ADVA Optical Networking

2001 consolidated financial results (U.S. GAAP)

TABLE OF CONTENTS

Letter to the shareholders

While many industry observers will remember 2001 as the year the optical networking bubble burst, for ADVA Optical Networking it has been a year of unprecedented progress under difficult conditions. And while we have been severely impacted by the wider economic slowdown and prevailing investor sentiment, last year's downturn gave us the opportunity to show the fundamental strength of our markets and our products.

Over the course of the past year we have maintained our position as the No. 1 supplier of optical networking equipment to the **enterprise** and **metro access** markets in Europe, and we advanced to become No. 3 worldwide. We have increased sales by 51% at a time when carrier equipment investments and corporate IT spending as whole are declining – a clear indication that not all market segments are struggling and that our solutions remain in demand. To better understand the changes and achievements ADVA made during the course of 2001, it is important to understand how the market evolved over the year.

A YEAR OF DRAMATIC CHANGE

At the beginning of 2001, the global optical networking industry was forecasted to grow in triple figures and investment poured in. However, it soon became clear that the long-haul market segment was massively oversupplied. This situation was exacerbated by the wider economic slowdown in the United States and around the world, and subsequent decrease in corporate IT spending. The combination of these developments led to a severe reduction in investment in private and publicly held carriers, service providers, component manufacturers, and equipment vendors. And investors, still smarting from costly write-offs sustained during the dotcom boom, slashed optical networking holdings.

Responding fast

ADVA reacted quickly to these events and we took a number of significant steps to maximize operating efficiencies and secure our financial position.

ADVA used the opportunity of slackening demand for IT equipment to strengthen partnerships with suppliers, and subsequently reduce order lead-time unit costs while significantly increasing inventory turns. Inventory is down 35% to EUR 15.8 million.

We implemented a wide ranging cost-reduction program in 2001. This involved discontinuing non-core operations at our site in Cambridge, United Kingdom, reducing our workforce by 13%, and further reducing discretionary spending. In addition, we significantly curtailed the number of days of outstanding accounts receivable by 13 days to 52 days.

These figures illustrate a marked improvement in working capital management and have resulted in ADVA managing operating cash flow effectively, while setting us on course to achieve quarterly operating profit breakeven.

A YEAR OF GREAT PROGRESS

Although we took the above-mentioned steps to ensure ADVA's short-term financial stability, our strategic focus remained unchanged and we made numerous important achievements during 2001 to develop the business and expand our market-leading position.

Products

We released two major new hardware product platforms this year: the FSP 1000 and FSP 2000. The FSP 1000 was developed to target growing opportunities for metro access solutions and the FSP 2000 focuses on enterprise and storage solutions. As an integrated part of our product portfolio, we also developed two important software products in 2001: the FSP Network Manager and the FSP Network Planner. The FSP Network Planner, in particular, gives us an important competitive advantage and assists customers in designing highly complex optical networks in minutes, rather than the days or weeks required by our competitors.

We now have a broad product portfolio ideally suited to meet the service demands for multi-protocol, high-speed, mission-critical applications. While many have mistaken simplicity for lack of technological leadership in our industry, ADVA has proven the superiority of developing simple solutions with an extensive range of features and carrier-class reliability for technologically complex optical networks. Furthermore, all of our solutions are developed with ADVA's core principle of lowest total cost of ownership in mind, a concept which spans the entire life cycle of each product.

Customers
ADVA's end customer base of carriers and service providers grew 68% in 2001 as we continued to sign new clients throughout the year. Today, we serve over 47 carriers and service providers, more than 500 Fortune 1000 enterprises, and have deployed over 20,000 Wavelength Division Multiplexing channel cards. Most notably, we continue to attract business from large incumbent carriers, whonow account for a majority of ADVA's business and are a testament to the quality of our products and our strategy of working with distribution partners to access major international customers.

New partnerships
ADVA forged a number of new partnerships and strengthened existing alliances with VAR partners throughout 2001. We extended our relationship with OEM partner, Siemens, to further our penetration in the European and Asia-Pacific regions. And we strengthened our relationship with INRANGE Technologies, enhancing our pursuit of storage networking opportunities. Both of these partners now market our entire FSP portfolio to their customers.

We entered the South American market through our new partnership with Brazilian-based VAR, Novasistemas Engenharia. This gives us marketing, training, and technical support capabilities in Brazil for the first time. We also acted to consolidate our leading position in Europe, the Middle East, and Africa by adding Quante, Telindus, and VA TECH SAT to our list of regional European VARs.

POSITIONED FOR GROWTH IN AN EXPANDING MARKET
Contrary to the oversupplied long-haul market segment, the **metro** optical networking market is only now emerging and ADVA is one of the few companies solely focused on this opportunity. And although customer spending patterns and the macro economic conditions remain unpredictable, ADVA's solutions continue to provide a compelling business case to customers and stimulate new demand.

The need for companies to invest in high-speed centralized data storage and disaster recovery capabilities – ADVA's core applications – was tragically highlighted by the terrorist attacks of September 11. In addition, carriers and service providers the world over are actively seeking bids and conducting lab tests of optical networking equipment for **metro core** infrastructure. ADVA is among a handful of leading vendors actively competing for these contracts, oftentimes together with our blue-chip partners.

ADVA is well placed to benefit from future growth. In a market where there remains significant differentiation between products, we have the most advanced, customer-oriented, carrier-class product portfolio on the market. What's more, we continue to lead the industry in delivering lowest total cost of ownership solutions.

Our proprietary technology and know-how, coupled with the partnerships we signed or strengthened in 2001, give us a significant advantage over competitors in terms of products, services, reach, and access. We further extend this advantage over competitors by leveraging our leading optical manufacturing expertise and logistics to deliver best-in-class customer service. This means ADVA enters 2002 superbly positioned to capitalize on growth and gain share in the **metro** market.

Of course, none of this would have happened without the commitment, determination, and effort of our employees and partners worldwide, and we'd like to take this opportunity to thank them all. We're very pleased to be able to say ADVA continues to enjoy high employee dedication and motivation. We would also like to thank you, our shareholders, for standing by and supporting us in our management of the company during an apprehensive year. As you can see from this letter and the following pages, we have come a long way, and 2002 is shaping up to be an extremely exciting year for ADVA. We are **"Turning metro visions into value!"**

March 27, 2002

Brian L. Protiva, Chief Executive Officer
Jürgen Hansjosten, Chief Sales Officer
Brian P. McCann, Chief Marketing & Strategy Officer
Stephan Offermanns, Chief Operating Officer
Andreas G. Rutsch, Chief Financial Officer

Forward-looking statements

This annual report contains forward-looking statements with words such as “believes”, “anticipates”, and “expects” about expected revenues and earnings, anticipated demand for optical networking products, internal estimates, and liquidity. These forward-looking statements involve a number of unknown risks, uncertainties, and other factors that could cause actual results to differ materially. Unknown risks, uncertainties, and other factors include, but are not limited to, the following: (i) exposure to general economic and market conditions; (ii) operation in rapidly changing markets; (iii) variation in sales to carriers and service providers; (iv) intense competition from current and new competitors; (v) failure to introduce new and enhanced products in a timely manner; (vi) product installation delays, order cancellations, product returns, and damage to ADVA’s reputation if our products do not operate properly with other equipment in customers’ networks; (vii) dependence on a limited number of third parties who market, sell, and deploy ADVA’s products; (viii) dependence on a limited number of suppliers; (ix) inability to properly manage growth; (x) inability to properly manage international growth; (xi) inability to attract and retain qualified personnel, as well as dependence on key personnel; (xii) fluctuations in operating results; (xiii) inadequate protection of proprietary technology; (xiv) exposure to product liability and warranty claims; (xv) stock price volatility; (xvi) inability to obtain additional financing to satisfy future capital requirements; and (xvii) exposure to currency fluctuations as mentioned in the “Risk factors” section of this annual report.

Business

COMPANY OVERVIEW

ADVA AG Optical Networking ("ADVA" or "we") is a leading global provider of optical networking solutions for the delivery of high-speed data, storage, voice, and video services in the metropolitan ("metro") area. Leveraging our core competencies in optical networking and expertise in enterprise applications, we are focused on extending our leadership to metro core network applications and delivering end-to-end solutions in metro areas. We have developed a carrier-class portfolio - the Fiber Service Platform ("FSP") family of products. These products are explicitly designed to ensure the lowest total cost of ownership. Our solutions have been deployed at over 47 telecommunications carriers ("carriers") and other telecommunications service providers ("service providers"), including Post Telephone and Telegraph companies ("PTTs"), Regional Bell Operating Companies ("RBOCs"), Local Exchange Carriers ("LECs"), and Inter-Exchange Carriers ("IXCs"), and more than 500 Fortune 1000 companies, universities, and government agencies worldwide, according to our estimates. ADVA's products are sold through an international network of blue-chip distribution partners, in addition to our direct sales force.

