

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended September 30, 2023
or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to
Commission File No. 001-7784

LUMEN[®]

LUMEN TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

Louisiana

(State or other jurisdiction of
incorporation or organization)

100 CenturyLink Drive,
Monroe, Louisiana

(Address of principal executive offices)

72-0651161

(I.R.S. Employer
Identification No.)

71203

(Zip Code)

(318) 388-9000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value \$1.00 per share	LUMN	New York Stock Exchange
Preferred Stock Purchase Rights	N/A	New York Stock Exchange

Indicate by check mark whether the registrant: (1) has filed all reports 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. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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.

Large Accelerated Filer ☒ Accelerated Filer ☐ Non-accelerated Filer ☐ Smaller 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 whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

On October 27, 2023, there were 1,008,898,542 shares of common stock outstanding.

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* All references to "Notes" in this quarterly report refer to these Notes to Consolidated Financial Statements.

Special Note Regarding Forward-Looking Statements

This report and other documents filed by us under the federal securities law include, and future oral or written statements or press releases by us and our management may include, forward-looking statements about our business, financial condition, operating results or prospects. These "forward-looking" statements are defined by, and are subject to the "safe harbor" protections under the federal securities laws. These statements include, among others:

- forecasts of our anticipated future results of operations, cash flows or financial position;
- statements concerning the anticipated impact of our completed, pending or proposed transactions, investments, product development, participation in government programs, Quantum Fiber buildout plans, and other initiatives, including synergies or costs associated with these initiatives;
- statements about our liquidity, profitability, profit margins, tax position, tax assets, tax rates, asset values, contingent liabilities, growth opportunities, growth rates, acquisition and divestiture opportunities, business prospects, regulatory and competitive outlook, market share, product capabilities, investment and expenditure plans, business strategies, securities repurchase plans, leverage, capital allocation plans, financing or refinancing alternatives and sources, and pricing plans;
- statements regarding how the COVID-19 pandemic and its aftermath may impact our business, financial position, operating results or prospects; and
- other similar statements of our expectations, beliefs, future plans and strategies, anticipated developments and other matters that are not historical facts, many of which are highlighted by words such as "may," "will," "would," "could," "should," "plans," "believes," "expects," "anticipates," "estimates," "forecasts," "projects," "proposes," "targets," "intends," "likely," "seeks," "hopes," or variations or similar expressions with respect to the future.

These forward-looking statements are based upon our judgment and assumptions as of the date such statements are made concerning future developments and events, many of which are beyond our control. These forward-looking statements, and the assumptions upon which they are based, (i) are not guarantees of future results, (ii) are inherently speculative and (iii) are subject to a number of risks and uncertainties. Actual events and results may differ materially from those anticipated, estimated, projected or implied by us in those statements if one or more of these risks or uncertainties materialize, or if our underlying assumptions prove incorrect. All of our forward-looking statements are qualified in their entirety by reference below to factors that could cause our actual results to differ materially from those anticipated, estimated, projected or implied by us in those forward-looking statements. These factors include but are not limited to:

- the effects of intense competition from a wide variety of competitive providers, including decreased demand for our more mature service offerings and increased pricing pressures;
- the effects of new, emerging or competing technologies, including those that could make our products less desirable or obsolete;
- our ability to successfully and timely attain our key operating imperatives, including simplifying and consolidating our network, simplifying and automating our service support systems, attaining our Quantum Fiber buildout goals, strengthening our relationships with customers and attaining projected cost savings;
- our ability to safeguard our network, and to avoid the adverse impact of cyber-attacks, security breaches, service outages, system failures, or similar events impacting our network or the availability and quality of our services;
- the effects of ongoing changes in the regulation of the communications industry, including the outcome of legislative, regulatory or judicial proceedings relating to content liability standards, intercarrier compensation, universal service, service standards, broadband deployment, data protection, privacy and net neutrality;

- our ability to generate cash flows sufficient to fund our financial commitments and objectives, including our capital expenditures, operating costs, debt repayments, taxes, pension contributions and other benefits payments;
- our ability to effectively retain and hire key personnel and to successfully negotiate collective bargaining agreements on reasonable terms without work stoppages;
- our ability to successfully adjust to changes in customer demand for our products and services, including increased demand for high-speed data transmission services;
- our ability to successfully maintain the quality and profitability of our existing product and service offerings, to introduce profitable new offerings on a timely and cost-effective basis and to transition customers from our legacy products to our newer offerings;
- our ability to successfully and timely implement our corporate strategies, including our deleveraging and buildout strategies;
- our ability to successfully and timely consummate the pending divestiture of our European, Middle Eastern and African business, to successfully and timely realize the anticipated benefits from that divestiture and our divestitures completed in 2022, and to successfully operate and transform our remaining business;
- changes in our operating plans, corporate strategies, or capital allocation plans, whether based upon changes in our cash flows, cash requirements, financial performance, financial position, market or regulatory conditions or otherwise;
- the impact of any future material acquisitions or divestitures that we may transact;
- the negative impact of increases in the costs of our pension, healthcare, post-employment or other benefits, including those caused by changes in markets, interest rates, mortality rates, demographics or regulations;
- the potential negative impact of customer and shareholder complaints, government investigations, security breaches or service outages impacting us or our industry;
- adverse changes in our access to credit markets on favorable terms, whether caused by changes in our financial position, lower credit ratings, unstable markets, debt covenant restrictions or otherwise;
- our ability to meet the terms and conditions of our debt obligations and covenants, including our ability to make transfers of cash in compliance therewith;
- the impact of any purported notice of default or notice of acceleration arising from alleged breach of covenants under our credit documents;
- our ability to consummate the transactions contemplated by the transaction support agreement on the timeline currently expected or at all, including the ability of the parties to negotiate definitive agreements with respect to the matters covered by the term sheet included in the transaction support agreement. The occurrence of events may give rise to failure to satisfy any of the conditions to the closing of the transactions contemplated by, or a right of any of the parties to terminate, the transaction support agreement;
- our ability to maintain favorable relations with our security holders, key business partners, suppliers, vendors, landlords and lenders;
- our ability to timely obtain necessary hardware, software, equipment, services, governmental permits, and other items on favorable terms;

- our ability to meet evolving environmental, social and governance ("ESG") expectations and benchmarks, and effectively communicate and implement our ESG strategies;
- the potential adverse effects arising out of allegations regarding the release of hazardous materials into the environment from network assets owned or operated by us or our predecessors, including any resulting governmental actions, removal costs, litigation, compliance costs, or penalties;
- our ability to collect our receivables from, or continue to do business with, financially-troubled customers;
- our ability to continue to use or renew intellectual property used to conduct our operations;
- any adverse developments in legal or regulatory proceedings involving us;
- changes in tax, pension, healthcare or other laws or regulations, in governmental support programs, or in general government funding levels, including those arising from governmental programs promoting broadband development;
- our ability to use our net operating loss carryforwards and receive our expected U.S. Federal income tax refund in the amounts projected;
- the effects of changes in accounting policies, practices or assumptions, including changes that could potentially require additional future impairment charges;
- continuing uncertainties regarding the impact that COVID-19 and its aftermath could have on our business, operations, cash flows and corporate initiatives;
- the effects of adverse weather, terrorism, epidemics, pandemics, rioting, vandalism, societal unrest, or other natural or man-made disasters or disturbances;
- the potential adverse effects if our internal controls over financial reporting have weaknesses or deficiencies, or otherwise fail to operate as intended;
- the effects of changes in interest rates or inflation;
- the effects of more general factors such as changes in exchange rates, in operating costs, in public policy, in the views of financial analysts, or in general market, labor, economic or geopolitical conditions; and
- other risks referenced in the "Risk Factors" section or other portions of this report or other of our filings with the U.S. Securities and Exchange Commission (the "SEC").

Additional factors or risks that we currently deem immaterial, that are not presently known to us or that arise in the future could also cause our actual results to differ materially from our expected results. Given these uncertainties, investors are cautioned not to unduly rely upon our forward-looking statements, which speak only as of the date made. We undertake no obligation to publicly update or revise any forward-looking statements for any reason, whether as a result of new information, future events or developments, changed circumstances, or otherwise. Furthermore, any information about our intentions contained in any of our forward-looking statements reflects our intentions as of the date of such forward-looking statement, and is based upon, among other things, existing regulatory, technological, industry, competitive, economic and market conditions, and our assumptions as of such date. We may change our intentions, strategies or plans (including our capital allocation plans) at any time and without notice, based upon any changes in such factors, in our assumptions or otherwise.

PART I—FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

LUMEN TECHNOLOGIES, INC. CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
(Dollars in millions, except per share amounts, and shares in thousands)				
OPERATING REVENUE	\$ 3,641	4,390	11,040	13,678
OPERATING EXPENSES				
Cost of services and products (exclusive of depreciation and amortization)	1,850	1,999	5,407	6,042
Selling, general and administrative	791	792	2,302	2,407
Gain on sale of business	—	(593)	—	(593)
Loss on disposal group held for sale	22	—	112	—
Depreciation and amortization	755	808	2,234	2,443
Goodwill impairment	—	—	8,793	—
Total operating expenses	3,418	3,006	18,848	10,299
OPERATING INCOME (LOSS)	223	1,384	(7,808)	3,379
OTHER EXPENSE				
Interest expense	(295)	(363)	(868)	(1,052)
Net gain on early retirement of debt (Note 6)	—	9	618	9
Other expense, net	(13)	(93)	(37)	(145)
Total other expense, net	(308)	(447)	(287)	(1,188)
(LOSS) INCOME BEFORE INCOME TAXES	(85)	937	(8,095)	2,191
Income tax (benefit) expense	(7)	359	208	670
NET (LOSS) INCOME	\$ (78)	578	(8,303)	1,521
BASIC AND DILUTED (LOSS) EARNINGS PER COMMON SHARE				
BASIC	\$ (0.08)	0.57	(8.45)	1.50
DILUTED	\$ (0.08)	0.57	(8.45)	1.50
WEIGHTED-AVERAGE COMMON SHARES OUTSTANDING				
BASIC	983,550	1,013,124	982,853	1,011,498
DILUTED	983,550	1,017,013	982,853	1,016,281

See accompanying notes to consolidated financial statements.

LUMEN TECHNOLOGIES, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(Dollars in millions)			
NET (LOSS) INCOME	\$ (78)	578	(8,303)	1,521
OTHER COMPREHENSIVE (LOSS) INCOME:				
Items related to employee benefit plans:				
Change in net actuarial loss, net of \$(6), \$(8), \$(16) and \$(25) tax	16	24	47	74
Change in net prior service cost, net of \$1, \$1, \$3 and \$1 tax	(3)	(1)	(8)	(2)
Reclassification of realized loss on interest rate swaps to net income, net of \$—, \$—, \$— and \$(5) tax	—	—	—	17
Reclassification of realized loss on foreign currency translation to gain on sale of business, net of \$—, \$ —, \$— and \$— tax	—	112	—	112
Foreign currency translation adjustment, net of \$5, \$28, \$(3) and \$70 tax	(17)	(120)	3	(245)
Other comprehensive (loss) income	(4)	15	42	(44)
COMPREHENSIVE (LOSS) INCOME	\$ (82)	593	(8,261)	1,477

See accompanying notes to consolidated financial statements.

LUMEN TECHNOLOGIES, INC.
CONSOLIDATED BALANCE SHEETS
(UNAUDITED)

	September 30, 2023	December 31, 2022
	(Dollars in millions and shares in thousands)	
<u>ASSETS</u>		
CURRENT ASSETS		
Cash and cash equivalents	\$ 311	1,251
Accounts receivable, less allowance of \$82 and \$85	1,411	1,477
Assets held for sale	1,942	1,889
Other	982	803
Total current assets	4,646	5,420
Property, plant and equipment, net of accumulated depreciation of \$20,976 and \$19,886	19,606	19,166
GOODWILL AND OTHER ASSETS		
Goodwill	3,864	12,657
Other intangible assets, net	5,744	6,166
Other, net	2,061	2,172
Total goodwill and other assets	11,669	20,995
TOTAL ASSETS	\$ 35,921	45,581
<u>LIABILITIES AND STOCKHOLDERS' EQUITY</u>		
CURRENT LIABILITIES		
Current maturities of long-term debt	\$ 155	154
Accounts payable	1,015	950
Accrued expenses and other liabilities		
Salaries and benefits	733	692
Income and other taxes	287	1,158
Current operating lease liabilities	296	344
Interest	139	181
Other	174	277
Liabilities held for sale	478	451
Current portion of deferred revenue	643	596
Total current liabilities	3,920	4,803
LONG-TERM DEBT	19,740	20,418
DEFERRED CREDITS AND OTHER LIABILITIES		
Deferred income taxes, net	3,192	3,163
Benefit plan obligations, net	2,322	2,391
Deferred revenue	1,902	1,758
Other	2,626	2,611
Total deferred credits and other liabilities	10,042	9,923
COMMITMENTS AND CONTINGENCIES (Note 12)		
STOCKHOLDERS' EQUITY		
Preferred stock—non-redeemable, \$25.00 par value, authorized 2,000 and 2,000 shares, issued and outstanding 7 and 7 shares	—	—
Common stock, \$1.00 par value, authorized 2,200,000 and 2,200,000 shares, issued and outstanding 1,008,933 and 1,001,688 shares	1,008	1,002
Additional paid-in capital	18,117	18,080
Accumulated other comprehensive loss	(1,057)	(1,099)
Accumulated deficit	(15,849)	(7,546)
Total stockholders' equity	2,219	10,437
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 35,921	45,581

See accompanying notes to consolidated financial statements.

LUMEN TECHNOLOGIES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

	Nine Months Ended September 30,	
	2023	2022
	(Dollars in millions)	
OPERATING ACTIVITIES		
Net (loss) income	\$ (8,303)	1,521
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		
Depreciation and amortization	2,234	2,443
Gain on sale of business	—	(593)
Loss on disposal group held for sale	112	—
Goodwill impairment	8,793	—
Deferred income taxes	38	618
Provision for uncollectible accounts	77	99
Net gain on early retirement of debt	(618)	(9)
Unrealized loss on investments	96	197
Stock-based compensation	39	71
Changes in current assets and liabilities:		
Accounts receivable	3	(27)
Accounts payable	(147)	45
Accrued income and other taxes	(996)	25
Other current assets and liabilities, net	(196)	(323)
Retirement benefits	(9)	(440)
Changes in other noncurrent assets and liabilities, net	194	141
Other, net	59	126
Net cash provided by operating activities	1,376	3,894
INVESTING ACTIVITIES		
Capital expenditures	(2,279)	(2,183)
Proceeds from sale of business	3	2,707
Proceeds from sale of property, plant and equipment, and other assets	35	67
Other, net	9	3
Net cash (used in) provided by investing activities	(2,232)	594
FINANCING ACTIVITIES		
Payments of long-term debt	(145)	(3,899)
Net proceeds from revolving line of credit	75	80
Dividends paid	(10)	(780)
Other, net	(21)	(33)
Net cash used in financing activities	(101)	(4,632)
Net decrease in cash, cash equivalents and restricted cash	(957)	(144)
Cash, cash equivalents and restricted cash at beginning of period	1,307	409
Cash, cash equivalents and restricted cash at end of period	\$ 350	265
Supplemental cash flow information:		
Income taxes paid, net	\$ (1,289)	(58)
Interest paid (net of capitalized interest of \$75 and \$48)	\$ (886)	(1,092)
Supplemental noncash information regarding financing activities:		
Cancellation of senior unsecured notes as part of exchange offers (Note 6)	\$ (1,554)	—
Issuance of senior secured notes as part of exchange offers (Note 6)	\$ 924	—
Cash, cash equivalents and restricted cash:		
Cash and cash equivalents	\$ 311	252
Cash and cash equivalents and restricted cash included in Assets held for sale	28	—
Restricted cash included in Other current assets	—	1
Restricted cash included in Other, net noncurrent assets	11	12
Total	\$ 350	265

See accompanying notes to consolidated financial statements.

LUMEN TECHNOLOGIES, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(UNAUDITED)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
(Dollars in millions except per share amounts)				
COMMON STOCK				
Balance at beginning of period	\$ 1,008	1,032	1,002	1,024
Issuance of common stock through incentive and benefit plans	1	3	7	11
Other	(1)	—	(1)	—
Balance at end of period	1,008	1,035	1,008	1,035
ADDITIONAL PAID-IN CAPITAL				
Balance at beginning of period	18,100	18,459	18,080	18,972
Shares withheld to satisfy tax withholdings	(1)	(1)	(5)	(30)
Stock-based compensation	16	23	39	71
Dividends declared	—	(260)	—	(792)
Other	2	—	3	—
Balance at end of period	18,117	18,221	18,117	18,221
ACCUMULATED OTHER COMPREHENSIVE LOSS				
Balance at beginning of period	(1,053)	(2,217)	(1,099)	(2,158)
Other comprehensive (loss) income	(4)	15	42	(44)
Balance at end of period	(1,057)	(2,202)	(1,057)	(2,202)
ACCUMULATED DEFICIT				
Balance at beginning of period	(15,771)	(5,055)	(7,546)	(5,998)
Net (loss) income	(78)	578	(8,303)	1,521
Balance at end of period	(15,849)	(4,477)	(15,849)	(4,477)
TOTAL STOCKHOLDERS' EQUITY	\$ 2,219	12,577	2,219	12,577
DIVIDENDS DECLARED PER COMMON SHARE	\$ —	0.25	—	0.75

See accompanying notes to consolidated financial statements.

LUMEN TECHNOLOGIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

References in the Notes to "Lumen Technologies" or "Lumen," "we," "us," the "Company," and "our" refer to Lumen Technologies, Inc. and its consolidated subsidiaries, unless the context otherwise requires. References in the Notes to "Level 3" refer to Level 3 Parent, LLC and its predecessor, Level 3 Communications, Inc., which we acquired on November 1, 2017.

(1) Background

General

We are an international facilities-based technology and communications company focused on providing our business and mass markets customers with a broad array of integrated products and services necessary to fully participate in our ever-evolving digital world. We operate one of the world's most interconnected networks. Our platform empowers our customers to swiftly adjust digital programs securely to meet immediate demands, create efficiencies, accelerate market access and reduce costs - allowing customers to rapidly evolve their IT programs to address dynamic changes. Our specific products and services are detailed in Note 4—Revenue Recognition.

Basis of Presentation

Our consolidated balance sheet as of December 31, 2022, which was derived from our audited consolidated financial statements, and our unaudited interim consolidated financial statements provided herein have been prepared in accordance with the instructions for Form 10-Q. Certain information and note disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") have been condensed or omitted pursuant to rules and regulations of the U.S. Securities and Exchange Commission ("SEC"). However, in our opinion, the disclosures made therein are adequate to make the information presented not misleading. We believe these consolidated financial statements include all normal recurring adjustments necessary to fairly present the results for the interim periods. The consolidated results of operations and cash flows for the first nine months of the year are not necessarily indicative of the consolidated results of operations and cash flows that might be expected for the entire year. These consolidated financial statements and the accompanying notes should be read in conjunction with the audited consolidated financial statements and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2022.

The accompanying consolidated financial statements include our accounts and the accounts of our subsidiaries in which we have a controlling interest. Intercompany amounts and transactions with our consolidated subsidiaries have been eliminated.

To simplify the overall presentation of our consolidated financial statements, we report immaterial amounts attributable to noncontrolling interests in certain of our subsidiaries as follows: (i) income attributable to noncontrolling interests in other expense, net, (ii) equity attributable to noncontrolling interests in additional paid-in capital and (iii) cash flows attributable to noncontrolling interests in other, net financing activities.

We reclassified certain prior period amounts to conform to the current period presentation, including the recategorization of our Business revenue by product category and sales channel in our segment reporting. See Note 11—Segment Information for additional information. These changes had no impact on total operating revenue, total operating expenses or net (loss) income for any period.

Operating lease assets are included in other, net under goodwill and other assets on our consolidated balance sheets. Noncurrent operating lease liabilities are included in other under deferred credits and other liabilities on our consolidated balance sheets.

There were no book overdrafts included in accounts payable at September 30, 2023 or December 31, 2022.

Summary of Significant Accounting Policies

Refer to the significant accounting policies described in Note 1— Background and Summary of Significant Accounting Policies to the consolidated financial statements and accompanying notes in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2022.

