each carrier that accepted the revised offer of A-CAM support. The additional funding is retroactive to January 1, 2017, the original effective date of the program.

Millimeter Wave Spectrum Auctions

At its open meeting on August 2, 2018, the FCC adopted a public notice establishing procedures for two auctions of spectrum licenses in the 28 GHz and 24 GHz bands. The 28 GHz auction (Auction 101) will commence on November 14, 2018, and will offer two 425 MHz licenses in the 28 GHz band over portions of the United States that do not have incumbent licensees. Following the completion of Auction 101, the FCC will commence the 24 GHz auction (Auction 102), which will offer up to seven 100 MHz licenses in the 24 GHz band in Partial Economic Areas covering most of the United States. U.S. Cellular filed applications to participate in both auctions on September 18, 2018.

At the same meeting on August 2, 2018, the FCC adopted a Further Notice of Proposed Rulemaking in preparation for an additional Millimeter Wave auction offering licenses in the 37, 39 and 47 GHz bands. FCC statements indicate plans to hold this auction in the second half of 2019.

The Connect America Fund Phase II Auction

On July 24, 2018, bidding began in Auction 903, a reverse auction to award universal service support under the Connect America Fund Phase II program. This auction will award support in markets where support was previously declined by the price-cap incumbent local exchange carriers. On March 30, 2018, U.S. Cellular filed an application to participate in Auction 903, and on June 25, 2018, the FCC announced U.S. Cellular as a qualified bidder. The auction concluded on August 21, 2018, and the FCC subsequently announced winning bidders. U.S. Cellular was not awarded support in the auction.

Private Securities Litigation Reform Act of 1995 Safe Harbor Cautionary Statement

This Form 10-O, including exhibits, contains statements that are not based on historical facts and represent forward-looking statements, as this term is defined in the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, that address activities, events or developments that TDS intends, expects, projects, believes, estimates, plans or anticipates will or may occur in the future are forward-looking statements. The words "believes," "anticipates," "estimates," "expects," "plans," "intends," "projects" and similar expressions intended to identify these forward-looking statements, but are not the exclusive means of identifying them. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, events or developments to be significantly different from any future results, events or developments expressed or implied by such forward-looking statements. Such risks, uncertainties and other factors include those set forth below, as more fully described under "Risk Factors" in TDS' Form 10-K for the year ended December 31, 2017. Each of the following risks could have a material adverse effect on TDS' business, financial condition or results of operations. However, such factors are not necessarily all of the important factors that could cause actual results, performance or achievements to differ materially from those expressed in, or implied by, the forward-looking statements contained in this document. Other unknown or unpredictable factors also could have material adverse effects on future results, performance or achievements. TDS undertakes no obligation to update publicly any forward-looking statements whether as a result of new information, future events or otherwise. You should carefully consider the Risk Factors in TDS' Form 10-K for the year ended December 31, 2017, the following factors and other information contained in, or incorporated by reference into, this Form 10-Q to understand the material risks relating to TDS' business, financial condition or results of operations.

Intense competition in the markets in which TDS operates could adversely affect TDS' revenues or increase its costs to compete.

A failure by TDS to successfully execute its business strategy (including planned acquisitions, spectrum acquisitions, divestitures and exchanges) or allocate resources or capital could have an adverse effect on TDS' business, financial condition or results of operations.

Uncertainty in TDS' future cash flow and liquidity or in the ability to access capital, deterioration in the capital markets, other changes in TDS' performance or market conditions, changes in TDS' credit ratings or other factors could limit or restrict the availability of financing on terms and prices acceptable to TDS, which could require TDS to reduce its construction, development or acquisition programs, reduce the acquisition of spectrum licenses, and/or reduce or cease share repurchases and/or the payment of dividends.

TDS has a significant amount of indebtedness which could adversely affect its financial performance and in turn adversely affect its ability to make payments on its indebtedness, comply with terms of debt covenants and incur additional debt.

Changes in roaming practices or other factors could cause TDS' roaming revenues to decline from current levels, roaming expenses to increase from current levels and/or impact TDS' ability to service its customers in geographic areas where TDS does not have its own network, which could have an adverse effect on TDS' business, financial condition or results of operations.

A failure by TDS to obtain access to adequate radio spectrum to meet current or anticipated future needs and/or to accurately predict future needs for radio spectrum could have an adverse effect on TDS' business, financial condition or results of operations.

To the extent conducted by the FCC, TDS may participate in FCC auctions for additional spectrum or for funding in certain Universal Service programs in the future directly or indirectly and, during certain periods, will be subject to the FCC's anti-collusion rules, which could have an adverse effect on TDS.

Failure by TDS to timely or fully comply with any existing applicable legislative and/or regulatory requirements or changes thereto could adversely affect TDS' business, financial condition or results of operations.

An inability to attract people of outstanding potential, to develop their potential through education and assignments, and to retain them by keeping them engaged, challenged and properly rewarded could have an adverse effect on TDS' business, financial condition or results of operations.

TDS' assets and revenue are concentrated primarily in the U.S. telecommunications industry. Consequently, its operating results may fluctuate based on factors related primarily to conditions in this industry.

TDS' smaller scale relative to larger competitors that may have greater financial and other resources than TDS could cause TDS to be unable to compete successfully, which could adversely affect its business, financial condition or results of operations.

Changes in various business factors, including changes in demand, customer preferences and perceptions, price competition, churn from customer switching activity and other factors, could have an adverse effect on TDS' business, financial condition or results of operations.

Advances or changes in technology could render certain technologies used by TDS obsolete, could put TDS at a competitive disadvantage, could reduce TDS' revenues or could increase its costs of doing business.

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Complexities associated with deploying new technologies present substantial risk and TDS' investments in unproven technologies may not produce the benefits that TDS expects.

TDS receives regulatory support and is subject to numerous surcharges and fees from federal, state and local governments, and the applicability and the amount of the support and fees are subject to great uncertainty, which could have an adverse effect on TDS' business, financial condition or results of operations.

Performance under device purchase agreements could have a material adverse impact on TDS' business, financial condition or results of operations.

Changes in TDS' enterprise value, changes in the market supply or demand for wireless licenses, wireline or cable markets or IT service providers, adverse developments in the businesses or the industries in which TDS is involved and/or other factors could require TDS to recognize impairments in the carrying value of its licenses, goodwill, franchise rights and/or physical assets or require re-evaluation of the indefinite-lived nature of such assets.

Costs, integration problems or other factors associated with acquisitions, divestitures or exchanges of properties or licenses and/or expansion of TDS' businesses could have an adverse effect on TDS' business, financial condition or results of operations.

A failure by TDS to complete significant network construction and systems implementation activities as part of its plans to improve the quality, coverage, capabilities and capacity of its network, support and other systems and infrastructure could have an adverse effect on its operations.

Difficulties involving third parties with which TDS does business, including changes in TDS' relationships with or financial or operational difficulties of key suppliers or independent agents and third party national retailers who market TDS' services, could adversely affect TDS' business, financial condition or results of operations.

TDS has significant investments in entities that it does not control. Losses in the value of such investments could have an adverse effect on TDS' financial condition or results of operations.

A failure by TDS to maintain flexible and capable telecommunication networks or information technology, or a material disruption thereof, could have an adverse effect on TDS' business, financial condition or results of operations.

TDS has experienced and, in the future, expects to experience cyber-attacks or other breaches of network or information technology security of varying degrees on a regular basis, which could have an adverse effect on TDS' business, financial condition or results of operations.

The market price of TDS' Common Shares is subject to fluctuations due to a variety of factors.

Changes in facts or circumstances, including new or additional information, could require TDS to record charges relating to adjustments of amounts reflected in the financial statements, which could have an adverse effect on TDS' business, financial condition or results of operations.

Disruption in credit or other financial markets, a deterioration of U.S. or global economic conditions or other events could, among other things, impede TDS' access to or increase the cost of financing its operating and investment activities and/or result in reduced revenues and lower operating income and cash flows, which would have an adverse effect on TDS' business, financial condition or results of operations.

Settlements, judgments, restraints on its current or future manner of doing business and/or legal costs resulting from pending and future litigation could have an adverse effect on TDS' business, financial condition or results of operations.

The possible development of adverse precedent in litigation or conclusions in professional studies to the effect that radio frequency emissions from wireless devices and/or cell sites cause harmful health consequences, including cancer or tumors, or may interfere with various electronic medical devices such as pacemakers, could have an adverse effect on TDS' wireless business, financial condition or results of operations.

Claims of infringement of intellectual property and proprietary rights of others, primarily involving patent infringement claims, could prevent TDS from using necessary technology to provide products or services or subject TDS to expensive intellectual property litigation or monetary penalties, which could have an adverse effect on TDS' business, financial condition or results of operations.

Certain matters, such as control by the TDS Voting Trust and provisions in the TDS Restated Certificate of Incorporation, may serve to discourage or make more difficult a change in control of TDS.

Any of the foregoing events or other events could cause revenues, earnings, capital expenditures and/or any other financial or statistical information to vary from TDS' forward-looking estimates by a material amount.

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Risk Factors

In addition to the information set forth in this Form 10-Q, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in TDS' Annual Report on Form 10-K for the year ended December 31, 2017, which could materially affect TDS' business, financial condition or future results. The risks described in this Form 10-Q and the Form 10-K for the year ended December 31, 2017, may not be the only risks that could affect TDS. Additional unidentified or unrecognized risks and uncertainties could materially adversely affect TDS' business, financial condition and/or operating results. Subject to the foregoing, TDS has not identified for disclosure any material changes to the risk factors as previously disclosed in TDS' Annual Report on Form 10-K for the year ended December 31, 2017.

Quantitative and Qualitative Disclosures about Market Risk

Market Risk

Refer to the disclosure under Market Risk in TDS' Form 10-K for the year ended December 31, 2017, for additional information, including information regarding required principal payments and the weighted average interest rates related to TDS' Long-term debt. There have been no material changes to such information since December 31, 2017.

See Note 3 — Fair Value Measurements in the Notes to Consolidated Financial Statements for additional information related to the fair value of TDS' Long-term debt as of September 30, 2018.