We believe that ADVA is currently among the top four leading providers globally of optical Dense Wavelength Division Multiplexing ("DWDM") solutions for metro core, metro access, and enterprise network applications. Our beliefs are based upon analysis conducted and estimates published by a number of sources, including the industry analyst firms of Communications Industry Researchers, Inc. ("CIR"), Dell'Oro Group Inc. ("Dell'Oro"), Infonetics Research, Inc. ("Infonetics"), and RHK Inc. ("RHK"), and our internal estimates.

ADVA generated revenues of EUR 90.0 million in 2001, an increase of 51.2% over revenues of EUR 59.5 million in 2000, as a result of strong demand for storage networking solutions and heightened sales efforts to selected carrier, service provider, and enterprise customers. Excluding amortization and impairment of goodwill and intangible assets, as well as non-cash charges related to the stock option programs, we posted a net loss from continuing operations of EUR 4.1 million in 2001, compared to a net loss from continuing operations of EUR 7.0 million in 2000, primarily due to increased revenues, improved gross margin, and decreasing operating costs as a percentage of revenues. We posted a net loss of EUR 116.4 million in 2001, compared to a net loss of EUR 92.4 million in 2000, as a result of discontinuing operations at our site in Cambridge, United Kingdom, to focus on our core competencies as a systems vendor of metro optical networking solutions. The higher loss was furthermore the result of a one-time non-cash impairment loss from our acquisitions of Cellware Breitband Technologie GmbH ("Cellware") and First Fibre Ltd. ("First Fibre").

We commenced operations in 1994 as ADVA Integration, Service und Entwicklung von optischen Systemen und Komponenten GmbH. On January 25, 1999, the shareholders resolved to transform the company into a German stock corporation. Since that time, we have operated under the name ADVA AG Optical Networking.

INDUSTRY BACKGROUND

The rapid migration to the use of Internet technology has resulted in a substantial growth of high-speed data transmission needs across public and private communications networks spanning short to long distances. Additional factors driving the demand for bandwidth, or higher transmission capacity and capability, include deregulation of the telecommunications industry, the migration toward outsourced company information technology ("IT") at centralized facilities, electronic mail communication, electronic commerce, video conferencing, disaster recovery, data backup protection, and consolidation across numerous industries through mergers and acquisitions, which result in the need for multiple-site connections. Due to increasing bandwidth demand and the lack of necessary infrastructure, bottlenecks in public and private networks have developed, particularly in the metro area, where the majority of traffic originates and ends. As network requirements have grown and evolved, equipment vendors have worked together with enterprises, carriers, and service providers to develop and deploy new technologies with greater transmission capacity and capability.

Optical technologies involving communication over glass fiber have emerged as a preferred method of transmission, due to the significantly higher transmission capacity and greater reliability of fiber versus wireless or copper-based alternatives. Existing network infrastructures built primarily for voice transmission require upgrades with optical technologies to meet the changing and diverse requirements of enterprises, particularly as enterprises access increasing amounts of data, share files across multiple sites, back up data frequently, and expand their dependence on the Internet for daily business transactions. These changing and diverse requirements necessitate significant investments on the part of carriers and service providers, and relieving fiber exhaustion by laying new fiber or utilitizing new technologies to increase the capacity of each fiber is regarded as a first step. Carriers and service providers prefer not to lease dark fiber directly to enterprises, having recognized the revenue potential of offering high-speed services over fiber to enterprise end customers. To earn these additional revenues, carriers and service providers require a greater ability to manage and control the traffic moving through their networks. Service provisioning, increased transmission capacity, and enhanced capability for carriers, service providers, and enterprises mandate intelligent network management and have resulted in the rising importance of software for optical networking solutions, particularly in metro areas.

Network structures in metro areas

Optical networks were first deployed for long-haul applications, where the capacity constraints of existing networks were the most acute and where point-to-point architecture and high traffic volumes made it technically and economically viable. Due to the significantly growing demand for bandwidth, new optical networking systems using DWDM technology were developed to address shorter distance networks. For distances of less than 300 kilometers within metro areas, three classes of network applications emerged: enterprise, metro access, and metro core. Each class is characterized by specific transmission issues and requires products optimized to address these. Carriers and service providers have elected to complement their existing Synchronous Digital Hierarchy ("SDH") and Synchronous Optical Network ("SONET") infrastructure with Wavelength Division Multiplexing ("WDM") products not only to increase network capacity for high-speed traffic, but also because WDM is preferable for efficiently transporting the myriad of enterprise protocols, allows for more rapid provisioning of new services, and embodies lower life-cycle costs.

Enterprise networks provide simple optical services, and both low- and high-speed connectivity of many protocols for enterprises between multiple locations, or customer premises. Enterprise network architectures are evolving from point-to-point connections within buildings into complex high-capacity networks which run between numerous buildings in a city, or corporate, government, or university campus. These networks are typically managed directly by the enterprise.

Metro access networks play a critical role in the entire communications network by connecting clusters of end-users, such as enterprises, to other metro sites or to the metro core network. This requires a large number of short-distance connections and efficient aggregation of a diverse range of enterprise protocols, applications, and network architectures. These networks are typically managed by carriers or service providers.

Metro core networks connect metro access networks to long-haul networks, and are structured in point-to-point connections for fiber exhaust solutions, as well as ring or mesh configuration shapes to allow for the most efficient, reliable, and rapid transportation of services over limited fiber infrastructure. Optical networking equipment is located at each of the hubs along the ring or mesh shape, and optical add/drop multiplexers within the equipment efficiently route the traffic to its destination. These networks are typically managed by carriers or service providers.

Network build-out

The emergence of electronic commerce, substantial increases in Internet traffic, and the development of higher-bandwidth applications, as well as widespread optimism about market growth potential, led to large investments by carriers and service providers in network infrastructure in anticipation of future bandwidth demand. These large investments created significant network capacity particularly for long-haul applications, but minimal investment was made in metro areas where most traffic originates and ends, thereby creating widespread bottlenecks. Optical networking vendors who delivered high-end technology, as well as large amounts of vendor financing, achieved the most visibility and success. Global deregulation in the 1990s initially facilitated competition among carriers and service providers, and large amounts of available capital fueled the creation of a number of new well-funded competitors, particularly in the United States. These new carriers and service providers were the first adopters of high-end technology due to their lack of existing network infrastructure.

During the first months of 2001, optimism about market growth potential significantly decreased when demand did not materialize as forecasted. The North American economy weakened, other economies around the globe exhibited signs of similar weakness, and as a result, enterprises across all sectors reduced IT investments and expenditures. Carriers and service providers whose network infrastructure investments exceeded demand subsequently reduced their capital expenditures to allow for customer demand to meet available capacity. The large number of new service providers who were not able to attract a sufficient number of new customers or justify their business models faced consolidation or liquidation. The focus shifted from the development of high-end technology to cost of ownership and short returns on investment, since new carriers and service providers no longer possessed the necessary funding to invest in such equipment. Incumbent carriers and service providers placed higher emphasis on evolutionary, not revolutionary, technology in new products. Furthermore, these incumbent carriers and service providers valued working with vendors who delivered a combination of proven and reliable leading technology with near-term return on investment and most importantly, had also achieved significant customer traction.

THE ADVA SOLUTION

ADVA develops, manufactures, markets, and sells optical networking equipment for carriers, service providers, and enterprises. These customers use our portfolio of multi-service, carrier-class products to deploy, manage, and deliver communications networks and high-speed services within metro areas. ADVA's products support our customers' requirements for mission-critical data applications, and address the myriad of protocol and bit-rate speeds prevalent throughout the enterprise, carrier, and service provider environments. We offer our customers a platform to effectively transition to next generation services. Our software solutions are sophisticated, yet simple to use, and provide extensive network management and service provisioning functionalities, which allow rapid and seamless planning, deployment, and maintenance of optical networks. Most importantly, we design our products from the beginning with lowest total cost of ownership in mind to maximize our customers' return on investment and minimize both capital and operating expenditures.

The key benefits of our solution include the following:

Comprehensive

ADVA offers a comprehensive portfolio of optical networking products to carriers, service providers, and enterprises, which responds to the diverse needs of our target customers. Our carrier-class portfolio spans all applications from the customer premise site through to metro core infrastructure, creating true end-to-end solutions for our customers. Secondly, our solutions are protocol and bit-rate independent, enabling in-service upgrades, which differentiates our solutions in the market. This in-depth understanding of and experience in working with all protocols and speeds enables the FSP platforms to simultaneously support speeds ranging from 1.5Mbit/s to 10Gbit/s, multiple data services, and all common application protocols, like Gigabit Ethernet, IP, ESCON, Fibre Channel, FICON, and SDH/SONET for wide area networks, local area networks, and storage networks – all without requiring the purchase of additional equipment.