Recently Adopted Accounting Pronouncements

Supplier Finance Programs

On January 1, 2023, we adopted Accounting Standards Update ("ASU") 2022-04, *"Liabilities-Supplier Finance Program (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations"* ("ASU 2022-04"). These amendments require that a company that uses a supplier finance program in connection with the purchase of goods or services disclose sufficient information about the program to allow a user of financial statements to understand the program's nature, program activity during the period, changes from period to period and the potential magnitude of program transactions. The adoption of ASU 2022-04 did not have a material impact to our consolidated financial statements.

Credit Losses

On January 1, 2023, we adopted ASU 2022-02, *"Financial Instruments-Credit Losses (Topic 326): Troubled Debt Restructurings ("TDR") and Vintage Disclosures"* ("ASU 2022-02"). The ASU eliminates the TDR recognition and measurement guidance, enhances existing disclosure requirements and introduces new requirements related to certain modifications of receivables made to borrowers experiencing financial difficulty. The adoption of ASU 2022-02 did not have any impact to our consolidated financial statements.

Derivatives and Hedging

On January 1, 2023, we adopted ASU 2022-01, *"Derivatives and Hedging (Topic 815): Fair Value Hedging-Portfolio Layer Method"* ("ASU 2022-01"). The ASU expands the current single-layer method to allow multiple hedged layers of a single closed portfolio under the method. The adoption of ASU 2022-01 did not have any impact to our consolidated financial statements.

Business Combinations

On January 1, 2023, we adopted ASU 2021-08, *"Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers"* ("ASU 2021-08"). This ASU requires entities to apply Topic 606 to recognize and measure contract assets and contract liabilities in a business combination. The adoption of ASU 2021-08 did not have any impact to our consolidated financial statements.

Government Assistance

On January 1, 2022, we adopted ASU 2021-10, *"Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance"* ("ASU 2021-10"). This ASU requires business entities to disclose information about certain types of government assistance they receive. The ASU only impacts annual financial statement note disclosures. The adoption of ASU 2021-10 did not have a material impact to our consolidated financial statements.

Leases

On January 1, 2022, we adopted ASU 2021-05, *"Leases (Topic 842): Lessors—Certain Leases with Variable Lease Payments"* ("ASU 2021-05"). This ASU (i) amends the lease classification requirements for lessors to align them with practice under ASC Topic 840, (ii) provides criteria for lessors to classify and account for a lease with variable lease payments that do not depend on a reference index or a rate as an operating lease; and (iii) provides guidance with respect to net investments by lessors under operating leases and other related topics. The adoption of ASU 2021-05 did not have a material impact to our consolidated financial statements.

Recently Issued Accounting Pronouncements

In October 2023, the Financial Accounting Standards Board (“FASB”) issued ASU 2023-06, *“Disclosure Improvements: Codification Amendments in Response to the SEC’s Disclosure Update and Simplification Initiative”* (“ASU 2023-06”). This ASU incorporates certain SEC disclosure requirements into the FASB Accounting Standards Codification (“Codification”). The amendments in the ASU are expected to clarify or improve disclosure and presentation requirements of a variety of Codification Topics, allow users to more easily compare entities subject to the SEC’s existing disclosures with those entities that were not previously subject to the requirements, and align the requirements in the Codification with the SEC’s regulations. ASU 2023-06 will become effective for each amendment on the effective date of the SEC’s corresponding disclosure rule changes. As of September 30, 2023, we do not expect ASU 2023-06 will have any impact to our consolidated financial statements.

In August 2023, the FASB issued ASU 2023-05, *“Business Combinations – Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement”* (“ASU 2023-05”). This ASU applies to the formation of entities that meet the definition of a joint venture (or a corporate joint venture). The amendments in the ASU require that a joint venture apply a new basis of accounting upon formation. ASU 2023-05 will become effective for us in the first quarter of fiscal 2025 and early adoption is permitted. As of September 30, 2023, we do not expect ASU 2023-05 will have any impact to our consolidated financial statements.

In August 2023, the FASB issued ASU 2023-04, *“Liabilities (Topic 405): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 121”* (“ASU 2023-04”). This ASU amends and adds various SEC paragraphs to the FASB Codification to reflect guidance regarding the accounting for obligations to safeguard crypto assets an entity holds for platform users. This ASU does not provide any new guidance. ASU 2023-04 will become effective for us once the addition to the FASB Codification is made available. As of September 30, 2023, we do not expect ASU 2023-04 will have any impact to our consolidated financial statements.

In July 2023, the FASB issued ASU 2023-03, *“Presentation of Financial Statements (Topic 205), Income Statement—Reporting Comprehensive Income (Topic 220), Distinguishing Liabilities from Equity (Topic 480), Equity (Topic 505), and Compensation—Stock Compensation (Topic 718): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 120, SEC Staff Announcement at the March 24, 2022 EITF Meeting, and Staff Accounting Bulletin Topic 6.B, Accounting Series Release 280—General Revision of Regulation S-X: Income or Loss Applicable to Common Stock”* (“ASU 2023-03”). This ASU amends or supersedes various SEC paragraphs within the applicable codification to conform to past SEC staff announcements. This ASU does not provide any new guidance. ASU 2023-03 will become effective for us once the addition to the FASB Codification is made available. As of September 30, 2023, we do not expect ASU 2023-03 will have any impact to our consolidated financial statements.

In March 2023, the FASB issued ASU 2023-02, *“Investments-Equity method and Joint Ventures (Topic 323): Accounting for Investments in Tax Credit Structures Using the Proportional Amortization Method”* (“ASU 2023-02”). These amendments allow reporting entities to elect to account for qualifying tax equity investments using the proportional amortization method, regardless of the program giving rise to the related income tax credits. ASU 2023-02 will become effective for us in the first quarter of fiscal 2024 and early adoption is permitted. As of September 30, 2023, we do not expect ASU 2023-02 will have any impact to our consolidated financial statements.

In March 2023, the FASB issued ASU 2023-01, *“Leases (Topic 842): Common Control Arrangements”* (“ASU 2023-01”). These amendments require all entities to amortize leasehold improvements associated with common control leases over the useful life to the common control group. ASU 2023-01 will become effective for us in the first quarter of fiscal 2024 and early adoption is permitted. As of September 30, 2023, we do not expect ASU 2023-01 will have any impact to our consolidated financial statements.

In June 2022, the FASB issued ASU 2022-03, *“Fair Value Measurement (Topic 820): Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions”* (“ASU 2022-03”). These amendments clarify that a contractual restriction on the sales of an investment in an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring its fair value. ASU 2022-03 will become effective for us in the first quarter of fiscal 2024 and early adoption is permitted. As of September 30, 2023, we do not expect ASU 2022-03 will have any impact to our consolidated financial statements.

(2) Planned Divestiture of the EMEA Business

On November 2, 2022, affiliates of Level 3 Parent, LLC, an indirect wholly-owned subsidiary of Lumen Technologies, Inc., granted an option to Colt Technology Services Group Limited, a portfolio company of Fidelity Investments, to purchase certain of their operations in Europe, the Middle East and Africa (the "EMEA business"), in exchange for \$1.8 billion in cash, subject to certain working capital and other purchase price adjustments. Following the completion of a French consultative process, Colt exercised its option and on February 8, 2023, the parties entered into a definitive purchase agreement, which contains various customary covenants for transactions of this type, including various indemnities. Subject to the satisfaction of customary closing conditions, Level 3 Parent LLC expects to close the transaction November 1, 2023, although it can provide no assurances to this effect.

The actual amount of our net after-tax proceeds from this divestiture could vary substantially from the amounts we currently estimate, particularly if we experience delays in completing the transaction or if any of our other assumptions prove to be incorrect.

We do not believe this divestiture represents a strategic shift for Lumen. Therefore, the planned divestiture of the EMEA business does not meet the criteria to be classified as discontinued operations. As a result, we will continue to report our operating results for the EMEA business (the "disposal group") in our consolidated operating results until the transaction is closed.

As of September 30, 2023 in the accompanying consolidated balance sheet, the assets and liabilities of our EMEA business are classified as held for sale and measured at the lower of (i) the carrying value when we classified the disposal group as held for sale and (ii) the fair value of the disposal group as of such date, less costs to sell. Effective with the designation of the disposal group as held for sale on November 2, 2022, we suspended recording depreciation of property, plant and equipment and amortization of finite-lived intangible assets and right-of-use assets while these assets are classified as held for sale. We estimate that we would have recorded an additional \$88 million and \$232 million of depreciation, intangible amortization, and amortization of right-of-use assets for the three and nine months ended September 30, 2023, respectively, if the EMEA business did not meet the held for sale criteria.

The classification of the EMEA business as held for sale was considered an event or change in circumstance which requires an assessment of the goodwill of the disposal group for impairment each reporting period until disposal. We performed a pre-classification and post-classification goodwill impairment test of the disposal group as described further in Note 3—Goodwill, Customer Relationships and Other Intangible Assets in our Annual Report on Form 10-K for the year ended December 31, 2022. As a result of our impairment tests, we determined the EMEA business disposal group was impaired, resulting in a non-cash, non-tax-deductible goodwill impairment charge of \$43 million in the fourth quarter of 2022. We evaluated the recoverability of the carrying value of the assets and liabilities held for sale relative to the agreed upon sales price, adjusted for costs to sell, and recorded an estimated loss on disposal of \$660 million during the year ended December 31, 2022 in the consolidated statement of operations and a valuation allowance included in assets held for sale on the consolidated balance sheet. As a result of our evaluation of the recoverability of the carrying value of the EMEA assets and liabilities held for sale relative to the agreed upon sales price, adjusted for costs to sell, as of September 30, 2023, we recorded a \$22 million and \$112 million estimated loss on disposal during the three and nine months ended September 30, 2023, respectively, and adjusted the valuation allowance by the same amounts. For each reporting period through the closing date, we will conduct similar evaluations and adjust the valuation allowance for the EMEA assets held for sale, as necessary.

The principal components of the held for sale assets and liabilities of the EMEA business as of the dates below are as follows:

	September 30, 2023	December 31, 2022
	(Dollars in millions)	
Assets held for sale		
Cash and cash equivalents	\$ 27	43
Accounts receivable, less allowance of \$4 and \$5	70	76
Other current assets	55	59
Property, plant and equipment, net of accumulated depreciation of \$1,020 and \$1,033	1,955	1,873
Customer relationships and other intangible assets, net	103	100
Operating lease assets	215	156
Valuation allowance on assets held for sale ⁽¹⁾	(772)	(660)
Deferred tax assets	154	138
Other non-current assets	38	38
Total assets held for sale	<u>\$ 1,845</u>	<u>1,823</u>
Liabilities held for sale		
Accounts payable	\$ 57	78
Salaries and benefits	20	23
Current portion of deferred revenue	28	28
Current operating lease liabilities	41	33
Other current liabilities	34	28
Deferred income taxes	60	38
Asset retirement obligations	31	30
Deferred revenue, non-current	99	85
Operating lease liabilities, non-current	103	103
Total liabilities held for sale	<u>\$ 473</u>	<u>446</u>

⁽¹⁾ Includes the impact of \$373 million and \$365 million as of September 30, 2023 and December 31, 2022, respectively, primarily related to loss on foreign currency translation, expected to be reclassified out of accumulated other comprehensive loss upon close of the sale.

(3) Goodwill, Customer Relationships and Other Intangible Assets

Goodwill, customer relationships and other intangible assets consisted of the following:

	September 30, 2023 ⁽¹⁾	December 31, 2022 ⁽¹⁾
	(Dollars in millions)	
Goodwill ⁽²⁾	\$ 3,864	12,657
Indefinite-lived intangible assets	\$ 9	9
Other intangible assets subject to amortization:		
Customer relationships, less accumulated amortization of \$4,087 and \$3,606	4,088	4,574
Capitalized software, less accumulated amortization of \$3,961 and \$3,895 ⁽³⁾	1,557	1,482
Trade names, patents and other, less accumulated amortization of \$68 and \$188 ⁽³⁾	90	101
Total other intangible assets, net	\$ 5,744	6,166

(1) These values exclude assets classified as held for sale.

(2) We recorded a non-cash, non-tax-deductible goodwill impairment charge of \$8.8 billion during the second quarter of 2023.

(3) Certain capitalized software with a gross carrying value of \$183 million and trade names with a gross carrying value of \$130 million became fully amortized during 2022 and were retired during the first quarter of 2023.

As of September 30, 2023, the gross carrying amount of goodwill, customer relationships, indefinite-lived and other intangible assets was \$17.7 billion.

Our goodwill was derived from numerous acquisitions where the purchase price exceeded the fair value of the net assets acquired. We report our results within two segments: Business and Mass Markets. See Note 11—Segment Information for more information on these segments.

We are required to assess our goodwill and other indefinite-lived intangible assets for impairment annually, or, under certain circumstances, more frequently, such as when events or changes in circumstances indicate there may be impairment. We are required to write down the value of goodwill only when our assessment determines the carrying value of equity of any of our reporting units exceeds its fair value. Our annual impairment assessment date for goodwill is October 31, at which date we assess our reporting units. Our annual impairment assessment date for indefinite-lived intangible assets other than goodwill is December 31.

As of September 30, 2023, we have three reporting units for goodwill impairment testing, which are (i) Mass Markets, (ii) North America Business and (iii) Asia Pacific region. Our reporting units are not discrete legal entities with discrete full financial statements. Our assets and liabilities are employed in and relate to the operations of multiple reporting units. For each reporting unit, we compare its estimated fair value of equity to its carrying value of equity that we assign to it. If the estimated fair value of the reporting unit is greater than the carrying value, we conclude that no impairment exists. If the estimated fair value of the reporting unit is less than its carrying value, we record a non-cash impairment charge equal to the excess amount. Depending on the facts and circumstances, we typically estimate the fair value of our reporting units by considering either or both of (i) a discounted cash flow method, which is based on the present value of projected cash flows over a discrete projection period and a terminal value, which is based on the expected normalized cash flows of the reporting units following the discrete projection period, and (ii) a market approach, which includes the use of market multiples of publicly-traded companies whose services and markets are comparable to ours.

Second Quarter 2023 Goodwill Impairment Analysis

When we performed our October 31, 2022 annual impairment test, we estimated the fair value of our reporting units by considering both a market approach and a discounted cash flow method.

The sustained decline in our share price during the second quarter of 2023 was considered a triggering event requiring evaluation of goodwill impairment. Given the continued erosion in our market capitalization, we determined our quantitative impairment analysis would estimate the fair value of our reporting units using only the market approach. Applying this approach, we utilized company comparisons and analyst reports within the telecommunications industry which supported a range of fair values derived from annualized revenue and EBITDA multiples between 1.5x and 4.3x and 4.6x and 10.5x, respectively. The revenue and EBITDA multiples used in the quantitative impairment analysis for each of our reporting units were below these comparable market multiples. The estimated fair values of the reporting units determined in connection with our impairment analysis in the second quarter of 2023 resulted in no control premium, which we determined to be reasonable based on our market capitalization relative to recent transactions. For the three months ended June 30, 2023, based on our assessments performed with respect to the reporting units as described above, we concluded the estimated fair value of certain of our reporting units was less than their carrying value of equity. As a result, we recorded a non-cash, non-tax-deductible goodwill impairment charge of \$8.8 billion for the three months ended June 30, 2023. We did not record any impairments to goodwill in the third quarter of 2023.

The market approach that we used in the quarter ended June 30, 2023 incorporated estimates and assumptions related to the forecasted results for the remainder of the year, including revenues, expenses, and the achievement of certain strategic initiatives. In developing the market multiples applicable to each reporting unit, we considered observed trends of our industry participants. Our assessment included many factors that required significant judgment. Alternative interpretations of these factors could have resulted in different conclusions regarding the size of our impairments.

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The following table shows the rollforward of goodwill assigned to our reportable segments from December 31, 2022 through September 30, 2023.

	Business	Mass Markets	Total
	(Dollars in Millions)		
As of December 31, 2022 ⁽¹⁾	\$ 7,906	4,751	12,657
Impairment	(6,580)	(2,213)	(8,793)
As of September 30, 2023 ⁽¹⁾	\$ 1,326	2,538	3,864

⁽¹⁾ Goodwill at September 30, 2023 and December 31, 2022 is net of accumulated impairment losses of \$19.8 billion and \$11.0 billion, respectively.

Total amortization expense for finite-lived intangible assets for the three months ended September 30, 2023 and 2022 totaled \$271 million and \$279 million, respectively, and for the nine months ended September 30, 2023 and 2022 totaled \$794 million and \$830 million, respectively.

We estimate that amortization expense for finite-lived intangible assets for the years ending December 31, 2023 through 2027 will be as provided in the table below. As a result of classifying our EMEA business as held for sale on our September 30, 2023 consolidated balance sheet, the amounts presented below do not include future amortization expense for intangible assets of the business to be divested. See Note 2 —Planned Divestiture of the EMEA Business for more information.

	(Dollars in millions)
2023 (remaining three months)	\$ 244
2024	925
2025	853
2026	809
2027	730

(4) Revenue Recognition

Product and Service Categories

We categorize our products and services revenue among the following categories for the Business segment:

- *Grow*, which includes products and services that we anticipate will grow, including our dark fiber, Edge Cloud services, IP, managed security, software-defined wide area networks ("SD WAN"), secure access service edge ("SASE"), Unified Communications and Collaboration ("UC&C") and wavelengths services;
- *Nurture*, which includes our more mature offerings, including ethernet and VPN data networks services;
- *Harvest*, which includes our legacy services managed for cash flow, including Time Division Multiplexing ("TDM") voice, private line and other legacy services; and
- *Other*, which includes equipment sales, IT solutions and other services.

We categorize our products and services revenue among the following categories for the Mass Markets segment:

- *Fiber Broadband*, under which we provide high speed broadband services to residential and small business customers utilizing our fiber-based network infrastructure;
- *Other Broadband*, under which we provide primarily lower speed broadband services to residential and small business customers utilizing our copper-based network infrastructure; and
- *Voice and Other*, under which we derive revenues from (i) providing local and long-distance voice services, professional services, and other ancillary services, and (ii) federal broadband and state support programs.

Reconciliation of Total Revenue to Revenue from Contracts with Customers

The following tables provide total revenue by segment, sales channel and product category. They also provide the amount of revenue that is not subject to ASC 606, "*Revenue from Contracts with Customers*" ("ASC 606"), but is instead governed by other accounting standards. The amounts in the tables below include revenue for the Latin American and ILEC businesses prior to their sales on August 1, 2022 and October 3, 2022, respectively. See Note 2—Divestitures of the Latin American and ILEC Businesses and Planned Divestiture of the EMEA Business in our Annual Report on Form 10-K for the year ended December 31, 2022 for additional information on these divestitures.

