UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

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

For the quarterly period ended March 31, 2024

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 Number: 001-41446

ADTRAN Holdings, Inc.
(Exact Name of Registrant as Specified in its Charter)

Delaware	**87-2164282**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
901 Explorer Boulevard Huntsville, Alabama	**35806-2807**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (256) 963-8000

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 $0.01 per share	ADTN	The NASDAQ Global Select Market

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 (§ 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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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 ☒

As of May 2, 2024, the registrant had 79,116,535 shares of common stock, $0.01 par value per share, outstanding.

ADTRAN Holdings, Inc.

Quarterly Report on Form 10-Q
For the three months ended March 31, 2024

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GLOSSARY OF SELECTED TERMS

Below are certain acronyms, concepts and defined terms commonly used in our industry and in this Quarterly Report on Form 10-Q, along with their meanings:

Acronym/Concept/ Defined Term	Meaning
CPE	Customer-premises equipment
DPLTA	Domination and Profit and Loss Transfer Agreement
DSO	Days Sales Outstanding
EURIBOR	Euro Interbank Offered Rate
MSO	Multiple System Operator
ODM	Original Design Manufacturing
RNCI	Redeemable Non-Controlling Interest
SaaS	Software as a Service
SEC	Securities and Exchange Commission
Service Provider or SP	Entity that provides voice, data or video services to consumers and businesses
SI	Person or company that specializes in bringing together component subsystems into a whole and ensuring that those subsystems function together
SLA	Service Level Agreement
SMB	Small and Mid-Sized Business
SOFR	Secured Overnight Financing Rate
U.S.	United States of America
VAR	Value-Added Reseller

GENERAL

Unless the context otherwise indicates or requires, references in this Quarterly Report on Form 10-Q to "ADTRAN," the "Company," "we," "us" and "our" refer to ADTRAN, Inc. and its consolidated subsidiaries prior to the merger of Acorn MergeCo, Inc., a subsidiary of ADTRAN Holdings, Inc., with and into ADTRAN, Inc., on July 8, 2022, after which ADTRAN, Inc. became a wholly-owned direct subsidiary of ADTRAN Holdings, Inc. (the "Merger"), and to ADTRAN Holdings, Inc. and its consolidated subsidiaries following the Merger. Furthermore, unless the context otherwise indicates or requires, references in this Quarterly Report on Form 10-Q to "Adtran Networks" refer to Adtran Networks SE (formerly ADVA Optical Networking SE).

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 provides a safe harbor for forward-looking statements made by or on behalf of ADTRAN. ADTRAN and its representatives may from time to time make written or oral forward-looking statements, including statements contained in this report, our other filings with the SEC and other communications with our stockholders. Any statement that does not directly relate to a historical or current fact is a forward-looking statement. Generally, the words "believe", "expect", "intend", "estimate", "anticipate", "would", "will", "may", "might", "could", "should", "can", "future", "assume", "plan", "seek", "predict", "potential", "objective", "expect", "target", "project", "outlook", "forecast" and similar expressions identify forward-looking statements. We caution you that any forward-looking statements made by us or on our behalf are subject to uncertainties and other factors that could affect the accuracy of such statements. Forward-looking statements are based on management's current expectations, as well as certain assumptions and estimates made by, and information available to, management at the time the statements are made. Those statements are based on general assumptions and are subject to various risks, and because they also relate to the future, they are likewise subject to inherent uncertainties and other factors that may cause actual results to differ materially from the views, beliefs and projections expressed in such statements. The following are some of the risks that could affect our financial performance or could cause actual results to differ materially from those expressed or implied in our forward-looking statements:

Risks related to our financial results and Company success

- We are obligated to comply with covenants related to our Wells Fargo Credit Agreement that could restrict our operating activities, and the failure to comply with such covenants could result in defaults that accelerates our debt.
- We have experienced significant fluctuations in revenue and such fluctuations may continue. Fluctuations in revenue can cause our operating results in a given reporting period to be higher or lower than expected.
- The lengthy sales and approval process required by Service Providers for new products has resulted in fluctuations in our revenue and may result in future revenue fluctuations.
- We depend heavily on sales to certain customers; the loss of any of these customers or a significant project would significantly reduce our revenue and net income.
- Our exposure to the credit risks of our customers and distributors may make it difficult to collect accounts receivable and could adversely affect our operating results, financial condition and cash flows.
- We expect gross margins to continue to vary over time, and our levels of product and services gross margins may not be sustainable.
- Our dependence on a limited number of suppliers for certain raw materials, key components and ODM products, combined with supply shortages, has prevented and may continue to prevent us from delivering our products on a timely basis, which has had and may continue to have a material adverse effect on operating results and could have a material adverse effect on customer relations.
- We compete in markets that have become increasingly competitive, which may result in reduced gross profit margins and market share.
- Our estimates regarding future warranty obligations may change due to product failure rates, installation and shipment volumes, field service repair obligations and other rework costs incurred in correcting product failures. If our estimates change, our liability for warranty obligations may increase or decrease, impacting future cost of revenue.
- Managing our inventory is complex and has included and may continue to include write downs of excess or obsolete inventory.
- The continuing growth of our international operations has and may continue to expose us to additional risks, increase our costs and adversely affect our operating results, financial condition and cash flows.
- Our success depends on attracting and retaining key personnel.
- We are exposed to adverse currency exchange rate fluctuations in jurisdictions where we transact in local currency, which could harm our financial results and cash flows.

•We require a significant amount of cash to service our indebtedness, our payment obligations to Adtran Networks shareholders under the DPLTA, and other obligations.

•We have recognized impairment charges related to goodwill and other intangible assets in the past and may be required to do so in the future.

•We may be unable to successfully and effectively manage and integrate acquisitions, divestitures and other significant transactions, which could harm our operating results, business and prospects.

•Ongoing inflationary pressures could negatively impact our revenues and profitability if increases in the prices of our products and services or a decrease in customer spending result in lower sales.

Risks related to our control environment

•We have had to restate our previously issued consolidated financial statements and, as part of that process, have identified material weaknesses in our internal control over financial reporting. If we are unable to develop and maintain effective internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in us and may adversely affect our business, financial condition and results of operations.

•We may face litigation and other risks as a result of the restatements of our previously issued consolidated financial statements and material weaknesses in our internal control over financial reporting.

•Breaches of our information systems and cyberattacks could compromise our intellectual property and cause significant damage to our business and reputation.

Risks related to the Business Combination and DPLTA

•Our ability to realize anticipated strategic and financial benefits sought from the Business Combination has been and may continue to be affected by a number of factors.

•We have incurred and expect to continue to incur significant costs in connection with the Business Combination and post-closing integration and restructuring efforts.

•We incurred a substantial amount of indebtedness in connection with the Business Combination and DPLTA. Our failure to meet our debt service obligations could have a material adverse effect on our business, financial condition and results of operations.

•We have experienced operational challenges as a result of the Business Combination and may also experience negative synergies and loss of customers.

•The terms of the DPLTA may have a material adverse effect on our financial results and condition.

•We are exposed to additional litigation risk and uncertainty with respect to the remaining minority shareholders of Adtran Networks, which litigation may require us to pay a higher purchase price for additional Adtran Networks shares than the amount provided for under the DPLTA.

•We may be unable to successfully retain and motivate our personnel.

Risks related to the telecommunications industry

•We must continue to update and improve our products and develop new products to compete and to keep pace with improvements in communications technology.

•Our failure or the failure of our contract manufacturers to comply with applicable environmental regulations could adversely impact our results of operations.

•If our products do not interoperate with our customers' networks, installations may be delayed or canceled, which could harm our business.

•We engage in research and development activities to develop new, innovative solutions and to improve the application of developed technologies, and as a consequence may miss certain market opportunities enjoyed by larger companies with substantially greater research and development efforts and which may focus on more leading-edge development.

•Our strategy of outsourcing a portion of our manufacturing requirements to subcontractors located in various international regions may result in us not meeting our cost, quality or performance standards.

•Our failure to maintain rights to intellectual property used in our business could adversely affect the development, functionality and commercial value of our products.

•Third party hardware or software that is used with our portfolios may not continue to be available or at commercially reasonable terms.

•Our use of open source software could impose limitations on our ability to commercialize our products.

•We may incur liabilities or become subject to litigation that would have a material effect on our business.

•If we are unable to successfully develop and maintain relationships with SIs, Service Providers and enterprise VARs, our revenue may be negatively affected.

•We depend on a third-party cloud platform provider to host our Mosaic One SaaS network operating platform, and if we were to experience a disruption or interference in service, our business and reputation could suffer.

Risks related to the Company's stock price

•Our operating results and financial performance historically have fluctuated and are likely to continue to fluctuate in future periods. Such fluctuations can adversely affect our stock price.

•The price of our common stock has been volatile and may continue to fluctuate significantly.

Risks related to the regulatory environments in which we do business

•We are subject to complex and evolving U.S. and foreign laws, regulations and standards governing the conduct of our business. Violations of these laws and regulations may harm our business, subject us to penalties and to other adverse consequences.

•Changes in trade policy in the U.S. and other countries, including the imposition of additional tariffs and the resulting consequences, may adversely impact our gross profits, gross margins, results of operations and financial condition.

•New or revised tax regulations, changes in our effective tax rate, recognition of a valuation allowance or assessments arising from tax audits may have an adverse impact on our results.

•Central banks' monetary policy actions and instability in the financial services sector could increase our costs of borrowing money and negatively impact our financial condition and future operations.

•Expectations relating to environmental, social and governance considerations expose the Company to potential liabilities, increased costs, reputational harm, and other adverse effects on the Company's business.

•Further downgrades of the U.S. credit rating, impending automatic spending cuts or a government shutdown could negatively impact our liquidity, financial condition and earnings.

The foregoing list of risks is not exclusive. For a more detailed description of the risk factors associated with our business, see Part I, Item 1A of the Company's Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 15, 2024, as well as the risk factors set forth in Part II, Item 1A of this Quarterly Report on Form 10-Q. We caution investors that other factors may prove to be important in the future in affecting our operating results. New factors emerge from time to time, and it is not possible for us to predict all of these factors, nor can we assess the impact each factor, or a combination of factors, may have on our business.

You are further cautioned not to place undue reliance on these forward-looking statements because they speak only of our views as of the date that the statements were made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PART I. FINANCIAL INFORMATION
ITEM 1. FINANCIAL STATEMENTS

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Unaudited)
(In thousands, except per share amounts)

	March 31, 2024	December 31, 2023
ASSETS		
Current Assets		
Cash and cash equivalents	$ 106,757	$ 87,167
Accounts receivable, less allowance for credit losses of $367 and $400 as of March 31, 2024 and December 31, 2023, respectively	187,554	216,445
Other receivables	12,116	17,450
Income tax receivable	8,717	7,933
Inventory, net	322,147	362,295
Prepaid expenses and other current assets	59,667	45,566
Total Current Assets	**696,958**	**736,856**
Property, plant and equipment, net	126,969	123,020
Deferred tax assets	25,421	25,787
Goodwill	55,129	353,415
Intangibles, net	306,448	327,985
Other non-current assets	87,729	87,706
Long-term investments	29,252	27,743
Total Assets	**$ 1,327,906**	**$ 1,682,512**
LIABILITIES, REDEEMABLE NON-CONTROLLING INTEREST AND EQUITY		
Current Liabilities		
Accounts payable	$ 159,083	$ 162,922
Unearned revenue	55,124	46,731
Accrued expenses and other liabilities	36,404	37,607
Accrued wages and benefits	25,869	27,030
Income tax payable, net	6,266	5,221
Total Current Liabilities	**282,746**	**279,511**
Non-current revolving credit agreement outstanding	195,000	195,000
Deferred tax liabilities	15,414	35,655
Non-current unearned revenue	22,884	25,109
Non-current pension liability	11,692	12,543
Deferred compensation liability	29,709	29,039
Non-current lease obligations	27,668	31,420
Other non-current liabilities	35,375	28,657
Total Liabilities	**620,488**	**636,934**
Commitments and contingencies (see Note 18)		
Redeemable Non-Controlling Interest	**441,635**	**451,756**
Equity		
Common stock, par value $0.01 per share; 200,000 shares authorized; 79,116 shares issued and 78,850 outstanding as of March 31, 2024 and 78,970 shares issued and 78,674 outstanding as of December 31, 2023	791	790
Additional paid-in capital	798,897	795,304
Accumulated other comprehensive income	29,656	47,461
Retained deficit	(558,363)	(243,908)
Treasury stock at cost: 265 and 297 shares as of March 31, 2024 and December 31, 2023, respectively	(5,198)	(5,825)
Total Equity	**265,783**	**593,822**
Total Liabilities, Redeemable Non-Controlling Interest and Equity	**$ 1,327,906**	**$ 1,682,512**

See accompanying notes to condensed consolidated financial statements.

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF LOSS
(Unaudited)
(In thousands, except per share amounts)

	Three Months Ended March 31,	
	2024	**2023**
Revenue		
Network Solutions	$ 181,273	$ 282,418
Services & Support	44,900	41,494
Total Revenue	**226,173**	**323,912**
Cost of Revenue		
Network Solutions	126,326	219,130
Network Solutions - inventory write-down and other charges	8,782	—
Services & Support	18,810	16,974
Total Cost of Revenue	**153,918**	**236,104**
Gross Profit	**72,255**	**87,808**
Selling, general and administrative expenses	59,100	67,397
Research and development expenses	60,251	70,143
Goodwill impairment	292,583	—
Operating Loss	**(339,679)**	**(49,732)**
Interest and dividend income	397	304
Interest expense	(4,598)	(3,287)
Net investment gain	2,253	1,252
Other income (expense), net	1,310	(303)
Loss Before Income Taxes	**(340,317)**	**(51,766)**
Income tax benefit	18,647	11,313
Net Loss	**$ (321,670)**	**$ (40,453)**
Less: Net Income (Loss) attributable to non-controlling interest[(1)]	**2,880**	**(370)**
Net Loss attributable to ADTRAN Holdings, Inc.	**$ (324,550)**	**$ (40,083)**
Weighted average shares outstanding – basic	78,814	78,358
Weighted average shares outstanding – diluted	78,814	78,358
Loss per common share attributable to ADTRAN Holdings, Inc. – basic	$ (4.12)	$ (0.51)
Loss per common share attributable to ADTRAN Holdings, Inc. – diluted	$ (4.12)	$ (0.51)

(1)For the three months ended March 31, 2024, we recognized $2.9 million of net gain attributable to non-controlling interest, representing the recurring cash compensation earned by non-controlling interest shareholders post-DPLTA. For the three months ended March 31, 2023, we recognized $3.2 million of net loss attributable to non-controlling interest pre-DPLTA, partially offset by $2.8 million, representing the recurring cash compensation earned by non-controlling interest shareholders post-DPLTA.

See accompanying notes to condensed consolidated financial statements.

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Unaudited)
(In thousands)

	Three Months Ended March 31,	
	2024	**2023**
Net Loss	$ (321,670)	$ (40,453)
Other Comprehensive (Loss) Income, net of tax		
Net unrealized gain on available-for-sale securities	—	69
Defined benefit plan adjustments	(60)	35
Foreign currency translation (loss) gain	(17,745)	8,678
Other Comprehensive (Loss) Income, net of tax	**(17,805)**	**8,782**
Comprehensive Loss, net of tax	**(339,475)**	**(31,671)**
Less: Comprehensive Income attributable to non-controlling interest, net of tax	2,880	12
Comprehensive Loss attributable to ADTRAN Holdings, Inc., net of tax	**$ (342,355)**	**$ (31,683)**

See accompanying notes to condensed consolidated financial statements.

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Unaudited)
(In thousands, except per share amounts)

	Common Shares	Common Stock	Additional Paid-In Capital	Retained Deficit	Treasury Stock	Accumulated Other Comprehensive Income	Total Equity
Balance as of December 31, 2023	**78,970**	**$ 790**	**$ 795,304**	**$ (243,908)**	**$ (5,825)**	**$ 47,461**	**$ 593,822**
Net loss	—	—	—	(321,670)	—	—	(321,670)
Annual recurring compensation earned	—	—	—	(2,880)	—	—	(2,880)
Other comprehensive loss, net of tax	—	—	—	—	—	(17,805)	(17,805)
Deferred compensation adjustments, net of tax	—	—	(368)	3	627	—	262
ADTRAN RSUs and restricted stock vested	110	1	—	(243)	—	—	(242)
ADTRAN stock options exercised	36	—	—	219	—	—	219
ADTRAN stock-based compensation expense	—	—	3,957	—	—	—	3,957
Redemption of redeemable non-controlling interest	—	—	—	1	—	—	1
Foreign currency remeasurement of redeemable non-controlling interest	—	—	—	10,115	—	—	10,115
ADVA stock-based compensation expense	—	—	4	—	—	—	4
Balance as of March 31, 2024	**79,116**	**$ 791**	**$ 798,897**	**$ (558,363)**	**$ (5,198)**	**$ 29,656**	**$ 265,783**

See accompanying notes to condensed consolidated financial statements.

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(Unaudited)
(In thousands, except per share amounts)

	Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income	Non-controlling interest	Total Equity
Balance as of December 31, 2022	**78,088**	**$ 781**	**$ 895,834**	**$ 55,338**	**$ (4,125)**	**$ 26,126**	**$329,659**	**$ 1,303,613**
Net loss	—	—	—	(37,274)	—	—	(3,179)	(40,453)
Annual recurring compensation earned	—	—	—	(2,809)	—	—	—	(2,809)
Reclassification and remeasurement from equity to mezzanine equity for non-controlling interests in ADVA	—	—	(116,895)	—	—	—	(326,862)	(443,757)
Other comprehensive income, net of tax	—	—	—	—	—	8,400	382	8,782
Dividend payments to ADTRAN Holdings, Inc. shareholders ($0.09 per share)	—	—	—	(7,076)	—	—	—	(7,076)
Deferred compensation adjustments, net of tax	—	—	—	—	(1,792)	—	—	(1,792)
ADTRAN RSUs and restricted stock vested	561	6	—	(144)	—	—	—	(138)
ADTRAN stock options exercised	6	—	—	58	—	—	—	58
ADTRAN stock-based compensation expense	—	—	3,812	—	—	—	—	3,812
Redemption of redeemable non-controlling interest	—	—	—	343	—	—	—	343
Foreign currency remeasurement of redeemable non-controlling interest	—	—	—	(430)	—	—	—	(430)
ADVA stock-based compensation expense	—	—	9	—	—	—	—	9
Balance as of March 31, 2023	**78,655**	**$ 787**	**$ 782,760**	**$ 8,006**	**$ (5,917)**	**$ 34,526**	**$ —**	**$ 820,162**

See accompanying notes to condensed consolidated financial statements.

ADTRAN Holdings, Inc.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(In thousands)

	March 31,	
	2024	**2023**
Cash flows from operating activities:		
Net loss	$ (321,670)	$ (40,453)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	22,528	33,402
Goodwill Impairment	292,583	—
Amortization of debt issuance cost	1,013	146
Gain on investments, net	(2,621)	(3,154)
Net loss on disposal of property, plant and equipment	150	—
Stock-based compensation expense	3,957	3,812
Deferred income taxes	(19,738)	(24,019)
Other, net	545	(1)
Inventory write down	3,992	—
Inventory reserves	1,837	16,051
Changes in operating assets and liabilities:		
Accounts receivable, net	26,002	17,658
Other receivables	5,605	1,980
Income taxes receivable, net	(1,296)	—
Inventory	30,426	(2,764)
Prepaid expenses, other current assets and other assets	(15,882)	1,118
Accounts payable	553	(40,367)
Accrued expenses and other liabilities	7,459	6,349
Income taxes payable, net	1,155	10,316
Net cash provided by (used in) operating activities	**36,598**	**(19,926)**
Cash flows from investing activities:		
Purchases of property, plant and equipment	(13,374)	(8,439)
Proceeds from sales and maturities of available-for-sale investments	873	930
Purchases of available-for-sale investments	(44)	(516)
Payment for beneficial interests in securitized accounts receivable	—	1,231
Net cash used in investing activities	**(12,545)**	**(6,794)**
Cash flows from financing activities:		
Tax withholdings related to stock-based compensation settlements	(176)	(6,258)
Proceeds from stock option exercises	219	58
Dividend payments	—	(7,076)
Proceeds from receivables purchase agreement	30,231	—
Repayments on receivables purchase agreement	(32,437)	—
Proceeds from draw on revolving credit agreements	—	138,236
Repayment of revolving credit agreements	—	(43,464)
Payment for redemption of redeemable non-controlling interest	(5)	(1,176)
Payment of debt issuance cost	(1,994)	—
Repayment of notes payable	—	(24,692)
Net cash (used in) provided by financing activities	**(4,162)**	**55,628**
Net increase in cash and cash equivalents	19,891	28,908
Effect of exchange rate changes	(301)	(1,095)
Cash and cash equivalents, beginning of period	**87,167**	**108,644**
Cash and cash equivalents, end of period	**$ 106,757**	**$ 136,457**
Supplemental disclosure of cash financing activities:		
Cash paid for interest	$ 5,243	$ 1,610
Cash paid for income taxes	$ 2,315	$ 1,251
Cash used in operating activities related to operating leases	$ 2,384	$ 4,057
Supplemental disclosure of non-cash investing activities:		
Right-of-use assets obtained in exchange for lease obligations	$ 842	$ 486
Purchases of property, plant and equipment included in accounts payable	$ 1,689	$ 4,354

See accompanying notes to condensed consolidated financial statements.

GENERAL

ADTRAN Holdings, Inc. ("ADTRAN" or the "Company") is a leading global provider of networking and communications platforms, software, systems and services focused on the broadband access market, serving a diverse domestic and international customer base in multiple countries that includes large, medium and small Service Providers, alternative Service Providers, such as utilities, municipalities and fiber overbuilders, cable/MSOs, SMBs and distributed enterprises. Our innovative solutions and services enable voice, data, video and internet-communications across a variety of network infrastructures and are currently in use by millions worldwide. We support our customers through our direct global sales organization and our distribution networks. Our success depends upon our ability to increase unit volume and market share through the introduction of new products and succeeding generations of products having optimal selling prices and increased functionality as compared to both the prior generation of a product and to the products of competitors in order to gain market share. To service our customers and grow revenue, we are continually conducting research and developing new products addressing customer needs and testing those products for the specific requirements of the particular customers. We offer a broad portfolio of flexible software and hardware network solutions and services that enable Service Providers to meet today's service demands, while enabling them to transition to the fully converged, scalable, highly-automated, cloud-controlled voice, data, internet and video network of the future. In addition to our global headquarters in Huntsville, Alabama, and our European headquarters in Munich, Germany, we have sales and research and development facilities in strategic global locations.

The Company solely owns ADTRAN, Inc. and is the majority shareholder of Adtran Networks (formerly ADVA Optical Networking SE). ADTRAN, Inc. is a leading global provider of open, disaggregated networking and communications solutions. Adtran Networks is a global provider of network solutions for data, storage, voice and video services. We believe that the combined technology portfolio can best address current and future customer needs for high-speed connectivity from the network core to the end consumer and in particular upon the convergence of solutions at the network edge.