Low total cost of ownership
ADVA places strong emphasis on optimizing the performance of each product platform while also lowering the total cost of ownership during the life cycle of our products, thus enabling our customers to achieve lower operating expenses and maximizing their return on investment. Firstly, we seek to reduce initial planning and engineering expenses with the use of our network planning software. Secondly, we offer customers a low initial investment with our modular system concept at competitive prices, which allows them to migrate to full solutions through future investments as their requirements increase. Thirdly, we make low cost of installation possible with easy-to-use, plug-and-play solutions that eliminate the need for and expense of on-site, highly-trained product specialists. Fourthly, the cost of ongoing maintenance and upgrades is minimized. Services can also be efficiently provisioned and changed quickly without disruption to the network. Lastly, facility costs are reduced, as all FSP products have one of the smallest physical footprints and lowest power consumption rates in the industry.

Flexible and scalable
ADVA's FSP products are designed to allow our customers the ability to improve the flexibility and scalability of their networks without the long lead times and large, upfront capital investment presently required for a network build-out. Based on the modularity of ADVA's products, our customers are able to easily adapt and upgrade their network infrastructure and services according to a "pay as you grow" structure as their demands for communication services evolve. Since the FSP platforms can simultaneously support individual applications ranging from 1.5Mbit/s to 10Gbit/s, multiple data services, and all common networking protocols, carriers and service providers are able to flexibly scale their networks with aggregate transport speeds up to 320Gbit/s to varying transport requests from their customers. Carriers and service providers are therefore able to rapidly expand their network architecture, scale capacity with low and high bandwidth, support next generation high-speed data applications, and introduce new value-added services to their customers.

Powerful software capabilities
ADVA has designed software solutions which are sophisticated, yet simple to use, and fully integrate into our products. The intelligent and user-friendly point-and-click software helps create new high-value, high-margin services featuring seamless end-to-end monitoring, control, and provisioning without costly personnel deployment or truck rolls. In particular, remote configuration and customized service provisioning enable customers to add services within a time period of several minutes and set the service levels they need, which can range from simple unprotected services to fully protected services for mission-critical applications.

Reliable and proven
In 1995, ADVA was among the first companies to develop optical networking systems for enterprises, and we have leveraged our experience and evolved our products through four generations to provide a complete portfolio of systems for carriers, service providers, and enterprises. With proven solutions delivered over the past seven years and used by more than 500 end-user enterprises and over 47 carriers and service providers around the world, we believe that our advanced development of optical systems and software, coupled with our application and protocol expertise, will enable current and future product offerings to meet the diverse and ever-changing network requirements of our customers.

BUSINESS STRATEGY

Our mission is to be the global leader in providing optical networking solutions to enable rapid and cost-effective deployment of high-speed data, storage, voice, and video services for the metro area. The key elements of ADVA's strategy are to:

- **Further build our market leadership in enterprise and metro access network applications.** We have built a leading market share in Europe and a strong worldwide position in enterprise and metro access network applications by developing and delivering optical solutions, which enable customers to reduce expenditures or increase profitable service offerings. We will further leverage our existing European customers to increase service deployments. We will selectively target new customers and distribution partners in the United States and Japan to leverage our products for increased revenues and global market share.

- **Expand our sales into metro core network applications.** The products and solutions we have already developed address the applications and service demands for metro core network infrastructure. Revenue opportunities for this class of network application are approximately twice as large as for metro access applications. We will continue to work with new and existing customers to expand awareness of the ADVA brand and increase deployment of our solutions, although the sales cycles and market access challenges are greater for this class of application.

- **Leverage our optical technology, software, and enterprise expertise to deliver best-of-breed solutions with the lowest total cost of ownership.** We have built a strong technology lead in the optical design and systems hardware of our products, and we will continue to develop our software features to enable the flexible management, integration, and provisioning of services, while providing our customers with the lowest total cost of ownership. We believe that this approach will strengthen the differentiation of our solutions from competitors in the market.

- **Selectively expand our sales and marketing partnerships to optimize our global coverage for value-added applications.** ADVA has a well-established network of sales and marketing partnerships worldwide. We intend to add new partners selectively, where we see that they complement our strategy, increase our market penetration, and enable us to offer better service to our customers.

- **Expand our direct sales and technical support resources globally for our customers and partners.** While we will continue to build revenues through our partnerships, we will also further expand our own direct sales and technical support ("tech support") teams to serve our dedicated lead customers and ensure that they recognize the value and services provided by our solutions. We will continue to increase our post sales tech support and service capabilities globally in order to provide high levels of response.

- **Leverage our leading optical manufacturing expertise and logistics to deliver best-in-class customer service.** Our new, purpose-built manufacturing facility in Meiningen, Germany, and a highly-trained local work force have enabled us to consistently provide manufacturing excellence with a high standard of quality management. As demand for our products increases, we plan to expand this facility further and leverage our world-class engineering and production expertise to continue to offer a flexible portfolio of carrier-class products to our customers.

- **Achieve and continue to increase operating profitability levels in the near future.** In view of the current weakness in the global communications market, we are conscious of the ongoing need to tightly control our cost structure, maintain margin levels, and monitor working capital in order to achieve profitability. Many cost-saving measures were implemented in 2001, and we will continue to control expenditures and investments. We plan to increase these only when this is supported by an increase in revenues. Our aim is to achieve and increase ongoing operating profitability in the near future.

PRODUCTS

ADVA offers a growing portfolio of carrier-class hardware and software products which address the optical networking requirements of carriers, service providers, and enterprises. In 1999, we began the introduction of our new Fiber Service Platform, or FSP. We developed the carrier-class FSP product portfolio in response to customer demands for affordable, high-bandwidth services. These products allow our customers to meet a wide variety of applications connecting multiple central offices, a central office with customer premise sites, or multiple customer premise sites. Now in our fourth generation of product, the FSP portfolio supports optical transport through technologies such as DWDM, Coarse Wavelength Division Multiplexing ("CWDM"), and media conversion modules, plus sub-wavelength multiplexing and switching of applications ranging from 1.5Mbit/s to 10Gbit/s per service, with aggregate transport speeds up to 320Gbit/s. Moreover, the FSP Management Suite provides network planning tools and point-and-click service provisioning and controlling across a complete end-to-end network.

FSP-I

ADVA's FSP-I was launched in February 1999, and we began shipping it to customers in the first quarter 1999. The FSP-I is a CWDM system specifically designed for enterprises, carriers, and service providers. Enterprise customers use the FSP-I to expand the reach and density of their network applications. Carriers and service providers deploy the FSP-I to terminate SONET/SDH applications in their metro network while targeting new revenue opportunities for high-speed local area network and storage network services. The hardware design supports point-to-point network topologies. All systems can be managed via the FSP Network Manager to allow remote system operation and service provisioning. This product has been succeeded by the FSP 2000 and although it is no longer actively marketed, it continues to be supported and sold to an existing customer base.

FSP-II

ADVA's FSP-II was officially launched in September 1999, although we had begun shipping it to customers in the second quarter 1999. The FSP-II is a DWDM system specifically designed for enterprises, carriers, and service providers. Enterprise customers use the FSP-II to expand the reach and density of their network applications. Carriers and service providers deploy the FSP-II to maximize the bandwidth density of their metro network while targeting new revenue opportunities for high-speed local area network and storage network services. The hardware design enables the system to support point-to-point and linear add/drop network topologies. All systems can be managed via the FSP Network Manager to allow remote system operation and service provisioning. This product has been succeeded by the FSP 2000 and while it is no longer actively marketed, it continues to be supported and sold to an existing customer base.

FSP 500

ADVA's FSP 500 was acquired through the purchase of First Fibre Ltd. in July 2000, and shipments to customers had already begun in the fourth quarter 1999. The FSP 500 is a media and optical conversion system with CWDM specifically designed for carriers and service providers. Carriers and service providers deploy the FSP 500 for managed services between metro networks and customer premise facilities for business applications such as local area network and storage network extension, co-location, managed dark fiber services, SONET/SDH tail circuits, and application service provider ("ASP") or internet service provider ("ISP") metro links. The hardware design supports point-to-point and point-to-multipoint network topologies. The sideband management feature monitors and maintains up to sixteen separate service links from a common shelf.

FSP 1000

ADVA's FSP 1000 was launched in March 2001, and we began shipping it to customers in the third quarter 2001. The FSP 1000 is a Time Division Multiplexing ("TDM") system specifically designed for carriers and service providers, and is compliant with U.S.-based Network Equipment Building System ("NEBS") standards. Carriers and service providers deploy the FSP 1000 as a DWDM feeder, managed fiber access solution, or for SONET/SDH tail circuits. The system design supports point-to-point topologies, and fully integrates with the FSP 3000 DWDM wavelength grid, Optical Supervisory Channel ("OSC"), and FSP Network Manager to allow remote system operation and service provisioning from any node on the network.

FSP 2000

ADVA's FSP 2000 was launched in May 2001, and we began shipping it to customers in the third quarter 2001. The FSP 2000 is a DWDM system specifically designed for enterprises, carriers, and service providers. Enterprise customers use the FSP 2000 to expand the reach and density of their network applications, including local area network and storage network interconnection. Carriers and service providers deploy the FSP 2000 to provide local area network and storage network interconnection services. Due to parallel use of DWDM and TDM technology, up to 256 applications can be transported over one single fiber pair. The hardware design enables the system to support protected or unprotected point-to-point, linear add/drop, and small ring network topologies. All systems can be managed via the FSP Network Manager to allow remote system operation and service provisioning.