	Three Months Ended September 30, 2023			Three Months Ended September 30, 2022		
	Total Revenue	Adjustments for Non-ASC 606 revenue ⁽¹⁾	Total revenue from Contracts with Customers	Total Revenue	Adjustments for Non-ASC 606 revenue ⁽¹⁾	Total revenue from Contracts with Customers
(Dollars in millions)						
Business Segment by Sales Channel and Product Category						
Large Enterprise						
Grow	\$ 557	(77)	480	571	(79)	492
Nurture	369	—	369	404	—	404
Harvest	186	—	186	245	—	245
Other	70	(3)	67	66	(1)	65
Total Large Enterprise Revenue	1,182	(80)	1,102	1,286	(80)	1,206
Mid-Market Enterprise						
Grow	201	(6)	195	192	(7)	185
Nurture	195	—	195	226	—	226
Harvest	94	(1)	93	129	(2)	127
Other	8	(1)	7	8	(1)	7
Total Mid-Market Enterprise Revenue	498	(8)	490	555	(10)	545
Public Sector						
Grow	117	(22)	95	106	(25)	81
Nurture	98	—	98	121	—	121
Harvest	96	—	96	119	(1)	118
Other	133	—	133	111	—	111
Total Public Sector Revenue	444	(22)	422	457	(26)	431
Wholesale						
Grow	250	(61)	189	247	(67)	180
Nurture	203	(5)	198	255	(6)	249
Harvest	314	(42)	272	404	(56)	348
Other	3	—	3	14	—	14
Total Wholesale Revenue	770	(108)	662	920	(129)	791
Business Segment by Product Category						
Grow	1,125	(166)	959	1,116	(178)	938
Nurture	865	(5)	860	1,006	(6)	1,000
Harvest	690	(43)	647	897	(59)	838
Other	214	(4)	210	199	(2)	197
Total Business Segment Revenue	2,894	(218)	2,676	3,218	(245)	2,973
Mass Markets Segment by Product Category						
Fiber Broadband	162	(4)	158	160	(4)	156
Other Broadband	340	(31)	309	580	(55)	525
Voice and Other	245	(9)	236	432	(27)	405
Total Mass Markets Revenue	747	(44)	703	1,172	(86)	1,086
Total Revenue	\$ 3,641	(262)	3,379	4,390	(331)	4,059

	Nine Months Ended September 30, 2023			Nine Months Ended September 30, 2022		
	Total revenue	Adjustments for non-ASC 606 revenue ⁽¹⁾	Total revenue from contracts with customers	Total revenue	Adjustments for non-ASC 606 revenue ⁽¹⁾	Total revenue from contracts with customers
(Dollars in millions)						
Business Segment by Sales Channel and Product Category						
Large Enterprise						
Grow	\$ 1,665	(234)	1,431	1,882	(284)	1,598
Nurture	1,113	—	1,113	1,302	—	1,302
Harvest	590	—	590	793	—	793
Other	187	(5)	182	183	(4)	179
Total Large Enterprise Revenue	3,555	(239)	3,316	4,160	(288)	3,872
Mid-Market Enterprise						
Grow	599	(21)	578	565	(23)	542
Nurture	608	—	608	698	—	698
Harvest	288	(3)	285	404	(6)	398
Other	25	(4)	21	23	(1)	22
Total Mid-Market Enterprise Revenue	1,520	(28)	1,492	1,690	(30)	1,660
Public Sector						
Grow	351	(60)	291	337	(79)	258
Nurture	297	—	297	380	—	380
Harvest	290	—	290	367	(3)	364
Other	350	—	350	346	(1)	345
Total Public Sector Revenue	1,288	(60)	1,228	1,430	(83)	1,347
Wholesale						
Grow	776	(194)	582	720	(202)	518
Nurture	621	(19)	602	780	(20)	760
Harvest	978	(129)	849	1,216	(170)	1,046
Other	9	—	9	40	—	40
Total Wholesale Revenue	2,384	(342)	2,042	2,756	(392)	2,364
Business Segment by Product Category						
Grow	3,391	(509)	2,882	3,504	(588)	2,916
Nurture	2,639	(19)	2,620	3,160	(20)	3,140
Harvest	2,146	(132)	2,014	2,780	(179)	2,601
Other	571	(9)	562	592	(6)	586
Total Business Segment Revenue	8,747	(669)	8,078	10,036	(793)	9,243
Mass Markets Segment by Product Category						
Fiber Broadband	471	(12)	459	456	(14)	442
Other Broadband	1,064	(96)	968	1,787	(166)	1,621
Voice and Other	758	(27)	731	1,399	(126)	1,273
Total Mass Markets Revenue	2,293	(135)	2,158	3,642	(306)	3,336
Total Revenue	\$ 11,040	(804)	10,236	13,678	(1,099)	12,579

⁽¹⁾ Includes regulatory revenue and lease revenue not within the scope of ASC 606.

Operating Lease Income

Lumen Technologies leases various dark fiber, office facilities, colocation facilities, switching facilities, other network sites and service equipment to third parties under operating leases. Lease and sublease income are included in operating revenue in our consolidated statements of operations.

For the three months ended September 30, 2023 and 2022, our gross rental income was \$254 million and \$307 million, respectively, which represented approximately 7% of our operating revenue for both the three months ended September 30, 2023 and 2022. For the nine months ended September 30, 2023 and 2022, our gross rental income was \$780 million and \$978 million, respectively, which represented approximately 7% of our operating revenue for both the nine months ended September 30, 2023 and 2022.

Customer Receivables and Contract Balances

The following table provides balances of customer receivables, contract assets and contract liabilities, net of amounts classified as held for sale, as of September 30, 2023 and December 31, 2022:

	September 30, 2023	December 31, 2022
	(Dollars in millions)	
Customer receivables ⁽¹⁾	\$ 1,372	1,424
Contract assets ⁽²⁾	29	34
Contract liabilities ⁽³⁾	725	656

(1) Reflects gross customer receivables of \$1.4 billion and \$1.5 billion at September 30, 2023 and December 31, 2022, respectively, net of allowance for credit losses of \$63 million and \$73 million, at September 30, 2023 and December 31, 2022, respectively. These amounts exclude customer receivables, net, classified as held for sale of \$70 million at September 30, 2023 and \$76 million at December 31, 2022 related to the EMEA business.

(2) These amounts exclude contract assets classified as held for sale of \$11 million at September 30, 2023 and \$16 million at December 31, 2022 related to the EMEA business.

(3) These amounts exclude contract liabilities classified as held for sale of \$47 million at September 30, 2023 and \$59 million at December 31, 2022 related to the EMEA business.

Contract liabilities are consideration we have received from our customers or billed in advance of providing goods or services promised in the future. We defer recognizing this consideration as revenue until we have satisfied the related performance obligation to the customer. Contract liabilities include recurring services billed one month in advance and installation and maintenance charges that are deferred and recognized over the actual or expected contract term, which typically ranges from one to five years depending on the service. Contract liabilities are included within deferred revenue on our consolidated balance sheets. During the three and nine months ended September 30, 2023, we recognized \$44 million and \$391 million of revenue that was included in contract liabilities of \$715 million as of January 1, 2023, including contract liabilities that were classified as held for sale. During the three and nine months ended September 30, 2022, we recognized \$47 million and \$494 million, respectively, of revenue that was included in contract liabilities of \$841 million as of January 1, 2022, including contract liabilities that were classified as held for sale.

Performance Obligations

As of September 30, 2023, we expect to recognize approximately \$7.2 billion of revenue in the future related to performance obligations associated with existing customer contracts that are partially or wholly unsatisfied. As of September 30, 2023, the transaction price related to unsatisfied performance obligations that are expected to be recognized for the remainder of 2023, 2024 and thereafter was \$913 million, \$2.4 billion and \$3.9 billion, respectively.

These amounts exclude (i) the value of unsatisfied performance obligations for contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed (for example, uncommitted usage or non-recurring charges associated with professional or technical services to be completed), (ii) contracts that are classified as leasing arrangements or government assistance that are not subject to ASC 606, and (iii) the value of unsatisfied performance obligations for contracts which relate to our EMEA business classified as held for sale.

Contract Costs

The following tables provide changes in our contract acquisition costs and fulfillment costs:

	Three Months Ended September 30, 2023		Three Months Ended September 30, 2022	
	Acquisition Costs	Fulfillment Costs	Acquisition Costs	Fulfillment Costs
	(Dollars in millions)			
Beginning of period balance ⁽¹⁾⁽²⁾	\$ 183	186	208	188
Costs incurred	31	41	45	38
Amortization	(37)	(35)	(49)	(35)
Change in contract costs held for sale	—	—	3	(2)
End of period balance ⁽⁵⁾⁽⁶⁾	\$ 177	192	207	189

	Nine Months Ended September 30, 2023		Nine Months Ended September 30, 2022	
	Acquisition Costs	Fulfillment Costs	Acquisition Costs	Fulfillment Costs
	(Dollars in millions)			
Beginning of period balance ⁽³⁾⁽⁴⁾	\$ 202	192	222	186
Costs incurred	96	120	129	119
Amortization	(117)	(106)	(150)	(113)
Change in contract costs held for sale	(4)	(14)	6	(3)
End of period balance ⁽⁵⁾⁽⁶⁾	\$ 177	192	207	189

- (1) Beginning of period balance for the three months ended September 30, 2023 excludes \$10 million of acquisition costs and \$14 million of fulfillment costs classified as held for sale related to the EMEA business.
- (2) Beginning of period balance for the three months ended September 30, 2022 excludes \$31 million of acquisition costs and \$33 million of fulfillment costs classified as held for sale (related to both the Latin American business and the ILEC business, sold in the third and fourth quarters of 2022, respectively).
- (3) Beginning of period balance for the nine months ended September 30, 2023 excludes \$6 million of acquisition costs and no fulfillment costs classified as held for sale related to the EMEA business.
- (4) Beginning of period balance for the nine months ended September 30, 2022 excludes acquisition costs and fulfillment costs classified as held for sale of \$34 million and \$32 million, respectively (related to both the Latin American business and the ILEC business, sold in the third and fourth quarters of 2022, respectively).
- (5) End of period balance for the three and nine months ended September 30, 2023 excludes \$10 million of acquisition costs and \$14 million of fulfillment costs classified as held for sale related to the EMEA business.
- (6) End of period balance for the three and nine months ended September 30, 2022 excludes acquisition costs and fulfillment costs classified as held for sale of \$28 million and \$35 million, respectively (related to both the Latin American business and the ILEC business, sold in the third and fourth quarters of 2022, respectively).

Acquisition costs include commission fees paid to employees as a result of obtaining contracts. Fulfillment costs include third party and internal costs associated with the provision, installation and activation of services to customers, including labor and materials consumed for these activities.

We amortize deferred acquisition and fulfillment costs based on the transfer of services on a straight-line basis over the average contract life of approximately 36 months for mass markets customers and 33 months for business customers. We include amortized fulfillment costs in cost of services and products and amortized acquisition costs in selling, general and administrative expenses in our consolidated statements of operations. We include the amount of these deferred costs that are anticipated to be amortized in the next 12 months in other current assets on our consolidated balance sheets. We include the amount of deferred costs expected to be amortized beyond the next twelve months in other noncurrent assets on our consolidated balance sheets. We assess deferred acquisition and fulfillment costs for impairment on a quarterly basis.

(5) Credit Losses on Financial Instruments

To assess our expected credit losses on financial instruments, we aggregate financial assets with similar risk characteristics to monitor their credit quality or deterioration over the life of such assets. We periodically monitor certain risk characteristics within our aggregated financial assets and revise their composition accordingly, to the extent internal and external risk factors change. We separately evaluate financial assets that do not share risk characteristics with other financial assets. Our financial assets measured at amortized cost primarily consist of accounts receivable.

We use a loss rate method to estimate our allowance for credit losses. Our determination of the current expected credit loss rate begins with our review of historical loss experience as a percentage of accounts receivable. We measure our historical loss period based on the average days to recognize accounts receivable as credit losses. When asset specific characteristics and current conditions change from those in the historical period, due to changes in our credit and collections strategy, certain classes of aged balances, or credit loss and recovery policies, we perform a qualitative and quantitative assessment to adjust our historical loss rate. We use regression analysis to develop an expected loss rate using historical experience and economic data over a forecast period. We measure our forecast period based on the average days to collect payment on billed accounts receivable. To determine our current allowance for credit losses, we combine the historical and expected credit loss rates and apply them to our period end accounts receivable.

If there is an unexpected deterioration of a customer's financial condition or an unexpected change in economic conditions, including macroeconomic events, we assess the need to adjust the allowance for credit losses. Any such resulting adjustments would affect earnings in the period that adjustments are made.

The assessment of the correlation between historical observed default rates, current conditions and forecasted economic conditions requires judgment. Alternative interpretations of these factors could have resulted in different conclusions regarding our allowance for credit losses. The amount of credit loss is sensitive to changes in circumstances and forecasted economic conditions. Our historical credit loss experience, current conditions and forecast of economic conditions may also not be representative of the customers' actual default experience in the future, and we may use methodologies that differ from those used by other companies.

The following table presents the activity of our allowance for credit losses by accounts receivable portfolio for the nine months ended September 30, 2023:

	Business	Mass Markets	Total
	(Dollars in millions)		
As of December 31, 2022 ⁽¹⁾	\$ 57	28	85
Provision for expected losses	27	50	77
Write-offs charged against the allowance	(37)	(51)	(88)
Recoveries collected	5	2	7
Change in allowance in assets held for sale	1	—	1
Ending balance at September 30, 2023 ⁽¹⁾	\$ 53	29	82

⁽¹⁾ As of September 30, 2023 and December 31, 2022, these amounts excluded \$4 million and \$5 million of allowance for credit losses classified as held for sale related to the EMEA business included in the Business portfolio. See Note 2—Planned Divestiture of the EMEA Business.

(6) Long-Term Debt and Credit Facilities

The following table reflects the consolidated long-term debt of Lumen Technologies, Inc. and its subsidiaries as of the dates indicated below, including unamortized discounts and premiums and unamortized debt issuance costs:

	Interest Rates ⁽¹⁾	Maturities ⁽¹⁾	September 30, 2023	December 31, 2022
(Dollars in millions)				
Senior Secured Debt: ⁽²⁾				
<i>Lumen Technologies, Inc.</i>				
Revolving Credit Facility ⁽³⁾	SOFR + 2.00%	2025	\$ 75	—
Term Loan A ⁽⁴⁾	SOFR + 2.00%	2025	948	991
Term Loan A-1 ⁽⁴⁾	SOFR + 2.00%	2025	271	283
Term Loan B ⁽⁵⁾	SOFR + 2.25%	2027	3,903	3,941
Senior notes	4.000%	2027	1,250	1,250
<i>Subsidiaries:</i>				
<i>Level 3 Financing, Inc.</i>				
Tranche B 2027 Term Loan ⁽⁶⁾	SOFR + 1.75%	2027	2,411	2,411
Senior notes	3.400% - 10.500%	2027 - 2030	2,425	1,500
Senior Notes and Other Debt:				
<i>Lumen Technologies, Inc.</i>				
Senior notes	4.500% - 7.650%	2025 - 2042	2,143	3,722
<i>Subsidiaries:</i>				
<i>Level 3 Financing, Inc.</i>				
Senior notes	3.625% - 4.625%	2027 - 2029	3,940	3,940
<i>Qwest Corporation</i>				
Senior notes	6.500% - 7.750%	2025 - 2057	1,986	1,986
Term loan ⁽⁷⁾	SOFR + 2.50%	2027	215	215
<i>Qwest Capital Funding, Inc.</i>				
Senior notes	6.875% - 7.750%	2028 - 2031	192	192
Finance lease and other obligations⁽⁸⁾	Various	Various	291	317
Unamortized discounts, net			(3)	(7)
Unamortized debt issuance costs			(152)	(169)
Total long-term debt			19,895	20,572
Less current maturities			(155)	(154)
Long-term debt, excluding current maturities			\$ 19,740	20,418

⁽¹⁾ As of September 30, 2023.

⁽²⁾ See Note 7—Long-Term Debt and Credit Facilities in our Annual Report on Form 10-K for the year ended December 31, 2022 for a description of certain parent or subsidiary guarantees and liens securing this debt.

⁽³⁾ Revolving Credit Facility had an interest rate of 7.450% as of September 30, 2023.

⁽⁴⁾ Term Loans A and A-1 had interest rates of 7.431% and 6.384% as of September 30, 2023 and December 31, 2022, respectively.

⁽⁵⁾ Term Loan B had interest rates of 7.681% and 6.634% as of September 30, 2023 and December 31, 2022, respectively.

⁽⁶⁾ The Level 3 Tranche B 2027 Term Loan had interest rates of 7.181% and 6.134% as of September 30, 2023 and December 31, 2022, respectively.

⁽⁷⁾ The Qwest Corporation Term Loan had interest rates of 7.931% and 6.640% as of September 30, 2023 and December 31, 2022, respectively.

⁽⁸⁾ Excludes finance lease obligations of our EMEA business classified as held for sale.

Long-Term Debt Maturities

Set forth below is the aggregate principal amount of our long-term debt as of September 30, 2023 (excluding unamortized discounts, net, and unamortized debt issuance costs), maturing during the following years. As a result of classifying our EMEA business as held for sale on our September 30, 2023 consolidated balance sheet, the amounts presented below do not include maturities of the finance lease obligations of that business. See Note 2—Planned Divestiture of the EMEA Business.

	(Dollars in millions)
2023 (remaining three months)	\$ 40
2024	157
2025	1,739
2026	498
2027	9,386
2028 and thereafter	8,230
Total long-term debt	\$ 20,050

Exchange Offers and Repurchases

Pursuant to exchange offers that commenced on March 16, 2023 (the “Exchange Offers”), on March 31, 2023, Level 3 Financing, Inc. issued \$915 million of its 10.500% Senior Secured Notes due 2030 (the “10.500% Notes”) in exchange for \$1.535 billion of Lumen’s outstanding senior unsecured notes. On April 17, 2023, in connection with the Exchange Offers, Level 3 Financing, Inc. issued an additional \$9 million of its 10.500% Notes in exchange for \$19 million of Lumen’s outstanding senior unsecured notes. All exchanged notes were concurrently cancelled. These transactions resulted in a \$630 million net reduction in the aggregate principal amount of Lumen’s consolidated indebtedness. In addition to the above described exchange offers, we repurchased \$24 million aggregate principal amount of Lumen’s outstanding senior unsecured notes during the first quarter of 2023. These above-described transactions resulted in an aggregate gain of \$618 million during the nine months ended September 30, 2023.

The following table sets forth the aggregate principal amount of each series of Lumen’s senior unsecured notes retired during the nine months ended September 30, 2023, in connection with the above-described exchange transactions:

Debt	Period of Reduction	Aggregate principal (amounts in millions)
5.625% Senior Notes, Series X, due 2025	Q1 2023	\$ 48
7.200% Senior Notes, Series D, due 2025	Q1 2023	21
5.125% Senior Notes due 2026	Q1 2023	291
6.875% Debentures, Series G, due 2028	Q1 2023	52
5.375% Senior Notes due 2029	Q1 2023	275
4.500% Senior Notes due 2029	Q1 2023	556
7.600% Senior Notes, Series P, due 2039	Q1 2023	161
7.650% Senior Notes, Series U, due 2042	Q1 2023	131
5.625% Senior Notes, Series X, due 2025	Q2 2023	1
4.500% Senior Notes due 2029	Q2 2023	2
7.600% Senior Notes, Series P, due 2039	Q2 2023	3
7.650% Senior Notes, Series U, due 2042	Q2 2023	13
Total		\$ 1,554

Level 3 Financing, Inc.'s obligations under the 10.500% Notes are guaranteed on a secured basis by its direct parent, Level 3 Parent, LLC, and certain of its material domestic subsidiaries that guarantee the term loan under Level 3 Financing, Inc.'s existing senior secured credit facility and existing senior secured notes (the "Issuer's Secured Debt"). Such guarantees are secured by liens on substantially the same collateral that is pledged to secure the Issuer's Secured Debt.

Revolving Credit Facility Borrowings and Repayments

During the three months ended September 30, 2023, Lumen borrowed \$150 million from, and made repayments of \$275 million to, its revolving credit facility, and during the nine months ended September 30, 2023, Lumen borrowed \$675 million from, and made repayments of \$600 million to, its revolving credit facility.

During the third quarter of 2023, we issued approximately \$110 million of letters of credit under our revolving credit facility, which reduced our borrowing capacity available thereunder by the same amount. As of September 30, 2023, these issued letters of credit were undrawn.

Covenants

Certain of our debt instruments contain affirmative and negative covenants. Debt at Lumen Technologies, Inc. and Level 3 Financing, Inc. contains more extensive covenants including, among other things and subject to certain exceptions, restrictions on the ability to declare or pay dividends, repay certain other indebtedness, create liens, incur additional indebtedness, make investments, engage in transactions with affiliates, dispose of assets and merge or consolidate with any other person. Also, Lumen Technologies, Inc. and certain of its affiliates will be required to offer to purchase certain of their respective outstanding debt under defined circumstances in connection with specified "change of control" transactions.

Certain of our debt instruments contain cross-payment default or cross-acceleration provisions.

Compliance

As of September 30, 2023, Lumen Technologies, Inc. believes it and its subsidiaries were in compliance with the provisions and financial covenants in their respective material debt agreements in all material respects.

(7) Severance

Periodically, we reduce our workforce and accrue liabilities for the related severance costs. These workforce reductions result primarily from: increased competitive pressures, cost reduction initiatives, process improvements through automation and reduced workloads due to reduced demand for certain services.

Changes in our accrued liabilities for severance expenses were as follows:

	Severance	
	(Dollars in millions)	
Balance at December 31, 2022	\$	11
Accrued to expense		21
Payments, net		(19)
Balance at September 30, 2023	\$	13

On October 31, 2023, the Company announced a plan to reduce its global workforce by approximately 4% as part of its ongoing efforts to reorganize Lumen for growth by right-sizing its operations to improve its profitability. The workforce reduction is expected to be substantially completed by the end of the fourth quarter of 2023. As a result of this plan, the Company expects to incur severance and related costs in the range of approximately \$55 to \$65 million. The Company does not expect to incur any material impairment or exit costs related to this plan. The workforce reduction is considered a subsequent event for the purposes of these financial statements, and therefore, no accrual for severance and related costs has been recorded as of September 30, 2023.

(8) Employee Benefits

For detailed descriptions of the various defined benefit pension plans (qualified and non-qualified), post-retirement benefits plans and defined contribution plan we sponsor, see Note 11—Employee Benefits to the consolidated financial statements and accompanying notes in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2022.