Liquidity, Domination and Profit and Loss Transfer Agreement and Credit Facility

The DPLTA between the Company, as the controlling company, and Adtran Networks SE ("Adtran Networks"), as the controlled company, as executed on December 1, 2022, became effective on January 16, 2023, as a result of its registration with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) at the registered seat of Adtran Networks (Jena).

Under the DPLTA, subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, (i) the Company is entitled to issue binding instructions to the management board of Adtran Networks, (ii) Adtran Networks will transfer its annual profit to the Company, subject to, among other things, the creation or dissolution of certain reserves, and (iii) the Company will generally

absorb the annual net loss incurred by Adtran Networks. The obligation of the Company to absorb Adtran Networks' annual net loss applied for the first time to the loss generated in 2023.

Pursuant to the terms of the DPLTA, each Adtran Networks shareholder (other than the Company) has received an offer to elect either (1) to remain an Adtran Networks shareholder and receive from us an Annual Recurring Compensation payment, or (2) to receive Exit Compensation plus guaranteed interest. The guaranteed interest under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component (according to the German Civil Code) that was 3.62% as of March 31, 2024. Assuming all the minority holders of currently outstanding Adtran Networks shares were to elect the second option, we would be obligated to make aggregate Exit Compensation payments, including guaranteed interest, of approximately €338.9 million or approximately $365.7 million, based on an exchange rate as of March 31, 2024 and reflecting interest accrued through March 31, 2024 during the pendency of the appraisal proceedings discussed below. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (Aktiengesetz) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (Bundesanzeiger).

We are also obligated to absorb any annual net loss of Adtran Networks under the DPLTA. Additionally, our obligation to pay Annual Recurring Compensation under the DPLTA is a continuing payment obligation, which will amount to approximately €10.6 million or $11.5 million (based on the current exchange rate) per year assuming none of the minority Adtran Networks shareholders were to elect Exit Compensation. The foregoing amounts do not reflect any potential increase in payment obligations that we may have depending on the outcome of ongoing appraisal proceedings in Germany. During the three months ended March 31, 2024 and 2023, we accrued $2.9 million and $2.8 million, respectively, in Annual Recurring Compensation, which was reflected as an increase to retained deficit. With respect to the year ended December 31, 2023, we are obligated to pay $11.5 million in Annual Recurring Compensation on the third banking day following the 2024 ordinary general shareholders' meeting of Adtran Networks, which is expected to occur on June 28, 2024 (but in any event within eight months following December 31, 2023).

On October 18, 2022, the Company's Board of Directors authorized the Company to purchase additional shares of Adtran Networks through open market purchases not to exceed 15,346,544 shares. For the three months ended March 31, 2024 and 2023, less than one thousand and 62 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €4 thousand and €1.1 million, respectively, or approximately $5 thousand and $1.2 million based on an exchange rate as of March 31, 2024 and 2023, respectively, were paid to Adtran Networks shareholders.

On July 18, 2022, ADTRAN, Inc., as the borrower, and ADTRAN Holdings, Inc. entered into a credit agreement with a syndicate of banks, including Wells Fargo Bank, National Association, as administrative agent ("Administrative Agent"), and the other lenders named therein (the "Credit Agreement"), which has since been amended three times. Pursuant to the terms of the Credit Agreement, as amended, the Company, ADTRAN, Inc., and the subsidiary guarantors (together, the "Credit Parties") are subject to a liquidity covenant, which provides that, during the fourth quarter of 2023 through and including the third quarter of 2024 (the "Covenant Relief Period") or a Springing Covenant Period (i.e., the period beginning upon the purchase by the Company of at least 60% of the outstanding shares of Adtran Networks not owned by the Company as of August 9, 2023 and the three consecutive quarterly test periods after such date), as of the last day of any fiscal quarter, the cash and cash equivalents of the Credit Parties must be at least $50.0 million and the cash and cash equivalents of the Company and its subsidiaries must be at least $75.0 million, limiting our ability to pay the obligations under the DPLTA. The Company had access to $203.0 million on its Credit Facility for future borrowings; however, as of March 31, 2024, the Company was limited to additional borrowings of $22.7 million based on debt covenant compliance metrics. *See Note 11, Revolving Credit Agreements for additional information regarding the terms of the Wells Fargo Credit Agreement and its amendments.*

As of March 31, 2024, and as of the date of issuance of these financial statements, the Company does not have sufficient liquidity to meet payment obligations under the DPLTA pertaining to Exit Compensation. For the three months ended March 31, 2024 and 2023, less than one thousand and 62 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €4 thousand and €1.1 million, respectively, or approximately $5 thousand and $1.2 million based on an exchange rate as of March 31, 2024 and 2023, respectively, were paid to Adtran Networks shareholders. We believe the probability that more than a small minority of Adtran Networks shareholders elect to receive Exit Compensation in the next twelve months is remote based on the diverse base of shareholders that must make this election on an individual shareholder basis, the current ongoing appraisal proceedings involving a dispute on the value of the Exit Compensation which is expected to take 24-32 months to resolve, the current guaranteed Annual Recurring Compensation payment plus the interest earned on such shares during the ongoing appraisal proceedings, and the current trading value of Adtran Networks shares.

The Company experienced revenue declines in the year ended December 31, 2023 and during the three months ended March 31, 2024. To the extent that the Company is further impacted by the uncertain macroeconomic environment related to continued elevated interest rates and ongoing inflationary pressures, the Company has established plans to preserve cash liquidity and maintain compliance with the Company's covenants. The Company has suspended dividend payments and is continuing to implement a business efficiency program, which includes, but is not limited to planned reductions in operating expenses and a site consolidation plan. In connection with

the site consolidation plan, the Company is also exploring a potential sale of portions of our headquarters in Huntsville. There can be no assurance that the Company will be successful in effecting this action on commercially reasonable terms or at all. We may need to further reduce capital expenditures and/or take other steps to preserve working capital in order to ensure that we can meet our needs and obligations and maintain compliance with our debt covenants.

In summary, the Company believes that its cash and cash equivalents, investments, working capital management initiatives and availability to access cash under the Wells Fargo credit facility, including (i) the additional funding provided for under the First Amendment to the Wells Fargo Credit Facility that was signed on August 9, 2023, (ii) the additional covenant headroom during the Covenant Relief Period provided for under the Second Amendment to Wells Fargo Credit Facility, and (iii) the exclusion of the Factoring Agreement as debt for purposes of the Credit Facility's financial covenants as provided for under the Third Amendment to the Wells Fargo Credit Facility will be adequate to meet our business operating requirements, our capital expenditures and our expected obligations under the DPLTA, including anticipated levels of Exit Compensation and ability to continue to comply with our debt covenants under the Credit Facility, for at least the next twelve months, from the issuance of these financial statements. *See Note 11, Revolving Credit Agreements, for additional information regarding the terms of the First, Second and Third Amendments of the Wells Fargo Credit agreement.*

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited Condensed Consolidated Financial Statements of ADTRAN Holdings, Inc. and its subsidiaries have been prepared pursuant to the rules and regulations of the SEC applicable to interim financial information presented in Quarterly Reports on Form 10-Q. Accordingly, certain information and notes required by generally accepted accounting principles in the United States of America ("U.S. GAAP") for complete financial statements are not included herein. The December 31, 2023 Condensed Consolidated Balance Sheet is derived from audited financial statements but does not include all disclosures required by U.S. GAAP for annual financial statements.

In the opinion of management, all adjustments necessary to fairly state these interim statements have been recorded and are of a normal and recurring nature. The results of operations for an interim period are not necessarily indicative of the results for the full year. The interim financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in ADTRAN Holdings, Inc. Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 15, 2024.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expense during the reporting period. Significant estimates include allowance for credit losses on accounts receivable and contract assets, excess and obsolete inventory reserves, warranty reserves, customer rebates, determination and accrual of the deferred revenue related to performance obligations under contracts with customers, estimated costs to complete obligations associated with deferred and accrued revenues and network installations, estimated income tax provision and income tax contingencies, fair value of stock-based compensation, assessment of goodwill and other intangibles for impairment, estimated lives of intangible assets, estimates of intangible assets upon measurement, estimated pension liability and fair value of investments and estimated contingent liabilities. Actual amounts could differ significantly from these estimates.

We assessed certain accounting matters that generally require consideration of forecasted financial information in context with the information reasonably available to us and the unknown future impacts of ongoing inflationary pressures, the energy crisis, currency fluctuations and political tensions as of March 31, 2024, and through the date of this report. The accounting matters assessed included, but were not limited to, the allowance for credit losses, stock-based compensation, carrying value of goodwill, intangibles and other long-lived assets, financial assets, valuation allowances for tax assets, revenue recognition and costs of revenue. Future conditions related to ongoing inflationary pressures, the energy crisis, continued elevated interest rates, instability in the financial services industry, currency fluctuations and political tensions could result in further impacts to the Company's consolidated financial statements in future reporting periods.

Accounts Receivable Factoring

New Accounts Receivable Factoring Agreement

On December 19, 2023, the Company entered into a new factoring agreement with a third-party financial institution to replace the Company's prior accounts receivable purchase agreement, to sell on a revolving basis, undivided interests in the Company's accounts receivable. The new factoring agreement qualifies for treatment as a secured borrowing with a pledge of collateral under Accounting Standards Codification ("ASC") Topic 810, *Consolidations,* as the Company is considered the primary beneficiary in a variable interest entity created to hold the factored receivables and the Company retains a residual claim on reserves related to the factored receivables. Within the Condensed Consolidated Balance Sheets, the receivables factored continue to be carried in accounts receivable, less allowance for credit losses, and the secured borrowings are carried as a current liability within accounts payable. The proceeds and repayments of secured borrowings are reflected as cash flows provided by (used in) financing activities within the Condensed Consolidated Statements of Cash Flows, and program fees are recorded as interest expense in the Consolidated Statements of Loss. The short-term liability classification of the secured borrowings is based on the estimated timing of the collection of the accounts receivable which are expected to be received within 12 months. See Note 2 for additional information.

Previous Accounts Receivable Factoring Agreement

The Company had previously entered into a factoring agreement to sell certain receivables to an unrelated third-party financial institution on a non-recourse basis. These transactions were accounted for in accordance with ASC Topic 860 and resulted in a reduction in accounts receivable because the agreement transferred effective control over and risk related to the receivables to the buyers. Trade accounts receivables balances sold were removed from the Condensed Consolidated Balance Sheets and cash received was reflected as cash flows provided by (used in) operating activities in the Condensed Consolidated Statements of Cash Flow. Factoring related interest expense was recorded to interest expense on the Condensed Consolidated Statements of Loss. On each sale date, the financial institution retained from the sale price a default reserve, up to a required balance, which was held by the financial institution in a reserve account and pledged to the Company. The financial institution was entitled to withdraw from the reserve account the sale price of a defaulted receivable. The balance in the reserve account was included in other assets on the Condensed Consolidated Balance Sheets.

Redeemable Non-Controlling Interest

As of March 31, 2024 and December 31, 2023, the non-controlling Adtran Networks stockholders' equity ownership percentage in Adtran Networks was approximately 34.7% for each period.

As a result of the effectiveness of the DPLTA on January 16, 2023, the Adtran Networks shares, representing the equity interest in Adtran Networks held by holders other than the Company, can be tendered at any time and are, therefore, redeemable and must be classified outside stockholders' equity. Therefore, the permanent equity noncontrolling interest balance was reclassified to redeemable non-controlling interest on January 16, 2023 and was remeasured to fair value based on the trading market price of the Adtran Networks shares.

Subsequently, the carrying value of the RNCI is adjusted to its maximum redemption value at each reporting date when the maximum redemption value is greater than the initial carrying amount of the RNCI. However, the RNCI will be remeasured using the current exchange rate at each reporting date as long as the RNCI is currently redeemable. For the period of time that the DPLTA is in effect, the RNCI will continue to be presented as RNCI outside of stockholders' equity in the Condensed Consolidated Balance Sheets. *See Note 14 for additional information on RNCI.*

Recent Accounting Pronouncements Not Yet Adopted

In December 2023, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update ("ASU") 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures", which is intended to enhance the transparency, decision usefulness and effectiveness of income tax disclosures. The amendments in this ASU require a public entity to disclose a tabular tax rate reconciliation, using both percentages and currency, with specific categories. A public entity is also required to provide a qualitative description of the states and local jurisdictions that make up the majority of the effect of the state and local income tax category and the net amount of income taxes paid, disaggregated by federal, state and foreign taxes and also disaggregated by individual jurisdictions. The amendments also remove certain disclosures that are no longer considered cost beneficial. The amendments are effective prospectively for annual periods beginning after December 15, 2024, and early adoption and retrospective application are permitted. The Company is currently evaluating the effect that adoption of ASU 2023-09 will have on our disclosures.

In November 2023, the FASB issued ASU 2023-7, "Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures", which is intended to improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses, allowing financial statement users to better understand the components of a segment's profit or loss to assess potential future cash flows for each reportable segment and the entity as a whole. The amendments expand a public entity's segment disclosures by requiring disclosure of significant segment expenses that are regularly provided to the chief operating decision maker ("CODM"), clarifying when an entity may report one or more additional measures to assess segment performance, requiring enhanced interim disclosures, providing new disclosure requirements for entities with a single reportable segment, and requiring other new disclosures. The amendments are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, and early adoption is permitted. The Company expect to adopt the new disclosures as required for the year ended December 31, 2024. The Company is currently evaluating the impact on the related disclosures.

Recent Final Rules Not Yet Adopted

In March 2024, the SEC adopted final rules under SEC Release No. 33-11275, *The Enhancement and Standardization of Climate-Related Disclosures for Investors*, which requires registrants to provide certain climate-related information in their registration statements and annual reports. The rules require information about a registrant's climate-related risks that are reasonably likely to have a material impact on its business, results of operations, or financial condition. The required information about climate-related risks will also include disclosure of a registrant's greenhouse gas emissions. In addition, the rules will require registrants to present certain climate-related financial metrics in their audited financial statements. These requirements are effective for the Company in various fiscal years, starting with its fiscal year beginning January 1, 2025. Disclosures will be required prospectively, with information for prior periods required only to the extent it was previously disclosed in an SEC filing. The Company is currently evaluating the impact of these final rules on its consolidated financial statements and disclosures. On April 12, 2024, the final rules were indefinitely delayed pending the completion of judicial review in consolidated proceedings in the U.S. Court of Appeals, Eighth Circuit.

Recently Adopted Accounting Pronouncements

There are currently no recently adopted accounting pronouncements that are expected to have a material effect on the Condensed Consolidated Financial Statements.

2. REVENUE

The following is a description of the principal activities from which revenue is generated by reportable segment:

Network Solutions Segment - Includes hardware and software products that enable a digital future which support the Company's Subscriber, Access & Aggregation, and Optical Networking Solutions.

Services & Support Segment - Includes network design, implementation, maintenance and cloud-hosted services supporting the Company's Subscriber, Access & Aggregation, and Optical Networking Solutions.

Revenue by Category

In addition to the Company's reportable segments, revenue is also reported for the following three categories – Subscriber Solutions, Access & Aggregation Solutions and Optical Networking Solutions.

Our Subscriber Solutions portfolio is used by Service Providers to terminate their access services infrastructure at the customer premises while providing an immersive and interactive experience for residential, business and wholesale subscribers. This revenue category includes hardware- and software-based products and services. These solutions include fiber termination solutions for residential, business and wholesale subscribers, Wi-Fi access solutions for residential and business subscribers, Ethernet switching and network edge virtualization solutions for business subscribers, and cloud software solutions covering a mix of subscriber types.

Our Access & Aggregation Solutions are solutions that are used by communications Service Providers to connect residential subscribers, business subscribers and mobile radio networks to the Service Providers' metro network, primarily through fiber-based connectivity. This revenue category includes hardware- and software-based products and services. Our solutions within this category are a mix of fiber access and aggregation platforms, precision network synchronization and timing solutions, and access orchestration solutions that ensure highly reliable and efficient network performance.

Our Optical Networking Solutions are used by communications Service Providers, internet content providers and large-scale enterprises to securely interconnect metro and regional networks over fiber. This revenue category includes hardware- and software-based products and services. Our solutions within this category include open optical terminals, open line systems, optical subsystems and modules, network infrastructure assurance systems, and automation platforms that are used to build high-scale, secure and assured optical networks.

The following table disaggregates revenue by reportable segment and revenue category:

	Three Months Ended					
	March 31, 2024			March 31, 2023		
(In thousands)	Network Solutions	Services & Support	Total	Network Solutions	Services & Support	Total
Subscriber Solutions	$ 60,369	$ 9,399	$ 69,767	$ 70,287	$ 9,049	$ 79,336
Access & Aggregation Solutions	67,777	13,535	81,312	84,554	12,266	96,820
Optical Networking Solutions	53,127	21,966	75,094	127,577	20,179	147,756
Total	**$ 181,273**	**$ 44,900**	**$ 226,173**	**$ 282,418**	**$ 41,494**	**$ 323,912**

The aggregate amount of transaction price allocated to remaining performance obligations that have not been satisfied as of March 31, 2024 and December 31, 2023 related to contractual maintenance agreements, contractual SaaS and subscription services, and hardware contracts that exceed one year in duration amounted to $346.9 million and $314.8 million, respectively. As of March 31, 2024, approximately 61.0% is expected to be recognized over the next 12 months and the remainder recognized thereafter. The majority of the Company's remaining performance obligations as of March 31, 2024 are related to contracts or orders that have an original expected duration of one year or less, for which the Company is electing to utilize the practical expedient available within the guidance, and are excluded from the transaction price related to these future obligations. The Company will generally satisfy the remaining performance obligations as we transfer control of the products ordered or services to our customers, excluding maintenance services, which are satisfied over time.

The following table provides information about accounts receivable, contract assets and unearned revenue from contracts with customers:

(In thousands)	As of March 31, 2024	As of December 31, 2023
Accounts receivable, net	$ 187,554	$ 216,445
Contract assets[(1)]	$ 815	$ 691
Unearned revenue	$ 55,124	$ 46,731
Non-current unearned revenue	$ 22,884	$ 25,109

(1) Included in other receivables on the Condensed Consolidated Balance Sheets.

Accounts Receivable

The allowance for credit losses was $0.4 million as of March 31, 2024 and December 31, 2023, related to accounts receivable.

Contract Assets

No allowance for credit losses was recorded for the three months ended March 31, 2024 and 2023 related to contract assets.

Receivables Purchase Agreement

The Company was party to a receivable purchase agreement with a third-party financial institution (the "Factor"), which accelerates receivable collection and helps to better manage cash flow. As of December 31, 2023 no accounts receivable were factored under the agreement or held in the reserve account. The cost of receivables purchase agreement is included in interest expense in the Condensed Consolidated Statements of Loss and totaled $0.3 million for the three months ended March 31, 2023.

On December 19, 2023, the agreement with the Factor was terminated and the Company, entered into a receivables purchase agreement with a third-party financial institution (the "New Factor") to replace the Company's prior accounts receivable purchase agreement and to sell, on a revolving basis, undivided interests in the Company's accounts receivable. The New Factor provides for up to $40.0 million in borrowing capacity, subject to eligible receivables and reserve requirements, secured by the receivables. The New Factor qualifies for treatment as a secured borrowing with a pledge of collateral under Accounting Standards Codification ("ASC") Topic 810, *Consolidations*. Total secured borrowings under the agreement were $12.6 million and $14.3 million as of March 31, 2024 and December 31, 2023, respectively, leaving $27.2 million and $25.4 million available for future borrowings as of March 31, 2024 and December 31, 2023, respectively. Accounts receivable pledged as collateral related to the secured borrowings were $16.4 million and $16.8 million as of March 31, 2024 and December 31, 2023, respectively. For the three months ended March 31, 2024, the Company incurred program fee expenses of $0.3 million. As of March 31, 2024, the program fee rate was 6.88% percent.

Of the outstanding unearned revenue balances as of December 31, 2023, $19.7 million were recognized as revenue during the three months ended March 31, 2024. Of the $60.4 million of outstanding unearned revenue balances as of December 31, 2022, $25.6 million were recognized as revenue during the three months ended March 31, 2023.

3. INCOME TAXES

The Company's effective tax rate changed from a benefit of 21.9% of pre-tax loss for the three months ended March 31, 2023, to a benefit of 5.5% of pre-tax loss for the three months ended March 31, 2024. The change in the effective tax rate for the three months ended March 31, 2024, was driven primarily by a loss jurisdiction for which no tax benefits were recognized on its pre-tax losses during the first quarter of 2024.

The Company continually reviews the adequacy of its valuation allowance and recognizes the benefits of deferred tax assets only as the assessment indicates that it is more likely than not that the deferred tax assets will be recognized in accordance with ASC 740, Income Taxes. As of March 31, 2024, the Company had net deferred tax assets totaling $96.5 million, and a valuation allowance totaling $86.5 million against those deferred tax assets. Our assessment of the realizability of our deferred tax assets includes the evaluation of historical operating results, as well as the evaluation of evidence which requires significant judgment, including the evaluation of our three-year cumulative income position, future taxable income projections and tax planning strategies. Should management's conclusion change in the future and an additional valuation allowance, or a partial or full release of the valuation allowance becomes necessary, it may have a material effect on our consolidated financial statements.

4. STOCK-BASED COMPENSATION

For the three months ended March 31, 2024 and 2023, stock-based compensation expense was $4.0 million and $2.6 million, respectively.

PSUs, RSUs and Restricted Stock - ADTRAN Holdings, Inc.

The following table summarizes the PSUs, RSUs and restricted stock outstanding as of December 31, 2023 and March 31, 2024 and the changes that occurred during the three months ended March 31, 2024:

	Number of Shares (in thousands)		Weighted Avg. Grant Date Fair Value (per share)
Unvested PSUs, RSUs and restricted stock outstanding, December 31, 2023	**1,942**	**$**	**17.46**
PSUs, RSUs and restricted stock granted	966	$	7.22
PSUs, RSUs and restricted stock vested	(102)	$	18.47
PSUs, RSUs and restricted stock forfeited	(32)	$	17.36
Unvested PSUs RSUs and restricted stock outstanding, March 31, 2024	**2,774**	**$**	**13.79**

The fair value of PSUs with performance conditions, RSUs and restricted stock is equal to the closing price of the Company's stock on the date of grant. The fair value of PSUs with market conditions is calculated using a Monte Carlo simulation valuation method.

As of March 31, 2024, total unrecognized compensation expense related to non-vested portion of performance-based PSUs (considered probable), market-based PSUs, RSUs and restricted stock was approximately $19.4 million, which will be recognized over the remaining weighted-average period of 1.8 years. As of March 31, 2024, there was $10.2 million of unrecognized compensation expense related to unvested performance-based PSUs (not-considered probable), which will be recognized over the remaining requisite service period of 1.8 years if achievement of the performance obligation becomes probable. Unrecognized compensation expense will be adjusted for actual forfeitures.

As of March 31, 2024, 0.5 million shares were available for issuance under stockholder-approved equity plans.

Stock Options - ADTRAN Holdings, Inc.