FSP 3000

ADVA's FSP 3000 was launched in February 2000, and we began shipping it to customers in the fourth quarter 2000. The FSP 3000 is a DWDM system specifically designed for carriers and service providers, and is compliant with U.S.-based NEBS and European-based European Telecommunications Standards Institute ("ETSI") standards. Carriers and service providers deploy the FSP 3000 to maximize the bandwidth density and service flexibility of their metro area networks, while supporting new revenue opportunities for high-speed local area network and storage network services. Optical amplifiers and regenerators enable it to reach distances of up to 300 kilometers, and integrated cross-connect functionality provides the ability to provision services and capacity dynamically. The hardware design enables the system to support point-to-point, linear add/drop, ring, and meshed network topologies. The OSC and FSP Network Manager allow remote system operation and service provisioning from any node on the network.

FSP Network Manager

ADVA's FSP Network Manager software was completed in May 2001, and we began distribution to customers in the second quarter 2001. The FSP Network Manager Graphical User Interface ("GUI") application is an Element Management System ("EMS") which manages a complete network. It provides network layer management with alarm correlation, analysis and end-to-end customer channel management, and performance monitoring.

FSP Network Planner

ADVA's FSP Network Planner software was launched in July 2001, and we began distribution to customers in the fourth quarter 2001. The FSP Network Planner enables the design and planning of new installations and network expansions by providing guidance during the network planning process, avoiding configuration errors, and hiding the complexity of large multi-channel configurations, while increasing the speed and simplicity of the complex network planning process. The planning tool displays all important network details as it creates "what-if" scenarios, and will determine the wavelengths to be used, calculate the optical budget, provide the best technical solution, list all required components for each node, generate a price list for the components, prepare an installation and cabling plan, and forward the configuration to the FSP Network Manager application.

CUSTOMERS

We sell our systems to a large installed end customer base of carriers, service providers, and enterprises, and continue to penetrate these target markets and win new accounts. Our carrier and service provider end customer base is comprised of more than 47 incumbent carriers, competitive local exchange carriers, ISPs, ASPs, storage service providers ("SSPs"), mobile service providers, and other alternative service providers, who are located throughout the world. The end customers we have announced include Belgacom SA ("Belgacom"), BellSouth Corporation ("BellSouth"), British Telecommunications plc ("BT"), COLT Telecom Group plc ("COLT"), CompleTel Europe NV ("Completel"), E-Plus Mobilfunk GmbH & Co. KG ("E-Plus"), Entreprise des Postes et Télécommunications ("EPT Luxemburg"), SBC Communications Inc. ("SBC"), Swisscom AG ("Swisscom"), Telefónica S.A. ("Telefónica"), Kingston Communications plc ("Torch Telecom"), Verizon Communications Inc. ("Verizon"), and XchangePoint plc ("XchangePoint"). Our enterprise end customer base is comprised of more than 500 leading global Fortune 1000 companies, universities, and government agencies, according to our estimates. Our end customer base of Fortune 1000 enterprises is comprised particularly of companies which are data-intensive and involved in the automobile, insurance, and financial services sectors.

MARKETING, SALES DISTRIBUTION, AND TECH SUPPORT

ADVA employs a three-pronged distribution model to market, sell, and support our systems. These include distribution partners, direct efforts, and strategic marketing alliances. We alter the composition mix of this model in each geographic region to ensure the most effective sales and support under local conditions. We have defined three key geographic regions with focused support and resources: the Americas; Europe, Middle East, and Africa ("EMEA"); and Asia-Pacific. ADVA's strength to-date has been in the European market, where we are an incumbent equipment provider to the majority of carriers and service providers. Our clear focus is to expand our presence and positioning in North America, which holds the largest market opportunity. As of December 31, 2001, our marketing, sales, and tech support team was comprised of 85 employees and had a presence in 8 countries.

Firstly, we have established relationships with Original Equipment Manufacturers ("OEMs"), Value Added Resellers ("VARs"), and other indirect distribution partners, each of whom is a leading vendor in a specific geographic region or target customer group. We work proactively with these partners to educate and motivate their sales personnel about our products and applications, and often approach customers together to provide network consulting. We rely on our partners to fulfill the primary tech support requirements of the end-user, and our tech support team provides second- and third-level support, as well as technical training. Our marketing team supports these efforts by, among other activities, launching partner-specific marketing programs and building additional market recognition and brand awareness. ADVA's OEM partners include Siemens AG ("Siemens"), who markets, sells, and supports the FSP portfolio under the TransXpress WaveLine label, and INRANGE Technologies Corporation ("INRANGE"), who markets, sells, and supports the FSP portfolio with the co-label of their Spectrum brand. VAR partners include NEC Corporation ("NEC Solutions"), Net One Systems Co., Ltd. ("Net One"), 3MQuante AG ("Quante"), Sistemas Informáticos Abiertos S.A. ("SIA"), and Telindus Group NV ("Telindus"). These VAR partners are vendors who pursue market opportunities for optical networking solutions and offer ADVA's FSP products under the ADVA label alone, or are vendors who perceive a joint synergy between optical networking solutions and other technologies and offer ADVA's FSP products together with their own or third-party products.

Secondly, ADVA's direct sales efforts focus on establishing relationships with select lead carrier, service provider, and enterprise customers where a direct relationship provides the greatest value, such as at BT and COLT. Our direct sales efforts include business development and network consultant team members who work collaboratively with existing and prospective carrier and service provider customers to identify, design, and implement new high-speed services which these carriers and service providers can offer to their customers. Our tech support team plays an active role in demonstrations, installation, and testing at the customer site, and provides extensive internal and end-user training. Our marketing team supports these efforts through increasing market awareness and visibility of the ADVA brand and our FSP portfolio by, among other activities, attending trade shows, advertising in trade publications, maintaining relationships with key industry analysts, updating the corporate website, and publishing newsletters.

Thirdly, ADVA has established strategic alliances with key communications technology vendors who directly benefit from the availability of cost-effective optical transport services. Under these alliances, our FSP products have been tested and certified for interoperability, and we implement joint marketing programs and are recommended as a preferred partner for specific customer projects. ADVA's strategic alliance partners include Brocade Communications Systems, Inc. ("Brocade"), Compaq Computer Corporation ("Compaq"), EMC Corporation ("EMC"), Extreme Networks, Inc. ("Extreme"), Hitachi Data Systems Corporation ("Hitachi Data Systems"), and Storage Technology Corp. ("StorageTek").

RESEARCH AND DEVELOPMENT

ADVA's research and development ("R&D") team has built up significant experience in working with low- and high-speed local area network, storage network, and telecommunications protocols, as well as Application Specific Integrated Circuits ("ASICs"), optical transport, CWDM, DWDM, and TDM. As of December 31, 2001, our highly-skilled, European-based R&D team was comprised of 125 engineers with expertise in hardware, software, and optics.

During 2001, we focused our R&D activities on developing new hardware and software products, specifically the FSP 1000 product, targeted at metro access solutions; the FSP 2000, targeted at enterprise and storage solutions; the FSP Network Manager, which enables management of a complete network; and the FSP Network Planner, which enables simple design of optical networks. New features for existing platforms included a 10Gbit/s module for the existing FSP 3000 product, which supports higher transportation speeds; an Erbium Doped Fiber Amplifier ("EDFA") module for the existing FSP 3000 product, which extends the distance by which information can be transported; and an all-optical switching module for the existing FSP 3000 product, which enables efficient deployment of applications such as optical add/drop multiplexing and dynamic traffic provisioning.

ADVA's product management team provides a critical interface between end customers, partners, and our sales and R&D teams. Close involvement with end customers and partners enables us to better incorporate their evolving requirements into new feature and product offerings, and close collaboration with the sales and R&D teams ensures that justifiable market demand exists and customer requirements are met. The product development process is formalized and tightly monitored within the organization. The process is structured around six key milestones, beginning with a detailed set of specifications and evolving into detailed project plans and prototypes before a feature or product is released to the market. This group also establishes which key technologies will be explored for the next generation of products.

INTELLECTUAL PROPERTY

ADVA relies on a combination of trademark, patent, copyright, contractual rights, trade secret laws, and restrictions on disclosure to establish and protect our intellectual property rights. Due to the rapidly evolving optical networking industry, new technologies can readily become obsolete and we therefore believe that factors such as our R&D activities, skills of our employees, new products, and enhanced features of existing products are just as important as the combination of methods used to protect our intellectual property rights as stated above.

ADVA has registered the trademark "ADVA" in the European Union and the United States. We have furthermore applied for trademark protection of the names “FSP-II”, “FSP 1000”, and “FSP 3000” in the European Union, and applied for trademark protection of all of the above-stated names in the United States. ADVA currently has patents and patent applications pending in the European Union, which pertain to new features, products, and technical development processes.