Net periodic benefit expense (income) for the Lumen Combined Pension Plan (the "Combined Pension Plan" or the "Plan") includes the following components:

	Combined Pension Plan			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022 ⁽¹⁾	2023	2022 ⁽¹⁾
	(Dollars in millions)			
Service cost	\$ 7	11	19	34
Interest cost	67	53	202	155
Expected return on plan assets	(72)	(100)	(215)	(302)
Recognition of prior service credit	(2)	(3)	(5)	(8)
Recognition of actuarial loss	27	32	78	99
Net periodic pension expense (income)	\$ 27	(7)	79	(22)

⁽¹⁾ These amounts include pension costs related to the Lumen Pension Plan prior to the sale of the ILEC business on October 3, 2022. For additional information on the Lumen Pension Plan, see Note 11—Employee Benefits to the consolidated financial statements and accompanying notes in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2022.

Net periodic benefit expense for our post-retirement benefit plans includes the following components:

	Post-Retirement Benefit Plans			
	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(Dollars in millions)			
Service cost	\$ 1	3	4	8
Interest cost	26	15	77	45
Recognition of prior service (credit) cost	(2)	1	(6)	5
Recognition of actuarial gain	(5)	—	(15)	—
Net periodic post-retirement benefit expense	\$ 20	19	60	58

Service costs for our pension plans and post-retirement benefit plans are included in the cost of services and products and selling, general and administrative line items on our consolidated statements of operations and all other costs listed above are included in other expense, net on our consolidated statements of operations for the three and nine months ended September 30, 2023 and 2022.

Our Combined Pension Plan contains provisions that allow us, from time to time, to offer lump sum payment options to certain former employees in settlement of their future retirement benefits. We record an accounting settlement charge, consisting of the recognition of certain deferred costs of the pension plan associated with these lump sum payments only if, in the aggregate, they exceed or are probable to exceed the sum of the annual service and interest costs for the plan's net periodic pension benefit cost, which represents the settlement accounting threshold. The amount of any future non-cash settlement charges will be dependent on several factors, including the total amount of our future lump sum benefit payments.

Benefits paid by the Combined Pension Plan are paid through a trust that holds the Plan's assets. The amount of required contributions to the Combined Pension Plan in 2023 and beyond will depend on a variety of factors, most of which are beyond our control, including earnings on plan investments, prevailing interest rates, demographic experience, changes in plan benefits and changes in funding laws and regulations. Based on current laws and circumstances, we do not believe we are required to make any contributions in 2023 and we do not expect to make voluntary contributions to the trust for the Combined Pension Plan in 2023.

(9) (Loss) Earnings Per Common Share

Basic and diluted (loss) earnings per common share for the three and nine months ended September 30, 2023 and 2022 were calculated as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(Dollars in millions, except per share amounts, shares in thousands)			
(Loss) Income (numerator)				
Net (loss) income	\$ (78)	578	(8,303)	1,521
Net (loss) income applicable to common stock for computing basic (loss) earnings per common share	(78)	578	(8,303)	1,521
Net (loss) income as adjusted for purposes of computing diluted (loss) earnings per common share	\$ (78)	578	(8,303)	1,521
Shares (denominator):				
Weighted-average number of shares:				
Outstanding during period	1,008,523	1,034,786	1,006,140	1,031,687
Non-vested restricted stock	(24,973)	(21,662)	(23,287)	(20,189)
Weighted average shares outstanding for computing basic (loss) earnings per common share	983,550	1,013,124	982,853	1,011,498
Incremental common shares attributable to dilutive securities:				
Shares issuable under convertible securities	—	10	—	10
Shares issuable under incentive compensation plans	—	3,879	—	4,773
Number of shares as adjusted for purposes of computing diluted (loss) earnings per common share	983,550	1,017,013	982,853	1,016,281
Basic (loss) earnings per common share	\$ (0.08)	0.57	(8.45)	1.50
Diluted (loss) earnings per common share ⁽¹⁾	\$ (0.08)	0.57	(8.45)	1.50

⁽¹⁾ For the three and nine months ended September 30, 2023, we excluded from the calculation of diluted loss per share, less than 1 million shares, potentially issuable under incentive compensations plans or convertible securities, as their effect, if included, would have been anti-dilutive.

Our calculation of diluted (loss) earnings per common share excludes unvested restricted stock awards that are antidilutive as a result of unrecognized compensation cost. Such shares were 24.5 million and 12.9 million for the three months ended September 30, 2023 and 2022, respectively, and 22.2 million and 10.4 million for the nine months ended September 30, 2023 and 2022, respectively.

(10) Fair Value of Financial Instruments

Our financial instruments consist of cash, cash equivalents, restricted cash, accounts receivable, accounts payable, long-term debt (excluding finance lease and other obligations), interest rate swap contracts, certain equity investments and certain indemnification obligations. Due primarily to their short-term nature, the carrying amounts of our cash, cash equivalents, restricted cash, accounts receivable and accounts payable approximate their fair values.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between independent and knowledgeable parties who are willing and able to transact for an asset or liability at the measurement date. We use valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs when determining fair value and then we rank the estimated values based on the reliability of the inputs using the below-described fair value hierarchy.

We determined the fair values of our long-term debt, including the current portion, based on quoted market prices where available or, if not available, based on inputs other than quoted market prices in active markets that are either directly or indirectly observable such as discounted future cash flows using current market interest rates.

The three input levels in the hierarchy of fair value measurements are defined by the FASB generally as follows:

Input Level	Description of Input
Level 1	Observable inputs such as quoted market prices in active markets.
Level 2	Inputs other than quoted prices in active markets that are either directly or indirectly observable.
Level 3	Unobservable inputs in which little or no market data exists.

The following table presents the carrying amounts and estimated fair values of our following financial assets and liabilities as of September 30, 2023 and December 31, 2022:

	Input Level	September 30, 2023		December 31, 2022	
		Carrying Amount	Fair Value	Carrying Amount	Fair Value
(Dollars in millions)					
Equity securities ⁽¹⁾	1	\$ —	—	22	22
Long-term debt, excluding finance lease and other obligations	2	19,604	14,163	20,255	17,309
Indemnifications related to the sale of the Latin American business ⁽²⁾	3	86	86	86	86

⁽¹⁾ For the nine months ended September 30, 2023, we recognized \$22 million of loss on equity securities in other expense, net in our consolidated statements of operations, with no change in value recognized for the three months ended September 30, 2023. For both the three and nine months ended September 30, 2022 we recognized \$83 million of loss on equity securities in other expense, net in our consolidated statements of operations.

⁽²⁾ Nonrecurring fair value is measured as of August 1, 2022.

Investment Held at Net Asset Value

We hold an investment in a limited partnership created as a holding company for various investments. The limited partnership has sole discretion as to the amount and timing of distributions of the underlying assets. As of September 30, 2023, the underlying investments held by the limited partnership were traded in active markets and as such, we account for our investment in the limited partnership using net asset value ("NAV"). Subject to restrictions imposed by law and other provisions of the limited partnership agreement, the general partner has the sole discretion as to the amounts and timing of distributions of partnership assets to partners. The following table summarizes the net asset value of our investment in this limited partnership.

	As of September 30, 2023	As of December 31, 2022
	Net Asset Value	
	(Dollars in millions)	
Investment in limited partnership ⁽¹⁾	\$ 11	85

⁽¹⁾ For the three and nine months ended September 30, 2023, we recognized a \$15 million and \$74 million loss on investment, respectively, reflected in other expense, net in our consolidated statements of operations. For the three and nine months ended September 30, 2022, we recognized \$43 million and \$114 million, respectively, of loss on investment, reflected in other expense, net in our consolidated statements of operations.

(11) Segment Information

We report our results within two segments: Business and Mass Markets.

Under our Business segment we provide products and services to meet the needs of our enterprise and wholesale customers under four distinct sales channels: Large Enterprise, Mid-Market Enterprise, Public Sector and Wholesale. For Business segment revenue, we report the following product categories: Grow, Nurture, Harvest and Other, in each case through the sales channels outlined above. The Business segment included the results of our Latin American and ILEC businesses prior to their sales on August 1, 2022 and October 3, 2022, respectively.

Under our Mass Markets Segment, we provide products and services to residential and small business customers. We report the following product categories: Fiber Broadband, Other Broadband and Voice and Other. The Mass Markets segment included the results of our ILEC business prior to its sale on October 3, 2022.

See detailed descriptions of these product and service categories in Note 4—Revenue Recognition.

As described in more detail below, our segments are managed based on the direct costs of providing services to their customers and directly associated selling, general and administrative costs (primarily salaries and commissions). Shared costs are managed separately and included in "other unallocated expense" in the table included below under the heading "—Revenue and Expenses". As referenced above, we reclassified certain prior period amounts to conform to the current period presentation. See Note 1— Background for additional detail on these changes.

The following tables summarize our segment results for the three and nine months ended September 30, 2023 and 2022, based on the segment categorization we were operating under at September 30, 2023.

	Three Months Ended September 30, 2023		Nine Months Ended September 30, 2023	
	Business	Mass Markets	Business	Mass Markets
	(Dollars in millions)			
Segment revenue	\$ 2,894	747	8,747	2,293
Segment expenses:				
Cost of services and products	796	22	2,343	71
Selling, general and administrative	324	356	916	1,010
Total segment expense	1,120	378	3,259	1,081
Total segment adjusted EBITDA	\$ 1,774	369	5,488	1,212

	Three Months Ended September 30, 2022		Nine Months Ended September 30, 2022	
	Business	Mass Markets	Business	Mass Markets
	(Dollars in millions)			
Segment revenue	\$ 3,218	1,172	10,036	3,642
Segment expenses:				
Cost of services and products	792	25	2,449	90
Selling, general and administrative	293	470	928	1,283
Total segment expense	1,085	495	3,377	1,373
Total segment adjusted EBITDA	\$ 2,133	677	6,659	2,269

Revenue and Expenses

Our segment revenue includes all revenue from our two segments as described in more detail above. Our segment revenue is based upon each customer's classification. We report our segment revenue based upon all services provided to that segment's customers. Our segment expenses include specific cost of service expenses incurred as a direct result of providing services and products to segment customers, along with selling, general and administrative expenses that are directly associated with specific segment customers or activities. We have not allocated assets or debt to specific segments.

The following items are excluded from our segment results, because they are centrally managed and not monitored by or reported to our chief operating decision maker by segment:

- network expenses not incurred as a direct result of providing services and products to segment customers and centrally managed expenses such as Finance, Human Resources, Legal, Marketing, Product Management and IT, all of which are reported as "other unallocated expense" in the table below;
- depreciation and amortization expense;
- goodwill or other impairments;
- stock-based compensation;
- interest expense, and
- other income and expense items.

The following table reconciles total segment adjusted EBITDA to net (loss) income for the three and nine months ended September 30, 2023 and 2022:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(Dollars in millions)			
Total segment adjusted EBITDA	\$ 2,143	2,810	6,700	8,928
Depreciation and amortization	(755)	(808)	(2,234)	(2,443)
Goodwill impairment	—	—	(8,793)	—
Other unallocated expense	(1,149)	(595)	(3,442)	(3,035)
Stock-based compensation	(16)	(23)	(39)	(71)
Operating income (loss)	223	1,384	(7,808)	3,379
Total other expense, net	(308)	(447)	(287)	(1,188)
(Loss) income before income taxes	(85)	937	(8,095)	2,191
Income tax (benefit) expense	(7)	359	208	670
Net (loss) income	\$ (78)	578	(8,303)	1,521

(12) Commitments, Contingencies and Other Items

We are subject to various claims, legal proceedings and other contingent liabilities, including the matters described below, which individually or in the aggregate could materially affect our financial condition, future results of operations or cash flows. As a matter of course, we are prepared to both litigate these matters to judgment as needed, as well as to evaluate and consider reasonable settlement opportunities.

We review our litigation accrual liabilities on a quarterly basis, but in accordance with applicable accounting guidelines only establish accrual liabilities when losses are deemed probable and reasonably estimable and only revise previously established accrual liabilities when warranted by changes in circumstances, in each case based on then-available information. As such, as of any given date we could have exposure to losses under proceedings as to which no liability has been accrued or as to which the accrued liability is inadequate. Subject to these limitations, at September 30, 2023, we had accrued \$85 million in the aggregate for our litigation and non-income tax contingencies, which is included in other current liabilities, other liabilities, or liabilities held for sale on our consolidated balance sheet as of such date. We cannot at this time estimate the reasonably possible loss or range of loss in excess of this \$85 million accrual due to the inherent uncertainties and speculative nature of contested proceedings. The establishment of an accrual does not mean that actual funds have been set aside to satisfy a given contingency. Thus, the resolution of a particular contingency for the amount accrued could have no effect on our results of operations but nonetheless could have an adverse effect on our cash flows.

In this Note, when we refer to a class action as "putative" it is because a class has been alleged, but not certified, in that matter.

Principal Proceedings

Shareholder Class Action Suits

Lumen and certain Lumen Board of Directors members and officers were named as defendants in a putative shareholder class action lawsuit filed on June 12, 2018 in the Boulder County District Court of the state of Colorado, captioned Houser et al. v. CenturyLink, et al. The complaint asserted claims on behalf of a putative class of former Level 3 shareholders who became CenturyLink, Inc. shareholders as a result of our acquisition of Level 3. It alleged that the proxy statement provided to the Level 3 shareholders failed to disclose various material information of several kinds, including information about strategic revenue, customer loss rates, and customer account issues, among other items. The complaint seeks damages, costs and fees, rescission, rescissory damages, and other equitable relief. In May 2020, the court dismissed the complaint. Plaintiffs appealed that decision, and in March 2022, the appellate court affirmed the district court's order in part and reversed it in part. It then remanded the case to the district court for further proceedings. Plaintiff filed an amended complaint, and we filed a motion to dismiss. The court granted our motion to dismiss and the plaintiffs have appealed that dismissal.

On March 3, 2023, a purported shareholder of Lumen filed a putative class action complaint captioned Voigt v. Lumen Technologies, Inc., et al., Case 3:23-cv-00286-TAD-KDM, in the U.S. District Court for the Western District of Louisiana. The complaint alleges that Lumen and certain of its current or former officers violated the federal securities laws by omitting or misstating material information related to Lumen's expansion of its Quantum Fiber business. The complaint seeks money damages, attorneys' fees and costs, and other relief.

On September 15, 2023, a purported shareholder of Lumen filed a putative class action complaint captioned McLemore v. Lumen Technologies, Inc., et al., Case 3:23-cv-01290, in the U.S. District Court for the Western District of Louisiana. The complaint alleges that Lumen and certain of its current or former officers violated the federal securities laws by omitting or misstating material information related to Lumen's responsibility for environmental degradation allegedly caused by the lead sheathing of certain telecommunications cables. The complaint seeks money damages, attorneys' fees and costs, and other relief.

State Tax Suits

Since 2012, a number of Missouri municipalities have asserted claims in the Circuit Court of St. Louis County, Missouri, alleging that we and several of our subsidiaries have underpaid taxes. These municipalities are seeking, among other things, declaratory relief regarding the application of business license and gross receipts taxes and back taxes from 2007 to the present, plus penalties and interest. In a February 2017 ruling in connection with one of these pending cases, the court entered an order awarding the plaintiffs \$4 million and broadening the tax base on a going-forward basis. We appealed that decision to the Missouri Supreme Court. In December 2019, it affirmed the circuit court's order in some respects and reversed it in others, remanding the case to the circuit court for further proceedings. The Missouri Supreme Court's decision reduced our exposure in the case. In a June 2021 ruling in one of the pending cases, another trial court awarded the cities of Columbia and Joplin approximately \$55 million, plus statutory interest. On appeal, the Missouri Court of Appeals affirmed in part and reversed in part, vacated the judgment and remanded the case to the trial court with instructions for further proceedings consistent with the Missouri Supreme Court's decision. We continue to vigorously defend against these claims.

Billing Practices Suits

In June 2017, a former employee filed an employment lawsuit against us claiming that she was wrongfully terminated for alleging that we charged some of our retail customers for products and services they did not authorize. Thereafter, based in part on the allegations made by the former employee, several legal proceedings were filed, including consumer class actions in federal and state courts, a series of securities investor class actions in federal courts and several shareholder derivative actions in federal and Louisiana state courts. The derivative cases were brought on behalf of CenturyLink, Inc. against certain current and former officers and directors of the Company and seek damages for alleged breaches of fiduciary duties.

The consumer class actions, the securities investor class actions, and the federal derivative actions were transferred to the U.S. District Court for the District of Minnesota for coordinated and consolidated pretrial proceedings as In Re: CenturyLink Sales Practices and Securities Litigation. We have settled the consumer and securities investor class actions. Those settlements are final. The derivative actions remain pending.

We have engaged in discussions regarding related claims with a number of state attorneys general, and have entered into agreements settling certain of the consumer practices claims asserted by state attorneys general. While we do not agree with allegations raised in these matters, we have been willing to consider reasonable settlements where appropriate.

December 2018 Outage Proceedings

We experienced an outage on one of our transport networks that impacted voice, IP, 911, and transport services for some of our customers between the 27th and 29th of December 2018. We believe that the outage was caused by a faulty network management card from a third-party equipment vendor.

The FCC and four states (both Washington Utilities and Transportation Commission ("WUTC") and the Washington Attorney General; the Montana Public Service Commission; the Nebraska Public Service Commission; and the Wyoming Public Service Commission) initiated formal investigations. In November 2020, following the FCC's release of a public report on the outage, we negotiated a settlement which was released by the FCC in December 2020. The amount of the settlement was not material to our financial statements.

In December 2020, the Staff of the WUTC filed a complaint against us based on the December 2018 outage, seeking penalties of approximately \$7 million for alleged violations of Washington regulations and laws. The Washington Attorney General's office sought penalties of \$27 million. Following trial before the WUTC, it issued an order in June 2023 penalizing us for approximately \$1 million. We and the Washington Attorney General's office have both filed for reconsideration. Those motions are pending.

Latin American Tax Litigation and Claims

In connection with the 2022 divestiture of our Latin American business, the purchaser assumed responsibility for the Peruvian tax litigation and Brazilian tax claims described in our prior periodic reports filed with the SEC. We agreed to indemnify the purchaser for amounts paid in respect of the Brazilian tax claims. The value of this indemnification is included in the indemnification amount as disclosed in Note 10—Fair Value of Financial Instruments.

Other Proceedings, Disputes and Contingencies

From time to time, we are involved in other proceedings incidental to our business, including patent infringement allegations, regulatory hearings relating primarily to our rates or services, actions relating to employee claims, various tax issues, environmental law issues, grievance hearings before labor regulatory agencies and miscellaneous third-party tort actions or commercial disputes.

We are currently defending several patent infringement lawsuits asserted against us by non-practicing entities, many of which are seeking substantial recoveries. These cases have progressed to various stages and one or more may go to trial within the next twelve months if they are not otherwise resolved. Where applicable, we are seeking full or partial indemnification from our vendors and suppliers. As with all litigation, we are vigorously defending these actions and, as a matter of course, are prepared to litigate these matters to judgment, as well as to evaluate and consider all reasonable settlement opportunities.

We are subject to various foreign, federal, state and local environmental protection and health and safety laws. From time to time, we are subject to judicial and administrative proceedings brought by various governmental authorities under these laws. Several such proceedings are currently pending, but none is reasonably expected to exceed \$300,000 in fines and penalties. In addition, in the past we acquired companies that had installed lead-sheathed cables several decades earlier, or had operated certain manufacturing companies in the first part of the 1900s. Under applicable environmental laws, we could be named as a potentially responsible party for a share of the remediation of environmental conditions arising from the historical operations of our predecessors.

The outcome of these other proceedings described under this heading is not predictable. However, based on current circumstances, we do not believe that the ultimate resolution of these other proceedings, after considering available defenses and any insurance coverage or indemnification rights, will have a material adverse effect on us.

The matters listed in this Note do not reflect all of our contingencies. For additional information on our contingencies, see Note 18—Commitments, Contingencies and Other Items to the consolidated financial statements and accompanying notes in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2022. The ultimate outcome of the above-described matters may differ materially from the outcomes anticipated, estimated, projected or implied by us in certain of our statements appearing above in this Note, and proceedings currently viewed as immaterial by us may ultimately materially impact us.