Financial Statements

Telephone and Data Systems, Inc. Consolidated Statement of Operations (Unaudited)					
	Three N	I onths	Nine M	onths	
	Ended		Ended		
	Septem	ber 30,	Septem	ber 30,	
	2018	2017	2018	2017	
(Dollars and shares in millions, except per share amounts)					
Operating revenues					
Service	\$1,017	\$988	\$2,988	\$2,976	
Equipment and product sales	280	263	789	760	
Total operating revenues	1,297	1,251	3,777	3,736	
Operating expanses					
Operating expenses Cost of services (excluding Depreciation, amortization and accretion reported					
below)	314	294	902	874	
Cost of equipment and products	291	291	804	848	
Selling, general and administrative	421	423	1,232	1,249	
Depreciation, amortization and accretion	220	209	662	632	
Loss on impairment of goodwill	220	262		262	
(Gain) loss on asset disposals, net		6	3	16	
(Gain) loss on sale of business and other exit costs, net		(1) —	(1)
(Gain) loss on license sales and exchanges, net		(I 	/)
Total operating expenses	1,246	1,484	3,585	3,861	,
Total operating expenses	1,210	1,101	5,505	5,001	
Operating income (loss)	51	(233) 192	(125)
Investment and other income (expense)					
Equity in earnings of unconsolidated entities	42	35	121	101	
Interest and dividend income	6	4	18	12	
Interest expense) (43)
Other, net	2	1	1	3	<i>,</i>
Total investment and other income (expense)	7	(3) 11	(12)
Income (loss) before income taxes	58	(236) 203	(137)
Income tax expense (benefit)	5	(5) 48	39	
Net income (loss)	53	(231) 155	(176)
Less: Net income (loss) attributable to noncontrolling interests, net of tax	7	(50) 36	(42)
Net income (loss) attributable to TDS shareholders	46	(181) 119	(134)
TDS Preferred dividend requirement					
Net income (loss) available to TDS common shareholders	\$46	\$(181) \$119	\$(134)
Basic weighted average shares outstanding	112	111	112	111	
Basic earnings (loss) per share available to TDS common shareholders	\$0.41) \$1.06	\$(1.21))
		-			
Diluted weighted average shares outstanding	114	111	113	111	

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Diluted earnings (loss) per share available to TDS common shareholders	\$0.41	\$(1.64)	\$1.04	\$(1.21)	
Dividends per share to TDS shareholders	\$0.160	\$0.155	\$0.480	\$0.465	
The accompanying notes are an integral next of these consolidated financial states	nonto				

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

Telephone and Data Systems, Inc. Consolidated Statement of Comprehensive Income (Unaudited)

	Three Months Ended September 30,	Nine Months Ended September 30,
	20182017	2018 2017
(Dollars in millions)		
Net income (loss)	\$53 \$(231)	\$155 \$(176)
Net change in accumulated other comprehensive income (loss)		
Change related to retirement plan		
Amounts included in net periodic benefit cost for the period		
Amortization of prior service cost		(1)(1)
Comprehensive income (loss)	53 (231)	154 (177)
Less: Net income (loss) attributable to noncontrolling interests, net of tax	7 (50)	36 (42)
Comprehensive income (loss) attributable to TDS shareholders	\$46 \$(181)	\$118 \$(135)

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

Telephone and Data Systems, Inc. Consolidated Statement of Cash Flows (Unaudited)

(Dollars in millions)	Ended	Months 1 mber 30, 2017
Cash flows from operating activities		
Net income (loss)	\$155	\$(176)
Add (deduct) adjustments to reconcile net income (loss) to net cash flows from operating activities		
Depreciation, amortization and accretion	662	632
Bad debts expense	71	68
Stock-based compensation expense	37	34
Deferred income taxes, net	31	(23)
Equity in earnings of unconsolidated entities	(121) (101)
Distributions from unconsolidated entities	91	85
Loss on impairment of goodwill		262
(Gain) loss on asset disposals, net	3	16
(Gain) loss on sale of business and other exit costs, net		(1)
(Gain) loss on license sales and exchanges, net	(18) (19)
Noncash interest	3	2
Changes in assets and liabilities from operations		
Accounts receivable	(5) (6)
Equipment installment plans receivable	(88) (164)
Inventory	13	44
Accounts payable	13	(59)
Customer deposits and deferred revenues	(7) (16)
Accrued taxes	(3) 41
Accrued interest	11	11
Other assets and liabilities	(36) (9)
Net cash provided by operating activities	812	621
Cash flows from investing activities	(4 4 7) (200))
Cash paid for additions to property, plant and equipment	(447) (398)
Cash paid for acquisitions and licenses	(10) (200)
Cash received for investments	100	(100)
Cash paid for investments		(100)
Cash received from divestitures and exchanges	28	19
Other investing activities	4	I
Net cash used in investing activities	(325) (678)
Cash flows from financing activities		
Repayment of long-term debt	(15) (9)
TDS Common Shares reissued for benefit plans, net of tax payments	27	(1)
U.S. Cellular Common Shares reissued for benefit plans, net of tax payments	7	(1)
Repurchase of TDS Preferred Shares	/	(1)
Dividends paid to TDS shareholders	(54	(1) (51)
Dividends paid to 1D0 shareholders	(37) (31)

Payment of debt issuance costs Distributions to noncontrolling interests Other financing activities	(2 (5) —) (2	-)
Net cash used in financing activities	(42) (5	0)
Net easil used in financing activities	(42) (5	,)
Net increase (decrease) in cash, cash equivalents and restricted cash	445	(1	16)
Cash, cash equivalents and restricted cash				
Beginning of period	622	90)4	
End of period	\$1,067	7 \$7	788	
The accompanying notes are an integral part of these consolidated financial statements.				

Telephone and Data Systems, Inc. Consolidated Balance Sheet — Assets (Unaudited)

	September 30, 2018	r December 31, 2017
(Dollars in millions)		
Current assets		
Cash and cash equivalents	\$ 1,062	\$ 619
Short-term investments		100
Accounts receivable		
Customers and agents, less allowances of \$68 and \$61, respectively	930	861
Other, less allowances of \$2 and \$2, respectively	128	100
Inventory, net	132	145
Prepaid expenses	102	112
Income taxes receivable	3	2
Other current assets	30	27
Total current assets	2,387	1,966
Assets held for sale	42	10
Licenses	2,198	2,232
Goodwill	509	509
Other intangible assets, net of accumulated amortization of \$161 and \$142, respectively	260	279
Investments in unconsolidated entities	500	453
Property, plant and equipment		
In service and under construction	11,873	11,742
Less: Accumulated depreciation and amortization	8,644	8,318
Property, plant and equipment, net	3,229	3,424
Other assets and deferred charges	594	422
Total assets ¹	\$ 9,719	\$ 9,295

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

Telephone and Data Systems, Inc. Consolidated Balance Sheet — Liabilities and Equity (Unaudited)		
(Onaudited)	-	r December 31, 2017
(Dollars and shares in millions, except per share amounts)		
Current liabilities		
Current portion of long-term debt	\$ 20	\$ 20
Accounts payable	365	368
Customer deposits and deferred revenues	182	223
Accrued interest	22	11
Accrued taxes	55	64
Accrued compensation	115	126
Other current liabilities	93	106
Total current liabilities	852	918
Deferred liabilities and credits		
Deferred income tax liability, net	642	552
Other deferred liabilities and credits	542	495
Long-term debt, net	2,422	2,437
Commitments and contingencies		
Noncontrolling interests with redemption features	11	1
Equity TDS shareholders' equity Series A Common and Common Shares Authorized 290 shares (25 Series A Common and 265 Common Shares) Issued 133 shares (7 Series A Common and 126 Common Shares) Outstanding 113 shares (7 Series A Common and 106 Common Shares) and 111 shares (7 Series A Common and 104 Common Shares), respectively	°S	
Par Value (\$.01 per share)	1	1
Capital in excess of par value	2,424	2,413
Treasury shares, at cost, 20 and 22 Common Shares, respectively	(563)	(669)
Accumulated other comprehensive loss	(3)	(1)
Retained earnings	2,683	2,525
Total TDS shareholders' equity	4,542	4,269
Noncontrolling interests	708	623
Total equity	5,250	4,892
Total liabilities and equity ¹	\$ 9,719	\$ 9,295

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

The consolidated total assets as of September 30, 2018 and December 31, 2017, include assets held by consolidated variable interest entities (VIEs) of \$831 million and \$765 million, respectively, which are not available to be used to settle the obligations of TDS. The consolidated total liabilities as of September 30, 2018 and December 31, 2017, include certain liabilities of consolidated VIEs of \$17 million and \$21 million, respectively, for which the creditors of the VIEs have no recourse to the general credit of TDS. See Note 10 — Variable Interest Entities for additional information.

Telephone and Data Systems, Inc. Consolidated Statement of Changes in Equity (Unaudited)

(enduited)	Ser A Co and Co	DS Share ri€apital in menucess lof mparon ureslue		oth con inc	ccumu ner mprel come ss)		Retaine		Total TD shareholo equity		Noncontro S interests	fføtal equity	
(Dollars in millions)													
December 31, 2017	\$1	\$2,413	\$(669)	\$	(1)	\$2,525		\$ 4,269		\$ 623	\$4,892	2
Cumulative effect of accounting changes	—			(1)	163		162		31	193	
Net income attributable to TDS							119		119			119	
shareholders							117		117			117	
Net income attributable to noncontrolling	5										23	23	
interests classified as equity													
Other comprehensive loss				(1)			(1)		(1)
TDS Common and Series A Common share dividends							(54)	(54)		(54)
Dividend reinvestment plan		1	21				(12)	10			10	
Incentive and compensation plans			85				(58)	27			27	
Adjust investment in subsidiaries for													
repurchases, issuances and other		—									33	33	
compensation plans		10							10			10	
Stock-based compensation awards	—	10							10		<u> </u>	10	
Distributions to noncontrolling interests	<u></u>			<u></u>	(2	`					(2)	(2 \$5.250)
September 30, 2018	\$1	\$2,424	\$(563)	\$	(3)	\$2,683		\$ 4,542		\$ 708	\$5,250)

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

Telephone and Data Systems, Inc. Consolidated Statement of Changes in Equity (Unaudited)

	Se: A Co and Co	DS Share ri€apital in manucess dof ompanon arealue		oth	npro ome	ehei	ted Retaine nsive earning		Total TE sharehole equity		°C'	e N oncont interests		l iĥg tal equity	r
(Dollars in millions)	<u> </u>	¢0.200	¢ (COQ)	¢	1		¢ 2 454		ф <u>л</u> 1 л л		<u> </u>	¢ (05		ф 4 75	0
December 31, 2016	\$1	\$2,386	\$(698)	\$	1		\$2,454		\$ 4,144		\$ 1	\$ 605		\$4,75	0
Net loss attributable to TDS shareholders	_		_				(134)	(134)	_			(134)
Net loss attributable to															
noncontrolling interests classified a	s—		_								_	(42)	(42)
equity	0											(,	(,
Other comprehensive loss				(1)			(1)	_			(1)
TDS Common and Series							(51	`	(51	`				(51)
A Common share dividends							(51)	(51)				(51)
Redemption of Preferred shares											(1)			(1)
Dividend reinvestment plan	—		10	—			(2)	8					8	
Incentive and compensation plans	—		9				(10)	(1)				(1)
Adjust investment in subsidiaries for															
repurchases, issuances and other	_	5		—					5			15		20	
compensation plans															
Stock-based compensation awards	—	13							13					13	
Distributions to noncontrolling interests				—			—					(2)	(2)
September 30, 2017	\$1	\$2,404	\$(679)	\$	—		\$2,257		\$ 3,983		\$ —	\$ 576		\$4,55	9

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

Telephone and Data Systems, Inc. Notes to Consolidated Financial Statements

Note 1 Basis of Presentation

The accounting policies of Telephone and Data Systems, Inc. (TDS) conform to accounting principles generally accepted in the United States of America (GAAP) as set forth in the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC). The consolidated financial statements include the accounts of TDS and subsidiaries in which it has a controlling financial interest, including TDS' 82%-owned subsidiary, United States Cellular Corporation (U.S. Cellular) and TDS' wholly-owned subsidiary, TDS Telecommunications LLC (TDS Telecom). In addition, the consolidated financial statements include certain entities in which TDS has a variable interest that require consolidation under GAAP. All material intercompany accounts and transactions have been eliminated.