The following table summarizes the ADTRAN Holdings, Inc. stock options outstanding as of December 31, 2023 and March 31, 2024 and the changes that occurred during the three months ended March 31, 2024:

	Number of Stock Options (in thousands)	Weighted Avg. Exercise Price (per share)	Weighted Avg. Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Stock options outstanding, December 31, 2023	**3,894**	**$ 10.32**	**5.25**	**$ 3,087**
Stock options exercised	(36)	$ 6.06		
Stock options forfeited	(58)	$ 6.68		
Stock options expired	(178)	$ 7.89		
Stock options outstanding, March 31, 2024	**3,622**	**$ 10.54**	**5.18**	**$ 268**
Stock options exercisable, March 31, 2024	**1,264**	**$ 13.30**	**1.43**	**$ —**

As of March 31, 2024, there was $6.6 million of unrecognized compensation expense related to stock options which will be recognized over the remaining weighted-average period of 1.6 years.

The determination of the fair value of stock options assumed or granted by ADTRAN Holdings was estimated using the Monte Carlo method and is affected by its stock price, as well as assumptions regarding a number of complex and subjective variables that may have a significant impact on the fair value estimate. The stock option pricing model requires the use of several assumptions that impact the fair value estimate. These variables include, but are not limited to, the volatility of the Company's stock price and employee exercise behaviors.

All of the options were previously issued at exercise prices that approximated fair market value at the date of grant.

The aggregate intrinsic value of stock options represents the total pre-tax intrinsic value (the difference between the Company's closing stock price on the last trading day of the quarter and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on March 31, 2024. The amount of aggregate intrinsic value was $0.3 million as of March 31, 2024, which will change based on the fair market value of the Company's stock. The total pre-tax intrinsic value of options exercised during the three months ended March 31, 2024 and 2023 was $34 thousand and $43 thousand, respectively. No stock options vested during the three months ended March 31, 2024 and 2023.

5. INVESTMENTS

Debt Securities and Other Investments

The Company did not have any debt securities and other investments as of March 31, 2024.

Realized gains and losses on sales of debt securities are computed under the specific identification method. The following table presents the gross realized gains and losses related to its debt securities:

	Three Months Ended March 31,	
(In thousands)	**2024**	**2023**
Gross realized gain on debt securities	$ —	$ 4
Gross realized loss on debt securities	—	(11)
Total loss recognized, net	**$ —**	**$ (7)**

Realized and unrealized gains and losses related to marketable equity securities were as follows:

	Three Months Ended March 31,	
(In thousands)	**2024**	**2023**
Realized gain on equity securities sold	$ 123	$ 13
Unrealized gain on equity securities held	2,130	1,246
Total gain recognized, net	**$ 2,253**	**$ 1,259**

Income generated from marketable equity securities was recorded as interest and dividend income in the Condensed Consolidated Statements of Loss. U.S. GAAP establishes a three-level valuation hierarchy based upon observable and unobservable inputs for fair value measurement of financial instruments:

- Level 1 – Observable outputs; values based on unadjusted quoted prices for identical assets or liabilities in an active market;

- Level 2 – Significant inputs that are observable; values based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly;
- Level 3 – Significant unobservable inputs; values based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. These inputs could include information supplied by investees.

The Company's cash equivalents and investments held at fair value are categorized into this hierarchy as follows:

		Fair Value Measurements as of March 31, 2024 Using		
(In thousands)	Fair Value	Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents				
Money market funds	$ 5,375	$ 5,375	$ —	$ —
Marketable equity securities				
Marketable equity securities – various industries	987	987	—	—
Deferred compensation plan assets	28,265	28,265	—	—
Total	**$ 34,627**	**$ 34,627**	**$ —**	**$ —**

		Fair Value Measurements as of December 31, 2023 Using		
(In thousands)	Fair Value	Quoted Prices in Active Market for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash equivalents				
Money market funds	$ 5,302	$ 5,302	$ —	$ —
Marketable equity securities				
Marketable equity securities – various industries	905	905	—	—
Deferred compensation plan assets	26,838	26,838	—	—
Total	**$ 33,045**	**$ 33,045**	**$ —**	**$ —**

Market prices are obtained from a variety of industry standard data providers, large financial institutions and other third-party sources. These multiple market prices are used as inputs into a distribution-curve-based algorithm to determine the daily market value of each security.

6. INVENTORY

Inventory consisted of the following:

(In thousands)	As of March 31, 2024	As of December 31, 2023
Raw materials	$ 130,977	$ 152,140
Work in process	14,856	17,239
Finished goods	176,314	192,916
Total inventory, net	**$ 322,147**	**$ 362,295**

Inventory reserves are established for estimated excess and obsolete inventory equal to the difference between the cost of the inventory and the estimated net realizable value of the inventory based on estimated reserve percentages, which considers historical usage, known trends, inventory age and market conditions.

During the three months ended March 31, 2024, we incurred total charges of $8.8 million as a result of a strategy shift which included discontinuance of certain product lines in connection with the Business Efficiency Program, of which, $4.0 million relates to inventory write-downs and $4.8 million relates to other charges, and are included in cost of revenue in the Condensed Consolidated Statements of Loss. There were no write-downs of inventory during the three months ended March 31, 2023.

7. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following:

(In thousands)	As of March 31, 2024	As of December 31, 2023
Engineering and other equipment	$ 184,330	$ 183,336
Building	79,159	79,215
Computer hardware and software	111,354	101,572
Building and land improvements	57,491	58,238
Furniture and fixtures	21,536	21,368
Land	5,227	5,242
Total property, plant and equipment	**459,097**	**448,971**
Less: accumulated depreciation	(332,128)	(325,951)
Total property, plant and equipment, net	**$ 126,969**	**$ 123,020**

Long-lived assets used in operations are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable and the undiscounted cash flows estimated to be generated by the asset are less than the asset's carrying value.

Depreciation expense was $7.2 million and $7.6 million for the three months ended March 31, 2024 and 2023, respectively, which is recorded in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Loss.

8. GOODWILL

The changes in the carrying amount of goodwill for the three months ended March 31, 2024 are as follows:

(In thousands)	Network Solutions	Services & Support	Total
As of December 31, 2023	**$ 297,031**	**$ 56,384**	**$ 353,415**
Goodwill impairment	(290,528)	—	(290,528)
Foreign currency translation adjustments	(6,503)	(1,255)	(7,758)
As of March 31, 2024	**$ —**	**$ 55,129**	**$ 55,129**

Goodwill represents the excess purchase price over the fair value of net assets acquired. The Company performs its annual goodwill impairment assessment on the first day of the fourth quarter. In addition, the Company performs an interim impairment assessment prior to our October 1st annual measurement date whenever events or changes in circumstances indicate that the carrying amount of such assets (or group of assets) may not be recoverable.

During the third quarter of 2023, the Company identified a triggering event due to a decrease in the Company's market capitalization and changes in projections (decrease in estimated cash flows). While the quantitative impairment analysis indicated that there was no impairment of Network Solutions goodwill, the Company determined that a $37.9 million non-cash impairment charge for goodwill was warranted for the Services & Support reporting unit. During the fourth quarter of 2023, the Company completed its annual

impairment test. There were no significant market changes or changes to cash flow projections, as such no triggering event was identified during the fourth quarter of 2023.

During the first quarter of 2024, qualitative factors such as a decrease in the Company's market capitalization, lower service provider spending and delayed holding patterns of inventory with respect to customers caused us to reduce our forecasts, triggering a quantitative impairment assessment for our reporting units. The Company determined the fair value of each reporting unit using a combination of an income approach and a market based peer group analysis. The significant inputs and assumptions used in the determination of the fair value of our reporting units based on future cash flows for the reporting units, requires significant judgment and the use of estimates and assumptions related to cash flow projections, discount rate, peer group determination and market multiple selection. The Company determined upon its quantitative impairment assessment to recognize a $292.6 million non-cash goodwill impairment charge for the Network Solutions reporting unit. The quantitative impairment analysis indicated there was no impairment of the Services & Support goodwill. No impairment of goodwill was recorded during the three months ended March 31, 2023. As of March 31, 2024, accumulated goodwill impairment losses totaled $330.5 million.

Subsequent to March 31, 2024, the Company has experienced volatility in its stock price which reduced the market value of the Company's common stock as of this filing. The Company will continue to monitor its stock price, operating results and other macroeconomic factors to determine if there is further indication of a sustained decline in fair value requiring an event driven assessment of the recoverability of its remaining goodwill prior to the annual assessment.

9. INTANGIBLE ASSETS

Intangible assets consisted of the following:

		As of March 31, 2024			As of December 31, 2023		
(In thousands)	Weighted Average Useful Life (in years)	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Customer relationships	10.9	$ 52,754	$ (15,725)	$ 37,029	$ 54,856	$ (15,943)	$ 38,913
Backlog	1.6	56,106	(51,712)	4,394	57,391	(52,022)	5,369
Developed technology	8.5	322,176	(69,549)	252,627	329,369	(61,271)	268,098
Licensed technology	9.0	5,900	(3,961)	1,939	5,900	(3,797)	2,103
Licensing agreements	8.5	560	(378)	182	560	(368)	192
Trade names	3.0	29,024	(18,747)	10,277	29,689	(16,379)	13,310
Total		**$ 466,520**	**$ (160,072)**	**$ 306,448**	**$ 477,765**	**$ (149,780)**	**$ 327,985**

Intangible assets are reviewed for impairment whenever events and circumstances indicate impairment may have occurred. The Company assessed impairment triggers related to intangible assets during each financial period in 2024 and 2023. During the first quarter of 2024, qualitative factors such as a decrease in the Company's market capitalization, cautious service provider spending due to economic uncertainty and continued customer inventory adjustments triggered a quantitative reassessment of our estimated future undiscounted cash flows for our Network Solutions reporting unit. The Company determined that our estimated future undiscounted cash flows exceeded the carrying value of our Network Solutions reporting unit as of March 31, 2024. Our Services & Support asset group is a stable business with gross margins of 58%, the Company has sufficient cash flows that exceed the carrying value as of March 31, 2024. No impairment losses related to intangible assets were recorded during the three months ended March 31, 2024 and 2023.

Amortization expense was $14.6 million and $25.8 million in the three months ended March 31, 2024 and 2023, respectively, and was included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Loss.

Estimated future amortization expense of intangible assets is as follows:

(In thousands)	As of March 31, 2024
2024	$ 43,396
2025	46,346
2026	43,089
2027	41,725
2028	41,578
Thereafter	90,314
Total	**$ 306,448**

10. HEDGING

The Company has certain forward rate agreements to hedge foreign currency exposure of expected future cash flows in foreign currency. The Company does not hold or issue derivative instruments for trading or other speculative purposes. Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured to their fair value at the end of each reporting period. All changes in the fair value of derivative instruments are recognized as other income (expense) in the Consolidated Statements of Loss and are classified as Level II under the fair value hierarchy. The derivative instruments are not subject to master netting agreements and are not offset in the Consolidated Balance Sheets. We are exposed to risk from credit-related losses resulting from nonperformance by counterparties to our financial instruments. We perform credit evaluations of our counterparties under forward exchange contracts and expect all counterparties to meet their obligations. We have not experienced credit losses from our counterparties. As of March 31, 2024, the Company had 45 forward rate contracts outstanding.

Foreign Currency Hedging Arrangements

On November 3, 2022, the Company entered into a euro/U.S. dollar forward contract arrangement (the "Initial Forward") with Wells Fargo Bank, N.A. (the “Hedge Counterparty”). The Initial Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, enable the Company to convert a portion of its euro denominated payment obligations under the proposed DPLTA into U.S. Dollars. Under the Initial Forward, the Company agreed to exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate ranging from $1.01 to $1.03. The aggregate amount of €160.0 million is divided into eight quarterly tranches of €20.0 million, which commenced in the fourth quarter of 2022. During the three months ended March 31, 2024, the Company settled one €20.0 million forward contract tranches and the remaining amount will be divided into three quarterly tranches of €20.0 million over the remainder of 2024. The Company, at its sole discretion, may exchange all or part of each tranche on any given day within the applicable quarter; provided, however, that it must exchange the full tranche by the end of such quarter. The Initial Forward may be accelerated or terminated early for a number of reasons, including but not limited to (i) non-payment by the Company or the Hedge Counterparty, (ii) breach of representation or warranty or covenant by either party or (iii) insolvency or bankruptcy of either party.

On March 21, 2023, the Company entered into a euro/U.S. dollar forward contract arrangement (the “Forward”) with the Hedge Counterparty. Under the Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, the Company will exchange an aggregate notional amount of €160.0 million U.S. dollars for euros at a daily fixed forward rate ranging from $1.09 to $1.10 per €1.00. During the three months ended March 31, 2024, the Company settled one $20.0 million forward contract tranches and the remaining amount will be divided into three quarterly tranches of $20.0 million. These forward contracts were executed on March 21, 2023 (to sell EUR/buy USD) and were entered into for the purpose of unwinding the Initial Forward (to buy EUR/sell USD). The drawdown dates of the Initial Forward are set to the same date as the maturity of the new offsetting Forward.

The fair values of the Company's derivative instruments recorded in the Condensed Consolidated Balance Sheet as of March 31, 2024 and December 31, 2023 were as follows:

(In thousands)	Balance Sheet Location	March 31, 2024	December 31, 2023
Derivatives Not Designated as Hedging Instruments (Level 2):			
Foreign exchange contracts – derivative assets	Other receivables	$ 4,088	$ 7,125
Foreign exchange contracts – derivative liabilities	Accounts payable	$ (16)	$ (2,277)
Total derivatives		**$ 4,072**	**$ 4,848**

The change in the fair values of the Company's derivative instruments recorded in the Condensed Consolidated Statements of Loss during the three months ended March 31, 2024 and 2023 were as follows:

		Three Months Ended March 31,	
(In thousands)	Income Statement Location	2024	2023
Derivatives Not Designated as Hedging Instruments:			
Foreign exchange contracts	Other income (expense), net	$ 766	$ (69)

11. REVOLVING CREDIT AGREEMENTS

The carrying amounts of the Company's non-current revolving credit agreements in its Condensed Consolidated Balance Sheets were as follows:

(In thousands)	As of March 31, 2024	As of December 31, 2023
Wells Fargo credit agreement	$ 195,000	$ 195,000
Total non-current revolving credit agreement	**$ 195,000**	**$ 195,000**

As of March 31, 2024, the weighted average interest rate on our revolving credit agreements was 8.46%.

Wells Fargo Credit Agreement

On July 18, 2022, ADTRAN, Inc., as the borrower, and ADTRAN Holdings, Inc. entered into a credit agreement with a syndicate of banks, including Wells Fargo Bank, National Association, as administrative agent (“Administrative Agent”), and the other lenders named therein (the “Credit Agreement”). As of the date of this filing, the Credit Agreement allows for revolving credit borrowings of up to $400.0 million in aggregate principal amount, as well as the $50.0 million delayed draw term loan facility described below.

On August 9, 2023, (the "First Amendment Effective Date") the Company, its wholly-owned direct subsidiary, ADTRAN, Inc. and the Administrative Agent entered into a First Amendment to the Credit Agreement (the “First Amendment” and together with the Credit Agreement, the "Credit Facility").

The First Amendment, provided for, among other things, a new $50.0 million delayed draw term loan (“DDTL”), which (subject to certain conditions) is available for borrowing in the event of the purchase by the Company of at least sixty percent (60.0%) of the outstanding shares of Adtran Networks SE that were not owned by the Company and its subsidiaries as of the First Amendment Effective Date (such event, a “Springing Covenant Event”). Proceeds of the DDTL may only be used to repurchase minority shares of Adtran Networks SE. The DDTL remains available for borrowing from the occurrence of a Springing Covenant Event through August 9, 2024.

The First Amendment further added additional financial flexibility by permitting, subject to certain requirements, the incurrence of convertible indebtedness by the Company in an aggregate principal amount of up to $172.5 million. Any such convertible indebtedness must, among other things, be incurred in pro forma compliance with the financial covenants in the Credit Agreement, be unsecured, and otherwise rank junior to borrowings under the Credit Agreement, and have a stated maturity date of at least 91 days after the latest scheduled maturity date of loans and commitments under the Credit Agreement. Net cash proceeds from any incurrence of convertible indebtedness must be used to repurchase minority shares of Adtran Networks or repay revolver borrowings under the Credit Agreement.

On January 16, 2024, the Company entered into a Second Amendment to the Credit Agreement and First Amendment to the Collateral Agreement. The Second Amendment, among other things, provides the Company and its subsidiaries with additional covenant headroom for the fourth quarter of 2023 through the third quarter of 2024 (the "Covenant Relief Period") and adds certain other financial covenants which are described below.

On March 12, 2024, the Company entered into a Third Amendment to the Credit Agreement. The Third Amendment, among other things, amends the definition of “Consolidated Funded Indebtedness” (which is used in the calculation of the Consolidated Total Net Leverage Ratio and the Consolidated Senior Secured Net Leverage Ratio) to exclude obligations of the Company and its subsidiaries under certain factoring arrangements when calculated for the fiscal quarters ending March 31, 2024 and June 30, 2024.

As of March 31, 2024, ADTRAN, Inc.’s borrowings under the revolving line of credit were $195.0 million. As of March 31, 2024, there were no borrowings under the DDTL. The Credit Facility matures in July 2027; however, the Company has an option to request extensions subject to customary conditions. In addition, we may issue up to $50.0 million in letters of credit against our $400.0 million total facility. As of March 31, 2024, we had a total of $2.0 million in letters of credit under ADTRAN, Inc. outstanding against our eligible borrowings, leaving a net amount of $203.0 million available for future borrowings. Any future credit extensions under the Credit Agreement are subject to customary conditions precedent. The proceeds of any loans are expected to be used for general corporate purposes and to pay a portion of the Exchange Offer consideration. As of March 31, 2024, the Company was in compliance with all covenants.

Revolving Line of Credit Interest Rate

All U.S. dollar borrowings under the revolving line of credit (other than swingline loans, which bear interest at the Base Rate (as defined below plus the applicable margin) bear interest, at the Company's option, at a rate per annum equal to either (A) the Base Rate plus an applicable margin ranging from 0.65% to 1.65% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 2.15% per annum), or (B) Adjusted Term SOFR (as defined below) plus an applicable margin ranging from 1.65% to 2.65% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 3.15% per annum).

"Base Rate" means the highest of (a) the federal funds rate (i.e., for any day, the rate per annum equal to the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System, as published by the Federal Reserve Bank of New York on the business day next succeeding such day) plus ½ of 1.0%, (b) the prime commercial lending rate of the Administrative Agent, as established from time to time at its principal U.S. office (which such rate is an index or base rate and will not necessarily be its lowest or best rate charged to its customers or other banks), and (c) the daily Adjusted Term SOFR (as defined in the Credit Agreement) for a one-month tenor plus 1.0%. The Base Rate is subject to a floor of 1.00% per annum.

"Adjusted Term SOFR" means Term SOFR for the applicable interest period *plus* 0.10% per annum. Adjusted Term SOFR is subject to a floor of 0.00% per annum.

All Euro borrowings under the revolving line of credit bear interest at a rate per annum equal to EURIBOR (as defined in the Credit Agreement and subject to a 0.00% per annum floor) plus an applicable margin ranging from 1.75% to 2.75% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 3.25% per annum).

In addition, (x) if on or prior to December 31, 2024 we have not reduced the aggregate revolving credit commitment to $340.0 million or less, the applicable margin for all loans shall be increased by 1.00% per annum, and (y) if on or prior to June 30, 2025 we have not reduced the aggregate revolving credit commitment to $300.0 million or less, the applicable margin for all loans shall be increased by 1.00% per annum.

In addition to paying interest on outstanding principal under the Credit Agreement, the Company is required to pay a quarterly commitment fee to the lenders under the Credit Agreement in respect of unutilized revolving loan commitments on the average daily unused portion of the revolving credit commitment of each lender, which commitment fee ranges from 0.20% to 0.25% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, is equal to 0.25% per annum). The Company is also required to pay a participation fee to the Administrative Agent for the account of each lender with respect to the Company's participation in letters of credit at the then applicable rate for Adjusted Term SOFR Loans or EURIBOR Loans, and other customary fronting, issuance and administration fees with respect to letters of credit.

The increases in the commitment fee and margin rates during the Covenant Relief Period (referenced above) continue until the first date when each of the following conditions have been met (the period during which such increases are in place is hereinafter referred to as the "Applicable Margin Interest Period"): (a) the Covenant Relief Period has ended, (b) since the Second Amendment effective date, the Company has repaid the revolving credit outstanding borrowings by a principal amount of at least $75.0 million, (c) the Company has reduced the aggregate revolving credit commitment to an amount no greater than $300.0 million and (d) the Company is in compliance with all financial covenants based on the financial statements for the most recently completed reference period.

Default interest is 2.0% per annum in excess of the rate otherwise applicable.

DDTL Interest Rate

All U.S. dollar borrowings under the DDTL bear interest, at the Company's option, at a rate per annum equal to either (A) the Base Rate plus an applicable margin ranging from 0.90% to 1.90% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 2.40% per annum), or (B) Adjusted Term SOFR plus an applicable margin ranging from 1.90% to 2.90% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 3.40% per annum).

In addition, (x) if on or prior to December 31, 2024 we have not reduced the aggregate revolving credit commitment to $340.0 million or less, the applicable margin for all loans shall be increased by 1.00% per annum, and (y) if on or prior to June 30, 2025 we have not reduced the aggregate revolving credit commitment to $300.0 million or less, the applicable margin for all loans shall be increased by 1.00% per annum.

In addition to paying interest on outstanding principal under the DDTL loan, the Company is required to pay a quarterly commitment fee to the lenders under the Credit Agreement in respect of unutilized DDTL commitments at a rate of 0.25% per annum on the daily unused portion of the aggregate DDTL commitment.

The increases in the commitment fee and margin rates during the Covenant Relief Period (referenced above) continue until the first date when each of the following conditions have been met (the period during which such increases are in place is hereinafter referred to as the "Applicable Margin Interest Period"): (a) the Covenant Relief Period has ended, (b) since the Second Amendment effective date, the Company has repaid the revolving credit outstanding borrowings by a principal amount of at least $75.0 million, (c) the Company has reduced the aggregate revolving credit commitment to an amount no greater than $300.0 million and (d) the Company is in compliance with all financial covenants based on the financial statements for the most recently completed reference period.

Default interest is 2.0% per annum in excess of the rate otherwise applicable.