(13) Other Financial Information

Other Current Assets

The following table presents details of other current assets reflected on our consolidated balance sheets:

	September 30, 2023	December 31, 2022
	(Dollars in millions)	
Prepaid expenses	\$ 392	319
Income tax receivable	122	—
Materials, supplies and inventory	227	236
Contract assets	20	20
Contract acquisition costs	107	123
Contract fulfillment costs	99	100
Other	15	5
Total other current assets ⁽¹⁾	<u>\$ 982</u>	<u>803</u>

⁽¹⁾ Excludes \$55 million and \$59 million of other current assets related to the EMEA business that were classified as held for sale as of September 30, 2023 and December 31, 2022, respectively.

(14) Repurchases of Lumen Common Stock

During the fourth quarter of 2022, our Board of Directors authorized a two-year program to repurchase up to an aggregate of \$1.5 billion of our outstanding common stock. During the three and nine months ended September 30, 2023, we did not repurchase any shares of our outstanding common stock under this program. As of September 30, 2023, we are authorized to purchase up to an aggregate of \$1.3 billion of our outstanding common stock under this program.

Any repurchases made in 2023 or thereafter will be subject to a non-deductible 1% excise tax on the fair market value of the stock under the Inflation Reduction Act of 2022.

(15) Accumulated Other Comprehensive Loss

Information Relating to 2023

The table below summarizes changes in accumulated other comprehensive loss recorded on our consolidated balance sheet by component for the nine months ended September 30, 2023:

	Pension Plans	Post-Retirement Benefit Plans	Foreign Currency Translation Adjustment and Other	Total
	(Dollars in millions)			
Balance at December 31, 2022	\$ (985)	308	(422)	(1,099)
Other comprehensive income before reclassifications	—	—	3	3
Amounts reclassified from accumulated other comprehensive loss	55	(16)	—	39
Net current-period other comprehensive income (loss)	55	(16)	3	42
Balance at September 30, 2023	\$ (930)	292	(419)	(1,057)

The tables below present further information about our reclassifications out of accumulated other comprehensive loss by component for the three and nine months ended September 30, 2023:

Three Months Ended September 30, 2023	Decrease (Increase) in Net Income	Affected Line Item in Consolidated Statement of Operations
	(Dollars in millions)	
Amortization of pension & post-retirement plans ⁽¹⁾		
Net actuarial loss	\$ 22	Other expense, net
Prior service credit	(4)	Other expense, net
Total before tax	18	
Income tax benefit	(5)	Income tax (benefit) expense
Net of tax	\$ 13	

Nine Months Ended September 30, 2023	Decrease (Increase) in Net Income	Affected Line Item in Consolidated Statement of Operations
	(Dollars in millions)	
Amortization of pension & post-retirement plans ⁽¹⁾		
Net actuarial loss	\$ 63	Other expense, net
Prior service credit	(11)	Other expense, net
Total before tax	52	
Income tax benefit	(13)	Income tax (benefit) expense
Net of tax	\$ 39	

(1) See Note 8—Employee Benefits for additional information on our net periodic benefit expense (income) related to our pension and post-retirement plans.

Information Relating to 2022

The table below summarizes changes in accumulated other comprehensive loss recorded on our consolidated balance sheets by component for the nine months ended September 30, 2022:

	Pension Plans	Post-Retirement Benefit Plans	Foreign Currency Translation Adjustment and Other	Interest Rate Swap	Total
(Dollars in millions)					
Balance at December 31, 2021	\$ (1,577)	(164)	(400)	(17)	(2,158)
Other comprehensive loss before reclassifications	—	—	(245)	—	(245)
Amounts reclassified from accumulated other comprehensive loss	68	4	112	17	201
Net current-period other comprehensive income (loss)	68	4	(133)	17	(44)
Balance at September 30, 2022	<u>\$ (1,509)</u>	<u>(160)</u>	<u>(533)</u>	<u>—</u>	<u>(2,202)</u>

The tables below present further information about our reclassifications out of accumulated other comprehensive loss by component for the three and nine months ended September 30, 2022:

Three Months Ended September 30, 2022	Decrease (Increase) in Net Income	Affected Line Item in Consolidated Statement of Operations
(Dollars in millions)		
Interest rate swaps	\$ —	Interest expense
Income tax benefit	—	Income tax (benefit) expense
Net of tax	<u>\$ —</u>	
Amortization of pension & post-retirement plans ⁽¹⁾		
Net actuarial loss	\$ 32	Other expense, net
Prior service cost	(2)	Other expense, net
Total before tax	30	
Income tax benefit	(7)	Income tax (benefit) expense
Net of tax	<u>\$ 23</u>	
Reclassification of realized loss on foreign currency translation to gain on sale of business	\$ 112	Gain on sale of business
Income tax benefit	—	Income tax (benefit) expense
Net of tax	<u>\$ 112</u>	

Nine Months Ended September 30, 2022	Decrease (Increase) in Net Income	Affected Line Item in Consolidated Statement of Operations
	(Dollars in millions)	
Interest rate swaps	\$ 22	Interest expense
Income tax benefit	(5)	Income tax (benefit) expense
Net of tax	<u>\$ 17</u>	
Amortization of pension & post-retirement plans ⁽¹⁾		
Net actuarial loss	\$ 99	Other expense, net
Prior service cost	(3)	Other expense, net
Total before tax	96	
Income tax benefit	(24)	Income tax (benefit) expense
Net of tax	<u>\$ 72</u>	
Reclassification of realized loss on foreign currency translation to gain on sale of business	\$ 112	Gain on sale of business
Income tax benefit	—	Income tax (benefit) expense
Net of tax	<u>\$ 112</u>	

(1) See Note 8—Employee Benefits for additional information on our net periodic benefit income related to our pension and post-retirement plans.

(16) Labor Union Contracts

As of September 30, 2023, approximately 19% of our employees were represented by the Communications Workers of America ("CWA") or the International Brotherhood of Electrical Workers ("IBEW"). Approximately 2% of our represented employees are subject to collective bargaining agreements that are scheduled to expire over the 12 month period ending September 30, 2024.

(17) Subsequent Events

Sale of Select Content Delivery Network ("CDN") Customer Contracts

On October 10, 2023, we announced the sale of substantially all of our CDN service contracts. We will provide certain transition services to the purchaser for 90 days, following which we plan to wind down the remaining portion of our remaining CDN contracts in 2024.

Debt Transaction Support Agreement

On October 31, 2023, Lumen announced that it has entered into a transaction support agreement with a group of creditors representing over \$7 billion of the outstanding indebtedness of the Company and its subsidiaries to, among other things, extend maturities of the debt instruments of the Company and Level 3 Financing, Inc. In addition, the creditors have committed to provide \$1.2 billion of financing to the Company through new long-term debt. The consummation of the transactions contemplated by the transaction support agreement is subject to the satisfaction of various closing conditions.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Unless the context requires otherwise, (i) references in this report to "Lumen Technologies" or "Lumen," "we," "us" and "our" refer to Lumen Technologies, Inc. and its consolidated subsidiaries and (ii) references in this report to "Level 3" refer to Level 3 Parent, LLC and its predecessor, Level 3 Communications, Inc., which we acquired on November 1, 2017.

All references to "Notes" in this Item 2 of Part I refer to the Notes to Consolidated Financial Statements included in Item 1 of Part I of this report.

Certain statements in this report constitute forward-looking statements. See "Special Note Regarding Forward-Looking Statements" appearing at the beginning of this report for factors relating to these statements and "Risk Factors" referenced in Item 1A of Part II of this report or other of our filings with the SEC for a discussion of certain risk factors applicable to our business, financial condition, results of operations, liquidity or prospects.

Overview

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") included herein should be read in conjunction with MD&A and the other information included in our Annual Report on Form 10-K for the year ended December 31, 2022 and with the consolidated financial statements and related notes in Item 1 of Part I of this report. The results of operations and cash flows for the first nine months of the year are not necessarily indicative of the results of operations and cash flows that might be expected for the entire year.

We are an international facilities-based technology and communications company focused on providing our business and mass markets customers with a broad array of integrated products and services necessary to fully participate in our ever-evolving digital world. We operate one of the world's most interconnected networks. Our platform empowers our customers to swiftly adjust digital programs securely to meet immediate demands, create efficiencies, accelerate market access, and reduce costs - allowing customers to rapidly evolve their IT programs to address dynamic changes. We are among the largest providers of communications services to domestic and global enterprise customers. Our terrestrial and subsea fiber optic long-haul network throughout North America, Europe, and Asia Pacific connects to metropolitan fiber networks that we operate. We provide services in over 60 countries, with most of our revenue being derived in the United States. As of September 30, 2023, we had approximately 30,000 employees.

On August 1, 2022, affiliates of Level 3 sold our Latin American business and on October 3, 2022, we and certain of our affiliates sold the portion of our facilities-based ILEC business primarily conducted within 20 Midwestern and Southeastern states. For additional information regarding these divestitures, including the amount of net proceeds we derived therefrom, see Note 2—Divestitures of the Latin American and ILEC Businesses and Planned Divestiture of the EMEA Business to the audited financial statements included within our Annual Report on Form 10-K for the year ended December 31, 2022.

Pending Divestiture of our European, Middle Eastern and African Business

Under agreements entered into on November 2, 2022 and February 8, 2023, affiliates of Level 3 Parent, LLC, have agreed to divest certain operations in EMEA to Colt Technology Services Group Limited, a portfolio company of Fidelity Investments, in exchange for \$1.8 billion in cash, subject to certain post-closing adjustments. Subject to the satisfaction of customary closing conditions, Level 3 Parent LLC expects to close the transaction November 1, 2023, although it can provide no assurances to this effect. The actual amount of our net after-tax proceeds from this divestiture could vary substantially from the amounts we currently estimate, particularly if we experience delays in completing the transaction or any of our other assumptions prove to be incorrect.

Changes in the Macroeconomic, Industry and Work Environments

Societal, governmental and macroeconomic changes have impacted us, our customers and our business in several ways since the onset of the COVID-19 pandemic in the U.S. in March 2020. Beginning in the second half of 2020 and continuing into 2023, we rationalized our leased footprint and ceased using 42 leased property locations that were underutilized. These lease cancellations resulted in accelerated lease costs, including \$8 million of such costs recognized during the nine months ended September 30, 2023, but will lower our future operating costs. During the second quarter of 2023, we also donated our Monroe, Louisiana campus and leased back a portion thereof. This donation resulted in a loss recognized during the second quarter, as discussed further below. In conjunction with our plans to continue to reduce costs, we expect to continue our real estate rationalization efforts and expect to incur additional accelerated real estate costs in future periods.

Additionally, as discussed further elsewhere herein, the pandemic and macroeconomic changes arising therefrom have resulted in (i) increases in certain revenue streams and decreases in others, (ii) operational challenges resulting from inflation and, to a lesser extent, shortages of certain components and other supplies that we use in our business, (iii) delays in our cost transformation initiatives and (iv) delayed decision-making by certain of our customers. None of these effects, individually or in the aggregate, have to date materially impacted our financial performance or financial position.

Industry developments over the past couple years have increased fiber construction demand. The resulting increase in construction labor rates has widened the range of enablement costs of our fiber buildout projects. Over the past couple years, we believe these factors, among others, contributed to a delay in attaining our Quantum Fiber buildout targets.

If any of the above-listed factors intensify, our financial results could be materially impacted in a variety of ways, including by increasing our expenses, decreasing our revenues, further delaying our network expansion plans or otherwise interfering with our ability to deliver products and services. For additional information on the impacts of the pandemic and the macroeconomic changes arising therefrom, see (i) the remainder of this item, including "—Liquidity and Capital Resources—Overview of Sources and Uses of Cash" and (ii) Item 1A of Part II of this report.

Reporting Segments

Our reporting segments are currently organized as follows, by customer focus:

- **Business Segment:** Under our Business segment, we provide our products and services under four sales channels:
 - **Large Enterprise:** Under our large enterprise sales channel, we provide our products and services to large enterprises, including multinational and global enterprise customers and carriers.
 - **Mid-Market Enterprise:** Under our mid-market enterprise sales channel, we provide our products and services to medium-sized enterprises directly and through our indirect channel partners.
 - **Public Sector:** Under our public sector sales channel, we provide our products and services to the public sector, including the U.S. Federal government, state and local governments and research and education institutions.
 - **Wholesale:** Under our wholesale sales channel, we provide our products and services to a wide range of other communication companies providing wireline, wireless, cable, voice and data center services.
- **Mass Markets Segment:** Under our Mass Markets segment, we provide products and services to residential and small business customers. At September 30, 2023, we served 2.8 million broadband subscribers under our Mass Markets segment.

See Note 11—Segment Information to our consolidated financial statements in Item 1 of Part I of this report for additional information.

We categorize our Business segment revenue among the following products and services categories:

- *Grow*, which includes products and services that we anticipate will grow, including our dark fiber, Edge Cloud services, IP, managed security, software-defined wide area networks ("SD WAN"), secure access service edge ("SASE"), Unified Communications and Collaboration ("UC&C") and wavelengths services;
- *Nurture*, which includes our more mature offerings, including ethernet and VPN data networks services;
- *Harvest*, which includes our legacy services managed for cash flow, including Time Division Multiplexing ("TDM") voice, private line and other legacy services; and
- *Other*, which includes equipment sales, IT solutions and other services.

We categorize our Mass Markets products and services revenue among the following categories:

- *Fiber Broadband*, under which we provide high speed broadband services to residential and small business customers utilizing our fiber-based network infrastructure;
- *Other Broadband*, under which we provide primarily lower speed broadband services to residential and small business customers utilizing our copper-based network infrastructure; and
- *Voice and Other*, under which we derive revenues from (i) providing local and long-distance voice services, professional services, and other ancillary services, and (ii) federal broadband and state support programs.

Trends Impacting Our Operations

In addition to the above-described impact of the pandemic and its aftermath, our consolidated operations have been, and will continue to be, impacted by the following company-wide trends:

- Customers' demand for automated products and services and competitive pressures will require that we continue to invest in new technologies and automated processes to improve the customer experience and reduce our operating expenses.
- The increased use of digital applications, online video, gaming and artificial intelligence has substantially increased demand for robust, scalable network services. We are continuing to enhance our product capabilities and simplify our product portfolio based on demand and profitability to enable customers to have access to greater bandwidth.
- Businesses continue to adopt distributed, global operating models. We are expanding and enhancing our fiber network, connecting more buildings to our network to generate revenue opportunities and reducing our reliance upon other carriers.
- Changes in customer preferences and in the regulatory, technological and competitive environment are (i) significantly reducing demand for our more mature service offerings, commoditizing certain of our other offerings, or resulting in volume or rate reductions for other of our offerings and (ii) also creating certain opportunities for us arising out of increased demand for lower latency provided by Edge computing and for faster and more secure data transmissions.
- The operating margins of several of our newer, more technologically advanced services, some of which may connect to customers through other carriers, are lower than the operating margins on our traditional, on-net wireline services.
- Our expenses will be impacted by higher vendor costs, reduced economies of scale and other dis-synergies due to our 2022 and any future divestitures.
- Declines in our traditional wireline services and other more mature offerings have necessitated right-sizing our cost structures to remain competitive.

Inflation has placed downward pressure on our margins and macroeconomic uncertainties have likely contributed to delayed decision-making by certain of our customers, which are trends that will likely continue to impact us as long as inflation rates remain elevated. These and other developments and trends impacting our operations are discussed elsewhere in this Item 2.

Results of Operations

In this section, we discuss our overall results of operations and highlight special items that are not included in our segment results. In "Segment Results" we review the performance of our two reporting segments in more detail. Results in this section include the results of our Latin American and ILEC businesses prior to their sale on August 1, 2022 and October 3, 2022, respectively.

The following table summarizes the results of our consolidated operations for the three and nine months ended September 30, 2023 and September 30, 2022:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
(Dollars in millions, except per share amounts)				
Operating revenue	\$ 3,641	4,390	11,040	13,678
Operating expenses	3,418	3,006	18,848	10,299
Operating income (loss)	223	1,384	(7,808)	3,379
Total other expense, net	(308)	(447)	(287)	(1,188)
(Loss) income before income taxes	(85)	937	(8,095)	2,191
Income tax (benefit) expense	(7)	359	208	670
Net (loss) income	\$ (78)	578	(8,303)	1,521
Basic (loss) earnings per common share	\$ (0.08)	0.57	(8.45)	1.50
Diluted (loss) earnings per common share	\$ (0.08)	0.57	(8.45)	1.50

We have experienced a prolonged period of revenue declines, excluding the impact of acquisitions, primarily due to declines in voice and private line customers, switched access rates and minutes of use. More recently, we have experienced declines in revenue derived from the sale of certain of our other products and services. To partially mitigate these revenue declines, we are increasing our focus on efforts to, among other things:

- promote long-term relationships with our customers through bundling of integrated services;
- increase the size, capacity, speed and usage of our networks;
- allocate capital to our most promising products and services;
- increase revenue from our Grow products and services to Business customers and our Quantum Fiber services to Mass Markets customers;
- pursue acquisitions of additional assets or divestitures of non-strategic assets, in each case if available at attractive prices;
- increase prices on our products and services and rationalize products across our portfolio if and when practicable; and
- market our products and services to new customers, and transition existing customers from our legacy products to our newer offerings.

Revenue

The following tables summarize our consolidated operating revenue recorded under each of our two segments and in our four revenue sales channels within the Business segment described above:

	Three Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Business Segment:			
Large Enterprise	\$ 1,182	1,286	(8)%
Mid-Market Enterprise	498	555	(10)%
Public Sector	444	457	(3)%
Wholesale	770	920	(16)%
Business segment revenue	2,894	3,218	(10)%
Mass Markets segment revenue	747	1,172	(36)%
Total consolidated operating revenue	\$ 3,641	4,390	(17)%

	Nine Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Business Segment:			
Large Enterprise	\$ 3,555	4,160	(15)%
Mid-Market Enterprise	1,520	1,690	(10)%
Public Sector	1,288	1,430	(10)%
Wholesale	2,384	2,756	(13)%
Business segment revenue	8,747	10,036	(13)%
Mass Markets segment revenue	2,293	3,642	(37)%
Total consolidated operating revenue	\$ 11,040	13,678	(19)%

Our consolidated operating revenue decreased by \$749 million and \$2.6 billion for the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022, \$571 million and \$2.0 billion of which is attributable to the sale of our Latin American and ILEC businesses in the second half of 2022. An additional \$59 million is attributable to the release during the first quarter of 2022 of previously deferred revenue related to the CAF II program, which lapsed on December 31, 2021. See our segment results below for additional information on the drivers of the remaining decrease in revenue.

Operating Expenses

The following tables summarize our operating expenses for the three and nine months ended September 30, 2023 and 2022:

	Three Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Cost of services and products (exclusive of depreciation and amortization)	\$ 1,850	1,999	(7)%
Selling, general and administrative	791	792	— %
Gain on sale of business	—	(593)	nm
Loss on disposal group held for sale	22	—	nm
Depreciation and amortization	755	808	(7)%
Total operating expenses	\$ 3,418	3,006	14 %

	Nine Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Cost of services and products (exclusive of depreciation and amortization)	\$ 5,407	6,042	(11)%
Selling, general and administrative	2,302	2,407	(4)%
Gain on sale of business	—	(593)	nm
Loss on disposal group held for sale	112	—	nm
Depreciation and amortization	2,234	2,443	(9)%
Goodwill impairment	8,793	—	nm
Total operating expenses	\$ 18,848	10,299	83 %

nm Percentages greater than 200% and comparisons between positive and negative values or to/from zero values are considered not meaningful.

Cost of Services and Products (exclusive of depreciation and amortization)

Cost of services and products (exclusive of depreciation and amortization) decreased by \$149 million and \$635 million for the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022. These decreases were primarily due to a decrease of approximately \$189 million and \$637 million for the three and nine months ended September 30, 2023 as compared to the comparable periods ended September 30, 2022, respectively, due to the sale of the Latin American and ILEC businesses in the second half of 2022, as well as reductions of approximately \$12 million and \$78 million for the three and nine months ended September 30, 2023 as compared to the comparable periods ended September 30, 2022, respectively, in employee-related expense from lower headcount in our remaining business. These decreases were partially offset by increased network expenses of \$27 million and \$45 million for the three and nine months ended September 30, 2023 as compared to the comparable periods ended September 30, 2022, respectively.

Selling, General and Administrative

Selling, general and administrative expenses decreased by \$1 million and \$105 million for the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022. These decreases were primarily due to a decrease of approximately \$46 million and \$169 million for the three and nine months ended September 30, 2023 as compared to the comparable periods ended September 30, 2022, respectively, due to the sale of our Latin American and ILEC businesses in the second half of 2022. For the three months ended September 30, 2023 as compared to September 30, 2022, these declines were partially offset by a \$40 million increase in employee related expenses. For the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022, these declines were partially offset by a \$67 million loss incurred as a result of our above-described donation of our Monroe, Louisiana campus.