TDS' business segments reflected in this Quarterly Report on Form 10-Q for the period ended September 30, 2018, are U.S. Cellular, Wireline, and Cable. TDS' non-reportable other business activities are presented as "Corporate, Eliminations and Other", which includes the operations of TDS' wholly-owned hosted and managed services (HMS) subsidiary, which operates under the OneNeck IT Solutions brand, and its wholly-owned subsidiary Suttle-Straus, Inc. (Suttle-Straus). HMS' and Suttle-Straus' financial results were not significant to TDS' operations. All of TDS' segments operate only in the United States, except for HMS, which includes an insignificant foreign operation. See Note 12 — Business Segment Information for summary financial information on each business segment.

The unaudited consolidated financial statements included herein have been prepared by TDS pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Certain information and disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. However, TDS believes that the disclosures included herein are adequate to make the information presented not misleading. Certain numbers included herein are rounded to millions for ease of presentation; however, certain calculated amounts and percentages are determined using the unrounded numbers. These unaudited consolidated financial statements should be read in conjunction with the consolidated financial statements and the notes thereto included in TDS' Annual Report on Form 10-K (Form 10-K) for the year ended December 31, 2017.

The accompanying unaudited consolidated financial statements contain all adjustments (consisting of normal recurring items, unless otherwise disclosed) necessary for the fair statement of TDS' financial position as of September 30, 2018 and December 31, 2017, its results of operations and comprehensive income for the three and nine months ended September 30, 2018 and 2017, and its cash flows and changes in equity for the nine months ended September 30, 2018 and 2017. These results are not necessarily indicative of the results to be expected for the full year. TDS has not changed its significant accounting and reporting policies from those disclosed in its Form 10-K for the year ended December 31, 2017, except as described below and as disclosed in Note 2 — Revenue Recognition and Note 8 — Investments in Unconsolidated Entities.

Change in Reportable Segments

TDS re-evaluated internal reporting roles with regard to its HMS business unit and, as a result, changed its reportable segments. Effective January 1, 2018, HMS was considered a non-reportable segment and is no longer being reported under TDS Telecom. This change enables TDS Telecom to continue to successfully execute on the Wireline and Cable segments' shared strategy to be the preferred service provider in its markets. Additionally, this change allows HMS to leverage TDS' corporate IT resources, to improve operations and customer service, and better position itself for growth. Prior periods have been recast to conform to this revised presentation. See Note 12 — Business Segment

Information for additional information on TDS' reportable segments.

Restricted Cash

TDS presents restricted cash with cash and cash equivalents in the Consolidated Statement of Cash Flows. The following table provides a reconciliation of Cash and cash equivalents and restricted cash reported in the Consolidated Balance Sheet to the total of the amounts in the Consolidated Statement of Cash Flows as of September 30, 2018 and December 31, 2017.

	September	r December
	30, 2018	31, 2017
(Dollars in millions)		
Cash and cash equivalents	\$ 1,062	\$ 619
Restricted cash included in Other current assets	5	3
Cash, cash equivalents and restricted cash in the statement of cash flows	\$ 1,067	\$ 622

Franchise Rights

Effective January 1, 2018, TDS prospectively changed its estimated useful life for cable video franchise rights from indefinite-lived to 15 years due primarily to the effects of increasing competition and advancements in technology for delivering and consuming video programming. Commensurate with this change, TDS reviewed its cable video franchise rights for impairment, and noted that no impairment existed as of January 1, 2018. As a result, Depreciation, amortization and accretion increased \$4 million, calculated on a straight-line basis, and Net income decreased \$3 million or \$0.03 per share (Basic and Diluted) for the three months ended September 30, 2018. For the nine months ended September 30, 2018, Depreciation, amortization and accretion increased \$13 million, calculated on a straight-line basis, and Net income decreased \$10 million or \$0.09 per share (Basic) and \$0.08 per share (Diluted).

Recently Adopted Accounting Pronouncements

In March 2017, the FASB issued Accounting Standards Update 2017-07, Compensation - Retirement Benefits: Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost (ASU 2017-07). ASU 2017-07 requires TDS to report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net periodic benefit cost must be presented separately from the service cost component and outside of Operating income in the Consolidated Statement of Operations. The new accounting standard also specifies that only the service cost component of net benefit cost is eligible for capitalization. TDS adopted ASU 2017-07 retrospectively on January 1, 2018, and prior periods have been recast to reflect ASU 2017-07. As a result of the adoption of ASU 2017-07, Selling, general and administrative expenses for the three and nine months ended September 30, 2017, increased by \$1 million and \$3 million from previously reported amounts, with a corresponding increase in Other, net in the Consolidated Statement of Operations. This change did not have an impact on Income before income taxes, Net income, or Earnings per share for the three and nine months ended September 30, 2017, nor did it have a cumulative impact to Retained earnings as of the date presented.

Recently Issued Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued Accounting Standards Update 2016-02, Leases (ASU 2016-02) and has since amended the standard with Accounting Standards Update 2018-01, Leases: Land Easement Practical Expedient for Transition to Topic 842, Accounting Standards Update 2018-10, Codification Improvements to Topic 842, Leases, and Accounting Standards Update 2018-11, Leases: Targeted Improvements. ASU 2016-02, as amended, requires lessees to record a right-of-use asset and lease liability for almost all leases. This ASU does not substantially impact the lessor accounting model. However, some changes to the lessor accounting guidance were made to align with lessee accounting changes within ASC 842, Leases and certain key aspects of ASC 606, Revenue from Contracts with Customers. Early adoption is permitted; however, TDS plans to adopt ASU 2016-02, as amended, using a modified retrospective method when required on January 1, 2019. Under this method, a cumulative effect adjustment to retained earnings is recognized upon adoption and the guidance is applied prospectively. TDS has identified that new systems, processes and controls are required to adopt ASU 2016-02, as amended, and is in the process of implementing a new lease management and accounting system to assist in the application of the new standard. The adoption of ASU 2016-02, as amended, is not expected to have a material impact on TDS' results of operations, but it is expected to result in a substantial increase to assets and liabilities on TDS' balance sheet.

In June 2016, the FASB issued Accounting Standards Update 2016-13, Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments (ASU 2016-13). ASU 2016-13 requires entities to use a new forward-looking, expected loss model to estimate credit losses. It also requires additional disclosure relating to the credit quality of trade and other receivables, including information relating to management's estimate of credit allowances. TDS is required to adopt ASU 2016-13 on January 1, 2020, using the modified retrospective approach.

Early adoption is permitted as of January 1, 2019; however, TDS does not intend to adopt early. TDS is evaluating the effects that adoption of ASU 2016-13 will have on its financial position, results of operations and disclosures. In June 2018, the FASB issued Accounting Standards Update 2018-07, Compensation - Stock Compensation: Improvements to Nonemployee Share-Based Payment Accounting (ASU 2018-07). ASU 2018-07 expands the scope of ASC 718, Compensation—Stock Compensation, which currently only includes share-based payments issued to employees, to also include share-based payments issued to nonemployees for goods and services. TDS is required to adopt ASU 2018-07 on January 1, 2019, using the modified retrospective approach. Early adoption is permitted. The adoption of ASU 2018-07 is not expected to have a significant impact on TDS' financial position or results of operations.

In August 2018, the FASB issued Accounting Standards Update 2018-14, Compensation - Retirement Benefits - Defined Benefit Plans - General: Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans (ASU 2018-14). ASU 2018-14 modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The amendments in ASU 2018-14 were developed as part of the FASB's broader disclosure framework project, which aims to improve the effectiveness of disclosure requirements. TDS is required to adopt ASU 2018-14 retrospectively on January 1, 2020. Early adoption is permitted. The adoption of ASU 2018-14 will not impact TDS' financial position or results of operations. TDS is evaluating the effects that adoption of ASU 2018-14 will have on its disclosures.

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In August 2018, the FASB issued Accounting Standards Update 2018-15, Intangibles - Goodwill and Other -Internal-Use Software: Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (ASU 2018-15). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the existing guidance for capitalizing implementation costs for an arrangement that has a software license. The service element of a hosting arrangement will continue to be expensed as incurred. Any capitalized implementation costs will be amortized over the period of the service contract. TDS is required to adopt ASU 2018-15 on January 1, 2020, either retrospectively or prospectively to eligible costs incurred on or after the date that this guidance is first applied. Early adoption is permitted. TDS is evaluating the effects that adoption of ASU 2018-15 will have on its financial position and results of operations.

Amounts Collected from Customers and Remitted to Governmental Authorities

TDS records amounts collected from customers and remitted to governmental authorities on a net basis within a tax liability account if the tax is assessed upon the customer and TDS merely acts as an agent in collecting the tax on behalf of the imposing governmental authority. If the tax is assessed upon TDS, then amounts collected from customers as recovery of the tax are recorded in Service revenues and amounts remitted to governmental authorities are recorded in Selling, general and administrative expenses in the Consolidated Statement of Operations. The amounts recorded gross in revenues that are billed to customers and remitted to governmental authorities totaled \$22 million and \$67 million for the three and nine months ended September 30, 2018, respectively, and \$20 million and \$58 million for the three and nine months ended September 30, 2017, respectively.

Note 2 Revenue Recognition

Change in Accounting Policy

In May 2014, the FASB issued Accounting Standards Update 2014-09, Revenue from Contracts with Customers and has since amended the standard with Accounting Standards Update 2015-14, Revenue from Contracts with Customers: Deferral of the Effective Date, Accounting Standards Update 2016-08, Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net), Accounting Standards Update 2016-10, Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing, Accounting Standards Update 2016-12, Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients, and Accounting Standards Update 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers, collectively referred to hereinafter as ASU 2014-09. These standards replace existing revenue recognition rules with a single comprehensive model to use in accounting for revenue arising from contracts with customers. In February 2017, the FASB issued Accounting Standards Update 2017-05, Other Income - Gains and Losses from the Derecognition of Nonfinancial Assets: Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets (ASU 2017-05). ASU 2017-05 clarifies how entities account for the derecognition of a nonfinancial asset and adds guidance for partial sales of nonfinancial assets. TDS adopted the provisions of ASU 2014-09 and ASU 2017-05 and applied them to all contracts as of January 1, 2018, using a modified retrospective method. Under this method, the new accounting standard is applied only to the most recent period presented, recognizing the cumulative effect of the accounting change as an adjustment to the beginning balance of retained earnings. Accordingly, prior periods have not been recast to reflect the new accounting standard. The cumulative effect of applying the provisions of ASU 2014-09 resulted in an increase of \$163 million in retained earnings as of January 1, 2018. ASU 2017-05 had no impact to retained earnings as of January 1, 2018.

As a practical expedient, TDS groups similar contracts or similar performance obligations together into portfolios of contracts or performance obligations if doing so does not result in a significant difference from applying the new accounting standard to the individual contracts. TDS applies this grouping method for the following types of transactions: device activation fees, contract acquisition costs, contract fulfillment costs, and certain customer promotions. Contract portfolios will be recognized over the respective expected customer lives or terms of the contracts.

The line items impacted by the adoption of ASU 2014-09 and ASU 2017-05 in the Consolidated Statement of Operations and the Consolidated Balance Sheet are presented below.