Covenants Under the Credit Agreement

The financial covenants under the Credit Agreement, as amended, include the following (capitalized terms used in this subsection and not otherwise defined herein have the meanings assigned to them in the Credit Agreement or its amendments, as applicable)::

- As of the last day of any fiscal quarter, commencing with the fiscal quarter ended December 31, 2023, the Consolidated Total Net Leverage Ratio may not exceed 5.00x.
- As of the last day of any fiscal quarter, commencing with the fiscal quarter ended December 31, 2023, the Consolidated Senior Secured Net Leverage Ratio may not exceed:
  - In the event of the purchase by the Company of at least sixty percent (60%) of the outstanding shares of Adtran Networks SE not owned by the Company as of August 9, 2023 that have been tendered (such event, a "Springing Covenant Event" and the fiscal quarter in which the Springing Covenant Event Occurs and the three consecutive quarterly test periods thereafter, the "Springing Covenant Period"), the following covenant levels:
    - First fiscal quarter ending after a Springing Covenant Event: 4.00x
    - Second fiscal quarter ending after a Springing Covenant Event: 3.75x
    - Third and fourth fiscal quarters ending after a Springing Covenant Event: 3.50x
- If the Company or any of its subsidiaries incurs certain unsecured indebtedness in excess of $50,000,000 in connection with a transaction that is a Springing Covenant Event or during a Springing Covenant Period, the Consolidated Senor Secured Net Leverage Ratio covenant will step down to 3.50x at the time of such incurrence.
- If a Springing Covenant Period is not in effect, the following covenant levels:
  - From December 31, 2023 through and including March 31, 2024: 3.25x.
  - From April 1, 2024 through and including June 30, 2024: 3.50x.
  - From July 1, 2024 and thereafter: 3.25x.
- As of the last day of any fiscal quarter, commencing with the fiscal quarter ended December 31, 2023, the Consolidated Fixed Charge Coverage Ratio may not exceed 1.25x.
- During the Covenant Relief Period or a Springing Covenant Period, as of the last day of any fiscal quarter (i) cash and cash equivalents of the Credit Parties must be at least $50.0 million and (ii) cash and cash equivalents of the Company and its subsidiaries must be at least $75.0 million.

The Credit Agreement is guaranteed by certain domestic subsidiaries of the Company, and the Company is also required to add certain additional domestic and international subsidiaries as guarantors under the Credit Agreement (such existing and new guarantors, collectively, the "Guarantors"). In addition to the guarantees provided by the Guarantors, the Guarantors have granted (or will grant) security interests in favor of the Administrative Agent over substantially all tangible and intangible assets, and the Borrower will grant mortgages in favor of the Administrative Agent over certain owned real estate assets. The Company is currently in negotiations with the Administrative Agent regarding a potential further amendment to the Credit Agreement to address the addition of certain foreign subsidiary guarantors.

The Credit Agreement provides for revolving borrowings of up to $400.0 million in aggregate principal amount, as well as an additional $50.0 million delayed draw term loan tranche that would be available upon a Springing Covenant Event. It also continues to permit the Company to prepay any or all of the outstanding loans or to reduce the commitments under the Credit Agreement subject to certain limitations and minimum payment thresholds.

During the Covenant Relief Period, the Company is not permitted to make certain dividend payments to the Company's Stockholders or certain other Restricted Payments. However, the Company is permitted to make the Recurring Compensation Payment to each Adtran Networks shareholder (other than the Company), pursuant to the terms of the DPLTA.

Furthermore, the Credit Agreement, as amended, contain customary affirmative and negative covenants, including incurrence covenants and certain other limitations on the ability of the Company and the Company's subsidiaries to incur additional debt, guarantee other obligations, grant liens on assets, make investments, dispose of assets, make restricted payments, engage in mergers or consolidations, engage in transactions with affiliates, modify its organizational documents, and enter into certain restrictive agreements. The negative covenants are subject to various exceptions and carveouts; however, certain of the exceptions and carveouts are not permitted to be used during the Covenant Relief Period. It also contains customary events of default, such as misrepresentation and a default in the performance or observance of any covenant (subject to customary cure periods and materiality thresholds). Upon the occurrence and during the continuance of an event of default, the Administrative Agent is entitled to take various actions, including the acceleration of all amounts due under the Credit Agreement.

12. EMPLOYEE BENEFIT PLANS

Pension Benefit Plan

We maintain a defined benefit pension plan covering employees in certain foreign countries. The Company's net non-current pension liability for all defined benefit pension plans totaled $11.7 million and $12.5 million as of March 31, 2024 and December 31, 2023, respectively and the net current pension liability for all defined benefit pension plans totaled $0.1 million as of March 31, 2024 and December 31, 2023, which is included in accounts payable on the Condensed Consolidated Balance Sheets. The Company's defined benefit pension liability represents the projected benefit obligation, which is the actuarial present value of the vested benefits to which the employee is currently entitled based on the employee's expected date of retirement.

The following table summarizes the components of net periodic pension cost related to the Company's defined benefit pension plans:

	Three Months Ended March 31,	
(In thousands)	**2024**	**2023**
Service cost	$ 340	$ 398
Interest cost	285	(32)
Expected return on plan assets	(360)	58
Amortization of actuarial losses	2	6
Net periodic pension cost	**$ 267**	**$ 430**

The components of net periodic pension cost, other than the service cost component, are included in other income, net in the Condensed Consolidated Statements of Loss. Service cost is included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statements of Loss. The Company made contributions to the defined benefit pension plans totaling $1.2 million and $1.0 million during the three months ended March 31, 2024 and 2023, respectively. Contributions to the defined benefit pension plans for the remainder of 2024 will be limited to benefit payments to retirees which are paid out of the operating cash flows of the Company and are expected to be approximately $3.5 million.

13. EQUITY

Accumulated Other Comprehensive Income

The following tables present the changes in accumulated other comprehensive income, net of tax, by component:

	Three Months Ended March 31, 2024				
(In thousands)	**Unrealized (Losses) Gains on Available-for-Sale Securities**	**Defined Benefit Plan Adjustments**	**Foreign Currency Adjustments**	**ASU 2018-02 Adoption**	**Total**
Balance as of December 31, 2023	**$ (382)**	**$ (2,506)**	**$ 49,964**	**$ 385**	**$ 47,461**
Other comprehensive loss before reclassifications	(119)	—	(17,745)	—	(17,864)
Amounts reclassified from accumulated other comprehensive income (loss)	119	(60)	—	—	59
Net current period other comprehensive loss	—	(60)	(17,745)	—	(17,805)
Balance as of March 31, 2024	**$ (382)**	**$ (2,566)**	**$ 32,219**	**$ 385**	**$ 29,656**

	Three Months Ended March 31, 2023				
(In thousands)	Unrealized (Losses) Gains on Available-for-Sale Securities	Defined Benefit Plan Adjustments	Foreign Currency Adjustments	ASU 2018-02 Adoption	Total
Balance as of December 31, 2022	**$ (836)**	**$ (1,016)**	**$ 27,593**	**$ 385**	**$ 26,126**
Other comprehensive income before reclassifications	83	—	8,678	—	8,761
Amounts reclassified from accumulated other comprehensive (loss) income	(14)	35	—	—	21
Net current period other comprehensive income	69	35	8,678	—	8,782
Less: Comprehensive income attributable to non-controlling interest, net of tax	—	—	382	—	382
Balance as of March 31, 2023	**$ (767)**	**$ (981)**	**$ 35,889**	**$ 385**	**$ 34,526**

The following tables present the details of reclassifications out of accumulated other comprehensive income:

	Three Months Ended March 31, 2024	
(In thousands)	Amount Reclassified from Accumulated Other Comprehensive Income	Affected Line Item in the Statement Where Net (Loss) Income Is Presented
Unrealized gain (loss) on available-for-sale securities:		
Net realized loss on sales of securities	$ (161)	Net investment gain
Defined benefit plan adjustments – actuarial gain	87	[1]
Total reclassifications for the period, before tax	**(74)**	
Tax benefit	15	
Total reclassifications for the period, net of tax	**$ (59)**	

[1] A part of the computation of net periodic pension cost, which is included in other income, net in the Condensed Consolidated Statements of Loss.

	Three Months Ended March 31, 2023	
(In thousands)	Amount Reclassified from Accumulated Other Comprehensive Income	Affected Line Item in the Statement Where Net (Loss) Income Is Presented
Unrealized gain (loss) on available-for-sale securities:		
Net realized gain on sales of securities	$ 18	Net investment gain
Defined benefit plan adjustments – actuarial loss	(51)	[1]
Total reclassifications for the period, before tax	**(33)**	
Tax benefit	12	
Total reclassifications for the period, net of tax	**$ (21)**	

[1] A part of the computation of net periodic pension cost, which is included in other income, net in the Condensed Consolidated Statements of Loss.

The following table presents the tax effects related to the change in each component of other comprehensive (loss) income:

(In thousands)	Three Months Ended March 31, 2024 Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount	Three Months Ended March 31, 2023 Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount
Unrealized (loss) gain on available-for-sale securities	$ (161)	$ 42	$ (119)	$ 109	$ (26)	$ 83
Reclassification adjustment for amounts related to available-for-sale investments included in net gain (loss)	161	(42)	119	(18)	4	(14)
Reclassification adjustment for amounts related to defined benefit plan adjustments included in net (loss) gain	(87)	27	(60)	51	(16)	35
Foreign currency translation adjustments	(17,745)	—	(17,745)	8,678	—	8,678
Total Other Comprehensive (Loss) Income	**$ (17,832)**	**$ 27**	**$ (17,805)**	**$ 8,820**	**$ (38)**	**$ 8,782**

14. REDEEMABLE NON-CONTROLLING INTEREST

As of March 31, 2024, the non-controlling Adtran Networks stockholders' equity ownership percentage in Adtran Networks was approximately 35%.

The following table summarizes the redeemable non-controlling interest activity for the three months ended March 31, 2024 and for the year ended December 31, 2023:

(In thousands)	Three Months Ended March 31, 2024	For the Year Ended December 31, 2023
Balance at beginning of period	**$ 451,756**	**$ —**
Reclassification of non-controlling interests	—	443,757
Fair value on redemption of redeemable non-controlling interest	(6)	(1,657)
Net income attributable to redeemable non-controlling interests	2,880	11,525
Annual recurring compensation earned	(2,880)	(11,525)
Adtran Networks stock option exercises	—	52
Translation adjustment	(10,115)	9,604
Balance at end of period	**$ 441,635**	**$ 451,756**

Annual recurring compensation payable on untendered outstanding shares under the DPLTA must be recognized as it is accrued. For the three months ended March 31, 2024, we have recognized $2.9 million, representing the portion of the annual recurring cash compensation to the non-controlling shareholders accrued during such periods, which will be paid after the ordinary general shareholders' meeting of Adtran Networks beginning in 2025. For the year ended December 31, 2023, we have recognized $11.5 million representing the portion of the annual recurring cash compensation to the non-controlling shareholders accrued during such periods, which will be paid after the ordinary general shareholders' meeting of Adtran Networks beginning in 2024. *See Note 1 for additional information on RNCI and the annual dividend.*

15. LOSS PER SHARE

The calculation of basic and diluted loss per share is as follows:

(In thousands, except per share amounts)	Three Months Ended March 31, 2024	2023
Numerator		
Net loss attributable to ADTRAN Holdings, Inc.	$ (324,550)	$ (40,083)
Denominator		
Weighted average number of shares – basic	78,814	78,358
Effect of dilutive securities		
Stock options	—	—
PSUs, RSUs and restricted stock	—	—
Weighted average number of shares – diluted	78,814	78,358
Loss per share attributable to ADTRAN Holdings, Inc. – basic	$ (4.12)	$ (0.51)
Loss per share attributable to ADTRAN Holdings, Inc. – diluted	$ (4.12)	$ (0.51)

For the three months ended March 31, 2024 and 2023, 1.1 million and 0.1 million shares, respectively, of unvested PSUs, RSUs and restricted stock were excluded from the calculation of diluted earnings per share due to their anti-dilutive effect.

For the three months ended March 31, 2024 and 2023, 3.5 million and 0.4 million stock options, respectively, were outstanding but were not included in the computation of diluted earnings per share. These stock options were excluded because their exercise prices were greater than the average market price of the common shares during the applicable period, making them anti-dilutive under the treasury stock method.

16. SEGMENT INFORMATION

The chief operating decision maker regularly reviews the Company's financial performance based on two reportable segments: (1) Network Solutions and (2) Services & Support.

The Network Solutions segment includes hardware and software products that enable a digital future which support the Company's Subscriber, Access & Aggregation, and Optical Networking Solutions. The Company's cloud-managed Wi-Fi gateways, virtualization software, and switches provide a mix of wired and wireless connectivity at the customer premises. In addition, its Carrier Ethernet products support a variety of applications at the network edge ranging from mobile backhaul to connecting enterprise customers ("Subscriber Solutions"). The Company's portfolio includes products for multi-gigabit service delivery over fiber or alternative media to homes and businesses.

The Services & Support segment offers a comprehensive portfolio of network design, implementation, maintenance and cloud-hosted services supporting its Subscriber, Access & Aggregation, and Optical Networking Solutions. These services assist operators in the deployment of multi-vendor networks while reducing their cost to maintain these networks. The cloud-hosted services include a suite of SaaS applications under the Company's Mosaic One platform that manages end-to-end network and service optimization for both fiber access infrastructure and mesh Wi-Fi connectivity. The Company backs these services with a global support organization that offers on-site and off-site support services with varying SLAs.

The performance of these segments is evaluated based on revenue, gross profit and gross margin; therefore, selling, general and administrative expenses, research and development expenses, interest and dividend income, interest expense, net investment gain, other income (expense), net and income tax benefit are reported on a Company-wide basis only. There is no inter-segment revenue. Asset information by reportable segment is not produced and, therefore, is not reported.

The following tables present information about the revenue and gross profit of the Company's reportable segments:

	Three Months Ended			
	March 31, 2024		March 31, 2023	
(In thousands)	Revenue	Gross Profit	Revenue	Gross Profit
Network Solutions	$ 181,273	$ 46,165	$ 282,418	$ 63,288
Services & Support	44,900	26,090	41,494	24,520
Total	**$ 226,173**	**$ 72,255**	**$ 323,912**	**$ 87,808**

For the three months ended March 31, 2024 and 2023, $1.6 million and $1.5 million, respectively, of depreciation expense was included in gross profit for our Network Solutions segment. For the three months ended March 31, 2024 and 2023, $8 and $2 thousand, respectively, of depreciation expense was included in gross profit for our Services & Support segment.

Revenue by Geographic Area

The following table presents revenue information by geographic area:

	Three Months Ended March 31,	
(In thousands)	2024	2023
United States	$ 83,290	$ 131,466
Germany	39,741	76,286
United Kingdom	52,740	57,397
Other international	50,402	58,763
Total	**$ 226,173**	**$ 323,912**

17. LIABILITY FOR WARRANTY RETURNS

The Company's products generally include warranties of 90 days to five years for product defects. The Company accrues for warranty returns at the time of product shipment based on its historical return rate and estimate of the cost to repair or replace the defective products. The Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers. The increasing complexity of the Company's products may cause warranty incidences, when they arise, to be more costly. Estimates regarding future warranty obligations may change due to product failure rates, material usage and other rework costs incurred in correcting a product failure. In addition, from time to time, specific warranty accruals may be recorded if unforeseen problems arise. Should the Company's actual experience relative to these factors be worse than its estimates, the Company will be required to record additional warranty expense. The liability for warranty obligations totaled $6.2 million and $6.4 million as of March 31, 2024 and December 31, 2023, respectively, and is included in accrued expenses and other liabilities in the Condensed Consolidated Balance Sheets. The warranty expense and write-off activity for the three months ended March 31, 2024 and 2023 are summarized as follows:

	Three Months Ended March 31,	
(In thousands)	2024	2023
Balance at beginning of period	**$ 6,445**	**$ 7,196**
Plus: Amounts charged to cost and expenses	646	1,077
Plus: Foreign currency translation adjustments	(54)	26
Less: Deductions	(816)	(1,099)
Balance at end of period	**$ 6,221**	**$ 7,200**

18. COMMITMENTS AND CONTINGENCIES

Legal Matters

From time to time, the Company is subject to or otherwise involved in various lawsuits, claims, investigations and legal proceedings that arise out of or are incidental to the conduct of our business (collectively, "Legal Matters"), including those relating to employment matters, patent rights, regulatory compliance matters, stockholder claims, and contractual and other commercial disputes. Such Legal Matters, even if not meritorious, could result in the expenditure of significant financial and managerial resources. Additionally, an unfavorable outcome in a legal matter, including in a patent dispute, could require the Company to pay damages, entitle claimants to other relief, such as royalties, or could prevent the Company from selling some of its products in certain jurisdictions. At this time, the Company is unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with such legal matters.

DPLTA Exit and Recurring Compensation Costs

Pursuant to the terms of the DPLTA, each Adtran Networks shareholder (other than the Company) has received an offer to elect either (1) to remain an Adtran Networks shareholder and receive from us an Annual Recurring Compensation payment, or (2) to receive Exit Compensation plus guaranteed interest. The guaranteed interest under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component (according to the German Civil Code) that was 3.62% as of March 31, 2024. Assuming all the minority holders of currently outstanding Adtran Networks shares were to elect the second option, we would be obligated to make aggregate Exit Compensation payments, including guaranteed interest, of approximately €338.9 million or approximately $365.7 million, based on an exchange rate as of March 31, 2024 and reflecting interest accrued through March 31, 2024 during the pendency of the appraisal proceedings discussed below. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (Aktiengesetz) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (Bundesanzeiger).

Our obligation to pay Annual Recurring Compensation under the DPLTA is a continuing payment obligation, which will amount to approximately €10.6 million or $11.5 million (based on the current exchange rate) per year assuming none of the minority Adtran Networks shareholders were to elect Exit Compensation. The foregoing amounts do not reflect any potential increase in payment obligations that we may have depending on the outcome of ongoing appraisal proceedings in Germany. During the three months ended March 31, 2024 and 2023, we accrued $2.9 million and $2.8 million, respectively, in Annual Recurring Compensation, which was reflected as an increase to retained deficit. With respect to the year ended December 31, 2023, we are obligated to pay $11.5 million in Annual Recurring Compensation on the third banking day following the 2024 ordinary general shareholders' meeting of Adtran Networks, which is expected to occur on June 28, 2024 (but in any event within eight months following December 31, 2023).

For the three months ended March 31, 2024 and 2023, less than one thousand and 62 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €4 thousand and €1.1 million, respectively, or

approximately $5 thousand and $1.2 million based on an exchange rate as of March 31, 2024 and 2023, respectively, were paid to Adtran Networks shareholders.

Performance Bonds

Certain contracts, customers and jurisdictions in which we do business require us to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds. As of March 31, 2024 and December 31, 2023, we had commitments related to these bonds totaling $10.6 million and $10.8 million, respectively, which expire at various dates through April 2031. In general, we would only be liable for the amount of these guarantees in the event of default under each contract, the probability of which we believe is remote.

Purchase Obligations

The Company purchases components from a variety of suppliers and use contract manufacturers to provide manufacturing services for our products. Our inventory purchase obligations are for short-term product manufacturing requirements, as well as for commitments to suppliers to secure manufacturing capacity. Certain of our inventory purchase obligations with contract manufacturers and suppliers relate to arrangements to secure supply and pricing for certain product components for multi-year periods. As of March 31, 2024, purchase obligations totaled $238.0 million.

19. RESTRUCTURING

During the fourth quarter of 2022, the Company initiated a restructuring program designed to optimize the assets, business processes, and information technology systems of the Company in relation to the Business Combination with Adtran Networks. The restructuring program is expected to maximize cost synergies by realizing operation scale, combining sales channels, streamlining corporate and general and administrative functions, including human capital resources and combining sourcing and production costs. This restructuring program is expected to be completed in late 2024 and includes expenses specifically associated with achieving run-rate synergies as well as Business Efficiency Program expenses described below.

On November 6, 2023, due to the uncertainty around the current macroeconomic environment and its impact on customer spending levels, the Company's management decided to implement a business efficiency program (the "Business Efficiency Program") targeting the reduction of ongoing operating expenses and focusing on capital efficiency inclusive of certain salary reductions, an early retirement program, a site consolidation plan to include lease impairments and the partial sale of owned real estate (including the potential sale of portions of our headquarters), inventory write downs from product discontinuances, and the suspension of the quarterly dividend. The Business Efficiency Program expands upon other recently implemented restructuring efforts and synergy costs following the Business Combination. For instance, on August 17, 2023, the Company's management determined to discontinue its copper-based Digital Subscriber Line broadband access technology products and its fixed wireless access products in its Network Solutions segment. Furthermore, on September 29, 2023, the Company's management decided to exit the "IoT" gateway market (indoor and outdoor), a subset of the broader IoT market (together with the other product discontinuations, the "Discontinuations"). On October 25, 2023, all employees were informed of certain personnel measures, which included the reduction of salary for select management, a reduction of approximately 5% of the workforce, an early retirement program and a hiring freeze. Additionally, on April 11, 2024, management determined to close a facility in Greifswald, Germany. The closure of the facility is expected to be substantially completed by June 30, 2024.

During the three months ended March 31, 2024, we recognized $17.1 million of costs related to the Business Efficiency Program. The costs recognized during the three months ended March 31, 2024, included charges of $8.8 million as a result of a strategy shift which included discontinuance of certain items in connection with the Business Efficiency Program, of which, $4.0 million relates to inventory write-downs and $4.8 million relates to other charges, and are included in cost of revenue in the Condensed Consolidated Statements of Loss. Since the inception of the Business Efficiency Program, we recognized $42.2 million of costs. We expect costs in the second quarter 2024 and thereafter relating to the Business Efficiency Program to range between $20.6 million and $35.8 million. Management expects these planned costs to include severance costs ranging from $17.3 million to $28.3 million in connection with an early retirement program and reductions in workforce and site consolidation transaction expenses (primarily brokers fees and Greifswald exit costs) ranging from $3.3 million to $7.5 million. Future cash payments include: severance costs and outplacement fees that are anticipated to be in the range of $18.1 million to $29.1 million and payments relating to the site consolidation transaction expenses that are anticipated to be in the range of $3.1 million to $7.3 million. We may also incur other charges or cash expenditures not currently contemplated due to events that may occur as a result of, or associated with, the Business Efficiency Program, including potential impairment charges related to the discontinuance of additional product lines, regulatory requirements related to personnel measures, and site closures. However, we are not able to estimate the amount or range of amounts of such potential incremental charges as of the date of this filing. If required, we will amend this disclosure at such time as management is able in good faith to estimate the amount, or range of amounts, of these charges.

For the three months ended March 31, 2023, we recognized $2.4 million of restructuring costs relating to the Business Combination under the multi-year integration program and synergy realization that are included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statement of Loss.