ADVA requires employees, consultants, partners, and other third parties with access to our proprietary information to enter into non-disclosure agreements. Agreements with employees typically state that ADVA exclusively owns the rights to all intellectual property developed by the individual during the course of his or her employment with ADVA, and most of the agreements with key employees also state that the individual is not permitted to enter into the employment of specific competitors for a period of up to six months following termination of employment with ADVA. We also seek to protect our intellectual property by limiting access to and distribution of our software, documentation, and other proprietary information, in particular restricting access to our source code. Furthermore, we establish licensing agreements with distribution partners and selected end-user customers for our software products.

MANUFACTURING AND QUALITY MANAGEMENT

ADVA is implementing a best-in-class operations program to deliver superior product performance, high quality, lowest total cost of ownership, and short lead times to customers. This program is driven by close integration of the R&D, procurement, logistics, production, quality management, and IT teams. ADVA outsources as many steps in the manufacturing process as possible, and only conducts in-house those which create significant value. The advantages of completing selected steps in the manufacturing process in-house include:

- the R&D team creates product designs with an awareness of minimizing material costs, simplifying manufacturing, and optimizing quality, and is also available on-site for resolving potential bugs throughout the early life cycle of products;
- the procurement team is immediately aware of supply and demand issues and conserves investment in inventory;
- the logistics and production teams achieve significant flexibility and speed in meeting varying levels of customer demand;
- the quality management team is involved in all areas to optimize process and cost efficiencies, ensure that quality standards are upheld, and impress a quality mindset upon all ADVA team members; and
- the IT team ensures seamless information flow through state-of-the-art Enterprise Resource Planning (“ERP”) and Materials Resource Planning (“MRP”) systems.

We procure all major electronic and optical components, which are predominantly off-the-shelf, from leading global suppliers in the telecommunications industry. Purchasing contracts with suppliers are based on a rolling forecast system, and we attempt to establish dual sources for each component. Under this strategy, ADVA aims to obtain the best pricing, conditions, delivery times, volumes, contracts, and avoid potential capacity constraints experienced by our suppliers. ADVA has benefited from improved lead times of component orders, which decreased from between six and nine months on average in 2000 to between two and four months on average in 2001, as a result of greater capacity at component manufacturers and ADVA’s rolling forecast system. A small number of components are customized by manufacturing partners specifically for ADVA, and we manufacture a limited number of components for selected products at our sites, which gives us both a price and performance advantage.

ADVA outsources the sub-assembly of systems, specifically production of the shelves, boards, and power units. Utilizing its specialized capabilities in fiber handling and complex optical network system manufacturing, our production team adds optical devices to the sub-assembled systems at our facilities in Meiningen, Germany, and York, UK. The production and quality management teams then perform comprehensive testing prior to shipment of products.

We have obtained ISO 9001 certification for each of our manufacturing facilities, and dedicated quality management teams at each facility actively implement total quality management principles and are currently certifying additional ADVA sites based on global processes for ISO 9001. ADVA is further driving a quality mindset throughout the organization with the introduction of a fully cross-functional, cross-site metrics system.

COMPETITION

The market for optical networking systems within metro areas is highly competitive, and based on varying combinations of price, functionality, scalability, flexibility, manufacturing capability, installation, and services. It is characterized by continuously evolving data transportation requirements, significant concerns about total cost of ownership, lengthy sales cycles, and cautious deployments only after clear business cases have been established. Given these characteristics and current circumstances, ADVA strives to develop products and network solutions with a thorough understanding of customer requirements, deliver the lowest total cost of ownership, execute a market access strategy which plays to our strengths, and leverage our manufacturing expertise to deliver compelling value.

We believe that the most critical assets for successful competition in the metro market include a broad and comprehensive product portfolio, which is responsive to the needs of diverse customers, low total cost of ownership throughout the life cycle of the product, sophisticated yet simple-to-use software and dynamic provisioning capabilities, proven expertise and experience in working with numerous applications and protocols, financial strength, well-established relationships with carriers, and a solid customer base. We believe that ADVA successfully meets most of these criteria. In comparison to the majority of our competitors, we have fewer resources and are a relatively new entrant to the market; therefore, we leverage the strength of our blue-chip partners, who have significantly greater resources and hold long-term, well-established relationships with carriers. Because of this, we believe that we are positioned well in the market against our competitors and will continue to gain market share.

Our current competitors, each of whom may compete with us only with regard to specific network applications or geographic regions, include the Compagnie Financière Alcatel (“Alcatel”), CIENA Corporation (“CIENA”), Cisco Systems Inc. (“Cisco”), Lucent Technologies Inc. (“Lucent”), Nortel Networks Ltd. (“Nortel”), and ONI Systems Corp. (“ONI”). We believe that of these companies, ADVA’s largest competitors are Alcatel, Nortel, and ONI. A number of privately-held companies have also announced plans to develop new products for the metro area and have received substantial amounts of venture capital funding, but it is our belief that these companies will be unable to meet the criteria for success in our market as previously described.

EMPLOYEES

As of December 31, 2001, ADVA’s worldwide team was comprised of 396 employees. Of these, 125 were involved in research and development; 97 in procurement and production; 19 in quality management; 85 in sales, marketing, and tech support; 55 in finance, administration, and IT; and 15 as apprentices in various functions. We have designed compensation packages which include fixed and flexible salary components, as well as stock option or option bond program participation for all of ADVA’s employees, with the goal of rewarding individual performance, team spirit, innovation, and productivity. We fulfill the respective local health and workplace safety requirements. Furthermore, ADVA is not a member of an employers' union, nor bound by any collective bargaining agreements, and we do not have a workers' council (Betriebsrat).

Our team is characterized by highly-skilled, highly-motivated employees, who possess a wealth of experience in the communications equipment, as well as numerous other, sectors. Such interdisciplinary diversification, together with the high number of nationalities represented among our employees, drives the creative thinking and dynamic communication within our company. ADVA's company culture is open and transparent, and the style of communication allows for a regular exchange of critiques and improvement recommendations to flow in all directions throughout the organization. The positive company culture and satisfaction experienced by our employees is reflected in our retention rate of 92% in 2001. ADVA's management team highly values our employees, and believes that they have all made important contributions to ADVA's development. The team's commitment and willingness to address new challenges will significantly contribute to ADVA's continued growth.

SHARE PRICE DEVELOPMENT

ADVA's shares are traded on the Neuer Markt of the Frankfurt Stock Exchange in Frankfurt, Germany. We had a total of 33,136,768 shares outstanding as of December 31, 2001, of which 40.5% was considered free float. During 2001, the shares traded at a 52-week high of EUR 68.20 and 52-week low of EUR 2.10 before ending at EUR 4.74 on December 31, 2001. Based on the share price at December 31, 2001, ADVA had a market capitalization of EUR 157.1 million.

Weakening economic conditions, cutbacks in enterprise IT budgets, and reduced capital expenditures by carriers and service providers led to revised financial guidance for 2001. In combination with negative announcements by many other communications technology companies, extreme fluctuations on international stock exchanges, and a postponement in releasing our 2000 audited financial results, ADVA's share price experienced a significant decline during the first nine months of 2001. In line with the slight recovery in technology stocks and improved market sentiment during the last three months of 2001, ADVA's share price increased and ended at EUR 4.74 on December 31, 2001.

We increased capital in June 2001, raising funding from one of our largest shareholders, the EGORA Group of Munich, Germany. Against a total cash contribution of EUR 7.0 million, we increased our share capital in an amount of 1,076,923 shares.

During 2001, we held an extraordinary shareholders meeting in addition to our annual shareholders meeting. At the extraordinary shareholders meeting on February 8, 2001, shareholders approved all items on the agenda. The resolutions approved included amongst others, an authorization to issue a total amount of 1.85 million new stock options to the management and employees of the company and its subsidiaries, as well as 1.6 million option bonds to employees, and 75,000 convertible bonds to the members of the Supervisory Board.

At the annual shareholders meeting on August 28, 2001, shareholders approved all items on the agenda. The resolutions approved included amongst others, the election of Dr. Yves Dzialowski and Dr. Bernd Jäger as new Supervisory Board members, the appointment of Deloitte & Touche Wirtschaftsprüfungsgesellschaft mbH as ADVA's 2001 auditors, the increase of the authorized capital to issue new shares for cash contributions or contributions in kind to EUR 14.9 million, and the authorization to issue option bonds and/or convertible bonds for financing purposes in a total amount of EUR 100.0 million.

Management's discussion and analysis of financial condition and results of operations

BUSINESS DEVELOPMENT

The year 2001 was marked by a number of challenging developments in the global communications market. The North American economy was the first to exhibit signs of weakness, and others around the world soon followed. Previously forecasted growth rates of 100% to 300% for the metro optical networking market were reduced to 50%, then below 50%. Enterprises made significant cutbacks in their IT budgets, and carriers and service providers largely reduced their capital expenditures and installed minimal infrastructure in metro core networks. Orders which had been placed with equipment vendors were pushed off for unspecified periods of time. Carriers and service providers only invested where specific customer demand existed and where they saw clear, short-term return on their investment. Minimal metro core infrastructure was therefore built in anticipation of future demand.