Consolidated Statement of Operations

Three Months Ended September 30, 2018	Results under prior accounting standards	Adjustmer	t As reported
(Dollars and shares in millions, except per share amounts)			
Operating revenues			
Service	\$ 1,045	\$ (28	\$ 1,017
Equipment and product sales	261	19	280
Total operating revenues	1,306	(9	1,297
Cost of equipment and products	294	(3	291
Selling, general, and administrative	422	(1	421
Total operating expenses	1,250	(4	1,246

Operating income (loss)	56	(5) 51
Income (loss) before income taxes	63	(5) 58
Income tax expense (benefit)	6	(1) 5
Net income (loss)	56	(3) 53
Less: Net income (loss) attributable to noncontrolling interests, net of tax	8	(1) 7
Net income (loss) attributable to TDS shareholders	49	(3) 46
Net income (loss) available to TDS common shareholders	49	(3) 46
Basic earnings (loss) per share available to TDS common shareholders	\$ 0.44	\$ (0.03) \$0.41
Diluted earnings (loss) per share available to TDS common shareholders	\$ 0.43	\$ (0.02) \$0.41

Numbers may not foot due to rounding

Nine Months Ended September 30, 2018	Results under prior accounting standards	Admistrien		t As reported	
(Dollars and shares in millions, except per share amounts)					
Operating revenues					
Service	\$ 3,075	\$ (87)	\$2,988	
Equipment and product sales	728	61		789	
Total operating revenues	3,803	(26)	3,777	
Cost of equipment and products	812	(8)	804	
Selling, general and administrative	1,229	3		1,232	
(Gain) loss on license sales and exchanges, net	(17)	(1)	(18)	
Total operating expenses	3,591	(6)	3,585	
Operating income (loss)	212	(20)	192	
Income (loss) before income taxes	223	(20)	203	
Income tax expense (benefit)	53	(5)	48	
Net income (loss)	170	(15)	155	
Less: Net income (loss) attributable to noncontrolling interests, net of tax	38	(2)	36	
Net income (loss) attributable to TDS shareholders	131	(12)	119	
Net income (loss) available to TDS common shareholders	131	(12)	119	
Basic earnings (loss) per share available to TDS common shareholders	\$ 1.17	\$ (0.11)	\$1.06	
Diluted earnings (loss) per share available to TDS common shareholders	\$ 1.15	\$ (0.11)	\$1.04	

Numbers may not foot due to rounding

The decrease in Service revenues and the increase in Equipment and product sales revenues are driven primarily by differences in the timing and classification of revenue recognized for certain arrangements with multiple performance obligations and ceasing to record deferred imputed interest and the resulting interest income on equipment installment contracts. Under prior accounting standards, revenues were allocated to deliverables using the relative selling price method, where consideration was allocated to each element on the basis of its relative selling price. Revenue recognized for the delivered items was limited to the amount due from the customer that was not contingent upon the delivery of additional products or services. Under ASU 2014-09, the revenue allocation of the transaction price is based on the relative standalone selling prices of the individual performance obligations in the customer's contract, and the resulting revenue attributable to each is recognized as control over the performance obligation is transferred to the customer. This has resulted in increased Equipment and product sales revenues as more revenue is allocated to discounted equipment than under prior accounting standards. Under prior accounting standards, TDS deferred imputed interest related to equipment installment plan receivable contracts that exceeded twelve months, and recognized the corresponding interest income over the contract period in Service revenues. Under the provisions of ASU 2014-09, TDS has determined that equipment installment plan contracts do not contain a significant financing component, and accordingly, TDS ceased recording deferred imputed interest and the resulting interest income on equipment installment contracts upon the adoption of ASU 2014-09.

Cost of equipment and products decreased due to a change in timing of recognition of cost of goods sold in the agent channel. Under prior accounting standards, Equipment and product sales to agents and the related Cost of equipment and products was recognized when equipment was sold through from the agent to end user customers. In accordance with the provisions of ASU 2014-09, such amounts are recognized when TDS delivers the equipment to the agent. Selling, general and administrative expenses include the amortization of contract acquisition and contract fulfillment costs that are capitalized under ASU 2014-09.

Under ASU 2017-05, (Gain) loss on license sales and exchanges, net is calculated by subtracting the carrying amount of the distinct asset being disposed from the consideration measured and allocated to that distinct asset. With respect to license exchange transactions, the consideration, or transaction price, is the fair value of the licenses received. Under prior accounting standards, the transaction price was typically the fair value of the licenses surrendered.

Consolidated Balance Sheet

As of September 30, 2018	Results under prior accounting standards	Adjustmer	ıt	As reported
(Dollars in millions)				
Accounts receivable				
Customers and agents, less allowances	\$ 871	\$ 59		\$ 930
Prepaid expenses	118	(16)		102
Other current assets	26	4		30
Total current assets	2,340	47		2,387
Licenses	2,197	1		2,198
Investments in unconsolidated entities	485	15		500
Other assets and deferred charges	421	173		594
Total assets	9,483	236		9,719
Customer deposits and deferred revenues	194	(12)		182
Accrued taxes	58	(3)		55
Other current liabilities	90	3		93
Total current liabilities	863	(11)		852
Deferred income tax liability, net	586	56		642
Other deferred liabilities and credits	530	12		542
Retained earnings	2,533	150		2,683
Total TDS shareholders' equity	4,392	150		4,542
Noncontrolling interests	680	28		708
Total equity	5,072	178		5,250
Total liabilities and equity	\$ 9,483	\$ 236		\$ 9,719
Numbers may not foot due to rounding				

As a result of adoption of ASU 2014-09, TDS recorded short-term and long-term contract assets and contract liabilities in its Consolidated Balance Sheet as of September 30, 2018. Under ASU 2014-09, the timing of recognition of revenue for each performance obligation may differ from the timing of the customer billing, creating a contract asset or contract liability. See Contract Balances below for additional information. Contract assets are included in Other current assets if short-term in nature or Other assets and deferred charges if long-term in nature. Short-term contract liabilities are classified as Customer deposits and deferred revenues and long-term contract liabilities are included in Other deferred liabilities and credits. Accounts receivable increased as a result of TDS ceasing to record deferred imputed interest. Certain prepaid expenses decreased due to a change in timing of recognition of sales of equipment to agents. Investments in unconsolidated entities increased due to the cumulative effect of applying the provisions of ASU 2014-09 to certain of TDS' equity method investments as of January 1, 2018. Deferred income tax liabilities, net, increased due to the provisions of ASU 2014-09 increasing the net basis of assets on a U.S. GAAP basis, without a corresponding increase in tax basis. Contract cost assets have also been created as a result of ASU 2014-09 due to capitalization of fulfillment costs and costs to obtain a new contract. See Contract Cost Assets below for additional information.

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Nature of goods and services

The following is a description of principal activities from which TDS generates its revenues. Services and products Nature, timing of satisfaction of performance obligations, and significant payment terms Wireless service includes voice, messaging and data services. Revenue is recognized in Service revenues as wireless service is provided to the customer. Wireless services generally Wireless services are billed and paid in advance on a monthly basis. U.S. Cellular offers a comprehensive range of wireless devices such as handsets, modems, mobile hotspots, home phones and tablets for use by its customers, as well as accessories. U.S. Cellular also sells wireless devices to agents and other third-party distributors for resale. U.S. Cellular frequently discounts wireless devices sold to new and current customers. U.S. Cellular also offers customers the option to purchase certain devices under Wireless devices and installment contracts over a specified time period. For certain equipment installment plans, accessories after a specified period of time, the customer may have the right to upgrade to a new device. Such upgrades require the customer to enter into an equipment installment contract for the new device, and transfer the existing device to U.S. Cellular. U.S. Cellular recognizes revenue in Equipment and product sales revenues when control of the device or accessory is transferred to the customer, which is generally upon delivery. U.S. Cellular receives roaming revenues when other wireless carriers' customers use U.S. Cellular's wireless systems. U.S. Cellular recognizes revenue in Service revenues when the Wireless roaming roaming service is provided to the other carrier's customer. Telecommunications companies may be designated by states, or in some cases by the FCC, as an ETC to receive support payments from the Universal Service Fund if they provide Wireless Eligible specified services in "high cost" areas. ETC revenues recognized in the reporting period Telecommunications represent the amounts which U.S. Cellular is entitled to receive for such period, as Carrier (ETC) Revenues determined and approved in connection with U.S. Cellular's designation as an ETC in various states. U.S. Cellular receives tower rental revenues when another carrier leases tower space on a Wireless tower rents U.S. Cellular owned tower. U.S. Cellular recognizes revenue in Service revenues in the period during which the services are provided. TDS charges its end customers activation fees in connection with the sale of certain services and equipment. Activation fees charged by TDS Telecom in conjunction with a service Activation fees offering are deferred and recognized over the average customer's service period. These fees charged at U.S. Cellular are deferred and recognized over the period benefitted. Wireline services include broadband, video and voice services. Revenue is recognized in Wireline services Service revenues as service is provided to the customer. Wireline services are generally billed and paid in advance on a monthly basis. Wireline wholesale Wholesale revenues include network access services primarily to interexchange and wireless carriers for carrying data and voice traffic on TDS Telecom's network, special access services revenues and state and federal support payments, including A-CAM. Wholesale revenues are recorded

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	as the related service is provided.
Cable services	Cable services include broadband, video and voice services. Revenue is recognized in Service revenues as service is provided to the customer. Cable services are generally billed and paid in advance on a monthly basis.
IT hardware sales	TDS recognizes equipment revenue when it no longer has any requirements to perform, when title has passed and when the products are accepted by the customer.
Hosted and managed services	HMS Service revenues consist of cloud and hosting solutions, managed services, Enterprise Resource Planning (ERP) application management, colocation services, and IT hardware related maintenance and professional services. Revenues related to these services are recognized as services are provided.
Significant Judgments	

U.S. Cellular and TDS Telecom sell bundled service and equipment offerings. In these instances, TDS recognizes its revenue based on the relative standalone selling prices for each distinct service or equipment performance obligation, or bundles thereof. TDS estimates the standalone selling price of the device or accessory to be its retail price excluding discounts. TDS estimates the standalone selling price of wireless service to be the price offered to customers on month-to-month contracts.

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Revenues from sales of equipment and products are recognized when control has transferred to the customer. Service revenues are recognized as the related service is provided. Services are deemed to be highly interrelated when the method and timing of transfer and performance risk are the same. Highly interrelated services that are determined to not be distinct have been grouped into a single performance obligation. Each month of services promised is a performance obligation. The series of monthly service performance obligations promised over the course of the contract are combined into a single performance obligation for purposes of the allocation.

TDS has made judgments regarding transaction price, including but not limited to issues relating to variable consideration, time value of money and returns. When determined to be significant in the context of the contract, these items are considered in the valuation of transaction price at contract inception or modification, as appropriate.

Disaggregation of Revenue

In the following table, revenue is disaggregated by type of service and timing of revenue recognition. Service revenues are recognized over time and Equipment sales are point in time.

		TDS Telecom					
Three Months Ended September 30, 2018	U.S. Cellular	Wirel	li Ga ble	TDS Telecom Total	Elin	porate, ninations Other	Total
(Dollars in millions)							
Revenues from contracts with customers:							
Type of service:							
Retail service	\$ 659	\$—	\$ —	\$ —	\$		\$659
Inbound roaming	50	—			—		50
Residential		81	47	128			128
Commercial	—	46	10	56	—		56
Wholesale		50		50			50
Other service	34	—			18		52
Service revenues from contracts with customers	743	176	58	233	18		995
Equipment and product sales	242	—			38		280
Total revenues from contracts with customers ¹	\$ 985	\$176	\$ 58	\$ 234	\$	56	\$1,275

Numbers may not foot due to rounding.