A reconciliation of the beginning and ending restructuring liabilities, which is included in accrued wages and benefits and accounts payable in the Condensed Consolidated Balance Sheets as of March 31, 2024 and December 31, 2023, is as follows:

(In thousands)	Three Months Ended March 31, 2024
Balance at beginning of period	**$ 8,309**
Plus: Amounts charged to cost and expense	13,118
Less: Amounts paid	(11,075)
Balance as of March 31, 2024	**$ 10,352**

(In thousands)	For the Year Ended December 31, 2023
Balance as of December 31, 2022	**$ 159**
Plus: Amounts charged to cost and expense	22,241
Less: Amounts paid	(14,091)
Balance as of December 31, 2023	**$ 8,309**

Restructuring expenses included in the Condensed Consolidated Statements of Loss are for the three months ended March 31, 2024 and 2023:

(In thousands)	Three Months Ended March 31, 2024	2023
Network Solutions - Cost of revenue	$ 2,318	$ 58
Network Solutions - inventory write-down	8,782	—
Services & Support - Cost of revenue	148	18
Cost of revenue	$ 11,248	$ 76
Selling, general and administrative expenses	1,801	2,180
Research and development expenses	4,061	181
Total restructuring expenses	**$ 17,110**	**$ 2,437**

The following table represents the components of restructuring expenses by geographic area for the three months ended March 31, 2024 and 2023:

(In thousands)	Three Months Ended March 31, 2024	2023
United States	$ 15,060	$ 1,119
International	2,050	1,318
Total restructuring expenses	**$ 17,110**	**$ 2,437**

20. SUBSEQUENT EVENTS

Facility Closure

In connection with the Business Efficiency Program, management of the Company determined on April 11, 2024 to close the Company's facility in Greifswald, Germany. The closure of the facility is expected to be substantially completed by June 30, 2024.

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

The following discussion should be read in conjunction with the Condensed Consolidated Financial Statements and the related notes that appear in Part I, Item 1 of this document. In addition, the following discussion should be read in conjunction with our audited consolidated financial statements for the year ended December 31, 2023, Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and Part I, Item 1A, Risk Factors, included in our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 15, 2024.

This discussion is designed to provide the reader with information that will assist in understanding our Condensed Consolidated Financial Statements, the changes in certain key items in those financial statements from period to period, and the primary factors that accounted for those changes, as well as how certain accounting principles affect our Condensed Consolidated Financial Statements. See "Cautionary Note Regarding Forward-Looking Statements" on page 4 of this report for a description of important factors that could cause actual results to differ from expected results. See also Part 1, Item 1A, Risk Factors, of the 2023 Form 10-K and Part II, Item 1A, Risk Factors of this Form 10-Q.

Unless the context otherwise indicates or requires, references in this Quarterly Report on Form 10-Q to "ADTRAN", the "Company," "we," "us" and "our" refer to ADTRAN Holdings, Inc. and its consolidated subsidiaries. Furthermore, unless the context otherwise indicates or requires, references in this Quarterly Report on Form 10-Q to "Adtran Networks" refer to Adtran Networks SE (formerly ADVA Optical Networking SE).

OVERVIEW

The Company is a leading global provider of networking and communications platforms, software, systems and services focused on the broadband access market, serving a diverse domestic and international customer base in multiple countries that includes Large, Medium and Small Service Providers, alternative Service Providers, such as utilities, municipalities and fiber overbuilders, cable/MSOs, SMBs and distributed enterprises. including Fortune 500 companies with sophisticated business continuity applications; and federal, state and local government agencies.

Our innovative solutions and services enable voice, data, video and internet-communications across a variety of network infrastructures and are currently in use by millions worldwide. We support our customers through our direct global sales organization and our distribution networks. Our success depends upon our ability to increase unit volume and market share through the introduction of new products and succeeding generations of products having optimal selling prices and increased functionality as compared to both the prior generation of a product and the products of competitors in order to gain market share. To service our customers and grow revenue, we are continually conducting research and developing new products addressing customer needs and testing those products for the specific requirements of the particular customers. We offer a broad portfolio of flexible software and hardware network solutions and services that enable Service Providers to meet today's service demands while enabling them to transition to the fully converged, scalable, highly-automated, cloud-controlled voice, data, internet and video network of the future. In addition to our global headquarters in Huntsville, Alabama, and our European headquarters in Munich, Germany, we have sales and research and development facilities in strategic global locations.

The Company solely owns ADTRAN, Inc. and is the majority shareholder of Adtran Networks (formerly ADVA Optical Networking SE). ADTRAN is a leading global provider of open, disaggregated networking and communications solutions. Adtran Networks is a global provider of network solutions for data, storage, voice and video services. We believe that the combined technology portfolio can best address current and future customer needs for high-speed connectivity from the network core to the end customer, especially upon the convergence of solutions at the network edge.

The chief operating decision maker regularly reviews the Company's financial performance based on two reportable segments: (1) Network Solutions and (2) Services & Support. In addition to operating under two reportable segments, the Company also reports revenue across three categories – Subscriber Solutions, Access & Aggregation Solutions and Optical Networking Solutions.

Our Subscriber Solutions portfolio is used by Service Providers to terminate their access services infrastructure at customers' premises while providing an immersive and interactive experience for residential, business and wholesale subscribers. This revenue category includes hardware- and software-based products and services. These solutions include our Mosaic One SaaS applications, fiber termination solutions for residential, business and wholesale subscribers, Wi-Fi access solutions for residential and business subscribers, Ethernet switching and network edge virtualization solutions for business subscribers and cloud software solutions covering a mix of subscriber types.

Our Access & Aggregation Solutions are solutions that are used by communications Service Providers to connect residential subscribers, business subscribers and mobile radio networks to the Service Providers' metro network, primarily through fiber-based connectivity. This revenue category includes hardware- and software-based products and services. Our solutions within this category are a mix of fiber access and aggregation platforms, precision network synchronization and timing solutions and access orchestration solutions that ensure highly reliable and efficient network performance.

Our Optical Networking Solutions are used by communications Service Providers, internet content providers and large-scale enterprises to securely interconnect metro and regional networks over fiber. This revenue category includes hardware- and software-based products and services. Our solutions within this category include open optical terminals, open line systems, optical subsystems and modules, network infrastructure assurance systems and automation platforms that are used to build high-scale, secure and assured optical networks.

ADTRAN NETWORKS DOMINATION AND PROFIT AND LOSS TRANSFER AGREEMENT

The DPLTA between the Company, as the controlling company, and Adtran Networks, as the controlled company, which was executed on December 1, 2022, became effective on January 16, 2023, as a result of its registration with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) at the registered seat of Adtran Networks (Jena).

Under the DPLTA, subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, (i) the Company is entitled to issue binding instructions to the management board of Adtran Networks, (ii) Adtran Networks will transfer its annual profit to the Company, subject to, among other things, the creation or dissolution of certain reserves, and (iii) the Company will generally absorb the annual net loss incurred by Adtran Networks. The obligation of the Company to absorb Adtran Networks' annual net loss applied for the first time to the loss generated in 2023.

Additionally, and subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, the DPLTA provides that Adtran Networks shareholders (other than us) be offered, at their election, (i) to put their Adtran Networks shares to the Company in exchange for compensation in cash of €17.21 per share plus guaranteed interest (the "Exit Compensation"), or (ii) to remain Adtran Networks shareholders and receive a recurring compensation in cash of €0.59 (€0.52 net under the current tax regime) per share for each full fiscal year of Adtran Networks (the "Annual Recurring Compensation"). The guaranteed interest component under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component that was 3.62% as of March 31, 2024. The Annual Recurring Compensation is due on the third banking day following the ordinary general shareholders' meeting of Adtran Networks for the respective preceding fiscal year, which is expected to occur on June 28, 2024 (but in any event within eight months following expiration of the fiscal year), and it will be payable for the first time after the ordinary general shareholders' meeting of Adtran Networks in 2024 for the fiscal year ended December 31, 2023. The adequacy of both forms of compensation has been challenged by minority shareholders of Adtran Networks via court-led appraisal proceedings under German law, and it is possible that the courts in such appraisal proceedings may adjudicate a higher Exit Compensation or Annual Recurring Compensation (in each case, including interest thereon) than agreed upon in the DPLTA.

The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (*Aktiengesetz*) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (*Bundesanzeiger*). For the three months ended March 31, 2024 and 2023, less than one thousand and 62 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €4 thousand and €1.1 million, respectively, or approximately $5 thousand and $1.2 million based on an exchange rate as of March 31, 2024 and 2023, respectively, were paid to Adtran Networks shareholders.

In addition to our cash and cash equivalents and the credit facility, we may fund a portion or all of the Exit Compensation through the sale of securities or additional alternative funding sources, if available. There can be no assurances that we would be successful in effecting these actions on commercially reasonable terms or at all. If we cannot raise additional funds as needed, it could have a material adverse impact on our financial results and financial condition.

We currently hold 33,957,538 no-par value bearer shares of Adtran Networks, representing 65.32% of Adtran Networks outstanding shares as of March 31, 2024.

The foregoing description of the DPLTA does not purport to be complete and is qualified in its entirety by reference to the DPLTA, a non-binding English translation of which incorporated by reference to Exhibit 10.7 included in our Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on March 15, 2024.

Multi-Year Integration Program

During the fourth quarter of 2022, the Company initiated a multi-year integration program designed to optimize the assets, business processes, and information technology systems of the Company. During the three months ended March 31, 2023, we recognized $2.4 million of integration costs related to the Business Combination, of restructuring costs relating to the Business Combination under the multi-year integration program that are included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statement of Loss. We did not incur any costs related to our multi-year integration program in the three months ended March 31, 2024. The Company does not anticipate additional material expenses to be incurred in connection with this integration program. *See Note 19 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report for additional information.*

Business Efficiency Program

On November 6, 2023, due to the uncertainty around the current macroeconomic environment and its impact on customer spending levels, the Company's management decided to implement a business efficiency program (the "Business Efficiency Program") targeting the reduction of ongoing operating expenses and focusing on capital efficiency inclusive of certain salary reductions, an early retirement program, a site consolidation plan to include lease impairments and the partial sale of owned real estate (including the potential sale of portions of our headquarters), inventory write downs from product discontinuances, and the suspension of the quarterly dividend. The Business Efficiency Program expands upon other recently implemented restructuring efforts and synergy costs following the Business Combination. For instance, on August 17, 2023, the Company's management determined to discontinue its copper-based Digital Subscriber Line broadband access technology products and its fixed wireless access products in its Network Solutions segment. Furthermore, on September 29, 2023, the Company's management decided to exit the "IoT" gateway market (indoor and outdoor), a subset of the broader IoT market (together with the other product discontinuations, the "Discontinuations"). On October 25, 2023, all employees were informed of certain personnel measures, which included the reduction of salary for select management, a reduction of approximately 5% of the workforce, an early retirement program and a hiring freeze. Additionally, on April 11, 2024, management determined to close a facility in Greifswald, Germany. The closure of the facility is expected to be substantially completed by June 30, 2024.

During the three months ended March 31, 2024, we recognized $17.1 million of costs related to the Business Efficiency Program. The costs recognized during the three months ended March 31, 2024, included charges of $8.8 million as a result of a strategy shift which included discontinuance of certain items in connection with the Business Efficiency Program, of which, $4.0 million relates to inventory write-downs and $4.8 million relates to other charges, and are included in cost of revenue in the Condensed Consolidated Statements of Loss. Since the inception of the Business Efficiency Program, we recognized $42.2 million of costs. We expect costs in the second quarter 2024 and thereafter relating to the Business Efficiency Program to range between $20.6 million and $35.8 million. Management expects these planned costs to include severance costs ranging from $17.3 million to $28.3 million in connection with an early retirement program and reductions in workforce and site consolidation transaction expenses (primarily brokers fees and Greifswald exit costs) ranging from $3.3 million to $7.5 million. Future cash payments include: severance costs and outplacement fees that are anticipated to be in the range of $18.1 million to $29.1 million and payments relating to the site consolidation transaction expenses that are anticipated to be in the range of $3.1 million to $7.3 million. We may also incur other charges or cash expenditures not currently contemplated due to events that may occur as a result of, or associated with, the Business Efficiency Program, including potential impairment charges related to the discontinuance of additional product lines, regulatory requirements related to personnel measures, and site closures. However, we are not able to estimate the amount or range of amounts of such potential incremental charges as of the date of this filing. If required, we will amend this disclosure at such time as management is able in good faith to estimate the amount, or range of amounts, of these charges.

Business Combination Integration Costs

During the three months ended March 31, 2024 and 2023, we recognized $0.5 million and $0.8 million of integration costs related to the Business Combination, respectively, that are included in selling, general and administrative expenses, research & development expenses and cost of revenue in the Condensed Consolidated Statement of Loss. We expect to incur additional integration costs and expenses associated with the implementation of the DPLTA throughout 2024 and such costs are expected to be material. These costs are separate and apart from the costs associated with the integration program discussed above.

FINANCIAL PERFORMANCE AND TRENDS

We ended the first quarter of 2024 with a year-over-year revenue decreased 30.2% as compared to the three months ended March 31, 2023, driven by decreased volume of sales activity due to customers' focus on reducing inventory levels and the continued macroeconomic environment impacting the spending behavior of our customers. During the first quarter of 2024, we had two customers with revenues greater than 10.0%, which were both international Service Provider customers and our five largest customers comprised 38.7% of our revenue. Our year-over-year domestic revenue decreased by 36.6% and continued to be impacted by macroeconomic factors and elevated inventory levels. Internationally, our year-over-year revenue decreased by 25.8%, primarily driven by the unfavorable impact on revenue as a result of the strengthened U.S. dollar and decreased shipments to two Large network operators and one alternative network operator in Europe.

The continuing macroeconomic environment and excess inventory in our industry impacted revenue in the first quarter of 2024. Access & Aggregation and Optical Networking revenue categories experienced a general slowdown in revenue as a result of reduced spending by our Service Provider customers as they continue to reduce inventory levels and monitor uncertain macroeconomic conditions related to continued elevated interest rates and ongoing inflationary pressures. Despite these challenges, we have maintained our emphasis on product development to enable us to respond to rapidly changing technology and evolving industry standards. For example, we expect public funding through projects such as IPCEI ME/CT to further our research and development for new communication technologies. Additionally, public funding through the Broadband Equity, Access and Deployment Program is expected to commence in late 2024 through 2026, which provides a positive outlook for the future. In Europe, we continue to see increased activity from high-risk vendor replacement and broadband subsidy programs.

Our operating results have fluctuated and may continue to fluctuate on a quarterly basis due to several factors, including customer order activity, prior supply chain constraints, component availability, and the Company's consolidation and integration with Adtran Networks. Further, a significant percentage of orders require delivery within a few days requiring us to maintain higher inventory levels. These factors may result in limited order flow visibility. For example, although, expedite fees and lead times for semiconductor chips and other key components began to ease during 2023 following shortages in the industry, we continued to be negatively impacted by price increases, which could continue to have a material adverse effect on customer relations and our financial condition. We have taken decisive steps to transform our business into a leaner, more efficient and more profitable company, including through the implementation of a Business Efficiency Program, which includes a significant cost efficiency program targeting a reduction of ongoing operating expenses and a capital efficiency program inclusive of certain salary reductions, an early retirement program, a site consolidation plan to include lease impairments and the partial sale of owned real estate (including the potential sale of portions of our headquarters), inventory write downs from product discontinuances, and the suspension of the quarterly dividend. Nevertheless, our operating expenses are relatively fixed in the short term; therefore, a shortfall in quarterly revenues has and may again in the future significantly impact our financial results in a given quarter.

Our operating results have significantly fluctuated and may do so in the future as a result of a number of other factors, including a decline in general economic and market conditions, foreign currency exchange rate movements, inflation, regional conflicts, increased competition, customer order patterns, changes in product and services mix, timing differences between price decreases and product cost reductions, product warranty returns, expediting costs, tariffs and announcements of new products by us or our competitors. In recent years, inflationary pressures on input costs, such as raw materials and labor, and distribution costs had a negative impact on our operating results. However, inflationary pressures on our supply chain have eased somewhat, which has led to reductions in cost premiums on raw material costs and freight. We continue to support our customer demand for our products by working with our suppliers, contract manufacturers, distributors, and customers to address and to limit the disruption to our operations and order fulfillment. Additionally, maintaining sufficient inventory levels to assure prompt delivery of our products increases the amount of inventory that may become obsolete and increases the risk that the obsolescence of this inventory may have an additional adverse effect on our business and operating results beyond the effects of the most recent inventory write-downs. Also, not maintaining sufficient inventory levels to ensure prompt delivery of our products may cause us to incur expediting costs to meet customer delivery requirements, which may negatively impact our operating results.

We are exposed to changes in foreign currencies relative to the U.S. dollar, which are references to the differences between the foreign-exchanges rates we use to convert the financial results of our international operations from local currencies into U.S. dollars for financial reporting purposes. This impact of foreign-exchange rate changes is calculated based on the difference between the current period’s currency exchange rates and that of the comparable prior period. Our primary exposures to foreign currency exchange rate movements are with the Euro and the British pound sterling. As a result of our global operations, our revenue, gross margins, operating expense and operating loss in some international markets have been and may continue to be affected by foreign currency fluctuations.

The Company’s policy is to assess the realizability of assets (long-lived assets, intangibles and goodwill) held within our reporting units and to evaluate such assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. During the third quarter of 2023, the Company identified a triggering event due to a decrease in its market capitalization and changes in projections (decrease in estimated cash flows). While the quantitative impairment analysis indicated that there was no impairment of Network Solutions goodwill, the Company determined a $37.9 million non-cash impairment charge for goodwill was warranted for the Services & Support reporting unit. During the fourth quarter of 2023, the Company completed its annual impairment test. There were no significant market changes or changes to cash flow projections, as such no triggering event was identified during the fourth quarter of 2023. During the first quarter of 2024, qualitative factors such as a decrease in the Company’s market capitalization, lower service provider spending and delayed holding patterns of inventory with respect to customers caused us to reduce our forecasts, triggering a quantitative impairment assessment for our reporting units. The Company determined the fair value of the Network Solutions reporting unit using a combination of an income approach and a market based peer group analysis. The Company determined upon its quantitative impairment assessment to recognize a $292.6 million non-cash goodwill impairment charge for the Network Solutions reporting unit during the three months ended March 31, 2024. The quantitative impairment analysis indicated there was no impairment of the Services & Support goodwill during the three months ended March 31, 2024.

Our historical financial performance is not necessarily a meaningful indicator of future results, and in general, management expects that our financial results may vary from period to period. Factors that could materially affect our business, financial condition or operating results are included in Part I, Item 1A of the 2023 Form 10-K and Part II, Item 1A of this Form 10-Q.

EFFECT OF RECENT ACCOUNTING PRONOUNCEMENTS

See Note 1 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition, which is incorporated herein by reference.

RESULTS OF OPERATIONS – THREE MONTHS ENDED MARCH 31, 2024 COMPARED TO THE THREE MONTHS ENDED MARCH 31, 2023

The following table presents selected financial information derived from our Condensed Consolidated Statements of Loss expressed as a percentage of revenue for the periods indicated. Amounts may not foot due to rounding.

	Three Months Ended March 31,	
	2024	2023
Revenue		
Network Solutions	80.1 %	87.2 %
Services & Support	19.9	12.8
Total Revenue	**100.0**	**100.0**
Cost of Revenue		
Network Solutions	55.9	67.7
Network Solutions - inventory write-down and other charges	3.9	—
Services & Support	8.3	5.2
Total Cost of Revenue	**68.1**	**72.9**
Gross Profit	**31.9**	**27.1**
Selling, general and administrative expenses	26.1	20.8
Research and development expenses	26.6	21.7
Goodwill impairment	129.4	—
Operating Loss	**(150.2)**	**(15.4)**
Interest and dividend income	0.2	0.1
Interest expense	(2.0)	(1.0)
Net investment gain	1.0	0.4
Other income (expense), net	0.6	(0.1)
Loss Before Income Taxes	**(150.5)**	**(16.0)**
Income tax benefit	8.2	3.5
Net Loss	**(142.2)** %	**(12.5)** %
Less: Net Income (loss) attributable to non-controlling interest	**1.3**	**(0.1)**
Net Loss attributable to ADTRAN Holdings, Inc.	**(143.5)** %	**(12.4)** %

REVENUE

Our revenue decreased 30.2% from $323.9 million for the three months ended March 31, 2023 to $226.2 million for the three months ended March 31, 2024. The decrease in revenue for the three months ended March 31, 2024 is primarily driven by decrease in volume of sales activity due to customers' focus on reducing inventory levels and the completion of significant customer projects. The decrease in revenue by category for the three months ended March 31, 2024 was primarily attributable to a $72.7 million decrease in Optical Networking Solutions products, a $15.5 million decrease in Access & Aggregation revenue and a $9.6 million decrease in Subscriber Solutions products. Continued customer concerns over inventory stocking levels have affected our revenue in the first quarter in our Optical Networking Solutions category, Access & Aggregation category and our Subscriber Solutions category. We believe that the over-supply of CPE products will continue into the second quarter of 2024.

Network Solutions segment revenue decreased 35.8% from $282.4 million for the three months ended March 31, 2023 to $181.3 million for the three months ended March 31, 2024. The decrease in Network Solutions revenue for the three months ended March 31, 2024 was due to a decrease of $74.5 million in volume of sales activity in Optical Networking products, a decrease of $16.8 million in volume of sales activity in Access & Aggregation products and a decrease of $9.9 million in volume of sales activity in Subscriber Solutions products.

Services & Support segment revenue increased 8.2% from $41.5 million for the three months ended March 31, 2023 to $44.9 million for the three months ended March 31, 2024. The increase in revenue for the three months ended March 31, 2024 was primarily attributable a $1.8 million increase in revenue for Optical Networking products, a $1.3 million increase in revenue for Access & Aggregation revenue and a $0.3 million increase in revenue for Subscriber Solutions services. More specifically, the increase in revenue for the three months ended March 31, 2024 of our ADTRAN, Inc. operations was primarily due to higher volume of sales of our software services and business solutions services.

Domestic revenue decreased by 36.6% from $131.5 million for the three months ended March 31, 2023 to $83.3 million for the three months ended March 31, 2024. The decrease in domestic revenue for the three months ended March 31, 2024 was primarily due to lower volume of sales of our residential solutions products as a result of customers focus on reducing inventory levels across all revenue categories.

International revenue, which is defined as revenue generated from the Network Solutions and Services & Support segments provided to a customer outside of the U.S., decreased by 25.8% from $192.4 million for the three months ended March 31, 2023 to $142.9 million for the three months ended March 31, 2024. International revenue, as a percentage of total revenue, increased from 59.4% for the three months ended March 31, 2023 to 63.2% for the three months ended March 31, 2024. The decrease in international revenue for the three months ended March 31, 2024 was primarily due to the conclusion of specific customer projects and customer concerns over inventory stocking levels. While international revenue has increased to approximately 63.2% of total revenues for the three months ended March 31, 2024, the mix of our Network Solutions and Services & Support segments as a percentage of total international revenue remains relatively linear. For the three months ended March 31, 2024 as compared to the three months ended March 31, 2023, changes in foreign currencies relative to the U.S. dollar increased our net revenue by approximately $2.2 million.

Our ADTRAN, Inc. international revenue is largely focused on broadband infrastructure and is consequently affected by the decisions of our customers as to timing for installation of new technologies, expansion of their networks and/or network upgrades. Our international customers must make these decisions in the regulatory and political environment in which they operate – both nationally and, in some instances, regionally – whether of a multi-country region or a more local region within a country. Consequently, while we expect the global trend towards deployment of more robust broadband speeds and access to continue creating additional market opportunities for us, the factors described above have resulted in and may continue to result in pressure on revenue and operating income. Our Adtran Networks international revenue is largely focused on the manufacture and selling of networking solutions that are based on three core areas of expertise: fiber-optic transmission technology (cloud interconnect), cloud access technology for rapid creation of innovative services around the network edge and solutions for precise timing and synchronization of networks. In addition, Adtran Networks international operations offers a comprehensive portfolio of network design, implementation and maintenance services to assist operators in the deployment of market-leading networks while reducing costs to maintain these networks.