As a result of weakness in the global communications market, we implemented several cost-reduction measures to align our business to lower-than-expected revenues during the second half of 2001. These measures included discontinuing operations at our Cambridge site, reducing our workforce by 13% in the fourth quarter 2001, and further reducing discretionary spending.

We experienced stability in our business due to demand for enterprise and metro access network solutions from carriers and service providers, as well as demand for data storage and disaster recovery applications from enterprises. New relationships with carriers and service providers like Belgacom, E-Plus, and XchangePoint were announced, and additional products were leveraged into existing customer relationships with carriers like BT and COLT. This resulted in a 51.2% increase in revenues from EUR 59.5 million in 2000 to EUR 90.0 million in 2001, despite the challenging market conditions.

Furthermore, we continued to broaden our product portfolio with four new hardware and software products and additional features for existing platforms. We added new partners to our international network of distribution and strategic marketing partners, and further expanded relationships with existing OEM partners Siemens and INRANGE. We also continued to build up our direct sales force and tech support team.

RESULTS OF OPERATIONS

Revenues

Revenues grew from EUR 59.5 million in 2000 to EUR 90.0 million in 2001, an increase of 51.2%. The increase in revenues was primarily due to strong demand for storage networking solutions in the EMEA geographic region and heightened direct sales efforts to selected carrier, service provider, and enterprise customers.

FSP-II remained our top selling product in 2001, generating 51% of total revenues. FSP 500 comprised 12% of total revenues in 2001, FSP 3000 11%, FSP-I 11%, FSP 2000 8%, CELL-ACE 3%, and FSP 1000 1%. Other revenues, consisting of services, software, and our CityLAN and CampusLIGHT products, comprised 3% of total revenues in 2001. During 2000, FSP-II generated 77% of total revenues, FSP-I 11%, FSP 500 5%, CELL-ACE 3%, and OCM 1%. Other revenues comprised 3% of total revenues in 2000.

ADVA sold into the geographic regions of EMEA, the Americas, and Asia-Pacific during 2000 and 2001. Sales in the EMEA region increased 181.9% from EUR 22.0 million in 2000 to EUR 62.0 million in 2001. The significant increase was driven by stronger demand for storage networking solutions, additional carrier and service provider customer wins, a higher percentage of direct sales, and improved market access through our enhanced strategic OEM partnership with Siemens. Sales in the Americas decreased

28.9% from EUR 35.8 million in 2000 to EUR 25.5 million in 2001. The decrease was primarily due to lower sales to our OEM partners and reduced capital expenditures by carriers, service providers, and enterprises in light of the weak economic and market conditions. Sales in Asia-Pacific increased 43.3% from EUR 1.7 million in 2000 to EUR 2.5 million in 2001. The increase was primarily due to improved market access through new VAR relationships.

Gross profit

Gross profit increased from EUR 16.0 million in 2000 to EUR 37.1 million in 2001. Gross profit comprised 26.9% of revenues in 2000 and 41.3% of revenues in 2001. The increase in gross profit as a percentage of revenues was primarily due to the non-cash charges related to our stock option programs. These charges were negative in 2000, totaling EUR 2.6 million, due to the increase in our stock price, compared to positive charges in 2001, totaling EUR 3.3 million, due to the subsequent decrease in our stock price.

Excluding these non-cash charges, gross profit increased from EUR 18.6 million, or 31.2% of revenues, in 2000 to EUR 33.9 million, or 37.6% of revenues, in 2001. The increase can be primarily contributed to improved inventory management, decreasing component costs, and improved operating efficiencies. The increase in gross profit was partially off-set by aggressive pricing for strategic partners and key customers during 2001.

Selling and marketing expenses

Selling and marketing expenses decreased from EUR 13.3 million in 2000 to EUR 9.4 million in 2001. Selling and marketing expenses comprised 22.3% of revenues in 2000 and 10.5% of revenues in 2001. The decrease in selling and marketing expenses was primarily due to the non-cash charges related to our stock option programs. These charges were negative in 2000, totaling EUR 4.0 million, due to the increase in our stock price, compared to positive charges in 2001, totaling EUR 3.7 million, due to the subsequent decrease in our stock price.

Excluding these non-cash charges, selling and marketing expenses increased from EUR 9.3 million, or 15.7% of revenues, in 2000 to EUR 13.1 million, or 14.6% of revenues, in 2001. The absolute increase in selling and marketing expenses was primarily due to investments in our direct sales force, which included the hiring of business development, sales, and tech support personnel, predominantly in Europe and the Americas. We also invested in sales and marketing efforts by expanding our presence at industry trade shows and conferences, launching partner-specific marketing programs, and increasing market awareness and brand recognition through such measures as advertising in trade publications, publishing newsletters, and relaunching our corporate website. The decrease in selling and marketing expenses as a percentage of revenues was a result of the cost-reduction measures implemented in the second half of 2001.

General and administrative expenses

General and administrative expenses decreased from EUR 18.6 million in 2000 to EUR 0.4 million in 2001. General and administrative expenses comprised 31.2% of revenues in 2000 and 0.4% of revenues in 2001. The decrease in general and administrative expenses was primarily due to the non-cash charges related to our stock option programs. These charges were negative in 2000, totalling EUR 10.0 million, due to the increase in our stock price, compared to positive charges in 2001, totalling EUR 11.8 million, due to the subsequent decrease in our stock price.

Excluding these non-cash charges, general and administrative expenses increased from EUR 8.6 million, or 14.4% of revenues, in 2000 to EUR 12.2 million, or 13.5% of revenues, in 2001. The absolute increase in general and administrative expenses was primarily due to our investments in IT infrastructure and the build up of resources in administrative functions. The decrease in general and administrative expenses as a percentage of revenues was a result of the cost-reduction measures implemented during the second half of 2001.

Research and development expenses
R&D expenses decreased from EUR 15.2 million in 2000 to EUR 7.4 million in 2001. R&D expenses comprised 25.6% of revenues in 2000 and 8.2% of revenues in 2001. The decrease in R&D expenses was primarily due to the non-cash charges related to our stock option programs. These charges were negative in 2000, totalling EUR 5.8 million, due to the increase in our stock price, compared to positive charges in 2001, totalling EUR 6.8 million, due to the subsequent decrease in our stock price.

Excluding these non-cash charges, R&D expenses increased from EUR 9.4 million, or 15.8% of revenues, in 2000 to EUR 14.2 million, or 15.8% of revenues, in 2001. The absolute increase in R&D expenses was primarily due to the increased amount of material used for the development of new hardware products and new features for existing products, as well as higher personnel costs resulting from the Berlin, Oslo, and York R&D teams being consolidated on a full-year basis in 2001. The increase in R&D expenses was partially off-set by the cost-reduction measures implemented during the second half of 2001.

Amortization and impairment of goodwill
Amortization and impairment of goodwill increased from EUR 10.5 million in 2000 to EUR 35.0 million in 2001. Amortization and impairment of goodwill comprised 17.7% of revenues in 2000 and 38.9% of revenues in 2001. The increase in amortization and impairment of goodwill was primarily due to impairment tests on the assets resulting from our acquisitions of Cellware and First Fibre and a subsequent impairment charge of EUR 19.3 million in 2001, as well as ongoing amortization of the remaining goodwill. These impairment tests were performed in order to align asset values with the significant negative industry and economic trends affecting both the Company's current operations and expected future sales, as well as the general decline of technology valuations (see Note 3).

Amortization and impairment of intangible assets
Amortization and impairment of intangible assets decreased from EUR 21.9 million in 2000 to EUR 21.5 million in 2001. Amortization and impairment of intangible assets comprised 36.8% of revenues in 2000 and 23.9% of revenues in 2001. The decrease in amortization and impairment of intangible assets was primarily due to the inclusion of a one-time charge in 2000 of EUR 16.9 million for in-process R&D expenses resulting from our acquisitions. The decrease in amortization and impairment of intangible assets was off-set by a one-time charge in 2001 of EUR 12.2 million relating to impairment of intangible assets resulting from our acquisitions of Cellware and First Fibre, as well as ongoing amortization on the remaining portion of intangible assets (see Note 3).

Operating and net loss from continuing operations
Operating loss decreased from EUR 63.6 million in 2000 to EUR 36.6 million in 2001. The decrease in operating loss was primarily due to increased revenues, improved gross margin, decreasing operating costs as a percentage of revenues, and positive non-cash charges related to our stock option programs. The decrease in operating loss was partially off-set by the non-cash charges resulting from the impairment of goodwill and intangible assets relating to our acquisitions of Cellware and First Fibre.

Excluding amortization and impairment of goodwill and intangible assets, non-cash charges related to the stock option programs, and in-process R&D expenses related to the acquisitions made in 2000, operating loss decreased from EUR 8.7 million in 2000 to EUR 5.6 million in 2001. The decrease in operating loss was primarily due to increased revenues, improved gross margin, and decreasing operating costs as a percentage of revenues.