Loss on Disposal Group Held for Sale

For a discussion of the loss on disposal group held for sale that we recognized for the three and nine months ended September 30, 2023, see Note 2—Planned Divestiture of the EMEA Business.

Depreciation and Amortization

The following tables provide detail of our depreciation and amortization expense:

	Three Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Depreciation	\$ 484	529	(9)%
Amortization	271	279	(3)%
Total depreciation and amortization	\$ 755	808	(7)%

	Nine Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Depreciation	\$ 1,440	1,613	(11)%
Amortization	794	830	(4)%
Total depreciation and amortization	\$ 2,234	2,443	(9)%

Depreciation expense decreased by \$45 million and \$173 million for the three and nine months ended September 30, 2023, as compared to the three and nine months ended September 30, 2022 primarily due to the discontinuation during the fourth quarter of 2022 of the depreciation of the tangible EMEA assets we plan to divest, resulting in a decrease of \$48 million and \$139 million, respectively, of depreciation expense during the three and nine months ended September 30, 2023 compared to the three and nine months ended September 30, 2022. In addition, for the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022, depreciation expense decreased \$34 million and \$103 million, respectively, due to the impact of annual rate depreciable life changes, which was partially offset by higher depreciation expense of \$31 million and \$70 million, respectively, associated with net growth in depreciable assets.

Amortization expense decreased by \$8 million and \$36 million for the three and nine months ended September 30, 2023, as compared to the three and nine months ended September 30, 2022. The decrease was primarily due to a decrease of \$11 million and \$27 million, respectively, due to the discontinuation during the fourth quarter of 2022 of the amortization of the intangible EMEA assets we plan to divest. In addition, for the three and nine months ended September 30, 2023, as compared to the three and nine months ended September 30, 2022, amortization expense decreased \$7 million and \$11 million, respectively, resulting from certain customer relationship intangible assets becoming fully amortized in the second quarter of 2023.

Further analysis of our segment operating expenses by segment is provided below in Segment Results.

Goodwill Impairment

We are required to perform impairment tests related to our goodwill annually, which we perform as of October 31, or sooner if an indicator of impairment occurs. The sustained decline in our share price during the second quarter of 2023 was considered a triggering event requiring evaluation of goodwill impairment.

We report under two segments: Business and Mass Markets. As of September 30, 2023, we had three reporting units for goodwill impairment testing, which were (i) Mass Markets, (ii) North America Business ("NA Business") and (iii) Asia Pacific ("APAC") region. Prior to the planned divestiture of the EMEA business, the EMEA region was also a reporting unit and was tested for impairment in the pre-classification test as of October 31, 2022 discussed elsewhere herein. Prior to its August 1, 2022 divestiture, the Latin American ("LATAM") region was also a reporting unit.

When we performed an impairment test during the second quarter of 2023, we concluded that the estimated fair value of certain of our reporting units was less than their carrying value of equity as of our testing date. As a result, we recorded a non-cash, non-tax-deductible goodwill impairment charge aggregating to \$8.8 billion in the second quarter of 2023. We did not record any impairments to goodwill in the third quarter of 2023.

See Note 3—Goodwill, Customer Relationships and Other Intangible Assets to our consolidated financial statements in this report for further details on these tests and impairment charges.

Other Consolidated Results

The following tables summarize our total other expense, net and income tax expense:

	Three Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Interest expense	\$ (295)	(363)	(19)%
Net gain on early retirement of debt	—	9	nm
Other expense, net	(13)	(93)	(86)%
Total other expense, net	<u>\$ (308)</u>	<u>(447)</u>	<u>(31)%</u>
Income tax (benefit) expense	<u>\$ (7)</u>	<u>359</u>	<u>nm</u>

	Nine Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Interest expense	\$ (868)	(1,052)	(17)%
Net gain on early retirement of debt	618	9	nm
Other expense, net	(37)	(145)	(74)%
Total other expense, net	<u>\$ (287)</u>	<u>(1,188)</u>	<u>(76)%</u>
Income tax expense	<u>\$ 208</u>	<u>670</u>	<u>(69)%</u>

nm Percentages greater than 200% and comparisons between positive and negative values or to/from zero values are considered not meaningful.

Interest Expense

Interest expense decreased by \$68 million and \$184 million for the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022. The decrease was due to the decrease in average outstanding long-term debt (inclusive of debt classified as held for sale) of \$8.0 billion and \$8.2 billion, respectively, which was partially offset by the increase in the average interest rate from 5.14% to 6.17% and from 5.08% to 5.89%, respectively, for the three and nine months ended September 30, 2022 compared to the three and nine months ended September 30, 2023.

Net Gain on Early Retirement of Debt

For a discussion of the exchange offers that resulted in the net gain on debt that we recognized for the three and nine months ended September 30, 2023, see Note 6—Long-Term Debt and Credit Facilities.

Other Expense, Net

Other expense, net reflects certain items not directly related to our core operations, including (i) components of net periodic pension and post-retirement benefit costs, (ii) foreign currency gains and losses, (iii) our share of income from partnerships we do not control, (iv) interest income, (v) gains and losses from non-operating asset dispositions, (vi) income from transition and separation services provided by us to the purchasers of our divested businesses and (vii) other non-core items.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(Dollars in millions)			
Pension and post-retirement net periodic (expense) income	\$ (39)	2	(117)	6
Foreign currency loss	(44)	(20)	(32)	(49)
Loss on investment in limited partnership	(15)	(43)	(74)	(114)
Loss on investment in equity securities	—	(83)	(22)	(83)
Transition and separation services	64	37	150	70
Other	21	14	58	25
Total other expense, net	<u>\$ (13)</u>	<u>(93)</u>	<u>(37)</u>	<u>(145)</u>

See Note 10—Fair Value of Financial Instruments for more information regarding the losses recognized on our investments in equity securities and a limited partnership.

Income Tax (Benefit) Expense

For the three and nine months ended September 30, 2023, our effective income tax rate was 8.2% and (2.6)%, respectively, and for the three and nine months ended September 30, 2022, our effective income tax rate was 38.3% and 30.6%, respectively. The effective tax rate for both the three and nine months ended September 30, 2023 is attributable to a pre-tax loss in the same periods. The effective tax rate for the nine months ended September 30, 2023 includes a \$1.8 billion unfavorable impact of a non-deductible goodwill impairment and a \$11 million unfavorable impact as a result of our donating our Monroe, Louisiana campus.

Segment Results

General

Reconciliation of segment revenue to total operating revenue is below. The results presented in this section include results of our Latin American and ILEC businesses prior to their sale on August 1, 2022 and October 3, 2022, respectively:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
(Dollars in millions)				
Operating revenue				
Business segment	\$ 2,894	3,218	8,747	10,036
Mass Markets segment	747	1,172	2,293	3,642
Total operating revenue	\$ 3,641	4,390	11,040	13,678

Additional information regarding our total adjusted EBITDA is below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
(Dollars in millions)				
Net (loss) income	\$ (78)	578	(8,303)	1,521
Income tax (benefit) expense	(7)	359	208	670
Total other expense, net	308	447	287	1,188
Depreciation and amortization expense	755	808	2,234	2,443
Goodwill impairment	—	—	8,793	—
Stock-based compensation expense	16	23	39	71
Total adjusted EBITDA	\$ 994	2,215	3,258	5,893
Business segment adjusted EBITDA	\$ 1,774	2,133	5,488	6,659
Mass Markets segment adjusted EBITDA	369	677	1,212	2,269
Other unallocated expense	(1,149)	(595)	(3,442)	(3,035)

For additional information on our reportable segments and product and services categories, see Note 4—Revenue Recognition and Note 11—Segment Information to our consolidated financial statements in Item 1 of Part I of this report.

Business Segment

	Three Months Ended September 30,		
	2023	2022	% Change
	(Dollars in millions)		
Business Segment Product Categories:			
Grow	\$ 1,125	1,116	1 %
Nurture	865	1,006	(14)%
Harvest	690	897	(23)%
Other	214	199	8 %
Total segment revenue	2,894	3,218	(10)%
Expenses:			
Total segment expense	1,120	1,085	3 %
Total segment adjusted EBITDA	\$ 1,774	2,133	(17)%

	<u>Nine Months Ended September 30,</u>		
	<u>2023</u>	<u>2022</u>	<u>% Change</u>
	<u>(Dollars in millions)</u>		
Business Segment Product Categories:			
Grow	\$ 3,391	3,504	(3)%
Nurture	2,639	3,160	(16)%
Harvest	2,146	2,780	(23)%
Other	571	592	(4)%
Total segment revenue	8,747	10,036	(13)%
Expenses:			
Total segment expense	3,259	3,377	(3)%
Total segment adjusted EBITDA	\$ 5,488	6,659	(18)%

Three and nine months ended September 30, 2023 compared to the same periods ended September 30, 2022

Business segment revenue decreased \$324 million and \$1.3 billion for the three and nine months ended as of September 30, 2023 compared to the same periods ended September 30, 2022. Approximately \$217 million and \$918 million, for the three and nine months ended September 30, 2023, respectively, of these decreases was due to the sale of the Latin American and ILEC businesses in the second half of 2022. More specifically, within each product category for the three and nine months ended September 30, 2023 as compared to the comparable periods ended September 30, 2022:

- Grow increased by \$9 million and decreased by \$113 million, reflecting a decrease of approximately \$47 million and \$320 million associated with the sale of the Latin American and ILEC businesses. Excluding the impact of these divestitures, Grow increased by approximately \$56 million and \$207 million primarily in products such as IP, dark fiber, wavelengths and colocation;
- Nurture decreased by \$141 million and \$521 million, approximately \$62 million and \$241 million of which was attributable to the sale of the Latin American and ILEC businesses. The remainder of the decline is principally attributable to declines in traditional VPN network services of \$61 million and \$207 million and declines in Ethernet services of \$18 million and \$77 million;
- Harvest decreased by \$207 million and \$634 million, approximately \$107 million and \$354 million of which was attributable to the sale of the Latin American and ILEC businesses. The remainder of the decline is principally attributable to a \$61 million and \$203 million decline in legacy voice services;

- Other increased by \$15 million and decreased by \$21 million, primarily due to higher equipment revenue of \$25 million and \$30 million and lower IT solutions services of \$10 million and \$46 million.

Business segment revenue for the three and nine months ended September 30, 2023 compared to the three and nine months ended September 30, 2022 includes \$7 million of favorable and \$18 million of unfavorable foreign currency adjustments, respectively.

Business segment expense increased by \$35 million and decreased by \$118 million for the three and nine months ended September 30, 2023, respectively, as compared to the three and nine months ended September 30, 2022. Segment expense for the three months ended September 30, 2023 increased from the three months ended September 30, 2022 due to a \$16 million increase in employee-related costs. Additionally, segment expense increased for the three and nine months ended September 30, 2023 as compared to the comparable periods ended September 30, 2022 by \$36 million and \$57 million in higher network access costs and \$11 million and \$17 million in higher professional fees, respectively. These increases were partially offset for the three months ended September 30, 2023 and fully offset for the nine months ended September 30, 2023 by \$34 million and \$187 million due to the sale of the Latin American and ILEC businesses.

Business segment adjusted EBITDA as a percentage of segment revenue for the three and nine months ended September 30, 2023 was 61% and 63%, respectively, and for each of the three and nine months ended September 30, 2022 was 66%.

Mass Markets Segment

	Three Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Mass Markets Product Categories:			
Fiber Broadband	\$ 162	160	1 %
Other Broadband	340	580	(41)%
Voice and Other	245	432	(43)%
Total segment revenue	747	1,172	(36)%
Expenses:			
Total segment expense	378	495	(24)%
Total segment adjusted EBITDA	\$ 369	677	(45)%

	Nine Months Ended September 30,		% Change
	2023	2022	
	(Dollars in millions)		
Mass Markets Product Categories:			
Fiber Broadband	\$ 471	456	3 %
Other Broadband	1,064	1,787	(40)%
Voice and Other	758	1,399	(46)%
Total segment revenue	2,293	3,642	(37)%
Expenses:			
Total segment expense	1,081	1,373	(21)%
Total segment adjusted EBITDA	\$ 1,212	2,269	(47)%

Three and nine months ended September 30, 2023 compared to the same periods ended September 30, 2022

Mass Markets segment revenue decreased \$425 million and \$1.3 billion for the three and nine months ended September 30, 2023 as compared to the comparable periods ended September 30, 2022, respectively. Approximately \$354 million and \$1.1 billion of this decrease is due to the sale of our ILEC business in the fourth quarter of 2022. More specifically, within each product category for the three and nine months ended September 30, 2023 as compared to the comparable periods ended September 30, 2022:

- Fiber Broadband revenue increased \$2 million and \$15 million, primarily driven by \$17 million and \$54 million of growth in fiber customers associated with our continued increase in enabled locations from our Quantum Fiber buildout, partially offset by respective decreases of \$15 million and \$41 million due to the sale of the ILEC business relating to such periods;
- Other Broadband revenue decreased \$240 million and \$723 million. Approximately \$185 million and \$563 million of this decrease was due to the sale of the ILEC business and \$55 million and \$160 million was due to fewer customers for our lower speed copper-based broadband services;
- Voice and Other declined \$187 million and \$641 million. The decline was principally due to (i) a \$154 million and \$472 million decrease due to the sale of the ILEC business, (ii) a \$34 million and \$111 million decrease due to the continued loss of legacy voice customers and (iii) the recognition in the first quarter of 2022 of \$59 million of previously deferred revenue related to the CAF II program, which lapsed on December 31, 2021.

Mass Markets segment expense for the three and nine months ended September 30, 2023 as compared to the three and nine months ended September 30, 2022 decreased by \$117 million and \$292 million, respectively, primarily driven by a decrease of \$81 million and \$295 million due to the sale of the ILEC business. For the three months ended September 30, 2023, segment expense additionally decreased due to \$13 million of lower bad debt expense and a decrease of \$11 million of professional fees as compared to the three months ended September 30, 2022. Segment expense for the nine months ended September 30, 2023 additionally decreased by \$34 million due to lower professional fees, offset by an increase in employee costs of \$39 million for the nine months ended September 30, 2023.

Mass Markets segment adjusted EBITDA as a percentage of segment revenue for the three and nine months ended September 30, 2023 was 49% and 53%, respectively, and for the three and nine months ended September 30, 2022 was 58% and 62%, respectively.

Liquidity and Capital Resources

Overview of Sources and Uses of Cash

We are a holding company that is dependent on the capital resources of our subsidiaries to satisfy our parent company liquidity requirements. Several of our significant operating subsidiaries have borrowed funds either on a standalone basis or as part of a separate restricted group with certain of its subsidiaries or affiliates. The terms of the instruments governing the indebtedness of these borrowers or borrowing groups may restrict our ability to access their accumulated cash. In addition, our ability to access the liquidity of these and other subsidiaries may be constrained by tax, legal and other limitations.

At September 30, 2023, we held cash and cash equivalents of \$338 million, \$27 million of which is classified as held for sale. During the third quarter of 2023, we issued approximately \$110 million of letters of credit under our revolving credit facility, which reduced our borrowing capacity available thereunder by the same amount. As of September 30, 2023, these issued letters of credit were undrawn and we had \$2.0 billion of borrowing capacity available under our revolving credit facility. We typically use our revolving credit facility as a source of liquidity for operating activities and our other cash requirements. We had approximately \$65 million of cash and cash equivalents outside the United States at September 30, 2023. We currently believe that there are no material restrictions on our ability to repatriate cash and cash equivalents into the United States and that we may do so without paying or accruing U.S. taxes. Other than transactions related to our EMEA divestiture, we do not currently intend to repatriate to the United States any of our foreign cash and cash equivalents from operating entities.

Our executive officers and our Board of Directors review our sources and potential uses of cash in connection with our annual budgeting process and throughout the year as circumstances warrant. Generally speaking, our principal funding source is cash from operating activities, and our principal cash requirements include operating expenses, capital expenditures, income taxes, debt repayments, periodic securities repurchases, periodic pension contributions and other benefits payments. The impact of the recent sales of our Latin American and ILEC businesses and our planned divestiture of our EMEA business is further described below.

Based on our current capital allocation objectives, for the full year 2023 we project expending approximately \$2.9 billion to \$3.1 billion of capital expenditures.

For the 12-month period ending September 30, 2024, we project our fixed commitments will include (i) \$125 million of scheduled term loan amortization payments and (ii) \$32 million of finance lease and other fixed payments (which includes \$2 million of finance lease obligations that have been classified as held for sale).

We are currently experiencing competitive, macroeconomic and financial pressures, including operational challenges resulting from inflation, dis-synergies resulting from our 2022 divestitures, concerns about our ability to refinance debt in the future, and, to a lesser extent, shortages of certain components and other supplies that we use in our business. These and other factors contributed to us recognizing goodwill impairments in the fourth quarter of 2022 and, coupled with the sustained decline in our share price during the second quarter of 2023, contributed to us recognizing additional goodwill impairments for the three months ended June 30, 2023. If these pressures continue, we may experience additional deterioration in our projected cash flows or market capitalization, or make significant changes to our assumptions of discount rates and market multiples. Any of these could result in additional goodwill impairments in future quarters.

We will continue to monitor our future sources and uses of cash and anticipate that we will make adjustments to our capital allocation strategies when, as and if determined by our Board of Directors. We may also draw on our revolving credit facility as a source of liquidity for operating activities and to give us additional flexibility to finance our capital investments, repayments of debt, pension contributions and other cash requirements.

For additional information, see "Risk Factors—Financial Risks" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2022.

Impact of the Divestitures of the Latin American and ILEC Businesses and Planned Divestiture of the EMEA Business

During 2022, we sold our Latin American business and a portion of our ILEC business. We additionally agreed to divest our EMEA business subject to satisfaction of certain customary closing conditions. See Note 2—Planned Divestiture of the EMEA Business to our consolidated financial statements in Item 1 of Part I of this report for more information. As further described in previous reports, these transactions have provided or are expected to provide us with a substantial amount of cash proceeds, but ultimately will reduce our base of income-generating assets that generate our recurring cash from operating activities. As a result of these divestitures, we utilized all of our NOLs available for use in 2022. During the first quarter of 2023, we paid \$90 million of indemnification payments related to our 2022 divestitures. In addition, during the second quarter of 2023, we paid approximately \$1.2 billion of estimated federal and state income taxes, the majority of which relates to our 2022 divestitures. See "—Net Operating Loss Carryforwards" below for additional information on our 2023 tax year cash tax estimate.

We are expecting a U.S. Federal income tax refund of approximately \$900 million previously not included within the Financial Outlook. Approximately \$200 million of the refund will be applied to pay 2023 estimated taxes, and we are expecting a cash refund of approximately \$700 million in the first quarter of 2024. While we expect to receive a near-term cash benefit, this is in part due to an accelerated use of our NOLs for which some of the near-term benefits will reverse over the next few years.

Capital Expenditures

We incur capital expenditures on an ongoing basis to expand and improve our service offerings, enhance and modernize our networks and compete effectively in our markets. We evaluate capital expenditure projects based on a variety of factors, including expected strategic impacts (such as forecasted impact on revenue growth, productivity, expenses, service levels and customer retention) and our expected return on investment. The amount of capital investment is influenced by, among other things, current and projected demand for our services and products, cash flow generated by operating activities, cash required for debt service and other purposes, and regulatory considerations (such as governmentally-mandated infrastructure buildout requirements) and the availability of requisite supplies, labor and permits.

Our capital expenditures continue to be focused on enhancing network operating efficiencies, supporting new service developments, and expanding our fiber network, including our Quantum Fiber buildout plan. A portion of our 2023 capital expenditures will also be focused on restoring network assets destroyed or damaged by Hurricane Ian in Florida during 2022. For more information on our capital spending, see (i) "—Overview of Sources and Uses of Cash" above, (ii) "Cash Flow Activities—Investing Activities" below and (iii) Item 1 of Part I of our Annual Report on Form 10-K for the year ended December 31, 2022.