COST OF REVENUE

As a percentage of revenue, cost of revenue decreased from 72.9% for the three months ended March 31, 2023 to 68.1% for the three months ended March 31, 2024. The decrease for the three months ended March 31, 2024 was attributable to a 4.9% decrease in expense as a percentage of revenue related to decreased amortization of intangible backlog, developed technology and fair value adjustments to inventory costs that flow through to cost of revenue as a result of the Business Combination with Adtran Networks, and a 5.0% decrease in expense as a percentage of revenue related to decreased acquisition costs, partially offset by a 5.0% increase in expense as a percentage of revenue in connection with our Business Efficiency Program, which resulted in an inventory write down and other charges of $8.8 million incurred as a result of a strategy shift which included discontinuance of certain product lines. For the three months ended March 31, 2024 as compared to the three months ended March 31, 2023, changes in foreign currencies relative to the U.S. dollar increased our cost of revenue by approximately $0.5 million.

Network Solutions cost of revenue, as a percentage of that segment's revenue, decreased from 77.6% for the three months ended March 31, 2023 to 74.5% for the three months ended March 31, 2024. The decrease in cost of revenue as a percentage of revenue for the three months ended March 31, 2024 was attributable to a 6.1% decrease in expense as a percentage of revenue related to decreased amortization of intangible backlog, developed technology and fair value adjustments to inventory costs that flow through to cost of revenue as a result of the Business Combination with Adtran Networks and a 6.2% decrease in expense as a percentage of revenue related to decreased acquisition costs, partially offset by a 6.1% increase in expense as a percentage of revenue in connection with our Business Efficiency Program, which resulted in an inventory write down and other charges of $8.8 million incurred as a result of a strategy shift which included discontinuance of certain product lines and a 3.2% increase in expense as a percentage of revenue attributable to changes in customer and product mix.

Services & Support cost of revenue, as a percentage of that segment's revenue, increased from 40.9% for the three months ended March 31, 2023 to 41.9% for the three months ended March 31, 2024. The increase in cost of revenue as a percentage of revenue for the three months ended March 31, 2024 was primarily attributable to changes in customer and product mix.

Services & Support revenue is comprised of network planning and implementation, maintenance, support and cloud-based management services, with network planning and implementation being the largest and fastest growing component in the long-term. Compared to our other services, such as maintenance, support and cloud-based management services, our network planning and implementation services typically utilize a higher percentage of internal and subcontracted engineers, professionals and contractors to perform the work for customers. The additional costs incurred to perform these infrastructure and labor-intensive services inherently result in lower average gross margins as compared to maintenance and support services. Within the Services & Support segment, we do expect variability in gross margins from quarter-to-quarter based on the mix of the services recognized.

GROSS PROFIT

As a percentage of revenue, gross profit increased from 27.1% for the three months ended March 31, 2023 to 31.9% for the three months ended March 31, 2024. The increase for the three months ended March 31, 2024 was attributable to a 4.9% increase in gross profit as a percentage of revenue related to decreased amortization of intangible backlog, developed technology and fair value adjustments to inventory costs that flow through to cost of revenue as a result of the Business Combination with Adtran Networks, and a 5.0% increase in gross profit as a percentage of revenue related to decreased acquisition costs, partially offset by a 5.0% decrease in gross profit as a percentage of revenue in connection with increased expenses with our Business Efficiency Program, which resulted in an inventory

write down and other charges of $8.8 million incurred as a result of a strategy shift which included discontinuance of certain product lines.

As a percentage of that segment's revenue, Network Solutions gross profit increased from 22.4% for the three months ended March 31, 2023 to 25.5% for the three months ended March 31, 2024. The increase was attributable to a 6.1% increase in gross profit as a percentage of revenue related to decreased amortization of intangible backlog, developed technology and fair value adjustments to inventory costs that flow through to cost of revenue as a result of the Business Combination with Adtran Networks and a 6.2% increase in gross profit as a percentage of revenue related to decreased acquisition costs, partially offset by a 6.1% decrease in gross profit as a percentage of revenue in connection with increased expenses with our Business Efficiency Program, which resulted in an inventory write down and other charges of $8.8 million incurred as a result of a strategy shift which included discontinuance of certain product lines and a 3.1% decrease in gross profit as a percentage of revenue attributable to changes in customer and product mix.

As a percentage of that segment's revenue, Services & Support gross profit decreased from 59.1% for the three months ended March 31, 2023 to 58.1% for the three months ended March 31, 2024. The decrease was primarily attributable to changes in customer and product mix.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

As a percentage of revenue, selling, general and administrative expenses increased from 20.8% for the three months ended March 31, 2023 to 26.1% for the three months ended March 31, 2024. Selling, general and administrative expenses as a percentage of revenue will generally fluctuate whenever there is a significant fluctuation in revenue for the periods being compared. We are still in the process of implementing our Business Efficiency Program, which we expect will lower selling, general and administrative expense as a percentage of revenue over time.

Selling, general and administrative expenses decreased 12.3% from $67.4 million for the three months ended March 31, 2023 to $59.1 million for the three months ended March 31, 2024. Selling, general and administrative expenses include personnel costs for management, accounting, information technology, human resources, sales and marketing, as well as independent auditor, tax and other professional fees, contract services and legal and litigation related costs. The decrease in selling, general and administrative expenses for the three months ended March 31, 2024 was primarily attributable to the impact of the Company's Business Efficiency Program and integration programs. Specifically, the Company reduced its employee-related costs by $6.8 million, travel expenses by $1.4 million, and depreciation of property, plant and equipment by $0.4 million. For the three months ended March 31, 2024 as compared to the three months ended March 31, 2023, changes in foreign currencies relative to the U.S dollar increased our selling, general and administrative expenses by approximately $0.5 million.

RESEARCH AND DEVELOPMENT EXPENSES

As a percentage of revenue, research and development expenses increased from 21.7% for the three months ended March 31, 2023 to 26.6% for the three months ended March 31, 2024. Research and development expenses as a percentage of revenue will generally fluctuate whenever there are incremental product development activities or significant fluctuations in revenue for the periods being compared. We are still in the process of implementing our Business Efficiency Program, which we expect will lower research and development expense as a percentage of revenue over time

Research and development expenses decreased 14.1% from $70.1 million for the three months ended March 31, 2023 to $60.3 million for the three months ended March 31, 2024. The decrease in research and development expenses was primarily attributable to the impact of the Company's Business Efficiency Program and integration programs. Specifically, the Company reduced its employee-related costs by $1.6 million and contract services by $2.7 million. For the three months ended March 31, 2024 as compared to the three months ended March 31, 2023, changes in foreign currencies relative to the U.S. dollar increased our research and development expenses by approximately $0.6 million.

Adtran Networks has arrangements with governmental entities for the purpose of obtaining funding for research and development activities. The Company classifies government grants received under these arrangements as a reduction to research and development expense incurred. For the three months ended March 31, 2024 and 2023, the Company recognized $1.9 million and $0.6 million as a reduction of research and development expense, respectively.

We expect to continue to incur research and development expenses in connection with our new and existing products. We continually evaluate new product opportunities and engage in significant research and product development efforts, which provides for new product development, enhancement of existing products and product cost reductions. We may incur significant research and development expenses prior to the receipt of revenue from a major new product group.

GOODWILL IMPAIRMENT

The Company’s policy is to assess the realizability of assets (long-lived assets, intangibles and goodwill) held within our reporting units and to evaluate such assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. During the first quarter of 2024, qualitative factors such as a decrease in the Company’s market capitalization, cautious service provider spending due to economic uncertainty and continued customer focus on inventory adjustments, triggered a

quantitative impairment assessment for our reporting units. The Company determined upon its quantitative impairment assessment to recognize a $292.6 million non-cash goodwill impairment charge for the Network Solutions reporting unit. No impairment of goodwill was recorded for our Services & Support reporting unit during the three months ended March 31, 2024. No impairment of goodwill was recorded for either reporting unit during the three months ended March 31, 2023.

INTEREST AND DIVIDEND INCOME

Interest and dividend income increased from $0.3 million for the three months ended March 31, 2023 to $0.4 million for the three months ended March 31, 2024. The increase in interest and dividend income is primarily attributable to fluctuations in investment balances and an increase in the rate of return on those investments due to interest rate movements.

INTEREST EXPENSE

Interest expense increased from $3.3 million for the three months ended March 31, 2023 to $4.6 million for the three months ended March 31, 2024. The increase in interest expense during the three months ended March 31, 2024 was primarily driven by higher average borrowings outstanding versus the three months ending March 31, 2023 and the amortization of debt issuance costs. *See Note 11 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report.*

NET INVESTMENT GAIN

We recognized a net investment gain of $1.3 million and $2.3 million for the three months ended March 31, 2023 and 2024, respectively. The fluctuations in our net investments were primarily attributable to changes in the fair value of our securities recognized during the period. We expect that any future market volatility could result in continued fluctuations in our investment portfolio. *See Note 5 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report, and "Investing Activities" in "Liquidity and Capital Resources" below for additional information.*

OTHER (EXPENSE) INCOME, NET

Other (expense) income, net, which primarily consisted of gains and losses on foreign currency transactions and income from excess material sales, increased from an expense of $0.3 million for the three months ended March 31, 2023 to income of $1.3 million for the three months ended March 31, 2024.

INCOME TAX BENEFIT

The Company's effective tax rate changed from a benefit of 21.9% of pre-tax loss for the three months ended March 31, 2023, to a benefit of 5.5% of pre-tax loss for the three months ended March 31, 2024. The change in the effective tax rate for the three months ended March 31, 2024, was driven primarily by a loss jurisdiction for which no tax benefits were recognized on the Company's pre-tax losses during the first quarter of 2024.

NET LOSS ATTRIBUTABLE TO ADTRAN HOLDINGS, INC.

As a result of the above factors, net loss attributable to ADTRAN Holdings, Inc. increased from net loss of $40.1 million for the three months ended March 31, 2023 to a net loss of $324.6 million for the three months ended March 31, 2024.

LIQUIDITY AND CAPITAL RESOURCES

We have historically financed our ongoing business with existing cash, investments and cash flow from operations. We had a net operating cash inflow in the three months ended March 31, 2024. We have used, and expect to continue to use, existing cash, investments, credit arrangements and cash generated from operations for working capital and other general corporate purposes, including product development activities to enhance our existing products and develop new products, expand our sales and marketing activities and fund capital expenditures. In addition, we have increasingly relied upon our credit arrangements to manage our working capital needs.

As of March 31, 2024, our cash on hand was $106.8 million of which $86.7 million was held by our foreign subsidiaries. The Company had access to $203.0 million on its Credit Facility for future borrowings; however, as of March 31, 2024, the Company was limited to additional borrowings of $22.7 million based on debt covenant compliance metrics. Generally, we intend to permanently reinvest funds held outside the U.S., except to the extent that any of these funds can be repatriated without withholding tax. As of December 31, 2023, our cash on hand was $87.2 million, of which $73.0 million was held by our foreign subsidiaries.

Pursuant to the terms of the DPLTA, each Adtran Networks shareholder (other than the Company) has received an offer to elect either (1) to remain an Adtran Networks shareholder and receive from us an Annual Recurring Compensation payment, or (2) to receive Exit Compensation plus guaranteed interest. The guaranteed interest under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component (according to the German Civil Code) that was 3.62% as of March 31, 2024. Assuming all the minority holders of currently outstanding Adtran Networks shares were to elect the second option, we would be obligated to make aggregate Exit Compensation payments, including guaranteed interest, of approximately €338.9 million or approximately $365.7 million, based on an exchange rate as of March 31, 2024 and reflecting interest accrued through March 31, 2024 during the pendency of the appraisal proceedings discussed below. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (*Aktiengesetz*) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (*Bundesanzeiger*).

We are also obligated to absorb any annual net loss of Adtran Networks under the DPLTA. Additionally, our obligation to pay Annual Recurring Compensation under the DPLTA is a continuing payment obligation, which will amount to approximately €10.6 million or $11.5 million (based on the current exchange rate) per year assuming none of the minority Adtran Networks shareholders were to elect Exit Compensation. The foregoing amounts do not reflect any potential increase in payment obligations that we may have depending on the outcome of ongoing appraisal proceedings in Germany. During the three months ended March 31, 2024 and 2023, we accrued $2.9 million and $2.8 million, respectively, in Annual Recurring Compensation, which was reflected as an increase to retained deficit with the offset in other non-current liability and accrued expenses and other liabilities, respectively, in our Condensed Consolidated Balance Sheets. With respect to the year ended December 31, 2023, we are obligated to pay $11.5 million in Annual Recurring Compensation on the third banking day following the 2024 ordinary general shareholders' meeting of Adtran Networks, which is expected to occur on June 28, 2024 (but in any event within eight months following December 31, 2023).

On July 18, 2022, ADTRAN, Inc., as the borrower, and ADTRAN Holdings, Inc. entered into a credit agreement with a syndicate of banks, including Wells Fargo Bank, National Association, as administrative agent ("Administrative Agent"), and the other lenders named therein (the "Credit Agreement"), which has since been amended three times. Pursuant to the terms of the Credit Agreement, as amended, the Company, ADTRAN, Inc., and the subsidiary guarantors (together, the "Credit Parties") are subject to a liquidity covenant, which provides that, during the fourth quarter of 2023 through and including the third quarter of 2024 (the "Covenant Relief Period") or a Springing Covenant Period, (i.e., the period beginning upon the purchase by the Company of at least 60% of the outstanding shares of Adtran Networks not owned by the Company as of August 9, 2023 and the three consecutive quarterly test periods after such date), as of the last day of any fiscal quarter, the cash and cash equivalents of the Credit Parties must be at least $50.0 million and the cash and cash equivalents of the Company and its subsidiaries must be at least $75.0 million, limiting our ability to pay the obligations under the DPLTA. *See below, as well as Note 11 of Notes to Condensed Consolidated Financial Statements included in Part I, Item, 1 for additional information regarding the terms of each amendment to the Wells Fargo Credit Agreement.*

As of March 31, 2024, and as of the date of issuance of these financial statements, the Company does not have sufficient liquidity to meet payment obligations under the DPLTA pertaining to Exit Compensation. For the three months ended March 31, 2024 and 2023, less than one thousand and 62 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €4 thousand and €1.1 million, respectively, or approximately $5 thousand and $1.2 million based on an exchange rate as of March 31, 2024 and 2023, respectively, were paid to Adtran Networks shareholders. We believe the probability that more than a small minority of Adtran Networks shareholders elect to receive Exit Compensation in the next twelve months is remote based on the diverse base of shareholders that must make this election on an individual shareholder basis, the current ongoing appraisal proceedings involving a dispute on the value of the Exit Compensation which is expected to take 24-32 months to resolve, the current guaranteed Annual Recurring Compensation payment plus the interest earned on such shares during the ongoing appraisal proceedings, and the current trading value of Adtran Networks shares.

The Company experienced revenue declines in the year ended December 31, 2023 and during the three months ended March 31, 2024. To the extent that the Company is further impacted by the uncertain macroeconomic environment related to continued elevated interest rates and ongoing inflationary pressures, the Company has established plans to preserve cash liquidity and maintain compliance with the Company's covenants. The Company has suspended dividend payments and is continuing to implement a Business Efficiency Program, which includes, but is not limited to planned reductions in operating expenses and a site consolidation plan. In connection with the site consolidation plan, the Company is also exploring a potential sale of portions of our headquarters in Huntsville. There can be no assurance that the Company will be successful in effecting this action on commercially reasonable terms or at all. We may need to further reduce capital expenditures and/or take other steps to preserve working capital in order to ensure that we can meet our needs and obligations and maintain compliance with our debt covenants.

In summary, the Company believes that its cash and cash equivalents, investments, working capital management initiatives and availability to access cash under the Wells Fargo Credit Facility (described below), including (i) the additional funding provided for under the First Amendment to the Wells Fargo Credit Facility that was signed on August 9, 2023, (ii) the additional covenant headroom

during the Covenant Relief Period provided for under the Second Amendment to Wells Fargo Credit Facility, and (iii) the exclusion of the Factoring Agreement as debt for purposes of the Credit Facility's financial covenants as provided for under the Third Amendment to Wells Fargo Credit Facility (each as described below), will be adequate to meet our business operating requirements, our capital expenditures and our expected obligations under the DPLTA, including anticipated levels of Exit Compensation and ability to continue to comply with our debt covenants under the Credit Facility for at least the next twelve months, from the issuance of these financial statements. *See Note 11, Revolving Credit Agreements, for additional information regarding the terms of the First, Second and Third Amendments of the Wells Fargo Credit agreement and Notes to Condensed Consolidated Financial Statements included in Part I, Item, 1 for additional information regarding the terms of the Wells Fargo Credit Agreement, as amended.*

Wells Fargo Credit Facility

On July 18, 2022, ADTRAN, Inc., as the borrower, and ADTRAN Holdings, Inc. entered into a credit agreement with a syndicate of banks, including Wells Fargo Bank, National Association, as administrative agent ("Administrative Agent"), and the other lenders named therein (the "Credit Agreement"). As of the date of this filing, the Credit Agreement allows for revolving credit borrowings of up to $400.0 million in aggregate principal amount, as well as the $50.0 million delayed draw term loan facility described below.

On August 9, 2023, (the "First Amendment Effective Date") the Company, its wholly-owned direct subsidiary, ADTRAN, Inc. and the Administrative Agent entered into a First Amendment to the Credit Agreement (the "First Amendment" and together with the Credit Agreement, the "Credit Facility").

The First Amendment, provided for, among other things, a new $50.0 million delayed draw term loan ("DDTL"), which (subject to certain conditions) is available for borrowing in the event of the purchase by the Company of at least sixty percent (60.0%) of the outstanding shares of Adtran Networks SE that were not owned by the Company and its subsidiaries as of the First Amendment Effective Date (such event, a "Springing Covenant Event"). Proceeds of the DDTL may only be used to repurchase minority shares of Adtran Networks SE. The DDTL remains available for borrowing from the occurrence of a Springing Covenant Event through August 9, 2024.

The First Amendment further added additional financial flexibility by permitting, subject to certain requirements, the incurrence of convertible indebtedness by the Company in an aggregate principal amount of up to $172.5 million. Any such convertible indebtedness must, among other things, be incurred in pro forma compliance with the financial covenants in the Credit Agreement, be unsecured, and otherwise rank junior to borrowings under the Credit Agreement, and have a stated maturity date of at least 91 days after the latest scheduled maturity date of loans and commitments under the Credit Agreement. Net cash proceeds from any incurrence of convertible indebtedness must be used to repurchase minority shares of Adtran Networks or repay revolver borrowings under the Credit Agreement.

On January 16, 2024, the Company entered into a Second Amendment to the Credit Agreement and First Amendment to the Collateral Agreement. The Second Amendment, among other things, provided the Company and its subsidiaries with additional covenant headroom for the fourth quarter of 2023 through the third quarter of 2024 (the "Covenant Relief Period") and added certain other financial covenants which are described below.

On March 12, 2024, the Company entered into a Third Amendment to the Credit Agreement. The Third Amendment, among other things, amends the definition of "Consolidated Funded Indebtedness" (which is used in the calculation of the Consolidated Total Net Leverage Ratio and the Consolidated Senior Secured Net Leverage Ratio) to exclude obligations of the Company and its subsidiaries under certain factoring arrangements when calculated for the fiscal quarters ending March 31, 2024 and June 30, 2024.

As of March 31, 2024, ADTRAN, Inc.'s borrowings under the revolving line of credit were $195.0 million. As of March 31, 2024, there were no borrowings under the DDTL. The Credit Facility matures in July 2027; however, the Company has an option to request extensions subject to customary conditions. In addition, we may issue up to $50.0 million in letters of credit against our $400.0 million total facility. As of March 31, 2024, we had a total of $2.0 million in letters of credit under ADTRAN, Inc. outstanding against our eligible borrowings, leaving a net amount of $203.0 million available for future borrowings. Any future credit extensions under the Credit Agreement are subject to customary conditions precedent. The proceeds of any loans are expected to be used for general corporate purposes and to pay a portion of the Exchange Offer consideration. As of March 31, 2024, the Company was in compliance with all covenants.

Revolving Line of Credit Interest Rate

All U.S. dollar borrowings under the revolving line of credit (other than swingline loans, which bear interest at the Base Rate (as defined below plus the applicable margin) bear interest, at the Company's option, at a rate per annum equal to either (A) the Base Rate plus an applicable margin ranging from 0.65% to 1.65% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 2.15% per annum), or (B) Adjusted Term SOFR (as defined below) plus an applicable margin ranging from 1.65% to 2.65% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 3.15% per annum).

"Base Rate" means the highest of (a) the federal funds rate (i.e., for any day, the rate per annum equal to the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System, as published by the Federal Reserve Bank of New York on the business day next succeeding such day) plus ½ of 1.0%, (b) the prime commercial lending rate of the Administrative Agent, as established from time to time at its principal U.S. office (which such rate is an index or base rate and will not necessarily be its lowest or best rate charged to its customers or other banks), and (c) the daily Adjusted Term SOFR (as defined in the Credit Agreement) for a one-month tenor plus 1.0%. The Base Rate is subject to a floor of 1.00% per annum.

"Adjusted Term SOFR" means Term SOFR for the applicable interest period *plus* 0.10% per annum. Adjusted Term SOFR is subject to a floor of 0.00% per annum.

All Euro borrowings under the revolving line of credit bear interest at a rate per annum equal to EURIBOR (as defined in the Credit Agreement and subject to a 0.00% per annum floor) plus an applicable margin ranging from 1.75% to 2.75% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 3.25% per annum).

In addition, (x) if on or prior to December 31, 2024 we have not reduced the aggregate revolving credit commitment to $340.0 million or less, the applicable margin for all loans shall be increased by 1.00% per annum, and (y) if on or prior to June 30, 2025 we have not reduced the aggregate revolving credit commitment to $300.0 million or less, the applicable margin for all loans shall be increased by 1.00% per annum.

In addition to paying interest on outstanding principal under the Credit Agreement, the Company is required to pay a quarterly commitment fee to the lenders under the Credit Agreement in respect of unutilized revolving loan commitments on the average daily unused portion of the revolving credit commitment of each lender, which commitment fee ranges from 0.20% to 0.25% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, is equal to 0.25% per annum). The Company is also required to pay a participation fee to the Administrative Agent for the account of each lender with respect to the Company's participation in letters of credit at the then applicable rate for Adjusted Term SOFR Loans or EURIBOR Loans, and other customary fronting, issuance and administration fees with respect to letters of credit.

The increases in the commitment fee and margin rates during the Covenant Relief Period (referenced above) continue until the first date when each of the following conditions have been met (the period during which such increases are in place is hereinafter referred to as the ("Applicable Margin Interest Period"): (a) the Covenant Relief Period has ended, (b) since the Second Amendment effective date, the Company has repaid the revolving credit outstanding borrowings by a principal amount of at least $75.0 million, (c) the Company has reduced the aggregate revolving credit commitment to an amount no greater than $300.0 million and (d) the Company is in compliance with all financial covenants based on the financial statements for the most recently completed reference period.