Net loss from continuing operations decreased from EUR 61.8 million in 2000 to EUR 35.1 million in 2001. Basic net loss per share from continuing operations decreased from EUR 1.98 in 2000 to EUR 1.08 in 2001.

Excluding amortization and impairment of goodwill and intangible assets, non-cash charges related to the stock option programs, and in-process R&D expenses related to the acquisitions made in 2000, net loss from continuing operations decreased from EUR 7.0 million in 2000 to EUR 4.1 million in 2001. Basic net loss per share from continuing operations decreased from EUR 0.22 in 2000 to EUR 0.13 in 2001.

Net loss from discontinued operations of the component
Net loss from discontinued operations of the component comprised the write-off of goodwill and intangible assets associated with the acquisition of Storage Area Networks Ltd. ("Storage Area Networks"), other asset write-offs, future contractual obligations, estimated liabilities, and operating losses (see Note 3). This write-off followed our decision to focus resources on our core competencies as a systems vendor of metro optical networking solutions. Discontinuation involved cancellation of the DiskLink product and reduction of 19 employees. Net loss from discontinued operations of the component increased from EUR 30.6 million in 2000 to EUR 81.3 million in 2001.

Basic net loss per share from discontinued operations increased from EUR 0.98 per share in 2000 to EUR 2.49 in 2001.

Net loss and dividends
Net loss increased from EUR 92.4 million in 2000 to EUR 116.4 million in 2001.

Basic net loss per share increased from EUR 2.95 in 2000 to EUR 3.57 in 2001.

We did not issue any dividends as of December 31, 2001.

LIQUIDITY AND CAPITAL RESOURCES
Current assets increased from EUR 38.1 million at the end of 2000 to EUR 42.4 million at the end of 2001, due primarily to an increase in trade accounts receivable and cash and cash equivalents. The increase in current assets was partially off-set by a decrease in inventory. Cash and cash equivalents increased from EUR 2.4 million at the end of 2000 to EUR 7.4 million at the end of 2001, primarily as a result of the capital increase executed in June 2001. Trade accounts receivable increased from EUR 7.4 million at the end of 2000 to EUR 17.3 million at the end of 2001, primarily due to a significant increase in revenues in the fourth quarter 2001 compared to the fourth quarter 2000. Inventories decreased from EUR 25.2 million at the end of 2000 to EUR 15.8 million at the end of 2001, as a result of improved inventory turnover and continued conservative inventory valuation.

Non-current assets decreased from EUR 173.4 million at the end of 2000 to EUR 48.5 million at the end of 2001, primarily due to decreases in goodwill and intangible assets. The decrease in non-current assets was partially off-set by the increase in deferred tax assets. Property, plant, and equipment increased from EUR 9.3 million at the end of 2000 to EUR 10.3 million at the end of 2001, primarily reflecting the investments in our research, development, production, and administration facility in Meiningen, Germany. Construction of this facility was completed in January 2001 at a total cost of EUR 5.2 million. Goodwill decreased significantly from EUR 104.4 million at the end of 2000 to EUR 10.6 million at the end of 2001, and intangible assets decreased significantly from EUR 49.9 million at the end of 2000 to EUR 16.7 million at the end of 2001. These decreases resulted from the discontinued operations at our Cambridge site and subsequent write-off of all purchased intangible assets and goodwill associated with the acquisition of Storage Area Networks, the impairment of assets relating to the acquisitions of Cellware and First Fibre, as well as ongoing amortization of the remaining intangible assets and goodwill. Deferred tax assets increased from EUR 2.5 million at the end of 2000 to EUR 5.7 million at the end of 2001, primarily due to the taxable loss from continued and discontinued operations.

Total assets decreased from EUR 211.5 million at the end of 2000 to EUR 90.9 million at the end of 2001.

Current liabilities increased from EUR 27.2 million at the end of 2000 to EUR 36.5 million at the end of 2001, primarily due to the increase in other current liabilities. The increase in other current liabilities was partially off-set by the decrease in trade accounts payable. Trade accounts payable decreased from EUR 8.1 million at the end of 2000 to EUR 6.7 million at the end of 2001, primarily due to lower inventory levels. Other current liabilities increased from EUR 1.5 million at the end of 2000 to EUR 23.0 million at the end of 2001, and notes payable decreased from EUR 10.0 million at the end of 2000 to EUR 0 at the end of 2001, reflecting a reclassification and net increase in the use of our credit facilities.

Non-current liabilities, comprised primarily of the long-term portion of capital lease obligations and construction loans for our research, development, production, and administration facility in Meiningen, Germany, decreased slightly from EUR 7.2 million at the end of 2000 to EUR 6.9 million at the end of 2001.

Stockholders' equity decreased from EUR 177.0 million at the end of 2000 to EUR 47.5 million at the end of 2001, primarily due to the decrease in retained earnings resulting from the impairment of goodwill and intangible assets and the loss from discontinued operations. Common stock increased from EUR 32.1 million at the end of 2000 to EUR 33.1 million at the end of 2001, and additional paid-in capital increased from EUR 221.9 million at the end of 2000 to EUR 227.8 million at the end of 2001, due to the capital increase executed in June 2001. Retained earnings decreased from EUR –98.0 million at the end of 2000 to EUR –214.3 million at the end of 2001.

Total liabilities and stockholders' equity decreased from EUR 211.5 million at the end of 2000 to EUR 90.9 million at the end of 2001.

Cash flow from operating activities increased from EUR –16.4 million in 2000 to EUR –4.9 million in 2001, primarily due to a decrease in inventory. The increase in cash flow from operating activities was partially off-set by the increase in receivables and other assets. Cash flow from investing activities improved from EUR –6.0 million in 2000 to EUR –4.6 million in 2001, primarily due to decreased purchases of tangible assets and no investment or acquisitions. Cash flow from financing activities increased from EUR 11.1 million in 2000 to EUR 16.9 million in 2001, primarily due to proceeds from the issuance of common stocks and increased proceeds from short- and long-term borrowings. Cash paid in discontinued operations of the component decreased from EUR –2.8 million in 2000 to EUR –2.3 million in 2001, reflecting one-time costs incurred in conjunction with the acquisition of Storage Area Networks in 2000.

RISK FACTORS

We are exposed to general economic and market conditions

Our business is subject to the effects of general economic conditions in Europe and large countries around the world; in particular, market conditions in the communications and networking industries. In recent quarters, our operating results have been adversely affected as a result of unfavorable economic conditions and reduced capital spending by our carrier, service provider, and enterprise customers in Europe, the United States, and Asia. If the economic conditions in Europe and large countries around the world do not improve, or if a further slowdown in the global economy occurs, we may continue to experience material adverse impacts on our business, operating results, and financial condition.

We operate in rapidly changing markets

The market for optical networking products which enable businesses to communicate over public and private networks is evolving rapidly. Demand for new products and acceptance of recently-introduced products is therefore uncertain. Many critical issues concerning the growth and adoption of optical networking solutions remain unresolved and may impact the growth in the market for optical networking equipment. These issues include:

- potentially insufficient suitability of optical networking solutions to prevail over other solutions to become the industry standard;
- reduced demand for optical networking products due to the development of more cost-effective solutions to transport increasing data traffic;
- potential postponement or delay of investment by carriers or service providers in network infrastructure; and
- a slowdown in the increase of data traffic due to actual or perceived lack of security for information transmitted across the Internet or other public networks.

The market for our products may not develop sufficiently to meet our revenue goals.

Our sales to carriers and service providers are subject to variation

Sales to carriers and service providers have been characterized by large and often sporadic purchases. Sales activity in this industry depends upon the stage of completion of expanding network infrastructures, the availability of funding, and the extent to which carriers and service providers are affected by regulatory, economic, and business conditions in the country of operations. A decline or delay in sales orders from this industry could have a material adverse effect on our business, operating results, and financial condition. The slowdown in the general economy, changes in the carrier and service provider market, and the constraints on capital availability have had a material adverse effect on many carriers and service providers, with a number of such providers going out of business or substantially reducing their expansion plans. If these conditions do not improve, we may experience material adverse effects on our business and operating results.

The period between our initial contacts with a potential new customer and the purchase of our products is often long and subject to delays associated with the lengthy budgeting and approval processes of these customers, particularly carriers and service providers. We expect our average sales period to lengthen as sales to carriers and service providers increase as a percentage of total revenues. This long sales cycle may adversely affect the timing of our revenues. In addition, because a majority of our revenues are currently obtained through indirect sales distribution relationships, we have limited ability to forecast future demand for our products and may suffer delayed revenue growth.