¹ These amounts do not include revenues outside the scope of ASU 2014-09; therefore, revenue line items in this table will not agree to amounts presented in the Consolidated Statement of Operations.

		TDS Telecom				
Nine Months Ended September 30, 2018	U.S. Cellular	Wirel	li Ga ble	TDS Telecom Total	Corporate, Eliminations and Other	Total
(Dollars in millions)						
Revenues from contracts with customers:						
Type of service:						
Retail service	\$ 1,960	\$—	\$ —	\$ —	\$ —	\$1,960
Inbound roaming	116	_				116
Residential		241	140	381		381
Commercial		140	30	170		170
Wholesale	_	143		143		143
Other service	99	_		(1)	52	150
Service revenues from contracts with customers	2,175	524	170	693	52	2,920
Equipment and product sales	692	1		1	96	789
Total revenues from contracts with customers ¹	\$ 2,867	\$525	\$170	\$ 694	\$ 148	\$3,709

Numbers may not foot due to rounding.

¹ These amounts do not include revenues outside the scope of ASU 2014-09; therefore, revenue line items in this table will not agree to amounts presented in the Consolidated Statement of Operations.

Contract Balances

For contracts that involve multiple element service and equipment offerings, the transaction price is allocated to each performance obligation based on its relative standalone selling price. When payment is collected in advance of delivery of goods or services, a contract liability is recorded. A contract asset is recorded when revenue is recognized in advance of TDS' right to receive consideration. Once there is an unconditional right to receive the consideration, TDS bills the customer under the terms of the respective contract and the amounts are recorded as receivables.

TDS recognizes Equipment and product sales revenue when the equipment is delivered to the customer and a corresponding contract asset or liability is recorded for the difference between the amount of revenue recognized and the amount billed to the customer in cases where discounts are offered. The contract asset or liability is reduced over the contract term as service is provided and billed to the customer.

The accounts receivable balance related to amounts billed and not paid on contracts with customers, net of allowances, is shown in the table below. Bad debts expense recognized for the three and nine months ended September 30, 2018, related to receivables was \$27 million and \$70 million, respectively.

September 30, 2018 (Dollars in millions) Accounts receivable Customer and agents \$ 926 Other 98 Total¹ \$ 1,024 These amounts do not include accounts receivable related to revenues outside the scope of ASU 2014-09; therefore, accounts receivable line items presented in this table will not agree to amounts presented in the Consolidated Balance Sheet.

The following table provides a rollforward of contract assets from contracts with customers, which are recorded in Other current assets and Other assets and deferred charges in the Consolidated Balance Sheet.

	Contract
	Assets
(Dollars in millions)	
Balance at December 31, 2017	\$ —
Change in accounting policy	28
Contract additions	20
Terminated contracts	(1)
Reclassified to receivables	(35)
Balance at September 30, 2018	\$ 12

The following table provides a rollforward of contract liabilities from contracts with customers, which are recorded in Customer deposits and deferred revenues and Other deferred liabilities and credits in the Consolidated Balance Sheet.

	Contrac	t
	Liabiliti	ies
(Dollars in millions)		
Balance at December 31, 2017	\$ —	
Change in accounting policy - Deferred revenues reclassification ¹	209	
Change in accounting policy - Retained earnings impact	(22)
Contract additions	137	
Revenue recognized	(137)
Balance at September 30, 2018	\$ 187	

¹ This amount represents TDS' obligation to transfer goods or services to customers for which it had received payment and classified as deferred revenue at December 31, 2017.

Transaction price allocated to the remaining performance obligations

The following table includes estimated service revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period. The estimates represent service revenue to be recognized when services are delivered to customers pursuant to service plan contracts. These estimates are based on contracts in place as of September 30, 2018, and may vary from actual results due to future contract modifications. As a practical expedient, revenue related to contracts of less than one year, generally contracts with month-to-month customers, are excluded from these estimates.

	Service
	Revenue
(Dollars in millions))
Remainder of 2018	\$ 211
2019	220
Thereafter	116
Total	\$ 547

TDS has certain contracts at U.S. Cellular and TDS Telecom in which it bills an amount equal to a fixed per-unit price multiplied by a variable quantity (e.g., roaming agreements with other carriers). Because TDS invoices for such items in an amount that corresponds directly with the value of the performance completed to date, TDS may recognize revenue in that amount. As a practical expedient, these contracts are excluded from the estimate of future revenues

expected to be recognized related to performance obligations that are unsatisfied as of the end of a reporting period.

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Contract Cost Assets

TDS expects that incremental commission fees paid as a result of obtaining contracts are recoverable and therefore TDS capitalizes these costs. As a practical expedient, costs with an amortization period of one year or less are not capitalized. TDS also incurs fulfillment costs, such as installation costs, where there is an expectation that a future benefit will be realized. Capitalized commission fees and fulfillment costs are amortized based on the transfer of the goods or services to which the assets relate, typically the contract term which ranges from thirteen months to five years. Contract cost asset balances, which are recorded in Other assets and deferred charges in the Consolidated Balance Sheet, were as follows:

	September 30,		
	201	8	
(Dollars in millions)			
Costs to obtain contracts			
Sales commissions	\$	149	
Fulfillment costs			
Installation costs	10		
Total contract cost assets	\$	159	

Amortization of contract cost assets was \$31 million and \$93 million for the three and nine months ended September 30, 2018, respectively, and was included in Selling, general and administrative expense. There was no impairment loss recognized for the three and nine months ended September 30, 2018, related to contract cost assets.

Note 3 Fair Value Measurements

As of September 30, 2018 and December 31, 2017, TDS did not have any material financial or nonfinancial assets or liabilities that were required to be recorded at fair value in its Consolidated Balance Sheet in accordance with GAAP.

The provisions of GAAP establish a fair value hierarchy that contains three levels for inputs used in fair value measurements. Level 1 inputs include quoted market prices for identical assets or liabilities in active markets. Level 2 inputs include quoted market prices for similar assets and liabilities in active markets or quoted market prices for identical assets and liabilities in inactive markets. Level 3 inputs are unobservable. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. A financial instrument's level within the fair value hierarchy is not representative of its expected performance or its overall risk profile and, therefore, Level 3 assets are not necessarily higher risk than Level 2 assets or Level 1 assets.

TDS has applied the provisions of fair value accounting for purposes of computing the fair value of financial instruments for disclosure purposes as displayed below.

		Septem	ber 30,	Decem	ber 31,
	Level within the Fair Value Hierarchy	2018		2017	
		Book	Fair	Book	Fair
		Value	Value	Value	Value
(Dollars in millions)					
Cash and cash equivalents	1	\$1,062	\$1,062	\$619	\$619
Short-term investments	1		_	100	100
Long-term debt					
Retail	2	1,753	1,762	1,753	1,783

Institutional	2	534	528	534	522
Other	2	185	185	194	194

The fair values of Cash and cash equivalents and Short-term investments approximate their book values due to the short-term nature of these financial instruments. Long-term debt excludes capital lease obligations, other installment arrangements, the current portion of Long-term debt and debt financing costs. The fair value of "Retail" Long-term debt was estimated using market prices for TDS' 7.0% Senior Notes, 6.875% Senior Notes, 6.625% Senior Notes and 5.875% Senior Notes, and U.S. Cellular's 6.95% Senior Notes, 7.25% 2063 Senior Notes and 7.25% 2064 Senior Notes. TDS' "Institutional" debt consists of U.S. Cellular's 6.7% Senior Notes which are traded over the counter. TDS' "Other" debt consists of a senior term loan credit agreement and other borrowings with financial institutions. TDS estimated the fair value of its Institutional and Other debt through a discounted cash flow analysis using the interest rates or estimated yield to maturity for each borrowing, which ranged from 4.75% to 6.88% and 4.74% to 7.13% at September 30, 2018 and December 31, 2017, respectively.

Note 4 Equipment Installment Plans

TDS sells devices to customers under equipment installment plans over a specified time period. For certain equipment installment plans, after a specified period of time or amount of payments, the customer may have the right to upgrade to a new device and have the remaining unpaid equipment installment contract balance waived, subject to certain conditions, including trading in the original device in good working condition and signing a new equipment installment contract. TDS values this trade-in right as a guarantee liability. The guarantee liability is initially measured at fair value and is determined based on assumptions including the probability and timing of the customer upgrading to a new device and the fair value of the device being traded-in at the time of trade-in. When a customer exercises the trade-in option, both the outstanding receivable and guarantee liability balances related to the respective device are reduced to zero, and the value of the used device that is received in the transaction is recognized as inventory. If the customer does not exercise the trade-in option at the time of eligibility, TDS begins amortizing the liability and records this amortization as additional equipment revenue. As of September 30, 2018 and December 31, 2017, the guarantee liability related to these plans was \$11 million and \$15 million, respectively, and is reflected in Customer deposits and deferred revenues in the Consolidated Balance Sheet.

The following table summarizes equipment installment plan receivables as of September 30, 2018 and December 31, 2017.

	September 30, December 3		
	2018	2017	
(Dollars in millions)			
Equipment installment plan receivables, gross	\$ 919	\$ 873	
Deferred interest		(80)	
Equipment installment plan receivables, net of deferred interest	919	793	
Allowance for credit losses	(67)	(65)	
Equipment installment plan receivables, net	\$ 852	\$ 728	
Net balance presented in the Consolidated Balance Sheet as:			
Accounts receivable — Customers and agents (Current portion)	\$ 537	\$ 428	
Other assets and deferred charges (Non-current portion)	315	300	
Equipment installment plan receivables, net	\$ 852	\$ 728	

TDS uses various inputs, including internal data, information from the credit bureaus and other sources, to evaluate the credit profiles of its customers. From this evaluation, a credit class is assigned to the customer that determines the number of eligible lines, the amount of credit available, and the down payment requirement, if any. Customers assigned to credit classes requiring no down payment represent a lower risk category, whereas those assigned to credit classes requiring a down payment represent a higher risk category. The balance and aging of the equipment installment plan receivables on a gross basis by credit category were as follows:

	I ,			December 31, 2017		
	LowerHigher Risk Risk			Lowe	Total	
	Risk	Risk	Total	Risk	Risk	Total
(Dollars in millions)						
Unbilled	\$848	\$ 21	\$869	\$807	\$ 20	\$827
Billed — current	32	1	33	31	1	32
Billed — past due	15	2	17	12	2	14
Equipment installment plan receivables, gross	\$ \$895	\$ 24	\$919	\$850	\$ 23	\$873

Activity for the nine months ended September 30, 2018 and 2017, in the allowance for credit losses balance for the equipment installment plan receivables was as follows:

	September 30, 2018	, September 30, 2017
(Dollars in millions)		
Allowance for credit losses, beginning of period	\$ 65	\$ 50
Bad debts expense	43	42
Write-offs, net of recoveries	(41)	(34)
Allowance for credit losses, end of period	\$ 67	\$ 58

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Note 5 Income Taxes

TDS' effective tax rate on Income before income taxes for the three and nine months ended September 30, 2018, was 7.3% and 23.9%, respectively. The effective tax rate is lower than normal due primarily to an income tax accounting method change that accelerated tax depreciation on certain assets for the 2017 tax year, resulting in a discrete tax benefit recorded in the third quarter of 2018.