Default interest is 2.0% per annum in excess of the rate otherwise applicable.

DDTL Interest Rate

All U.S. dollar borrowings under the DDTL bear interest, at the Company's option, at a rate per annum equal to either (A) the Base Rate plus an applicable margin ranging from 0.90% to 1.90% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 2.40% per annum), or (B) Adjusted Term SOFR plus an applicable margin ranging from 1.90% to 2.90% per annum based on the Company's Consolidated Total Net Leverage Ratio (or, during the Covenant Relief Period, an applicable margin of 3.40% per annum).

In addition, (x) if on or prior to December 31, 2024 we have not reduced the aggregate revolving credit commitment to $340.0 million or less, the applicable margin for all loans shall be increased by 1.00% per annum, and (y) if on or prior to June 30, 2025 we have not reduced the aggregate revolving credit commitment to $300.0 million or less, the applicable margin for all loans shall be increased by 1.00% per annum.

In addition to paying interest on outstanding principal under the DDTL loan, the Company is required to pay a quarterly commitment fee to the lenders under the Credit Agreement in respect of unutilized DDTL commitments at a rate of 0.25% per annum on the daily unused portion of the aggregate DDTL commitment.

The increases in the commitment fee and margin rates during the Covenant Relief Period (referenced above) continue until the first date when each of the following conditions have been met (the period during which such increases are in place is hereinafter referred to as the ("Applicable Margin Interest Period"): (a) the Covenant Relief Period has ended, (b) since the Second Amendment effective date, the Company has repaid the revolving credit outstanding borrowings by a principal amount of at least $75.0 million, (c) the Company has reduced the aggregate revolving credit commitment to an amount no greater than $300.0 million and (d) the Company is in compliance with all financial covenants based on the financial statements for the most recently completed reference period.

Default interest is 2.0% per annum in excess of the rate otherwise applicable.

Covenants Under the Credit Agreement

The financial covenants under the Credit Agreement, as amended, include the following (capitalized terms used in this subsection and not otherwise defined herein have the meanings assigned to them in the Credit Agreement or its amendments, as applicable):

- As of the last day of any fiscal quarter, commencing with the fiscal quarter ended December 31, 2023, the Consolidated Total Net Leverage Ratio may not exceed 5.00x.
- As of the last day of any fiscal quarter, commencing with the fiscal quarter ended December 31, 2023, the Consolidated Senior Secured Net Leverage Ratio may not exceed:
  - In the event of the purchase by the Company of at least sixty percent (60%) of the outstanding shares of Adtran Networks SE not owned by the Company as of August 9, 2023 that have been tendered (such event, a "Springing Covenant Event" and the fiscal quarter in which the Springing Covenant Event Occurs and the three consecutive quarterly test periods thereafter, the "Springing Covenant Period"), the following covenant levels:
    - First fiscal quarter ending after a Springing Covenant Event: 4.00x
    - Second fiscal quarter ending after a Springing Covenant Event: 3.75x
    - Third and fourth fiscal quarters ending after a Springing Covenant Event: 3.50x
- If the Company or any of its subsidiaries incurs certain unsecured indebtedness in excess of $50,000,000 in connection with a transaction that is a Springing Covenant Event or during a Springing Covenant Period, the Consolidated Senor Secured Net Leverage Ratio covenant will step down to 3.50x at the time of such incurrence.
- If a Springing Covenant Period is not in effect, the following covenant levels:
  - From December 31, 2023 through and including March 31, 2024: 3.25x.
  - From April 1, 2024 through and including June 30, 2024: 3.50x.
  - From July 1, 2024 and thereafter: 3.25x.
- As of the last day of any fiscal quarter, commencing with the fiscal quarter ended December 31, 2023, the Consolidated Fixed Charge Coverage Ratio may not exceed 1.25x.
- During the Covenant Relief Period or a Springing Covenant Period, as of the last day of any fiscal quarter (i) cash and cash equivalents of the Credit Parties must be at least $50.0 million and (ii) cash and cash equivalents of the Company and its subsidiaries must be at least $75.0 million.

The Credit Agreement is guaranteed by certain domestic subsidiaries of the Company, and the Company is also required to add certain additional domestic and international subsidiaries as guarantors under the Credit Agreement (such existing and new guarantors, collectively, the "Guarantors"). In addition to the guarantees provided by the Guarantors, the Guarantors have granted (or will grant) security interests in favor of the Administrative Agent over substantially all tangible and intangible assets, and the Borrower will grant mortgages in favor of the Administrative Agent over certain owned real estate assets. The Company is currently in negotiations with the Administrative Agent regarding a potential further amendment to the Credit Agreement to address the addition of certain foreign subsidiary guarantors.

The Credit Agreement provides for revolving borrowings of up to $400.0 million in aggregate principal amount, as well as an additional $50.0 million delayed draw term loan tranche that would be available upon a Springing Covenant Event. It also continues to permit the Company to prepay any or all of the outstanding loans or to reduce the commitments under the Credit Agreement subject to certain limitations and minimum payment thresholds.

During the Covenant Relief Period, the Company is not permitted to make certain dividend payments to the Company's Stockholders or certain other Restricted Payments. However, the Company is permitted to make the Recurring Compensation Payment to each Adtran Networks shareholder (other than the Company), pursuant to the terms of the DPLTA. *See Note 20 for additional information.*

Furthermore, the Credit Agreement, as amended, contain customary affirmative and negative covenants, including incurrence covenants and certain other limitations on the ability of the Company and the Company's subsidiaries to incur additional debt, guarantee other obligations, grant liens on assets, make investments, dispose of assets, make restricted payments, engage in mergers or consolidations, engage in transactions with affiliates, modify its organizational documents, and enter into certain restrictive agreements. The negative covenants are subject to various exceptions and carveouts; however, certain of the exceptions and carveouts are not permitted to be used during the Covenant Relief Period. It also contains customary events of default, such as misrepresentation and a default in the performance or observance of any covenant (subject to customary cure periods and materiality thresholds). Upon the occurrence and during the continuance of an event of default, the Administrative Agent is entitled to take various actions, including the acceleration of all amounts due under the Credit Agreement.

Operating Activities

Net cash provided by operating activities of $36.6 million during the three months ended March 31, 2024 improved by $56.5 million compared to net cash used in operating activities of $19.9 million during the three months ended March 31, 2023. The increase was primarily due to the net loss for the three months ended March 31, 2024 and 2023 remaining flat, excluding the goodwill impairment charge at March 31, 2024 of $292.6 million, as adjusted primarily for decreased depreciation, decreased deferred taxes and increased net cash inflows from working capital. Additional details related to our working capital and its drivers are discussed below.

Net accounts receivable decreased 13.3% from $216.4 million as of December 31, 2023 to $187.6 million as of March 31, 2024. There was an allowance for credit losses of $0.4 as of March 31, 2024 and December 31, 2023. The decrease in net accounts receivable was due primarily to improved collections. Quarterly accounts receivable DSO decreased from 88 days as of December 31, 2023 to 75 days as of March 31, 2024. The decrease in DSO was primarily driven by customer and geographical mix of commercial terms.

Other receivables decreased 30.6% from $17.5 million as of December 31, 2023 to $12.1 million as of March 31, 2024. The decrease in other receivables was primarily attributable to a decrease for sales of raw materials.

Quarterly inventory turnover was 2.07 turns as of December 31, 2023 and 1.8 turns as of March 31, 2024. Inventory decreased 11.1% from $362.3 million as of December 31, 2023 to $322.1 million as of March 31, 2024. The decrease in inventory was primarily due to a $4.0 million write down of inventory due to a restructuring discontinuation of certain product lines within our Network Solutions segment, a reduction in component purchases due to improved lead times and utilization of buffer stock. We expect inventory levels to fluctuate as we attempt to maintain sufficient inventory for customer demand and improve working capital.

Accounts payable decreased 2.4% from $162.9 million as of December 31, 2023 to $159.1 million as of March 31, 2024. The decrease in accounts payable was primarily due to a decrease in the average number of days payable to our trade suppliers. Accounts payable will fluctuate due to variations in the timing of the receipt of inventory, supplies and services and our subsequent payments for these purchases.

Investing Activities

Capital expenditures totaled approximately $13.4 million and $8.4 million for the three months ended March 31, 2024 and 2023, respectively. These expenditures were primarily used to purchase manufacturing and test equipment, software, computer hardware and building improvements. The increase in capital expenditures for the three months ended March 31, 2024 is primarily attributable to increases in expenditures related to software and building renovation projects.

Our long-term investments increased 5.4% from $27.7 million as of December 31, 2023 to $29.3 million as of March 31, 2024. Our investments include various marketable equity securities classified as long-term investments with a fair market value of $0.9 million and $1.0 million as of March 31, 2024 and December 31, 2023, respectively. Long-term investments as of March 31, 2024 and December 31, 2023 also included $28.3 million and $26.8 million, respectively, related to our deferred compensation plans. *See Note 5 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report for additional information.*

Dividends

During the three months ended March 31, 2023, we paid dividends totaling $7.1 million. On November 6, 2023, the Board of Directors suspended the Company's quarterly cash dividend which in order to reduce debt and interest expense and support the Company's capital efficiency program. We consequently did not pay any dividends during the three months ended March 31, 2024. The payment of any future dividends will be at the discretion of the Board of Directors and will depend on the Company's financial condition, results of operations, capital requirements, and any other factors deemed relevant by the Board of Directors. In addition, the Wells Fargo Credit Agreement currently does not allow for the payment of dividends to shareholders. *For additional information, see Note 11 of Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report and Liquidity & Capital Resources above.*

Stock Repurchase Program

There were no stock repurchases during the periods ended March 31, 2024 and 2023, and there currently is no authorized stock repurchase program.

Stock Option Exercises

To accommodate employee stock option exercises, the Company issued 36 thousand and 6 thousand shares of common stock which resulted in proceeds of $0.2 million and $0.1 million during the three months ended March 31, 2024 and 2023, respectively.

Pension Plans

We maintain defined benefit pension plans covering employees in certain foreign countries. The Company's net non-current pension liability for all defined benefit pension plans totaled $11.7 million and $12.5 million as of March 31, 2024 and December 31, 2023, respectively and the net current pension liability for all defined benefit pension plans totaled $0.1 million as of March 31, 2024 and December 31, 2023, which is included in accounts payable on the Condensed Consolidated Balance Sheets. *For additional information, see Note 12 of Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.*

Deferred Compensation Programs

We maintain four deferred compensation programs for certain executive management employees and our Board of Directors. The fair value of the assets held by the deferred compensation programs totaled $28.5 million and $26.8 million as of March 31, 2024 and December 31, 2023, respectively, and is included in long-term investments on the Condensed Consolidated Balance Sheets. The amounts payable to the deferred compensation program participants totaled $29.7 million and $29.0 million as of March 31, 2024 and December 31, 2023, respectively. *For additional information, see Note 5 of Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.*

Off-Balance Sheet Arrangements

We have exposure to credit losses from off-balance sheet exposures, to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds, where we believe the risk of loss is immaterial to our financial statements as of March 31, 2024. Otherwise, we do not have off-balance sheet financing arrangements and have not engaged in any related party transactions or arrangements with unconsolidated entities or other persons that are reasonably likely to materially affect liquidity or the availability of or requirements for capital resources. *See Note 18 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report for additional information.*

Cash Requirements

The following table summarizes the Company's material short- and long-term cash requirements from known obligations pursuant to certain contracts and commitments as of March 31, 2024, as well as an estimate of the timing in which such obligations and payments are expected to be satisfied (but excluding payments that may be made pursuant to the DPLTA and currency hedging arrangements, which are discussed below). Other than operating lease obligations, the cash requirements table excludes interest payments.

(In thousands)	Total	2024	2025	2026	2027	2028	Thereafter
Wells Fargo credit agreement[1]	$ 195,000	$ —	$ —	$ —	$ 195,000	$ —	$ —
Secured borrowings related to accounts receivable[2]	12,620	12,620	—	—	—	—	—
Purchase obligations[3]	237,989	201,867	31,742	4,325	55	—	—
Operating lease obligations[4]	41,139	6,534	7,699	6,091	4,560	4,274	11,981
Totals	**$ 486,748**	**$ 221,021**	**$ 39,441**	**$ 10,416**	**$ 199,615**	**$ 4,274**	**$ 11,981**

[1] See description below.

[2] Secured borrowings related to our accounts receivable factoring agreement that are expected to be repaid within 12 months.

[3] We have purchase obligations related to open purchase orders to our contract manufacturers, ODMs, component suppliers, service partners and other vendors. The settlement of our purchase obligations will occur at various dates beginning in 2024 and going through 2028. See Note 18 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report for more information.

[4] We have operating leases for office space, automobiles and various other equipment in the U.S. and in certain international locations. Our operating leases had remaining lease terms ranging from 2 months to 114 months as of March 31, 2024.

Wells Fargo Credit Agreement

On July 18, 2022, ADTRAN Holdings, Inc. and ADTRAN, Inc., as the borrower, entered into the Credit Agreement with the Administrative Agent and the other lenders named therein. The Credit Agreement was subsequently amended on August 9, 2023, January 16, 2024, and March 12, 2024. The Credit Agreement provides for a revolving line of credit and a DDTL. As of March 31, 2024, ADTRAN, Inc.'s borrowings under the revolving line of credit were $195.0 million. As of March 31, 2024, there were no borrowings under the DDTL. The Credit Facility matures in July 2027; however, the Company has an option to request extensions subject to customary conditions. *See Note 11 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report and "Liquidity and Capital Resources" in Part I, Item 2 of this report for additional information.*

Currency Hedging Arrangements

On November 3, 2022, the Company entered into a euro/U.S. dollar forward contract arrangement (the "Initial Forward") with Wells Fargo Bank, N.A. (the "Hedge Counterparty"). The Initial Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, enable the Company to convert a portion of its euro denominated payment obligations under the proposed DPLTA into U.S. Dollars. Under the Initial Forward, the Company agreed to exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate ranging from $1.01 to $1.03. The aggregate amount of €160.0 million is divided into eight quarterly tranches of €20.0 million, which commenced in the fourth quarter of 2022. During the three months ended March 31, 2024, the Company settled one €20.0 million forward contract tranches and the remaining amount will be divided into three quarterly tranches of €20.0 million over the remainder of 2024. The Company, at its sole discretion, may exchange all or part of each tranche on any given day within the applicable quarter; provided, however, that it must exchange the full tranche by the end of such quarter. The Initial Forward may be accelerated or terminated early for a number of reasons, including but not limited to (i) non-payment by the Company or the Hedge Counterparty, (ii) breach of representation or warranty or covenant by either party or (iii) insolvency or bankruptcy of either party.

On March 21, 2023, the Company entered into a euro/U.S. dollar forward contract arrangement (the "Forward") with the Hedge Counterparty. Under the Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, the Company will exchange an aggregate notional amount of €160.0 million U.S. dollars for euros at a daily fixed forward rate ranging from $1.09 to $1.10 per €1.00. During the three months ended March 31, 2024, the Company settled one $20.0 million forward contract tranches and the remaining amount will be divided into three quarterly tranches of $20.0 million. These forward contracts were executed on March 21, 2023 (to sell EUR/buy USD) and were entered into for the purpose of unwinding the Initial Forward (to buy EUR/sell USD). The drawdown dates of the Initial Forward are set to the same date as the maturity of the new offsetting Forward.

Receivables Purchase Arrangements

The Company was party to a receivable purchase agreement with a third-party financial institution, which accelerates receivable collection and helps to better manage cash flow. As of December 31, 2023 no accounts receivable were factored under the agreement or held in the reserve account. The cost of receivables purchase agreement is included in interest expense in the Condensed Consolidated Statements of Loss and totaled $0.3 million for the three months ended March 31, 2023.

On December 19, 2023, the agreement with the Factor was terminated and the Company entered into a receivables purchase agreement with a third-party financial institution (the "New Factor") to replace the Company's prior accounts receivable purchase agreement and to sell, on a revolving basis, undivided interests in the Company's accounts receivable. The New Factor provides for up to $40.0 million in borrowing capacity, subject to eligible receivables and reserve requirements, secured by the receivables. The New Factor qualifies for treatment as a secured borrowing with a pledge of collateral under Accounting Standards Codification ("ASC") Topic 810, Consolidations. Total secured borrowings under the agreement were $12.6 million and $14.3 million as of March 31, 2024 and December 31, 2023, respectively, leaving $27.2 million and $25.4 million available for future borrowings as of March 31, 2024 and December 31, 2023, respectively. Accounts receivable pledged as collateral related to the secured borrowings were $16.4 million and $16.8 million as of March 31, 2024 and December 31, 2023, respectively. For the three months ended March 31, 2024, the Company incurred program fee expenses of $0.3 million. As of March 31, 2024, the program fee rate was 6.88% percent.

Adtran Networks Domination and Profit and Loss Transfer Agreement

The DPLTA between the Company, as the controlling company, and Adtran Networks SE ("Adtran Networks"), as the controlled company, as executed on December 1, 2022, became effective on January 16, 2023, as a result of its registration with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) at the registered seat of Adtran Networks (Jena).

Under the DPLTA, subject to certain limitations pursuant to applicable law and the specific terms of the DPLTA, (i) the Company is entitled to issue binding instructions to the management board of Adtran Networks, (ii) Adtran Networks will transfer its annual profit to the Company, subject to, among other things, the creation or dissolution of certain reserves, and (iii) the Company will generally

absorb the annual net loss incurred by Adtran Networks. The obligation of the Company to absorb Adtran Networks' annual net loss applied for the first time to the loss generated in 2023.

Pursuant to the terms of the DPLTA, each Adtran Networks shareholder (other than the Company) has received an offer to elect either (1) to remain an Adtran Networks shareholder and receive from us an Annual Recurring Compensation payment, or (2) to receive Exit Compensation plus guaranteed interest. The guaranteed interest under the Exit Compensation is calculated from the effective date of the DPLTA to the date the shares are tendered, less any Annual Recurring Compensation paid. The guaranteed interest rate is 5.0% plus a variable component (according to the German Civil Code) that was 3.62% as of March 31, 2024. Assuming all the minority holders of currently outstanding Adtran Networks shares were to elect the second option, we would be obligated to make aggregate Exit Compensation payments, including guaranteed interest, of approximately €338.9 million or approximately $365.7 million, based on an exchange rate as of March 31, 2024 and reflecting interest accrued through March 31, 2024 during the pendency of the appraisal proceedings discussed below. Shareholders electing the first option of Annual Recurring Compensation may later elect the second option. The opportunity for outside Adtran Networks shareholders to tender Adtran Networks shares in exchange for Exit Compensation had been scheduled to expire on March 16, 2023. However, due to the appraisal proceedings that have been initiated in accordance with applicable German law, this time period for tendering shares has been extended pursuant to the German Stock Corporation Act (Aktiengesetz) and will end two months after the date on which a final decision in such appraisal proceedings has been published in the Federal Gazette (Bundesanzeiger).

We are also obligated to absorb any annual net loss of Adtran Networks under the DPLTA. Additionally, our obligation to pay Annual Recurring Compensation under the DPLTA is a continuing payment obligation, which will amount to approximately €10.6 million or $11.5 million (based on the current exchange rate) per year assuming none of the minority Adtran Networks shareholders were to elect Exit Compensation. The foregoing amounts do not reflect any potential increase in payment obligations that we may have depending on the outcome of ongoing appraisal proceedings in Germany. During the three months ended March 31, 2024 and 2023, we accrued $2.9 million and $2.8 million, respectively, in Annual Recurring Compensation, which was reflected as an increase to retained deficit. With respect to the year ended December 31, 2023, we are obligated to pay $11.5 million in Annual Recurring Compensation on the third banking day following the 2024 ordinary general shareholders' meeting of Adtran Networks, which is expected to occur on June 28, 2024 (but in any event within eight months following December 31, 2023).

On October 18, 2022, the Company's Board of Directors authorized the Company to purchase additional shares of Adtran Networks through open market purchases not to exceed 15,346,544 shares. For the three months ended March 31, 2024 and 2023, less than one thousand and 62 thousand shares, respectively, of Adtran Networks stock was tendered to the Company and Exit Compensation payments of approximately €4 thousand and €1.1 million, respectively, or approximately $5 thousand and $1.2 million based on an exchange rate as of March 31, 2024 and 2023, respectively, were paid to Adtran Networks shareholders.

We currently hold 33,957,538 no-par value bearer shares of Adtran Networks, representing 65.32% of Adtran Networks outstanding shares as of February 2, 2024.

The foregoing description of the DPLTA does not purport to be complete and is qualified in its entirety by reference to the DPLTA, a non-binding English translation of which incorporated by reference to Exhibit 10.5 included in our Annual Report on Form 10-K filed with the SEC on March 15, 2024.

Business Efficiency Program

On November 6, 2023, due to the uncertainty around the current macroeconomic environment and its impact on customer spending levels, the Company's management decided to implement a business efficiency program (the "Business Efficiency Program") targeting the reduction of ongoing operating expenses and focusing on capital efficiency inclusive of certain salary reductions, an early retirement program, a site consolidation plan to include lease impairments and the partial sale of owned real estate (including the potential sale of portions of our headquarters), inventory write downs from product discontinuances, and the suspension of the quarterly dividend. The Business Efficiency Program expands upon other recently implemented restructuring efforts and synergy costs following the Business Combination. For instance, on August 17, 2023, the Company's management determined to discontinue its copper-based Digital Subscriber Line broadband access technology products and its fixed wireless access products in its Network Solutions segment. Furthermore, on September 29, 2023, the Company's management decided to exit the "IoT" gateway market (indoor and outdoor), a subset of the broader IoT market (together with the other product discontinuations, the "Discontinuations"). On October 25, 2023, all employees were informed of certain personnel measures, which included the reduction of salary for select management, a reduction of approximately 5% of the workforce, an early retirement program and a hiring freeze. Additionally, on April 11, 2024, management determined to close a facility in Greifswald, Germany. The closure of the facility is expected to be substantially completed by June 30, 2024.

During the three months ended March 31, 2024, we recognized $17.1 million of costs related to the Business Efficiency Program. The costs recognized during the three months ended March 31, 2024, included charges of $8.8 million as a result of a strategy shift which included discontinuance of certain items in connection with the Business Efficiency Program, of which, $4.0 million relates to inventory write-downs and $4.8 million relates to other charges, and are included in cost of revenue in the Condensed Consolidated Statements of Loss. Since the inception of the Business Efficiency Program, we recognized $42.2 million of costs. We expect costs in the second quarter 2024 and thereafter relating to the Business Efficiency Program to range between $20.6 million and $35.8 million. Management

expects these planned costs to include severance costs ranging from $17.3 million to $28.3 million in connection with an early retirement program and reductions in workforce and site consolidation transaction expenses (primarily brokers fees and Greifswald exit costs) ranging from $3.3 million to $7.5 million. Future cash payments include: severance costs and outplacement fees that are anticipated to be in the range of $18.1 million to $29.1 million and payments relating to the site consolidation transaction expenses that are anticipated to be in the range of $3.1 million to $7.3 million. We may also incur other charges or cash expenditures not currently contemplated due to events that may occur as a result of, or associated with, the Business Efficiency Program, including potential impairment charges related to the discontinuance of additional product lines, regulatory requirements related to personnel measures, and site closures. However, we are not able to estimate the amount or range of amounts of such potential incremental charges as of the date of this filing. If required, we will amend this disclosure at such time as management is able in good faith to estimate the amount, or range of amounts, of these charges.