Debt Instruments and Financing Arrangements

Debt Instruments

Pursuant to exchange offers commenced on March 16, 2023 (the "Exchange Offers"), (i) on March 31, 2023, Level 3 Financing, Inc. issued \$915 million of its 10.500% Senior Secured Notes due 2030 in exchange for \$1.535 billion of Lumen's outstanding senior unsecured notes and (ii) on April 17, 2023, Level 3 Financing, Inc. issued an additional \$9 million of its 10.500% Notes in exchange for \$19 million of Lumen's outstanding senior unsecured notes. All exchanged notes were concurrently cancelled. These transactions resulted in a net reduction in the aggregate principal amount of Lumen's consolidated indebtedness of approximately \$630 million and, along with a repurchase of notes in the first quarter of 2023, a gain of \$618 million during the nine months ended September 30, 2023.

At September 30, 2023, we had \$11.3 billion of outstanding consolidated secured indebtedness, \$8.5 billion of outstanding consolidated unsecured indebtedness (excluding (i) finance lease obligations, (ii) unamortized premiums, net and (iii) unamortized debt issuance costs) and \$2.0 billion of unused borrowing capacity under our revolving credit facility, as discussed further below.

Under our amended and restated credit agreement dated as of January 31, 2020 (the "Amended Credit Agreement"), we maintained at September 30, 2023 (i) a \$2.2 billion senior secured revolving credit facility, under which we owed \$75 million as of such date, and (ii) \$5.1 billion of senior secured term loan facilities.

At September 30, 2023, we had \$212 million of undrawn letters of credit outstanding, \$110 million of which were issued under our revolving line of credit, \$99 million of which were issued under our \$225 million uncommitted letter of credit facility and \$3 million of which were issued under a separate facility maintained by one of our subsidiaries (the full \$3 million of which is collateralized by cash that is reflected on our consolidated balance sheet as restricted cash within other assets).

In addition to its indebtedness under our Amended Credit Agreement, Lumen Technologies is indebted under its outstanding senior notes, and several of its subsidiaries are indebted under separate credit facilities or senior notes.

For additional information regarding the foregoing matters and the terms and conditions of the debt instruments of us and our subsidiaries, including financial and operating covenants, see (i) "—Overview of Sources and Uses of Cash," (ii) Note 6—Long-Term Debt and Credit Facilities to our consolidated financial statements in Item 1 of Part I of this report, (iii) Note 7—Long-Term Debt and Credit Facilities in Item 8 of Part II of our Annual Report on Form 10-K for the year ended December 31, 2022 and (iv) "—Other Matters" below.

Future Financings and Debt Reduction Transactions

Subject to market conditions, we plan to continue to issue debt securities from time to time in the future to refinance a substantial portion of our maturing debt, including issuing debt securities of certain of our subsidiaries to refinance their maturing debt to the extent permitted under our debt covenants and consistent with our capital allocation strategies. The availability, interest rate and other terms of any new borrowings will depend on the ratings assigned by credit rating agencies, among other factors.

As of the filing date of this report, the credit ratings for the senior secured and unsecured debt of Lumen Technologies, Inc., Level 3 Financing, Inc. and Qwest Corporation were as follows:

Borrower	Moody's Investors Service, Inc.	Standard & Poor's	Fitch Ratings
Lumen Technologies, Inc.:			
Unsecured	Caa3	CCC-	CCC+
Secured	Caa2	B	BB-
Level 3 Financing, Inc.			
Unsecured	B3	CCC+	B
Secured	B1	B	BB-
Qwest Corporation:			
Unsecured	B3	B	BB-

Our credit ratings are reviewed and adjusted from time to time by the rating agencies. Any future changes in the senior unsecured or secured debt ratings of us or our subsidiaries could impact our access to capital or borrowing costs. With the recent downgrades of our credit ratings we may find it more difficult to borrow on favorable terms, or at all. See "Risk Factors—Financial Risks" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2022.

From time to time over the past couple of years, we have engaged in various refinancings, redemptions, tender offers, open market purchases and other transactions designed to reduce our consolidated indebtedness, improve our financial flexibility or otherwise enhance our debt profile. Subject to market conditions restrictions under our debt covenants, and other limitations, we may pursue similar transactions in the future to the extent feasible. We may not disclose these transactions in advance, unless required by applicable law or material in nature or amount. See Note 6—Long-Term Debt and Credit Facilities for additional information.

Net Operating Loss Carryforwards

As of December 31, 2022, Lumen Technologies had approximately \$1.0 billion of federal net operating loss carryforwards ("NOLs"), which for U.S. federal income tax purposes can be used to offset future taxable income. These NOLs are primarily related to federal NOLs we acquired through the Level 3 acquisition on November 1, 2017 and are subject to limitations under Section 382 of the Internal Revenue Code and related U.S. Treasury Department regulations. We maintain a Section 382 rights agreement designed to safeguard through late 2023 our ability to use those NOLs. We utilized a substantial portion of our previously available NOLs to offset taxable gains generated by the completion of our 2022 divestitures. As a result we anticipate that our cash income tax liability will increase substantially in current and future periods. During the nine months ended September 30, 2023, we paid approximately \$1.3 billion of estimated federal and state income taxes, the majority of which relates to our 2022 divestitures. The amounts of our near-term future tax payments will depend upon many factors, including our future earnings and tax circumstances and the impact of any corporate tax reform or taxable transactions. Based on current laws and our current assumptions and projections, we estimate our cash federal income tax liability related to the 2023 tax year will range from \$300 million to \$400 million, excluding the impact of the above-referenced impact of our 2022 divestitures.

Although we expect to use substantially all of our remaining NOLs in future periods in accordance with Section 382's annual limitations, we cannot assure this. See "Risk Factors—Financial Risks—We may not be able to fully utilize our NOLs" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2022.

Stock Repurchases

During the fourth quarter of 2022, our Board of Directors authorized a two-year program to repurchase up to an aggregate of \$1.5 billion of our outstanding common stock. During the nine months ended September 30, 2023, we did not repurchase any shares of our outstanding common stock under this program. As of September 30, 2023, we were authorized to purchase up to an aggregate of \$1.3 billion of our outstanding common stock under this program. We currently do not plan to purchase any shares our outstanding common stock under this program in the near term.

Pension and Post-retirement Benefit Obligations

We are subject to material obligations under our existing defined benefit pension plans and post-retirement benefit plans. At December 31, 2022, the accounting unfunded status of our qualified and non-qualified defined benefit pension plans and our qualified post-retirement benefit plans was \$615 million and \$2.0 billion, respectively. For additional information about our pension and post-retirement benefit arrangements, see "Critical Accounting Policies and Estimates—Pension and Post-retirement Benefits" in Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2022 and see Note 11—Employee Benefits to our consolidated financial statements in Item 8 of Part II of the same report.

Benefits paid by our Combined Pension Plan are paid through the trust that holds the Combined Pension Plan's assets. Based on current laws and circumstances, we do not expect any contributions to be required for our Combined Pension Plan during 2023. The amount of required contributions to our Combined Pension Plan in 2024 and beyond will depend on a variety of factors, most of which are beyond our control, including earnings on plan investments, prevailing interest rates, demographic experience, changes in plan benefits and changes in funding laws and regulations. We occasionally make voluntary contributions to our plans in addition to required contributions and reserve the right to do so in the future. We last made a voluntary contribution to the trust for our Combined Pension Plan during 2018. We currently do not expect to make a voluntary contribution in 2023.

Substantially all of our post-retirement health care and life insurance benefits plans are unfunded and are paid by us with available cash. Based on our most recent estimates, we expect to pay \$210 million of post-retirement benefits, net of participant contributions and direct subsidies, for the full year 2023. For additional information on our expected future benefits payments for our post-retirement benefit plans, please see Note 11—Employee Benefits to our consolidated financial statements in Item 8 of Part II of our Annual Report Form 10-K for the year ended December 31, 2022.

Our pension plan contains provisions that allow us, from time to time, to offer lump sum payment options to certain former employees in settlement of their future retirement benefits. We record an accounting settlement charge, consisting of the recognition of certain deferred costs of the pension plan, associated with these lump sum payments only if, in the aggregate, they exceed the sum of the annual service and interest costs for the plan's net periodic pension benefit cost, which represents the settlement accounting threshold. Please see Note 11—Employee Benefits to our consolidated financial statements in Item 8 of Part II of our Annual Report Form 10-K for the year ended December 31, 2022 for additional information.

For 2023, our expected annual long-term rate of return on the pension plan assets is 6.5%. However, actual returns could be substantially different.

See Note 8—Employee Benefits to our consolidated financial statements in Item 1 of Part I of this report for more information.

Future Contractual Obligations

For information regarding our estimated future contractual obligations, see the MD&A discussion included in Item 7 of Part II of our Annual Report on Form 10-K for the year ended December 31, 2022.

Federal Broadband Support Programs

In January 2020, the FCC created the Rural Digital Opportunity Fund ("RDOF") program, a federal support program designed to fund broadband deployment in rural America. For the first phase of this program, RDOF Phase I, the FCC ultimately awarded \$6.4 billion in support payments to be paid in equal monthly installments over 10 years. We were awarded RDOF funding in several of the states in which we operate and began receiving monthly support payments during the second quarter of 2022. We expect to receive approximately \$17 million in annual RDOF Phase I support payments during 2023 and each year thereafter during the program period.

For additional information on these programs, see (i) Note 4 - Revenue Recognition to our consolidated financial statements in Item 8 of Part II of our Annual Report on Form 10-K for the year ended December 31, 2022 (ii) "Business—Regulation of Our Business" in Item 1 of Part I of the same Annual Report and (iii) "Risk Factors—Legal and Regulatory Risks" in Item 1A of Part I of the same Annual Report.

Federal officials have proposed changes to current programs and laws that could impact us, including proposals designed to increase broadband access, increase competition among broadband providers, lower broadband costs and re-adopt "net neutrality" rules similar to those adopted under the Obama Administration. In late 2021, the U.S. Congress enacted legislation that appropriated \$65 billion to improve broadband affordability and access, primarily through federally funded state grants. As of the date of this report, various state and federal agencies are continuing to take steps to make this funding available to eligible applicants, including us. It remains premature to speculate on the ultimate impact of this legislation on us.

Cash Flow Activities

The following table summarizes our consolidated cash flow activities for the nine months ended September 30, 2023 and 2022.

	Nine Months Ended September 30,		
	2023	2022	\$ Change
	(Dollars in millions)		
Net cash provided by operating activities	\$ 1,376	3,894	(2,518)
Net cash (used in) provided by investing activities	(2,232)	594	2,826
Net cash used in financing activities	(101)	(4,632)	(4,531)

Operating Activities

Net cash provided by operating activities decreased by \$2.5 billion for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022 principally due to lower net income adjusted for non-cash expenses and gains, partially driven by the sale of the Latin American and ILEC businesses in the second half of 2022. Additionally, a substantial portion of the decrease is largely due to the payment of taxes, the majority of which relate to our 2022 divestitures. Cash provided by operating activities is subject to variability period over period as a result of timing differences, including with respect to the collection of receivables and payments of interest expense, accounts payable and bonuses.

For additional information about our operating results, see "Results of Operations" above.

Investing Activities

Net cash (used in) provided by investing activities changed by \$2.8 billion for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022 primarily due to the receipt of pre-tax cash proceeds of \$2.7 billion from the sale of the Latin American business in the prior year period.

Financing Activities

Net cash used in financing activities decreased by \$4.5 billion for the nine months ended September 30, 2023 as compared to the nine months ended September 30, 2022 primarily due to higher debt repayments and dividend payments in the prior year period.

See Note 6—Long-Term Debt and Credit Facilities to our consolidated financial statements in Item 1 of Part I of this report for additional information on our outstanding debt securities.

Other Matters

We have cash management and loan arrangements with a majority of our income-generating subsidiaries, in which a substantial portion of the aggregate cash of those subsidiaries' is periodically advanced or loaned to us or our service company affiliate. Although we periodically repay these advances to fund the subsidiaries' cash requirements throughout the year, at any given point in time we may owe a substantial sum to our subsidiaries under these arrangements. In accordance with generally accepted accounting principles, these arrangements are reflected in the balance sheets of our subsidiaries but are eliminated in consolidation and therefore not recognized on our consolidated balance sheets.

Our network includes some residual lead-sheathed copper cables installed years ago. These lead-sheathed cables constitute a small portion of our network. Due to recent media coverage of potential health and environmental risks associated with these cables, we anticipate incurring certain investigative costs. We also may include other costs from related proceedings, including litigation, regulatory initiatives, and remediation. As September 30, 2023, we have not accrued for any such potential costs and will only accrue when such costs are probable and reasonably estimable. For additional information about related litigation and potential risks, see Note 12—Commitments, Contingencies and Other Items to our consolidated financial statements in Item 1 of Part I of this report, and the risk factor disclosures incorporated by reference herein under “Risk Factors” in Item 1A of Part II of this report.

We are also involved in various legal proceedings that could substantially impact our financial position. See Note 12—Commitments, Contingencies and Other Items to our consolidated financial statements in Item 1 of Part I of this report for additional information.

Market Risk

As of September 30, 2023, we were exposed to market risk from changes in interest rates on our variable rate long-term debt obligations and fluctuations in certain foreign currencies.

Management periodically reviews our exposure to interest rate fluctuations and periodically implements strategies to manage the exposure. From time to time, we have used derivative instruments to swap our exposure to variable interest rates for fixed interest rates. We have established policies and procedures for risk assessment and the approval, reporting and monitoring of derivative instrument activities. As of September 30, 2023, we did not hold or issue derivative financial instruments for trading or speculative purposes.

As of September 30, 2023, we had approximately \$7.8 billion of unhedged floating rate debt based on the secured overnight financing rate ("SOFR"). A hypothetical increase of 100 basis points in SOFR relating to our \$7.8 billion of unhedged floating rate debt would, among other things, decrease our annual pre-tax earnings by approximately \$78 million.

We conduct a portion of our business in currencies other than the U.S. dollar, the currency in which our consolidated financial statements are reported. Our European subsidiaries use the local currency as their functional currency, as the majority of their sales and purchases are or were transacted in their local currencies. Although we continue to evaluate strategies to mitigate risks related to the effect of fluctuations in currency exchange rates, we will likely recognize gains or losses from international transactions. Accordingly, changes in foreign currency rates relative to the U.S. dollar could positively or negatively impact our operating results.

Certain shortcomings are inherent in the method of analysis presented in the computation of exposures to market risks. Actual values may differ materially from those disclosed by us from time to time if market conditions vary from the assumptions used in the analyses performed. These analyses only incorporate the risk exposures that existed at September 30, 2023.

Other Information

Our website is www.lumen.com. We routinely post important investor information in the "Investor Relations" section of our website at ir.lumen.com. The information contained on, or that may be accessed through, our website is not part of this quarterly report. You may obtain free electronic copies of annual reports on Form 10-K, quarterly reports on Form 10-Q, and current reports on Form 8-K filed by us or our affiliates Level 3 Parent, LLC and Qwest Corporation, and all amendments to those reports, in the "Investor Relations" section of our website (ir.lumen.com) under the headings "FINANCIALS" and "SEC Filings." These reports are available on our website as soon as reasonably practicable after they are electronically filed with the SEC. From time to time, we also use our website to webcast our earnings calls and certain of our meetings with investors or other members of the investment community.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See "Liquidity and Capital Resources—*Market Risk*" in Item 2 of Part I above.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We maintain disclosure controls and procedures (as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934 (the "Exchange Act")) designed to provide reasonable assurance that the information required to be disclosed by us in the reports we file or furnish under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. These include controls and procedures designed to ensure this information is accumulated and communicated to our senior management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Management, with the participation of our President and Chief Executive Officer, Kate Johnson, and our Executive Vice President and Chief Financial Officer, Chris Stansbury, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2023. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded our disclosure controls and procedures were effective, as of September 30, 2023, in providing reasonable assurance the information required to be disclosed by us in this report was accumulated and communicated in the manner provided above.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) that occurred during the third quarter of 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations of Internal Controls

The effectiveness of our or any system of disclosure controls and procedures is subject to certain limitations, including the exercise of judgment in designing, implementing and evaluating the controls and procedures, the assumptions used in identifying the likelihood of future events and the inability to eliminate misconduct completely. As a result, there can be no assurance that our disclosure controls and procedures will detect all errors or fraud. By their nature, our or any system of disclosure controls and procedures can provide only reasonable assurance regarding management's control objectives.

PART II—OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

The information contained in Note 12—Commitments, Contingencies and Other Items included in Item 1 of Part I of this quarterly report on Form 10-Q is incorporated herein by reference. The ultimate outcome of the matters described in Note 12 may differ materially from the outcomes anticipated, estimated, projected or implied by us in certain of our statements appearing in such Note, and proceedings currently viewed as immaterial by us may ultimately materially impact us. For more information, see “Risk Factors—Risks Relating to Legal and Regulatory Matters—Our pending legal proceedings could have a material adverse impact on our financial condition and operating results, on the trading price of our securities and on our ability to access the capital markets” in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2022.

ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties, which could adversely affect our business, financial condition or future results. We recommend that you carefully consider (i) the other information set forth in this report and (ii) the risk factors discussed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2022, as supplemented by the disclosures included in Part II, Item 1A of our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2023 and Part II, Item 1A of our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2023.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**Issuer Purchases of Equity Securities**

Effective November 2, 2022, our Board of Directors authorized a two-year program to repurchase up to an aggregate of \$1.5 billion of our outstanding common stock. During the three months ended September 30, 2023, we did not repurchase any shares of our outstanding common stock under this program. For additional information, see Note 14—Repurchases of Lumen Common Stock to our consolidated financial statements included in Item 1 of Part I of this report.

The following table contains information about shares of our previously-issued common stock that we withheld from employees upon vesting of their stock-based awards during the third quarter of 2023 to satisfy the related tax withholding obligations:

Period	Total Number of Shares Withheld for Taxes	Average Price Paid Per Share	
Jul-23	64,582	\$	2.21
Aug-23	53,989	\$	1.72
Sep-23	6,576	\$	1.42
Total	125,147		

ITEM 6. EXHIBITS

Exhibits identified in parentheses below are on file with the SEC and are incorporated herein by reference. All other exhibits are provided as part of this electronic submission.

Exhibit Number	Description
4.1*	<u>Supplement, dated as of October 26, 2023, to the Supplemental Indenture dated as of April 15, 2020, among Level 3 Financing, Inc., as Issuer, The Bank of New York Mellon Trust Company, N.A., as Trustee and Notes Collateral Agent, and Level 3 Parent, LLC and several of its subsidiaries, as guarantors, clarifying which subsidiaries are guarantors of the 3.400% Senior Secured Notes due 2027 of Level 3 Financing, Inc.</u>
4.2*	<u>Supplement, dated as of October 26, 2023, to the Supplemental Indenture dated as of April 15, 2020, among Level 3 Financing, Inc., as Issuer, The Bank of New York Mellon Trust Company, N.A., as Trustee and Notes Collateral Agent, and Level 3 Parent, LLC and several of its subsidiaries, as guarantors, clarifying which subsidiaries are guarantors of the 3.875% Senior Secured Notes due 2029 of Level 3 Financing, Inc.</u>
4.3*	<u>Supplemental Indenture, dated as of October 23, 2023, among Level 3 Financing, Inc., as Issuer, The Bank of New York Mellon Trust Company, N.A., as Trustee and Notes Collateral Agent, and Level 3 Parent, LLC and several of its subsidiaries, as guarantors, designating and outlining the terms and conditions of certain specified secured guarantees of the 10.500% Senior Secured Notes due 2030 of Level 3 Financing, Inc.</u>
31.1*	<u>Certification of the Chief Executive Officer of Lumen Technologies, Inc. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
31.2*	<u>Certification of the Chief Financial Officer of Lumen Technologies, Inc. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
32.1*	<u>Certification of the Chief Executive Officer of Lumen Technologies, Inc. pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
32.2*	<u>Certification of the Chief Financial Officer of Lumen Technologies, Inc. pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101*	Financial statements from the Quarterly Report on Form 10-Q of Lumen Technologies, Inc. for the period ended September 30, 2023, formatted in Inline XBRL: (i) the Consolidated Statements of Operations, (ii) the Consolidated Statements of Comprehensive (Loss) Income, (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Stockholders' Equity and (vi) the Notes to Consolidated Financial Statements.
104*	Cover page formatted as Inline XBRL and contained in Exhibit 101.

* Exhibit filed herewith.

SIGNATURE

Pursuant to the requirements of Section 13 or 15(d) 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 on October 31, 2023.

LUMEN TECHNOLOGIES, INC.