The effective tax rate for the three and nine months ended September 30, 2017, was not meaningful due primarily to the recognition of a loss on impairment of goodwill during the third quarter of 2017. Due to difficulty in reliably projecting an annual tax rate, TDS calculated income taxes for the nine months ended September 30, 2017, based on an estimated year-to-date tax rate.

In December 2017, the Tax Act was signed into law. Following the guidance of the FASB's Accounting Standards Update 2018-05, Income Taxes: Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118, Income tax expense (benefit) for the year ended December 31, 2017, included a provisional estimate for the impact of the Tax Act on TDS' 2017 depreciation deduction. TDS has now completed a full analysis of contracts and agreements related to fixed assets placed in service during 2017 and Income tax expense (benefit) for the three and nine months ended September 30, 2018, includes a benefit of \$1 million and \$4 million, respectively, related to this final adjustment.

Note 6 Earnings Per Share

Basic earnings (loss) per share available to TDS common shareholders is computed by dividing Net income (loss) available to TDS common shareholders by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share available to TDS common shareholders is computed by dividing Net income (loss) available to TDS common shareholders by the weighted average number of common shares outstanding during the period adjusted to include the effects of potentially dilutive securities. Potentially dilutive securities primarily include incremental shares issuable upon the exercise of outstanding stock options and the vesting of performance and restricted stock units.

The amounts used in computing earnings (loss) per common share and the effects of potentially dilutive securities on the weighted average number of common shares were as follows:

	Three Months		Nine N	/Ionths
	Ended September 30,		Ended	
			Septen	nber 30,
	2018	2017	2018	2017
(Dollars and shares in millions, except per share amounts)				
Basic earnings (loss) per share available to TDS common shareholders:				
Net income (loss) available to TDS common shareholders used in basic earnings (loss per share	⁹⁾ \$46	\$(181)	\$119	\$(134)
Adjustments to compute diluted earnings (loss):				
Noncontrolling interest adjustment			(2)) —
Net income (loss) available to TDS common shareholders used in diluted earnings (loss) per share	\$46	\$(181)	\$117	\$(134)
Weighted average number of shares used in basic earnings (loss) per share:				
Common Shares	105	104	105	104
Series A Common Shares	7	7	7	7

Total	112	111	112	111
Effects of dilutive securities Weighted average number of shares used in diluted earnings (loss) per share	_	 111	-	— 111
Basic earnings (loss) per share available to TDS common shareholders	\$0.41	\$(1.64)	\$1.06	\$(1.21)
Diluted earnings (loss) per share available to TDS common shareholders	\$0.41	\$(1.64)	\$1.04	\$(1.21)

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Certain Common Shares issuable upon the exercise of stock options, vesting of performance and restricted stock units or conversion of preferred shares were not included in average diluted shares outstanding for the calculation of Diluted earnings (loss) per share available to TDS common shareholders because their effects were antidilutive. The number of such Common Shares excluded was 3 million and 4 million for the three and nine months ended September 30, 2018, respectively, and 5 million and 6 million for the three and nine months ended September 30, 2017, respectively.

Note 7 Intangible Assets

Activity related to Licenses for the nine months ended September 30, 2018, is presented below:

	Licenses	5
(Dollars in millions)		
Balance at December 31, 2017	\$2,232	
Acquisitions	2	
Transferred to Assets held for sale	(42)
Divestitures	(11)
Exchanges - Licenses received	18	
Exchanges - Licenses surrendered	(1)
Balance at September 30, 2018	\$2,198	

Note 8 Investments in Unconsolidated Entities

Investments in unconsolidated entities consist of amounts invested in wireless and wireline entities in which TDS holds a noncontrolling interest. On January 1, 2018, TDS adopted Accounting Standards Update 2016-01, Financial Instruments – Overall: Recognition and Measurement of Financial Assets and Financial Liabilities (ASU 2016-01) using the modified retrospective approach. Accordingly, prior periods have not been recast to reflect the new accounting principle. Equity securities are measured at fair value with changes in value recognized in Net income. The cumulative effect of applying the provisions of ASU 2016-01 resulted in an increase of \$1 million in retained earnings as of January 1, 2018.

TDS' Investments in unconsolidated entities are accounted for using either the equity method or measurement alternative method as shown in the table below. The measurement alternative method was elected for investments without readily determinable fair values formerly accounted for under the cost method. The measurement alternative fair value represents cost minus any impairments plus or minus any observable price changes. TDS did not have an impairment or observable price change related to these investments for the three and nine months ended September 30, 2018.

_	September 30, 2018		December 31 2017		
(Dollars in millions)					
Equity method investments	\$	481	\$	435	
Measurement alternative method	19		18		
investments Total investments in unconsolidated		500	\$	453	

entities

The following table, which is based in part on information provided by third parties, summarizes the combined results of operations of TDS' equity method investments.

Three M	Three Months		Nine Months		
Ended	Ended				
Septemb	September 30,		er 30,		
2018	2017	2018	2017		
\$1,699	\$1,596	\$5,023	\$4,848		
1,234	1,184	3,651	3,631		
465	412	1,372	1,217		
let (3)	(2)	(3)	(4)		
\$462	\$410	\$1,369	\$1,213		
	Ended Septemb 2018 \$1,699 1,234 465 et (3)	Ended September 30, 2018 2017 \$1,699 \$1,596 1,234 1,184 465 412 et (3) (2)	Ended Ended September 30, 2018 2017 2018 \$1,699 \$1,596 \$5,023 1,234 1,184 3,651 465 412 1,372 et (3) (2) (3)		

Note 9 Debt

Revolving Credit Agreements

In May 2018, TDS entered into a new \$400 million revolving credit agreement with certain lenders and other parties and U.S. Cellular entered into a new \$300 million revolving credit agreement with certain lenders and other parties. Amounts under both of the new revolving credit agreements are available for general corporate purposes, including acquisitions, spectrum purchases and capital expenditures, and may be borrowed, repaid and reborrowed from time to time until maturity in May 2023. As a result of the new agreements, TDS' and U.S. Cellular's previous revolving credit agreements due to expire in June 2021 were terminated.

The following table summarizes the terms of the revolving credit agreements as of September 30, 2018:

TDS U.S. Cellular

(Dollars in millions)

Maximum borrowing capacity \$400 \$ 300 Letters of credit outstanding \$1 \$ 2

Amount borrowed \$-

Amount available for use \$399 \$ 298

Except for the change in the maturity date, the terms of the new revolving credit agreements are substantially the same as the previous revolving credit agreements.

Term Loan

In May 2018, U.S. Cellular also amended its senior term loan credit agreement in order to align with the new revolving credit agreement. There were no significant changes to the maturity date or other key terms of the agreement.

Note 10 Variable Interest Entities

Consolidated VIEs

TDS consolidates variable interest entities (VIEs) in which it has a controlling financial interest as defined by GAAP and is therefore deemed the primary beneficiary. A controlling financial interest will have both of the following characteristics: (a) the power to direct the VIE activities that most significantly impact economic performance; and (b) the obligation to absorb the VIE losses and the right to receive benefits that are significant to the VIE. TDS reviews these criteria initially at the time it enters into agreements and subsequently when events warranting reconsideration occur. These VIEs have risks similar to those described in the "Risk Factors" in TDS' Form 10-K for the year ended December 31, 2017.

During 2017, U.S. Cellular formed USCC EIP LLC (Seller/Sub-Servicer), USCC Receivables Funding LLC (Transferor) and the USCC Master Note Trust (Trust), special purpose entities (SPEs), to facilitate a securitized borrowing using its equipment installment plan receivables. Under a Receivables Sale Agreement, U.S. Cellular wholly-owned, majority-owned and unconsolidated entities, collectively referred to as "affiliated entities", will transfer device equipment installment plan contracts to the Seller/Sub-Servicer. The Seller/Sub-Servicer will aggregate device equipment installment plan contracts, and perform servicing, collection and all other administrative activities related to accounting for the equipment installment plan contracts. The Seller/Sub-Servicer will sell the eligible equipment installment plan receivables to the Transferor, a bankruptcy remote entity, which will subsequently sell the receivables to the Trust. The Trust, which is bankruptcy remote and isolated from the creditors of U.S. Cellular, will be responsible for issuing asset-backed variable funding notes (Notes), which are collateralized by the equipment installment plan receivables owned by the Trust. Given that U.S. Cellular has the power to direct the activities of these SPEs, and that these SPEs lack sufficient equity to finance their activities, U.S. Cellular is deemed to have a

controlling financial interest in the SPEs and, therefore, consolidates them. All transactions with third parties (e.g., issuance of the asset-backed variable funding notes) will be accounted for as a secured borrowing due to the pledging of equipment installment plan contracts as collateral, significant continuing involvement in the transferred assets, subordinated interests of the cash flows, and continued evidence of control of the receivables.

The following VIEs were formed to participate in FCC auctions of wireless spectrum and to fund, establish, and provide wireless service with respect to any FCC licenses won in the auctions:

Advantage Spectrum, L.P. (Advantage Spectrum) and Sunshine Spectrum, Inc., the general partner of Advantage Spectrum; and

King Street Wireless, L.P. (King Street Wireless) and King Street Wireless, Inc., the general partner of King Street Wireless.

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These particular VIEs are collectively referred to as designated entities. The power to direct the activities that most significantly impact the economic performance of these VIEs is shared. Specifically, the general partner of these VIEs has the exclusive right to manage, operate and control the limited partnerships and make all decisions to carry on the business of the partnerships. The general partner of each partnership needs the consent of the limited partner, an indirect TDS subsidiary, to sell or lease certain licenses, to make certain large expenditures, admit other partners or liquidate the limited partnerships. Although the power to direct the activities of these VIEs is shared, TDS has the most significant level of exposure to the variability associated with the economic performance of the VIEs, indicating that TDS is the primary beneficiary of the VIEs. Therefore, in accordance with GAAP, these VIEs are consolidated.

In the nine months ended September 30, 2018, U.S. Cellular received liquidating distributions from Aquinas Wireless, L.P. (Aquinas Wireless). Subsequent to the final distribution date, Aquinas Wireless had no remaining assets and was dissolved.

TDS also consolidates other VIEs that are limited partnerships that provide wireless service. A limited partnership is a variable interest entity unless the limited partners hold substantive participating rights or kick-out rights over the general partner. For certain limited partnerships, U.S. Cellular is the general partner and manages the operations. In these partnerships, the limited partners do not have substantive kick-out or participating rights and, further, such limited partners do not have the authority to remove the general partner. Therefore, these limited partnerships are also recognized as VIEs and are consolidated under the variable interest model.

The following table presents the classification and balances of the consolidated VIEs' assets and liabilities in TDS' Consolidated Balance Sheet.

	September 30, 2018	December 31, 2017
(Dollars in millions)		
Assets		
Cash and cash equivalents	\$ 24	\$ 3
Accounts receivable	582	473
Other current assets	8	7
Licenses	647	648
Property, plant and equipment, net	83	89
Other assets and deferred charges	324	304
Total assets	\$ 1,668	\$ 1,524
Liabilities		
Current liabilities	\$ 28	\$ 36
Deferred liabilities and credits	13	12
Total liabilities	\$ 41	\$ 48

Unconsolidated VIEs

TDS manages the operations of and holds a variable interest in certain other limited partnerships, but is not the primary beneficiary of these entities and, therefore, does not consolidate them under the variable interest model.