Business Combination Integration Costs

During the three months ended March 31, 2024 and 2023, we recognized $0.5 million and $0.8 million of integration costs related to the Business Combination, respectively, that are included in selling, general and administrative expenses, research & development expenses and cost of revenue in the Condensed Consolidated Statement of Loss. We expect to incur additional integration costs and expenses associated with the implementation of the DPLTA throughout 2024 and such costs are expected to be material. These costs are separate and apart from the costs associated with the integration program discussed below.

Multi-Year Integration Program

During the fourth quarter of 2022, the Company initiated a multi-year integration program designed to optimize the assets, business processes, and information technology systems of the Company. During the three months ended March 31, 2023, we recognized $2.4 million of integration costs related to the Business Combination, of restructuring costs relating to the Business Combination under the multi-year integration program that are included in cost of revenue, selling, general and administrative expenses and research and development expenses in the Condensed Consolidated Statement of Loss. The Company does not anticipate additional material expenses to be incurred in connection with this integration program. *See Note 19 of the Notes to Condensed Consolidated Financial Statements, included in Part I, Item 1 of this report for additional information.*

Other Cash Requirements

During the three months ended March 31, 2024, other than the Exit Compensation payments, Annual Recurring Compensation under the DPLTA, restructuring costs and increased debt service costs, there have been no other material changes in cash requirements from those discussed in the 2023 Form 10-K and our cash requirements table shown in Liquidity and Capital Resources above.

Performance Bonds

Certain contracts, customers and jurisdictions in which we do business require us to provide various guarantees of performance such as bid bonds, performance bonds and customs bonds. As of March 31, 2024 and December 31, 2023, we had commitments related to these bonds totaling $10.6 million and $10.8 million, respectively, which expire at various dates through April 2031. In general, we would only be liable for the amount of these guarantees in the event of default under each contract, the probability of which we believe is remote.

Critical Accounting Policies and Estimates

Accounting Policies

An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used or if changes in the accounting estimate that are reasonably likely to occur could materially impact the results of financial operations. Several accounting policies, as described in Note 1 of Notes to the Consolidated Financial Statements included in Part I, Item 1 of this report, require material subjective or complex judgment and have a significant impact on our financial condition and results of operations, as applicable. We believe the critical accounting policies affect our more significant judgments and estimates used in the preparation of our Condensed Consolidated Financial Statements. During the three months ended March 31, 2024, there were no significant changes to our critical accounting policies and estimates as described in the financial statements contained in the 2023 Form 10-K, except for goodwill as discussed below.

Goodwill

Goodwill represents the excess purchase price over the fair value of net assets acquired. The Company's annual impairment assessment is done at the reporting unit level, which we determined are generally the same as our operating segments, which are identified in Note 16 to the Condensed Consolidated Financial Statements. We review goodwill for impairment annually during the fourth quarter and also test for impairment between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of our reporting unit below its carrying amount. In addition, the Company performs an interim impairment assessment prior to our October 1st annual measurement date, whenever events or changes in circumstances indicate that the carrying amount of such assets (or group of assets) may not be recoverable. Such events and circumstances may include among others: a significant adverse change in legal factors or in the general business climate; significant decline in our stock price and market capitalization; unanticipated competition; the testing for recoverability of a significant asset group within the reporting unit; and an adverse action or assessment by a regulator. Any adverse change in these factors could have a significant impact on the recoverability of goodwill and could have a material impact on our consolidated financial statements.

During the first quarter of 2024, qualitative factors such as a decrease in the Company's market capitalization, lower service provider spending and delayed holding patterns of inventory with respect to customers caused us to reduce our forecasts, triggering a quantitative impairment assessment for our reporting units. The Company determined the fair value of the Network Solutions reporting unit using a combination of an income approach and a market based peer group analysis. The Company determined upon its quantitative impairment assessment to recognize a $292.6 million non-cash goodwill impairment charge for the Network Solutions reporting unit during the three months ended March 31, 2024. The quantitative impairment analysis indicated there was no impairment of the Services & Support goodwill during the three months ended March 31, 2024. Our Network Solutions reporting unit had no remaining goodwill and our Services & Support reporting unit had $55.1 million of goodwill as of March 31, 2024, respectively.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to financial market risks, including changes in foreign currency rates, prices of marketable equity and fixed-income securities. In addition, the ongoing global pandemic raises the possibility of an extended economic downturn and has caused volatility in financial markets. The primary objective of the large majority of our investment activities is to preserve principal while at the same time achieving appropriate yields without significantly increasing risk. To achieve this objective, a majority of our marketable securities are investment grade, fixed-rate bonds and municipal money market instruments denominated in U.S. dollars. Our investment policy provides limitations for issuer concentration, by restricting, at the time of purchase, the concentration in any one issuer to 5.0% of the market value of our total investment portfolio.

We maintain depository investments with certain financial institutions. As of March 31, 2024, $102.7 million of our cash and cash equivalents, primarily foreign depository accounts, were in excess of government provided insured depository limits. Although these depository investments exceed government insured depository limits, we have evaluated the credit-worthiness of these financial institutions and determined the risk of material financial loss due to exposure of such credit risk to be minimal.

Interest Rate Risk

As of March 31, 2024, approximately $5.8 million of our cash and investments may be directly affected by changes in interest rates. As of March 31, 2024, we held $5.8 million of cash and variable-rate investments where a change in interest rates would impact our interest income. A hypothetical 50 basis point decline in interest rates as of March 31, 2024, assuming all other variables remain constant, would reduce annualized interest income on our cash and investments by less than $0.1 million. As of March 31, 2024, the carrying amounts of our revolving credit agreements totaled $195.0 million where a change in interest rates would impact our interest expense. A hypothetical 50 basis point increase in interest rates as of March 31, 2024, assuming all other variables remain constant, would increase our interest expense by $1.0 million. The analyses cover our debt and investments. The analyses use actual or approximate maturities for the debt and investments. The discount rates used were based on the market interest rates in effect at March 31, 2024.

Foreign Currency Exchange Rate Risk

We are exposed to changes in foreign currency exchange rates to the extent that such changes affect our revenue and gross margin on revenue derived from some international customers, operating expenses, and assets and liabilities held in non-functional currencies related to our foreign subsidiaries. Our primary exposures to foreign currency exchange rate movements are with the euro and the British pound sterling. Our revenue is primarily denominated in the respective functional currency of the subsidiary and paid in that subsidiary's functional currency or certain other local currency. The majority of our global supply chain predominately makes payments in U.S. dollars and some of our operating expenses are paid in certain local currencies (approximately 42.9% of total operating expense for the year ended March 31, 2024, respectively). Therefore, our revenue, gross margins, operating expenses and operating loss are all subject to foreign currency fluctuations. As a result, changes in currency exchange rates could cause variations in our operating loss. A hypothetical 10% movement in foreign exchange rates would result in a before-tax positive or negative impact of approximately $2.2 million for the year ended March 31, 2024. Actual future gains and losses associated with our foreign currency exposures and positions may differ materially from the sensitivity analyses performed as of March 31, 2024 due to the inherent limitations associated with predicting the foreign currency exchange rates, and our actual exposures and positions.

We have certain customers and suppliers who are invoiced or pay in a non-functional currency. Changes in the monetary exchange rates used to invoice such customers versus the functional currency of the entity billing such customers may adversely affect our results of operations and financial condition. To manage the volatility relating to these typical business exposures, we may enter into various derivative transactions, when appropriate. We do not hold or issue derivative instruments for trading or other speculative purposes. All non-functional currencies billed would result in a combined hypothetical gain or loss of $7.2 million if the U.S. dollar weakened or strengthened 10% against the billing currencies. All non-functional currencies invoiced by suppliers would result in a combined hypothetical gain or loss of $10.5 million if the U.S. dollar weakened or strengthened 10% against the billing currencies. This change represents an increase in the amount of hypothetical gain or loss compared to prior periods and is mainly due to an increase in U.S. dollar denominated billings in a non-U.S. dollar denominated subsidiary.

As of March 31, 2024, we had certain material contracts subject to currency revaluation, including accounts receivable, accounts payable and lease liabilities denominated in foreign currencies. As of March 31, 2024, we had 45 forward contracts outstanding with a fair value of $4.1 million. The objective of these foreign currency forward contracts is to reduce the impact of currency exchange rate movements on our operating results by offsetting gains and losses on the forward contracts with increases or decreases in foreign currency transactions. We do not use foreign currency contracts for speculative or trading purposes. Hedging of our currency exposures may not always be effective to protect us against currency exchange rate fluctuations. *See Note 10 of Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.*

On November 3, 2022, the Company entered into a euro/U.S. dollar forward contract arrangement (the "Initial Forward") with Wells Fargo Bank, N.A. (the “Hedge Counterparty”). The Initial Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, enable the Company to convert a portion of its euro denominated payment obligations under the proposed DPLTA into U.S. Dollars. Under the Initial Forward, the Company agreed to exchange an aggregate notional amount of €160.0 million for U.S. dollars at a daily fixed forward rate ranging from $1.01 to $1.03. The aggregate amount of €160.0 million is divided into eight quarterly tranches of €20.0 million, which commenced in the fourth quarter of 2022. During the three months ended March 31, 2024, the Company settled one €20.0 million forward contract tranches and the remaining amount will be divided into three quarterly tranches of €20.0 million over the remainder of 2024. The Company, at its sole discretion, may exchange all or part of each tranche on any given day within the applicable quarter; provided, however, that it must exchange the full tranche by the end of such quarter. The Initial Forward may be accelerated or terminated early for a number of reasons, including but not limited to (i) non-payment by the Company or the Hedge Counterparty, (ii) breach of representation or warranty or covenant by either party or (iii) insolvency or bankruptcy of either party.

On March 21, 2023, the Company entered into a euro/U.S. dollar forward contract arrangement (the “Forward”) with the Hedge Counterparty. Under the Forward, which is governed by the provisions of an ISDA Master Agreement (including schedules thereto and transaction confirmations that supplement such agreement) entered into between the Company and the Hedge Counterparty, the Company will exchange an aggregate notional amount of €160.0 million U.S. dollars for euros at a daily fixed forward rate ranging from $1.09 to $1.10 per €1.00. During the three months ended March 31, 2024, the Company settled one $20.0 million forward contract tranches and the remaining amount will be divided into three quarterly tranches of $20.0 million. These forward contracts were executed on March 21, 2023 (to sell EUR/buy USD) and were entered into for the purpose of unwinding the Initial Forward (to buy EUR/sell USD). The drawdown dates of the Initial Forward are set to the same date as the maturity of the new offsetting Forward.

For further information about the fair value of our investments as of March 31, 2024, *see Note 5 of the Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.*

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that the information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the rules and forms promulgated by the SEC, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of the end of the period covered by this report, an evaluation was carried out by management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e)) under the Exchange Act. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that due to the material weaknesses in our internal control over financial reporting described below, our disclosure controls and procedures were not effective as of March 31, 2024.

Material Weaknesses in Internal Control over Financial Reporting

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. In its assessment of the effectiveness of internal control over financial reporting as of March 31, 2024, management determined that there were deficiencies in ADTRAN's internal control over financial reporting that constituted material weaknesses that existed as of March 31, 2024. Such material weaknesses were as follows:

- The Company did not design and maintain effective controls in response to the risks of material misstatement. Specifically, changes to existing controls or the implementation of new controls have not been sufficient to respond to changes to the risks of material misstatement to financial reporting. This material weakness contributed to the following additional material weaknesses:
- The Company did not design and maintain effective controls over financial statement preparation, presentation and disclosure commensurate with its financial reporting requirements. Specifically, the Company did not design and maintain effective controls over the presentation and disclosure of transactions, including non-controlling interest.
- The Company did not design and maintain effective controls to address the initial application of complex accounting standards and accounting of non-routine, unusual or complex events and transactions. Specifically, the Company did not design and maintain effective controls to timely analyze and account for (i) non-controlling interest and (ii) the receivable purchase and servicing agreement.

The material weaknesses resulted in the restatements and revisions of and immaterial adjustments to our consolidated financial statements for the year ended December 31, 2022, as well as the condensed consolidated financial statements for the quarterly and year-to-date periods ended September 30, 2022, March 31, 2023, June 30, 2023, and September 30, 2023. The material weaknesses also resulted in material adjustments to our consolidated financial statements for the year ended December 31, 2023. Additionally, these material weaknesses could result in misstatements of the Company's accounts or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Management's Remediation Efforts

To remediate the material weaknesses in the Company's internal control over financial reporting related to the risks of material misstatement, including financial statement preparation, presentation and disclosure of transactions and the non-controlling interest, the Company plans to initiate a remediation plan that will involve designing and implementing new or enhanced controls over the review of our consolidated financial statements, global identification and reassessment of all key process and controls, increased training and awareness of control activities, and increased scrutiny on control performance and documentation standards. We believe that the foregoing actions will support the improvement of the Company's internal control over financial reporting, and, through our efforts to identify, design, and implement the necessary control activities, will be effective in remediating such material weaknesses.

To remediate the material weaknesses in the Company's internal control over financial reporting relating to accounting of non-routine unusual or complex events and transactions for non-controlling interest and the receivable purchase and servicing agreement, the Company is preparing a remediation plan that includes designing and implementing new controls over the identification and review of contracts, transactions or arrangements that may result in a financial obligation including the use of an accounting specialist as needed to ensure proper presentation of these items within our financial statements.

We will continue to devote significant time and attention to these remediation efforts. As we continue to evaluate and work to improve our internal control over financial reporting, management may determine to take additional measures to address the material weaknesses or determine to modify the remediation plans described above. Until the remediation steps set forth above, including the efforts to implement the necessary control activities that we identify, are fully completed, and there has been time for us to conclude through testing that the control activities are operating effectively, the material weaknesses described above will not be considered remediated.

Changes in Internal Control over Financial Reporting.

Other than the remediation plans outlined above, there were no changes in the Company's internal control over financial reporting that occurred during the most recent fiscal quarter covered by this report that have materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time we are subject to or otherwise involved in various lawsuits, claims, investigations and legal proceedings that arise out of or are incidental to the conduct of our business (collectively, "Legal Matters"), including those relating to employment matters, patent rights, regulatory compliance matters, stockholder claims, and contractual and other commercial disputes. Such Legal Matters, even if not meritorious, could result in the expenditure of significant financial and managerial resources. Additionally, an unfavorable outcome in a Legal Matter, including in a patent dispute, could require the Company to pay damages, entitle claimants to other relief, such as royalties, or could prevent the Company from selling some of its products in certain jurisdictions. See Note 18 of the Notes to Condensed Consolidated Financial Statements included in Part 1 of this report for a description of our material legal proceedings, which is incorporated herein by reference. At this time, we are unable to predict the outcome of or estimate the possible loss or range of loss, if any, associated with these Legal Matters.

ITEM 1A. RISK FACTORS

A list of factors that could materially affect our business, financial condition or operating results is described in Part I, Item 1A, "Risk Factors" in the 2023 Form 10-K. There have been no material changes to our risk factors from those disclosed in Part I, Item 1A, "Risk Factors" in the 2023 Form 10-K other than as described in the risk factors below.

Risks related to our financial results and Company success

Managing our inventory is complex and has included and may continue to include write downs of excess or obsolete inventory.

Managing our inventory of components and finished products is complicated by a number of factors, including the need to maintain a significant inventory of certain components that are in short supply, that have been discontinued by the component manufacturer, that must be purchased in bulk to obtain favorable pricing or that require long lead times. These issues have and may continue to result in our purchasing and maintaining significant amounts of inventory, which if not used or expected to be used based on anticipated production requirements, may become excess or obsolete. Any excess or obsolete inventory could also result in sales price reductions and/or inventory write- downs, which could adversely affect our business and results of operations. During the year ended December 31, 2023, we recognized write-downs of inventory of $24.3 million due to a discontinuation of certain product lines within our Network Solutions segment in connection with our business efficiency program. Additionally, during the three months ended March 31, 2024, we recognized write-downs of inventory and other charges of $8.8 million as a result of a strategy shift which included discontinuance of certain items in connection with the Business Efficiency Program, of which, $4.0 million relates to inventory write-downs and $4.8 million relates to other charges. Significant and unanticipated changes in our business could require additional charges for inventory write downs in a future period. Any future charges relating to such inventory write-downs could materially adversely affect our business, financial condition and results of operations in the periods recognized. *For additional details regarding the business efficiency program, see "Management's Discussion and Analysis of Financial Condition and Results of Operations – Business Efficiency Program" in Part II, Item 7 of this report.*

We have recognized impairment charges related to goodwill and other intangible assets in the past and may be required to do so in the future.

The Business Combination added a significant amount of goodwill and other intangible assets to our consolidated balance sheets. In accordance with U.S. GAAP, management periodically assesses these assets to determine if they are impaired. Significant negative industry or economic trends, disruptions to our business, the inability to effectively integrate acquired businesses, the under performance of our business as compared to management's initial expectations, unexpected significant changes or planned changes in use of the assets, divestitures, and market capitalization declines may impair goodwill and other intangible assets. During the first quarter of 2024, qualitative factors such as a decrease in the Company's market capitalization, lower service provider spending and delayed holding patterns of inventory with respect to customers caused us to reduce our forecasts, triggering a quantitative impairment assessment for our reporting units. The Company determined upon its quantitative impairment assessment to recognize a $292.6 million non-cash goodwill impairment charge for the Network Solutions reporting unit. The quantitative impairment analysis indicated there was no impairment of the Services & Support goodwill. Subsequent to March 31, 2024, the Company has experienced volatility in its stock price which reduced the market value of the Company's common stock as of this filing. The Company will continue to monitor its stock price, operating results and other macroeconomic factors to determine if there is further indication of a sustained decline in fair value requiring an event driven assessment of the recoverability of its remaining goodwill. Any future charges relating to such impairments could have a material adverse effect our business, financial condition and results of operations in the periods recognized.

Risks related to our control environment

We have had to restate our previously issued consolidated financial statements and, as part of that process, have identified material weaknesses in our internal control over financial reporting. If we are unable to develop and maintain effective internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in us and may adversely affect our business, financial condition and results of operations.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Effective internal control over financial reporting is necessary for us to provide reliable financial reporting and prevent fraud. We have had to restate our previously issued consolidated financial statements and, as part of that process, have identified material weaknesses in our internal control over financial reporting. We have implemented new controls with respect to one material weakness, and we plan to initiate remediation plans with respect to the other material weaknesses. These remediation measures may be time consuming and costly and there is no assurance that these initiatives will ultimately have the intended effects. Any failure to maintain effective internal control over financial reporting could adversely impact our ability to report our financial position and results from operations on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis, we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the SEC, the Federal Financial Supervisory Authority, or other regulatory authorities. In either case, there could be an adverse effect on our business, financial condition and results of operations. Ineffective internal control over financial reporting could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

We can provide no assurance that the measures that we have taken, are taking, and plan to take in the future will remediate the material weaknesses identified or that any additional material weaknesses or restatements of financial results will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, while we have strengthened our controls and procedures, in the future those controls and procedures may not be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our consolidated financial statements.

Furthermore, as a public company, we are required to comply with U.S. GAAP, the Sarbanes-Oxley Act of 2002 ("SOX"), the Dodd-Frank Act and the rules and regulations subsequently implemented by the SEC and the Public Company Accounting Oversight Board. As such, Adtran Networks, as a subsidiary of a public company, has established and is required to maintain effective disclosure controls, as well as internal control over financial reporting under U.S. GAAP. Current and ongoing compliance efforts have and may continue to be costly and require the attention of management. There are a large number of processes, policies, procedures and functions that have been integrated, or enhanced at Adtran Networks, particularly those related to the implementation of internal controls for SOX compliance. The maintenance of these plans may lead to additional unanticipated costs and time delays. These incremental costs may exceed the savings we expect to achieve from the realization of efficiencies related to the combination of the businesses, particularly in the near term and in the event there are material unanticipated costs.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

During the three months ended March 31, 2024, we did not repurchase any shares of our common stock. As of March 31, 2024, there is no current authorization to repurchase common stock.

ITEM 5. OTHER INFORMATION

(a) Not applicable

(b) Not applicable

(c) Insider Trading Arrangements

During the fiscal quarter ended March 31, 2024, none of the Company's directors or executive officers adopted or terminated any contract, instruction or written plan for the purchase or sale of Company securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any "non-Rule 10b5-1 trading arrangement."

ITEM 6. EXHIBITS

Exhibits.

Effective June 8, 2023, ADVA Optical Networking SE, a subsidiary of the Company ("ADVA"), changed its name to Adtran Networks SE. By operation of law, any reference to ADVA Optical Networking SE in these exhibits should be read as Adtran Networks SE as set forth in the Exhibit List below.

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of ADTRAN Holdings, Inc. (incorporated by reference to Exhibit 3.1 to ADTRAN's Form 8-K filed July 8, 2022)
3.2	Second Amended and Restated Bylaws of ADTRAN Holdings, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed October 24, 2023)
10.1	Second Amendment to Credit Agreement and First Amendment to Collateral Agreement, dated as of January 16, 2024, by and among ADTRAN Holdings, Inc., ADTRAN, Inc., Wells Fargo Bank, National Association, and the lenders party thereto (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed January 22, 2024)
10.2	Third Amendment to Credit Agreement, dated as of March 12, 2024, by and among ADTRAN Holdings, Inc., ADTRAN, Inc., Wells Fargo Bank, National Association, and the lenders party thereto (incorporated by reference to exhibit 10.5 to the Company's Form 10-K filed March 15, 2024)
10.3	ADTRAN Holdings, Inc. 2024 Employee Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed May 9, 2024)
10.4	ADTRAN Holdings, Inc. 2024 Directors Stock Plan (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed May 9, 2024)
31*	Rule 13a-14(a)/15d-14(a) Certifications
32*	Section 1350 Certifications
101	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets as of March 31, 2024 and December 31, 2023; (ii) Condensed Consolidated Statements of Loss for the three months ended March 31, 2024 and 2023; (iii) Condensed Consolidated Statements of Comprehensive Loss for the three months ended March 31, 2024 and 2023; (iv) Condensed Consolidated Statements of Changes in Equity for the three months ended March 31, 2024 and 2023; (v) Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2024 and 2023; and (vi) Notes to Condensed Consolidated Financial Statements
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed herewith.

SIGNATURE

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

ADTRAN Holdings, Inc.
(Registrant)

Date: May 10, 2024

/s/ Ulrich Dopfer
Ulrich Dopfer
Chief Financial Officer
(Principal Accounting Officer)