By: /s/ Andrea Genschaw
Andrea Genschaw
Senior Vice President, Controller
(Principal Accounting Officer)

SUPPLEMENT (this “Supplement”) dated as of October 26, 2023 to the SUPPLEMENTAL INDENTURE (the “Supplemental Indenture”) dated as of April 15, 2020 (the “Effective Date”) among LEVEL 3 COMMUNICATIONS, LLC, a Delaware limited liability company, BROADWING, LLC, a Delaware limited liability company, BROADWING COMMUNICATIONS, LLC, a Delaware limited liability company, GLOBAL CROSSING TELECOMMUNICATIONS, INC., a Michigan corporation, LEVEL 3 TELECOM HOLDINGS, LLC, a Delaware limited liability company, TELCOVE OPERATIONS, LLC, a Delaware limited liability company, and WITEL COMMUNICATIONS, LLC, a Delaware limited liability company (each an “Additional Guarantor” and collectively, the “Additional Guarantors”), LEVEL 3 PARENT, LLC, a Delaware limited liability company (“Level 3 Parent”), LEVEL 3 FINANCING, INC., a Delaware corporation (the “Issuer”), on behalf of itself and the existing guarantors (other than Level 3 Parent) (the “Existing Guarantors”), under the Indenture referred to below, and THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., a national banking association, as trustee and collateral agent under the Indenture referred to below (the “Trustee”).

W I T N E S S E T H :

WHEREAS, the Issuer, Level 3 Parent and the other Guarantors party thereto have heretofore executed and delivered to the Trustee an Indenture dated as of November 29, 2019 (as supplemented, the “Indenture”; capitalized terms used but not defined herein having the meanings assigned thereto in the Indenture), providing for the issuance of its 3.400% Senior Secured Notes due 2027;

WHEREAS, the Supplemental Indenture constituted a “Note Guarantee”, and each of the Additional Guarantors constituted a “Guarantor”, for all purposes of the Indenture;

WHEREAS, pursuant to Section 801(9) and Section 1207 of the Indenture, the Trustee and the Issuer are authorized to execute and deliver this Supplement to cure an inconsistency in the Supplemental Indenture; and

WHEREAS, all acts and requirements necessary to make this Supplement the legal, valid and binding obligation of the Issuer and the Guarantor signatory hereto have been done.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guarantor signatory hereto, the Issuer and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Securities as follows:

1. Agreement to Guaranty. The Guarantor signatory hereto hereby acknowledges that, as of the Effective Date, it agreed, and it hereby agrees, jointly and severally with all the existing Guarantors, to unconditionally guarantee the Issuer’s obligations under the Securities and the Indenture on the terms and subject to the conditions set forth in Article Twelve of the Indenture and to be bound by all other applicable provisions of the Indenture, the Supplemental Indenture and the Securities, in each case, effective as of the Effective Date.

2. Successors and Assigns. This Supplement shall be binding upon the Guarantor signatory hereto and its successors and assigns and shall inure to the benefit of the successors and assigns of the Trustee and the Holders and, in the event of any transfer or assignment of

rights by any Holder or the Trustee, the rights and privileges conferred upon that party in the Indenture and in the Securities shall automatically extend to and be vested in such transferee or assignee, all subject to the terms and conditions of the Indenture.

3. No Waiver. Neither a failure nor a delay on the part of either the Trustee or the Holders in exercising any right, power or privilege under this Supplement, the Supplemental Indenture, the Indenture or the Securities shall operate as a waiver thereof, nor shall a single or partial exercise thereof preclude any other or further exercise of any right, power or privilege. The rights, remedies and benefits of the Trustee and the Holders herein and therein expressly specified are cumulative and not exclusive of any other rights, remedies or benefits which either may have under this Supplement, the Supplemental Indenture, the Indenture or the Securities at law, in equity, by statute or otherwise

4. Modification. No modification, amendment or waiver of any provision of this Supplement, nor the consent to any departure by the Guarantor signatory hereto therefrom, shall in any event be effective unless the same shall be in writing and signed by the Trustee, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Guarantor signatory hereto in any case shall entitle such Guarantor to any other or further notice or demand in the same, similar or other circumstances.

5. Ratification of Indenture; Supplemental Indentures Part of Indenture. Except as expressly supplemented hereby, the Indenture and the Supplemental Indenture are in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplement and the Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Securities heretofore or hereafter authenticated and delivered shall be bound hereby.

6. Governing Law. **THIS SUPPLEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK BUT WITHOUT GIVING EFFECT TO APPLICABLE PRINCIPLES OF CONFLICTS OF LAW TO THE EXTENT THAT THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION WOULD BE REQUIRED THEREBY.**

7. Counterparts. The parties may sign any number of copies of this Supplement. Each signed copy shall be an original, but all of them together represent the same agreement. The use of electronic signatures and electronic records (including, without limitation, any contract or other record created, generated, sent, communicated, received, or stored by electronic means) shall be of the same legal effect, validity and enforceability as a manually executed signature or use of a paper-based record-keeping system to the fullest extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, and any other applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act or the Uniform Commercial Code.

8. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction thereof.

9. Trustee. The Trustee makes no representations as to the validity or sufficiency of this Supplement. The recitals and statements herein are deemed to be those of the Issuer, and the Guarantor signatory hereto, and not of the Trustee.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Supplement to the Supplemental Indenture to be duly executed as of the date first written above.

LEVEL 3 FINANCING, INC., as the Issuer

By /s/ Rahul Modi

Name: Rahul Modi
Title: Senior Vice President and
Treasurer

LEVEL 3 COMMUNICATIONS, LLC, as
Guarantor

By /s/ Rahul Modi

Name: Rahul Modi
Title: Senior Vice President and
Treasurer

THE BANK OF NEW YORK
MELLON TRUST COMPANY, N.A., as
Trustee and as Note Collateral Agent
By /s/ April Bradley

Name: April Bradley
Title: Vice President

SUPPLEMENT (this “Supplement”) dated as of October 26, 2023 to the SUPPLEMENTAL INDENTURE (the “Supplemental Indenture”) dated as of April 15, 2020 (the “Effective Date”) among LEVEL 3 COMMUNICATIONS, LLC, a Delaware limited liability company, BROADWING, LLC, a Delaware limited liability company, BROADWING COMMUNICATIONS, LLC, a Delaware limited liability company, GLOBAL CROSSING TELECOMMUNICATIONS, INC., a Michigan corporation, LEVEL 3 TELECOM HOLDINGS, LLC, a Delaware limited liability company, TELCOVE OPERATIONS, LLC, a Delaware limited liability company, and WILTEL COMMUNICATIONS, LLC, a Delaware limited liability company (each an “Additional Guarantor” and collectively, the “Additional Guarantors”), LEVEL 3 PARENT, LLC, a Delaware limited liability company (“Level 3 Parent”), LEVEL 3 FINANCING, INC., a Delaware corporation (the “Issuer”), on behalf of itself and the existing guarantors (other than Level 3 Parent) (the “Existing Guarantors”), under the Indenture referred to below, and THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., a national banking association, as trustee and collateral agent under the Indenture referred to below (the “Trustee”).

W I T N E S S E T H :

WHEREAS, the Issuer, Level 3 Parent and the other Guarantors party thereto have heretofore executed and delivered to the Trustee an Indenture dated as of November 29, 2019 (as supplemented, the “Indenture”; capitalized terms used but not defined herein having the meanings assigned thereto in the Indenture), providing for the issuance of its 3.875% Senior Secured Notes due 2029;

WHEREAS, the Supplemental Indenture constituted a “Note Guarantee”, and each of the Additional Guarantors constituted a “Guarantor”, for all purposes of the Indenture;

WHEREAS, pursuant to Section 801(9) and Section 1207 of the Indenture, the Trustee and the Issuer are authorized to execute and deliver this Supplement to cure an inconsistency in the Supplemental Indenture; and

WHEREAS, all acts and requirements necessary to make this Supplement the legal, valid and binding obligation of the Issuer and the Guarantor signatory hereto have been done.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Guarantor signatory hereto, the Issuer and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Securities as follows:

1. Agreement to Guaranty. The Guarantor signatory hereto hereby acknowledges that, as of the Effective Date, it agreed, and it hereby agrees, jointly and severally with all the existing Guarantors, to unconditionally guarantee the Issuer’s obligations under the Securities and the Indenture on the terms and subject to the conditions set forth in Article Twelve of the Indenture and to be bound by all other applicable provisions of the Indenture, the Supplemental Indenture and the Securities, in each case, effective as of the Effective Date.

2. Successors and Assigns. This Supplement shall be binding upon the Guarantor signatory hereto and its successors and assigns and shall inure to the benefit of the successors and assigns of the Trustee and the Holders and, in the event of any transfer or assignment of

rights by any Holder or the Trustee, the rights and privileges conferred upon that party in the Indenture and in the Securities shall automatically extend to and be vested in such transferee or assignee, all subject to the terms and conditions of the Indenture.

3. No Waiver. Neither a failure nor a delay on the part of either the Trustee or the Holders in exercising any right, power or privilege under this Supplement, the Supplemental Indenture, the Indenture or the Securities shall operate as a waiver thereof, nor shall a single or partial exercise thereof preclude any other or further exercise of any right, power or privilege. The rights, remedies and benefits of the Trustee and the Holders herein and therein expressly specified are cumulative and not exclusive of any other rights, remedies or benefits which either may have under this Supplement, the Supplemental Indenture, the Indenture or the Securities at law, in equity, by statute or otherwise

4. Modification. No modification, amendment or waiver of any provision of this Supplement, nor the consent to any departure by the Guarantor signatory hereto therefrom, shall in any event be effective unless the same shall be in writing and signed by the Trustee, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Guarantor signatory hereto in any case shall entitle such Guarantor to any other or further notice or demand in the same, similar or other circumstances.

5. Ratification of Indenture; Supplemental Indentures Part of Indenture. Except as expressly supplemented hereby, the Indenture and the Supplemental Indenture are in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplement and the Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Securities heretofore or hereafter authenticated and delivered shall be bound hereby.

6. Governing Law. **THIS SUPPLEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK BUT WITHOUT GIVING EFFECT TO APPLICABLE PRINCIPLES OF CONFLICTS OF LAW TO THE EXTENT THAT THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION WOULD BE REQUIRED THEREBY.**

7. Counterparts. The parties may sign any number of copies of this Supplement. Each signed copy shall be an original, but all of them together represent the same agreement. The use of electronic signatures and electronic records (including, without limitation, any contract or other record created, generated, sent, communicated, received, or stored by electronic means) shall be of the same legal effect, validity and enforceability as a manually executed signature or use of a paper-based record-keeping system to the fullest extent permitted by applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, and any other applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act or the Uniform Commercial Code.

8. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction thereof.

9. Trustee. The Trustee makes no representations as to the validity or sufficiency of this Supplement. The recitals and statements herein are deemed to be those of the Issuer, and the Guarantor signatory hereto, and not of the Trustee.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Supplement to the Supplemental Indenture to be duly executed as of the date first written above.

LEVEL 3 FINANCING, INC., as the Issuer

By /s/ Rahul Modi

Name: Rahul Modi
Title: Senior Vice President and
Treasurer

LEVEL 3 COMMUNICATIONS, LLC, as
Guarantor

By /s/ Rahul Modi

Name: Rahul Modi
Title: Senior Vice President and
Treasurer

THE BANK OF NEW YORK
MELLON TRUST COMPANY, N.A., as
Trustee and as Note Collateral Agent

By /s/ April Bradley

Name: April Bradley
Title: Vice President

SUPPLEMENTAL INDENTURE (this “Supplemental Indenture”) dated as of October 23, 2023 among LEVEL 3 COMMUNICATIONS, LLC, a Delaware limited liability company, BROADWING, LLC, a Delaware limited liability company, BROADWING COMMUNICATIONS, LLC, a Delaware limited liability company, GLOBAL CROSSING TELECOMMUNICATIONS, INC., a Michigan corporation, LEVEL 3 TELECOM HOLDINGS, LLC, a Delaware limited liability company, TELCOVE OPERATIONS, LLC, a Delaware limited liability company, and WITEL COMMUNICATIONS, LLC, a Delaware limited liability company (each a “New Guarantor” and collectively, the “New Guarantors”), LEVEL 3 PARENT, LLC, a Delaware limited liability company (“Level 3 Parent”), LEVEL 3 FINANCING, INC., a Delaware corporation (the “Issuer”), on behalf of itself and the existing guarantors (other than Level 3 Parent) (the “Existing Guarantors”), under the Indenture referred to below, and THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., a national banking association, as trustee and note collateral agent under the Indenture referred to below (the “Trustee”).

W I T N E S S E T H :

WHEREAS, the Issuer, Level 3 Parent and the other Guarantors party thereto have heretofore executed and delivered to the Trustee an Indenture dated as of March 31, 2023 (the “Indenture”; capitalized terms used but not defined herein having the meanings assigned thereto in the Indenture), providing for the issuance of its 10.500% Senior Secured Notes due 2030;

WHEREAS, the Indenture permits the New Guarantors to execute and deliver to the Trustee a supplemental indenture pursuant to which the New Guarantors shall unconditionally guarantee all the Issuer’s obligations under the Securities pursuant to a Guarantee on the terms and conditions set forth herein;

WHEREAS, the Guarantee contained in this Supplemental Indenture shall constitute a “Note Guarantee”, and each of the New Guarantors shall constitute a “Guarantor”, for all purposes of the Indenture;

WHEREAS, pursuant to Section 801, Section 916 and Section 1207 of the Indenture, the Trustee and the Issuer are authorized to execute and deliver this Supplemental Indenture; and

WHEREAS, all acts and requirements necessary to make this Supplemental Indenture the legal, valid and binding obligation of Level 3 Parent, the Issuer and the New Guarantors have been done.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt of which is hereby acknowledged, each New Guarantor, Level 3 Parent, the Issuer, the Existing Guarantors and the Trustee mutually covenant and agree for the equal and ratable benefit of the Holders of the Securities as follows:

1. Agreement to Guaranty. Each New Guarantor hereby agrees, jointly and severally with all the Existing Guarantors, to unconditionally guarantee the Issuer's obligations under the Securities and the Indenture on the terms and subject to the conditions set forth in Article Twelve of the Indenture and to be bound by all other applicable provisions of the Indenture and the Securities.

2. Successors and Assigns. This Supplemental Indenture shall be binding upon each New Guarantor and its successors and assigns and shall inure to the benefit of the successors and assigns of the Trustee and the Holders and, in the event of any transfer or assignment of rights by any Holder or the Trustee, the rights and privileges conferred upon that party in the Indenture and in the Securities shall automatically extend to and be vested in such transferee or assignee, all subject to the terms and conditions of the Indenture.

3. No Waiver. Neither a failure nor a delay on the part of either the Trustee or the Holders in exercising any right, power or privilege under this Supplemental Indenture, the Indenture or the Securities shall operate as a waiver thereof, nor shall a single or partial exercise thereof preclude any other or further exercise of any right, power or privilege. The rights, remedies and benefits of the Trustee and the Holders herein and therein expressly specified are cumulative and not exclusive of any other rights, remedies or benefits which either may have under this Supplemental Indenture, the Indenture or the Securities at law, in equity, by statute or otherwise.

4. Modification. No modification, amendment or waiver of any provision of this Supplemental Indenture, nor the consent to any departure by any New Guarantor therefrom, shall in any event be effective unless the same shall be in writing and signed by the Trustee, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on any New Guarantor in any case shall entitle any such New Guarantor to any other or further notice or demand in the same, similar or other circumstances.

5. Opinion of Counsel. Concurrently with the execution and delivery of this Supplemental Indenture, the Issuer shall deliver to the Trustee an Opinion of Counsel to the effect that this Supplemental Indenture has been duly authorized, executed and delivered by the Issuer and each New Guarantor and that, subject to the application of bankruptcy, insolvency, moratorium, fraudulent conveyance or transfer and other similar laws relating to creditors' rights generally and to the principles of equity, whether considered in a proceeding at law or in equity, the Guarantee of each New Guarantor is a legal, valid and binding obligation of such New Guarantor, enforceable against such New Guarantor in accordance with its terms.

6. Ratification of Indenture; Supplemental Indentures Part of Indenture. Except as expressly amended hereby, the Indenture is in all respects ratified and confirmed and all the terms, conditions and provisions thereof shall remain in full force and effect. This Supplemental Indenture shall form a part of the Indenture for all purposes, and every Holder of Securities heretofore or hereafter authenticated and delivered shall be bound hereby.

7. Governing Law. **THIS SUPPLEMENTAL INDENTURE SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE**

STATE OF NEW YORK BUT WITHOUT GIVING EFFECT TO APPLICABLE PRINCIPLES OF CONFLICTS OF LAW TO THE EXTENT THAT THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION WOULD BE REQUIRED THEREBY.

8. Counterparts. The parties may sign any number of copies of this Supplemental Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

9. Electronic Signatures. For the avoidance of doubt, for all purposes of this Supplemental Indenture and any document to be signed or delivered in connection with or pursuant to this Supplemental Indenture (except where a manual signature is expressly required by the terms of the Indenture), the words “execution,” “signed,” “signature,” “delivery,” and words of like import shall be deemed to include electronic signatures, deliveries or the keeping of records in electronic form, as the case may be, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery or the use of a paper-based recordkeeping system, as the case may be, and the parties hereto consent to conduct the transactions contemplated hereunder by electronic means.

10. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction thereof.

11. Trustee. The Trustee makes no representations as to the validity or sufficiency of this Supplemental Indenture. The recitals and statements herein are deemed to be those of the Issuer, Level 3 Parent, the Existing Guarantors and the New Guarantors, and not of the Trustee.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Supplemental Indenture to be duly executed as of the date first above written.

BROADWING COMMUNICATIONS, LLC

By: /s/ Stacey W. Goff
Name: Stacey W. Goff
Title: Executive Vice President & General Counsel

BROADWING, LLC

By: /s/ Stacey W. Goff
Name: Stacey W. Goff
Title: Executive Vice President & General Counsel

GLOBAL CROSSING TELECOMMUNICATIONS, INC.

By: /s/ Stacey W. Goff
Name: Stacey W. Goff
Title: Executive Vice President & General Counsel

LEVEL 3 COMMUNICATIONS, LLC

By: /s/ Stacey W. Goff
Name: Stacey W. Goff
Title: Executive Vice President & General Counsel

LEVEL 3 TELECOM HOLDINGS, LLC

By: /s/ Stacey W. Goff
Name: Stacey W. Goff
Title: Executive Vice President & General Counsel

TELCOVE OPERATIONS, LLC

By: /s/ Stacey W. Goff
Name: Stacey W. Goff
Title: Executive Vice President & General Counsel

WILTEL COMMUNICATIONS, LLC

By: /s/ Stacey W. Goff
Name: Stacey W. Goff
Title: Executive Vice President & General Counsel

LEVEL 3 PARENT, LLC

By: /s/ Stacey W. Goff
Name: Stacey W. Goff
Title: Executive Vice President & General Counsel

LEVEL 3 FINANCING, INC., on behalf of itself as the Issuer and the other
Existing Guarantors

By: /s/ Stacey W. Goff

Name: Stacey W. Goff

Title: Executive Vice President & General Counsel

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., as Trustee and as
Note Collateral Agent

By: /s/ April Bradley
Name: April Bradley
Title: Vice President

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Kate Johnson, Chief Executive Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Lumen Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors:
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 31, 2023

/s/ Kate Johnson
Kate Johnson
Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Chris Stansbury, Chief Financial Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Lumen Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors:
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 31, 2023

/s/ Chris Stansbury

Chris Stansbury
Executive Vice President and Chief
Financial Officer

**Certification Pursuant to
18 U.S.C. Section 1350,
as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

I, Kate Johnson, Chief Executive Officer of Lumen Technologies, Inc. ("Lumen Technologies"), certify that, to my knowledge, the Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 of Lumen Technologies fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Lumen Technologies as of the dates and for the periods covered by such report.

A signed original of this statement has been provided to Lumen Technologies and will be retained by Lumen Technologies and furnished to the Securities and Exchange Commission or its staff upon request.

Date: October 31, 2023

/s/ Kate Johnson

Kate Johnson
Chief Executive Officer

**Certification Pursuant to
18 U.S.C. Section 1350,
as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

I, Chris Stansbury, Chief Financial Officer of Lumen Technologies, Inc. ("Lumen Technologies"), certify that, to my knowledge, the Quarterly Report on Form 10-Q for the quarter ended September 30, 2023 of Lumen Technologies fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Lumen Technologies as of the dates and for the periods covered by such report.

A signed original of this statement has been provided to Lumen Technologies and will be retained by Lumen Technologies and furnished to the Securities and Exchange Commission or its staff upon request.

Date: October 31, 2023

/s/ Chris Stansbury

Chris Stansbury
Executive Vice President and Chief
Financial Officer