TDS' total investment in these unconsolidated entities was \$4 million at September 30, 2018 and December 31, 2017, and is included in Investments in unconsolidated entities in TDS' Consolidated Balance Sheet. The maximum exposure from unconsolidated VIEs is limited to the investment held by TDS in those entities.

Other Related Matters

During the nine months ended September 30, 2018 and 2017, TDS made contributions, loans and/or advances to its VIEs totaling \$92 million and \$724 million, respectively; of these amounts \$66 million and \$701 million, respectively, are related to USCC EIP LLC as discussed above. TDS may agree to make additional capital contributions and/or advances to these or other VIEs and/or to their general partners to provide additional funding for operations or the development of licenses granted in various auctions. TDS may finance such amounts with a combination of cash on hand, borrowings under its revolving credit agreement and/or other long-term debt. There is no assurance that TDS will be able to obtain additional financing on commercially reasonable terms or at all to provide such financial support.

During the nine months ended September 30, 2018, TDS recorded an out-of-period adjustment attributable to 2016 and 2017 due to errors in the application of accounting guidance applicable to the calculation of Noncontrolling interests with redemption features related to King Street Wireless, Inc. This out-of-period adjustment had the impact of increasing Net income attributable to noncontrolling interests, net of tax, by \$6 million and decreasing Net income attributable to TDS shareholders by \$6 million for the nine months ended September 30, 2018. TDS determined that this adjustment was not material to any of the periods impacted. The adjustment was made in the first quarter of 2018.

Note 11 Noncontrolling Interests

The following schedule discloses the effects of Net income (loss) attributable to TDS shareholders and changes in				
TDS' ownership interest in U.S. Cellular on TDS' equity:				
Nine Months Ended September 30,	2018	2017		
(Dollars in millions)				
Net income (loss) attributable to TDS shareholders	\$119	\$(134)		
Transfers to noncontrolling interests				
Change in TDS' Capital in excess of par value from U.S. Cellular's issuance of U.S. Cellular shares	(22)	(12)		
Change in TDS' Capital in excess of par value from U.S. Cellular's repurchases of U.S. Cellular shares				
Purchase of ownership in subsidiaries from noncontrolling interests				
Net transfers to noncontrolling interests	(22)	(12)		
Change from net income (loss) attributable to TDS and transfers to noncontrolling interests	\$97	\$(146)		

Note 12 Business Segment Information

U.S. Cellular and TDS Telecom are billed for all services they receive from TDS, consisting primarily of information processing, accounting and finance, and general management services. Such billings are based on expenses specifically identified to U.S. Cellular and TDS Telecom and on allocations of common expenses. Management believes the method used to allocate common expenses is reasonable and that all expenses and costs applicable to U.S. Cellular and TDS Telecom are reflected in the accompanying business segment information on a basis that is representative of what they would have been if U.S. Cellular and TDS Telecom operated on a stand-alone basis. TDS has re-evaluated internal reporting roles with regard to its HMS business unit and, as a result, has changed its reportable segments. Effective January 1, 2018, HMS is no longer reported under TDS Telecom, but is reported as a part of Corporate, Eliminations and Other. Prior periods have been recast to conform to the revised presentation.

Financial data for TDS' reportable segments for the three and nine month periods ended, or as of September 30, 2018 and 2017, is as follows. See Note 1 — Basis of Presentation for additional information.

		TDS Te	lecom			
Three Months Ended or as of September 30, 2018 ¹	U.S. Cellular	Wirelin	e Cable	TDS Telecom Total ²	Corporate, Elimination and Other	s Total
(Dollars in millions)						
Operating revenues						
Service	\$759	\$176	\$58	\$234	\$ 24	\$1,017
Equipment and product sales	242				38	280
Total operating revenues	1,001	177	58	234	62	1,297
Cost of services (excluding Depreciation, amortization and accretion reported below)	200	68	26	94	20	314
Cost of equipment and products	258				33	291
Selling, general and administrative	346	49	14	63	12	421
Depreciation, amortization and accretion	160	35	17	53	7	220
(Gain) loss on asset disposals, net	3	(4)	1	(3)		
Operating income (loss)	34	28		28	(11)	51
Equity in earnings of unconsolidated entities	42					42
Interest and dividend income	4	2		2		6
Interest expense	(29)	1		1	(15)	(43)
Other, net		1		1	1	2
Income (loss) before income taxes	51	31		31	(24)	58
Income tax expense (benefit) ³	14			(5)	(4)	5
Net income (loss)	37			36	(20)	53
Add back:						
Depreciation, amortization and accretion	160	35	17	53	7	220
(Gain) loss on asset disposals, net	3	(4)	1	(3)		
Interest expense	29	(1)		(1)	15	43
Income tax expense (benefit) ³	14			(5)	(4)	5
Adjusted EBITDA ⁴	\$243	\$61	\$18	\$80	\$ (2)	\$321
Investments in unconsolidated entities Total assets Capital expenditures	\$461 \$7,228 \$118	\$4 \$1,302 \$41	\$— \$637 \$13	\$4 \$1,929 \$54	\$ 35 \$ 562 \$ 5	\$500 \$9,719 \$177

Numbers may not foot due to rounding.

		TDS T	elecom					
Three Months Ended or as of September 30, 2017	U.S. Cellular	Wirelin	neCable	TDS Telecom Total ²	Corporate Elimination and Other	ons	s Total	
(Dollars in millions)								
Operating revenues								
Service	\$737	\$178	\$52	\$ 230	\$ 21		\$988	
Equipment and product sales	226	_		_	37		263	
Total operating revenues	963	179	52	230	58		1,251	
Cost of services (excluding Depreciation, amortization and	105		25	00	10			
accretion reported below)	185	66	25	90	19		294	
Cost of equipment and products	261				30		291	
Selling, general and administrative ⁵	350	49	13	63	10		423	
Depreciation, amortization and accretion	153	38	11	49	7		209	
Loss on impairment of goodwill ⁶	370	_		_	(108)	262	
(Gain) loss on asset disposals, net	5		1	1			6	
(Gain) loss on sale of business and other exit costs, net) <u> </u>		_			(1)
Operating income (loss) ⁵	· ,	25	2	27	100		(233)
Equity in earnings of unconsolidated entities	35						35	<i>,</i>
Interest and dividend income	2	2		2			4	
Interest expense	(28)) <u> </u>			(15)	(43)
Other, net ⁵		1		1		,	1	
Income (loss) before income taxes	(351)	28	2	30	85		(236)
Income tax expense (benefit) ³	(53)			11	37		(5)
Net income (loss)	(298)			18	49		(231)
Add back:	()						X -	,
Depreciation, amortization and accretion	153	38	11	49	7		209	
Loss on impairment of goodwill ⁶	370				(108)	262	
(Gain) loss on asset disposals, net	5		1	1			6	
(Gain) loss on sale of business and other exit costs, net		·					(1)
Interest expense	28	_		_	15		43	,
Income tax expense (benefit) ³	(53)			11	37		(5)
Adjusted EBITDA ⁴	\$204	\$66	\$14	\$ 79	\$ —		\$283	,
Investments in unconsolidated entities	\$429	\$4	\$—	\$4	\$ 34		\$467	
Total assets	\$6,780	\$1,201	\$619	\$ 1,822	\$ 608		\$9,210)
Capital expenditures	\$112	\$41	\$14	\$ 56	\$4		\$172	
Numbers may not foot due to rounding.								

		TDS 7	Felecom	1				
Nine Months Ended or as of September 30, 2018 ¹	U.S. Cellular	Wireli	inEable	TDS Telecom Total ²	Corporate Elimination and Other	on	sTotal	
(Dollars in millions)								
Operating revenues								
Service	\$2,224	\$524	\$170	\$ 693	\$ 71		\$2,988	
Equipment and product sales	692	1		1	96		789	
Total operating revenues	2,916	526	170	695	166		3,777	
Cost of services (excluding Depreciation, amortization and accretion reported below)	566	200	78	277	59		902	
Cost of equipment and products	716	1		1	87		804	
Selling, general and administrative	1,014	146	42	187	31		1,232	
Depreciation, amortization and accretion	478	108	52	160	24		662	
(Gain) loss on asset disposals, net	5	(3)	1	(2)			3	
(Gain) loss on license sales and exchanges, net	(18)						(18)
Operating income (loss)	155	75	(4)	71	(34)	192	
Equity in earnings of unconsolidated entities	120				1		121	
Interest and dividend income	10	5	1	5	3		18	
Interest expense	(87)	1		1	(43)	(129)
Other, net		2		2	(1)	1	
Income (loss) before income taxes	198	83	(3)	80	(75)	203	
Income tax expense (benefit) ³	55			7	(14)	48	
Net income (loss)	143			73	(61)	155	
Add back:								
Depreciation, amortization and accretion	478	108	52	160	24		662	
(Gain) loss on asset disposals, net	5	(3)	1	(2)			3	
(Gain) loss on license sales and exchanges, net	(18)						(18)
Interest expense	87	(1))	(1)	43		129	
Income tax expense $(benefit)^3$	55			7	(14)	48	
Adjusted EBITDA ⁴	\$750	\$186	\$50	\$ 236	\$ (7)	\$979	
Capital expenditures	\$274	\$103	\$37	\$ 140	\$ 16		\$430	

Numbers may not foot due to rounding.

		TDS	Teleco	m				
Nine Months Ended or as of September 30, 2017	U.S. Cellular	Wire	li Ga ble	TDS Telecom Total ²	Corporate Eliminati and Other	on	sTotal	
(Dollars in millions)								
Operating revenues								
Service	\$2,223	\$537	\$152	\$ 689	\$ 64		\$2,976)
Equipment and product sales	639	1		1	120		760	
Total operating revenues	2,862	538	152	690	184		3,736	
Cost of services (excluding Depreciation, amortization and accretion reported below)	549	194	73	266	59		874	
Cost of equipment and products	749	2		2	97		848	
Selling, general and administrative ⁵	1,041	147	39	185	23		1,249	
Depreciation, amortization and accretion	460	114	32	146	26		632	
Loss on impairment of goodwill ⁶	370				(108)	262	
(Gain) loss on asset disposals, net	14	1	1	2			16	
(Gain) loss on sale of business and other exit costs, net	(1)	_					(1)
(Gain) loss on license sales and exchanges, net	(19)						(19)
Operating income (loss) ⁵	(301)	81	7	88	88		(125)
Equity in earnings of unconsolidated entities	101						101	
Interest and dividend income	6	4		4	2		12	
Interest expense	(85)	_			(43)	(128)
Other, net^5	1	3		2			3	
Income (loss) before income taxes	(278)	88	7	95	46		(137)
Income tax expense (benefit) ³	(19)			37	21		39	
Net income (loss)	(259)			58	25		(176)
Add back:								
Depreciation, amortization and accretion	460	114	32	146	26		632	
Loss on impairment of goodwill ⁶	370	_			(108)	262	
(Gain) loss on asset disposals, net	14	1	1	2			16	
(Gain) loss on sale of business and other exit costs, net	(1)						(1)
(Gain) loss on license sales and exchanges, net	(19)	_					(19)
Interest expense	85	_			43		128	
Income tax expense (benefit) ³	(19)			37	21		39	
Adjusted EBITDA ⁴	\$631	\$202	\$41	\$ 243	\$ 7		\$881	
Capital expenditures	\$257	\$91	\$35	\$ 127	\$ 19		\$402	

Numbers may not foot due to rounding.

As of January 1, 2018, TDS adopted ASU 2014-09 using a modified retrospective approach. Under this method, the

¹ new accounting standard is applied only to the most recent period presented. As a result, 2018 amounts include the impacts of ASU 2014-09, but 2017 amounts remain as previously reported, except as specifically stated. See Note 2 — Revenue Recognition for additional information.

² TDS Telecom Total includes eliminations between the Wireline and Cable segments.

³ Income tax expense (benefit) is not provided at the individual segment level for Wireline and Cable. TDS calculates income tax expense for "TDS Telecom Total".

Adjusted earnings before interest, taxes, depreciation, amortization and accretion (Adjusted EBITDA) is a segment measure reported to the chief operating decision maker for purposes of making decisions about allocating resources to the segments and assessing their performance. Adjusted EBITDA is defined as net income, adjusted for the items set forth in the reconciliation above. TDS believes Adjusted EBITDA is a useful measure of TDS' operating results before significant recurring non-cash charges, gains and losses, and other items as presented above as they provide additional relevant and useful information to investors and other users of TDS' financial data in evaluating the effectiveness of its operations and underlying business trends in a manner that is consistent with management's evaluation of business performance.

- ⁵ ASU 2017-07, regarding net periodic pension cost and net periodic postretirement benefit cost was adopted as of January 1, 2018, and applied retrospectively. All prior year numbers have been recast to conform to this standard. During the three months ended September 30, 2017, U.S. Cellular recorded a goodwill impairment of \$370 million while TDS recorded a goodwill impairment of the U.S. Cellular reporting unit of \$227 million. Prior to 2009, TDS accounted for U.S. Cellular's share repurchases as step acquisitions, allocating a portion of the share repurchase value to TDS' Goodwill. Further, goodwill of the U.S. Cellular reporting unit was impaired at the TDS level in 2003
- ⁶ but not at U.S. Cellular. Consequently, U.S. Cellular's goodwill on a stand-alone basis and any resulting impairments of goodwill does not equal the TDS consolidated goodwill related to U.S. Cellular. The TDS adjustment of \$143 million is included in "Corporate, Eliminations and Other." During the three months ended September 30, 2017, TDS also recorded a goodwill impairment of \$35 million related to its HMS operations included in "Corporate, Eliminations and Other."

Telephone and Data Systems, Inc. Additional Required Information

Controls and Procedures

Evaluation of Disclosure Controls and Procedures

TDS maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)) that are designed to ensure that information required to be disclosed in its reports filed or submitted under the Exchange Act is processed, recorded, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to TDS' management, including its principal executive officer and principal financial officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives.

As required by SEC Rules 13a-15(b), TDS carried out an evaluation, under the supervision and with the participation of management, including its principal executive officer and principal financial officer, of the effectiveness of the design and operation of TDS' disclosure controls and procedures as of the end of the period covered by this Quarterly Report. Based on this evaluation, TDS' principal executive officer and principal financial officer concluded that TDS' disclosure controls and procedures were effective as of September 30, 2018, at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There have been no changes in internal controls over financial reporting that have occurred during the nine months ended September 30, 2018, that have materially affected, or are reasonably likely to materially affect, TDS' internal control over financial reporting, except as follows: TDS implemented internal controls to ensure that, upon adoption of the new revenue recognition accounting standard, ASU 2014-09, effective January 1, 2018, and for all periods thereafter, contracts will be properly evaluated and any impacts to the financial statements will be recognized in accordance with this new accounting standard.

Legal Proceedings

The United States Department of Justice (DOJ) has notified TDS, that it is conducting inquiries of U.S. Cellular and TDS under the federal False Claims Act. The DOJ is investigating U.S. Cellular's participation in spectrum auctions 58, 66, 73 and 97 conducted by the FCC. U.S. Cellular is a limited partner in several limited partnerships which qualified for the 25% bid credit in each auction. TDS and U.S. Cellular are cooperating with the DOJ's review. TDS and U.S. Cellular believe that U.S. Cellular's arrangements with the limited partnerships and the limited partnerships' participation in the FCC auctions complied with applicable law and FCC rules. At this time, TDS cannot predict the outcome of this review.

Refer to the disclosure under Legal Proceedings in TDS' Form 10-K for the year ended December 31, 2017, for additional information. There have been no material changes to such information since December 31, 2017.

Unregistered Sales of Equity Securities and Use of Proceeds

On August 2, 2013, the Board of Directors of TDS authorized, and TDS announced by Form 8-K, a \$250 million stock repurchase program for TDS Common Shares. Depending on market conditions, such shares may be

repurchased in compliance with Rule 10b-18 of the Exchange Act, pursuant to Rule 10b5-1 under the Exchange Act, or pursuant to accelerated share repurchase arrangements, prepaid share repurchases, private transactions or as otherwise authorized. This authorization does not have an expiration date. TDS did not determine to terminate the foregoing Common Share repurchase program, or cease making further purchases thereunder, during the third quarter of 2018.

The maximum dollar value of shares that may yet be purchased under this program was \$199 million as of September 30, 2018. There were no purchases made by or on behalf of TDS, and no open market purchases made by any "affiliated purchaser" (as defined by the SEC) of TDS, of TDS Common Shares during the quarter covered by this Form 10-Q.

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Other Information

The following information is being provided to update prior disclosures made pursuant to the requirements of Form 8-K, Item 2.03 — Creation of a Direct Financial Obligation or an Obligation Under an Off-Balance Sheet Arrangement of a Registrant.

TDS entered into a revolving credit agreement on May 10, 2018. A description of TDS' revolving credit agreement is included in TDS' Current Report on Form 8-K dated May 10, 2018, and is incorporated by reference herein.

U.S. Cellular entered into a revolving credit agreement on May 10, 2018. A description of U.S. Cellular's revolving credit agreement is included in U.S. Cellular's Current Report on Form 8-K dated May 10, 2018, and is incorporated by reference herein.

Neither TDS nor U.S. Cellular borrowed or repaid any cash amounts under their revolving credit agreements in the third quarter of 2018 or through the filing date of this Form 10-Q, and had no cash borrowings outstanding under their revolving credit agreements as of September 30, 2018, or as of the filing date of this Form 10-Q.

Further, U.S. Cellular did not borrow or repay any cash amounts under its receivables securitization agreement in the third quarter of 2018 or through the filing date of this Form 10-Q, and had no cash borrowings outstanding under its receivables securitization agreement as of September 30, 2018, or as of the filing date of this Form 10-Q.

Exhibits Exhibit Number	Description of Documents
Exhibit 3.1	Restated Bylaws, as amended, are hereby incorporated by reference to Exhibit 3.1 to TDS' Current Report on Form 8-K dated August 15, 2018.
Exhibit 4.1	Restated Bylaws, as amended, are hereby incorporated as Exhibit 3.1.
Exhibit 4.2	Revolving Credit Agreement, among TDS, Wells Fargo National Association, as administrative agent, and the other lenders thereto, dated as of May 10, 2018, including Schedules and Exhibits, including the form of subsidiary Guaranty, is hereby incorporated by reference to Exhibit 4.1 to TDS' Current Report on Form 8-K dated May 10, 2018.
Exhibit 4.3	Revolving Credit Agreement, among U.S. Cellular, Toronto Dominion (Texas) LLC, as administrative agent, and the other lenders thereto, dated as of May 10, 2018, including Schedules and Exhibits, including the form of subsidiary Guaranty and Subordination Agreement, is hereby incorporated by reference to Exhibit 4.1 to U.S. Cellular's Form 8-K dated May 10, 2018.
Exhibit 4.4	First Amendment to Amended and Restated Credit Agreement, among U.S. Cellular, CoBank, ACB, as administrative agent, and the other lenders thereto, dated as of May 10, 2018, is hereby incorporated by reference to Exhibit 4.2 to U.S. Cellular's Form 8-K dated May 10, 2018.
Exhibit 10.1	Form of U.S. Cellular 2013 Long-Term Incentive Plan 2018 Performance Award Agreement for the President and CEO of U.S. Cellular is hereby incorporated by reference to Exhibit 10.2 to U.S. Cellular's Current Report on Form 8-K dated March 12, 2018.
Exhibit 10.2	Form of 2018 TDS Performance Share Award Agreement is hereby incorporated by reference to Exhibit 10.1 to TDS' Current Report on Form 8-K dated March 14, 2018.
Exhibit 10.3	TDS 2018 Officer Bonus Program is hereby incorporated by reference to Exhibit 10.1 to TDS' Current Report on Form 8-K dated March 23, 2018.
Exhibit 10.4	Form of Consulting Agreement Effective June 1, 2018, between TDS and Douglas D. Shuma is hereby incorporated by reference to Exhibit 10.1 to TDS' Current Report on Form 8-K/A dated February 23, 2018, as filed with the SEC on May 23, 2018.
Exhibit 10.5	Summary of Letter Agreement between TDS and Douglas W. Chambers is hereby incorporated by reference to Exhibit 10.1 to TDS' Current Report on Form 8-K/A dated February 23, 2018, as filed with the SEC on June 4, 2018.
Exhibit 11	Statement regarding computation of per share earnings is included herein as Note 6 — Earnings Per Share in the Notes to Consolidated Financial Statements.
Exhibit 12	Statement regarding computation of ratio of earnings to fixed charges.
Exhibit 31.1	Principal executive officer certification pursuant to Rule 13a-14 of the Securities Exchange Act of 1934.

Exhibit 31.2	Principal financial officer certification pursuant to Rule 13a-14 of the Securities Exchange Act of 1934.
Exhibit 32.1	Principal executive officer certification pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code.
Exhibit 32.2	Principal financial officer certification pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code.
Exhibit 101.INS	XBRL Instance Document
Exhibit 101.SCH	XBRL Taxonomy Extension Schema Document
Exhibit 101.PRE	XBRL Taxonomy Presentation Linkbase Document
Exhibit 101.CAL	XBRL Taxonomy Calculation Linkbase Document
Exhibit 101.LAB	XBRL Taxonomy Label Linkbase Document
Exhibit 101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

The foregoing exhibits include only the exhibits that relate specifically to this Form 10-Q or that supplement the exhibits identified in TDS' Form 10-K for the year ended December 31, 2017. Reference is made to TDS' Form 10-K for the year ended December 31, 2017, for a complete list of exhibits, which are incorporated herein except to the extent supplemented or superseded above.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

A S IN	ELEPHONE ND DATA YSTEMS, IC. Registrant)
Date: November 2, 2018	/s/ LeRoy T. Carlson, Jr. LeRoy T. Carlson, Jr. President and Chief Executive Officer (principal executive officer)
Date: November 2, 2018	/s/ Douglas W. Chambers Douglas W. Chambers Senior Vice President - Finance and Chief Accounting Officer (principal financial officer and principal accounting officer)
Date: November 2, 2018	/s/ Anita J. Kroll Anita J. Kroll Vice President

and Controller