We face intense competition from current and new competitors

The market for our products is extremely competitive, evolving, and subject to rapid technological change. We expect competition to intensify as current competitors develop new products and expand their product offerings, and new competitors enter the market. Competition in the optical networking market is based on varying combinations of price, functionality, manufacturing capability, installation, services, scalability, and the ability of the system solution to meet customers' immediate and future network requirements. A small number of very large companies, some of whom have formerly been our partners, including Alcatel, Cisco, Lucent, and Nortel, have historically dominated the telecommunications equipment industry. These companies have substantial financial, manufacturing, marketing, distribution, and tech support resources. In addition, these companies have substantially greater resources to develop or acquire new technologies than we do and often have existing relationships with our potential customers. We sell systems that compete directly with product offerings of these companies; as such, we represent a specific threat to these companies. The continued expansion of our product offerings with the FSP portfolio will likely increase this perceived threat. We expect aggressive tactics from many of these competitors in the future, including:

- price discounting, particularly when a competitor is selling used equipment or inventory that a competitor has written down or written off;
- early announcements of competing products and other marketing efforts;
- "one-stop shopping" options;
- customer financing assistance; and
- marketing and advertising assistance.

Our carrier and service provider customers are under increasing competitive pressure to deliver their services at the lowest possible cost. This pressure may result in the pricing of optical networking systems becoming a more important factor in customer decisions, which may favor larger competitors who can distribute the effect of price discounts in their optical networking products across a larger array of products and services and across a larger customer base than ours. If we are unable to offset any reductions in the average sales price for our products by a reduction in the cost of our products, our gross profit margins will be adversely affected and therefore our inability to compete successfully against our competitors would harm our business, financial condition, and results of operations.

New competitors are emerging with solution offerings to compete with our existing, as well as future, products. We expect new competitors to continue to enter the market as demand for optical networking solutions increases. These companies may achieve commercial availability of their products more quickly, due to the narrow and exclusive focus of their efforts. Several of these competitors have raised significant cash and they have in some cases offered stock in their companies, positions on technical advisory boards, or have provided significant vendor financing to attract new customers. Our potential inability to compete successfully against these companies would harm our business, financial condition, and results of operations.

We may fail to introduce new and enhanced products in a timely manner

ADVA's success will depend, in part, on our ability to enhance our existing products and develop new products. We must continue to address the sophisticated and varied needs of our customers and end-users of our products, and respond to technological advances, emerging industry standards, and practices on a cost-effective and timely basis. If we are unable to adapt to changing market conditions, customer and end-user requirements, or emerging industry standards, we may not be able to increase our revenues and expand our business. Any delay or failure in implementing or marketing new or enhanced products could seriously harm our business.

As ADVA continues to focus on providing products for carriers and service providers, in addition to individual enterprises, we will face new challenges, including accommodating the requirements of a new group of end-users with different needs and responding to the dynamics of a different market with different product cycles.

We may suffer product installations delays, order cancellations, or product returns, and our reputation could be harmed if our products do not operate properly with other equipment in our customers' networks

Our products are designed to interoperate with our customers' existing networks, each of which has its own specifications, is based on various industry standards, and may contain multiple generations of products from many vendors. If interoperability problems occur, they may cause us to incur warranty, support, and repair costs; divert the attention of our engineering personnel from our product development efforts; and suffer customer relations problems; irregardless of whether or not these problems are due to our products.

We depend on a limited number of third parties who market, sell, and deploy our products

ADVA employs primarily an indirect sales model, relying on third parties to market and deploy our products. Our customers are OEM partners, VAR partners, systems integrators, carriers, and service providers who assist end-users with the integration and implementation of our products. We are also building a direct sales force to support selected carrier, service provider, and enterprise customers. Should we fail to develop and maintain relationships in the interim with leading OEM partners, VAR partners, systems integrators, carriers, and service providers, our ability to successfully market, sell, and deploy our products would be severely limited. If we cannot adequately train a sufficient number of these distribution partners in the use of our products, or if for any reason a large number of them support or promote competing products or technologies, our business might be seriously harmed.

Some of our distribution partners compete against each other. This distribution channel conflict and competition may increase in the future, as our distributors increase in number, expand in size, merge, enter new market segments, or approach the same customers, which may result in damaged relationships with our distribution partners and potential pricing pressure.

We expect to continue deriving a significant portion of our revenues from sales to a relatively limited number of customers. The loss or a substantial decrease in the volume of orders from any of our top customers may seriously harm our business.

We depend on a limited number of suppliers, and for some items we do not have a substitute supplier

ADVA's products contain a number of components manufactured by third-party suppliers. We depend on a limited number of suppliers for components of our products, as well as for equipment used to manufacture and test our products. To reduce the risk of a supply shortage, we pursue a general policy of requiring components to be available through at least two different suppliers; however, we remain at risk to supply shortages of components. This risk is more severe in manufacturing optical networking solutions than in many other technology sectors, due to the difficulties in handling fiber optic connections, micro-machining, or otherwise producing optical components which are integrated into ADVA's products. Our products include several high-performance components for which reliable, high-volume suppliers are particularly limited. Some key optical and electronic components we use in our optical networking systems are currently available only from sole or limited sources, and in some cases, that source also is a competitor. Any delay in component availability for any of our products could result in delays in deployment of these products and in our ability to recognize revenues. Any problem in the implementation of manufacturing processes for new or enhanced products could delay the introduction of these products into the marketplace. These delays could also harm our customer relationships and our results of operations. Failures of components can affect customer confidence in our products and could adversely affect our financial performance and the reliability and performance of our products. On occasion, we have experienced delays in receipt of components and have received components that did not perform according to their specifications. Any future difficulty in obtaining sufficient and timely delivery of components could result in delays or reductions in product shipments which, in turn, could harm our business. A consolidation among suppliers of these components, or adverse developments in their businesses affecting their ability to supply us, could adversely impact the availability of components on which we depend. Delayed deliveries of key components from these sources could adversely affect our business. Any delays in component availability for any of our products or test equipment could result in delays in deployment of these products and in our ability to recognize revenue from them. These delays could also harm our customer relationships and our results of operations.

We may not be able to manage growth
We have expanded our operations via organic growth and acquisitions rapidly since our inception. We continue to increase the scope of our operations and have enlargened our headcount both domestically and internationally. Our growth has placed a significant strain on our management systems and resources. Our ability to successfully offer our products and services and implement our business plan in a rapidly evolving market requires an effective planning and management process. We expect that we will need to continue to improve our financial, managerial, manufacturing controls, and reporting systems, and will need to continue to expand, train, and manage our employee base worldwide. The cost of these investments will increase ADVA's operating expenses. We may not be able to implement adequate control systems in an efficient and timely manner.

In order to continue and steadily increase our growth, we are considering acquiring complementary businesses. We cannot guarantee that we will be able to successfully acquire or integrate any such businesses. An unsuccessful business acquisition could damage the business of ADVA.

We may not be able to manage international growth
ADVA's products are currently marketed in the geographic regions of EMEA, the Americas, and Asia-Pacific. Our future revenue growth will depend upon the successful continued expansion of our sales, marketing, and tech support teams, through direct or indirect channels, in the countries in which potential end customers are located. This expansion will require that we establish new offices, hire new personnel, and manage operations in widely disparate geographies, economies, currencies, legal systems, languages, and cultures. In pursuing our international strategy, we face several additional risks. These risks include:

- uncertainty of market acceptance in new regions due to linguistic, cultural, or other factors;
- difficulties in staffing and managing international operations;
- lower levels of networking technology and infrastructure in countries outside of North America and Europe;
- timing of entry into foreign markets and levels of demand in those markets;
- foreign currency fluctuations;
- deterioration of the economic conditions in certain foreign markets;
- difficulty in collecting accounts receivable under different legal systems; and
- difficulty in developing relationships with international partners.

If any of these risks manifest, our business might be seriously harmed.

We may not be able to attract and retain qualified personnel, and may depend on key personnel
ADVA's future success and ability to expand operations will depend upon our ability to identify, hire, train, and retain qualified technical and managerial personnel. Competition for top personnel with optical networking or software programming expertise is intense and we might not be able to hire or retain sufficient numbers of qualified personnel to support our business.

Our business depends substantially on the performance of our executive officers and key employees. To succeed, we must retain and motivate high-quality personnel, especially our management, sales, and R&D teams. Losing the services of our executive officers and key employees, and an inability to replace them, could seriously harm our business.

We may experience fluctuations in operating results
The results of operations for any quarter or year are not necessarily indicative of results to be expected in future periods. Our operating results have in the past been, and will

continue to be, subject to quarterly and annual fluctuations as a result of a number of factors. These factors include:

- overall IT spending;
- changes in general economic conditions and specific market conditions in the communications and networking sectors;
- the introduction and market acceptance of new technologies and products, as well as the adoption of new networking standards;
- the overall trend toward industry consolidation;
- the trend toward sales of integrated network solutions;
- price and product competition in the networking industry;
- existing network capacity, sharing of existing network capacity, and network capacity utilization rates of our customers;
- timing of market acceptance of our products;
- long sales and implementation cycles for our products and the reduced visibility into our customers' spending plans and associated revenue;
- fluctuations in demand for our products and services;
- the timing of orders, timing of shipments, and the ability to satisfy all contractual obligations in customer contracts;
- manufacturing lead times;
- variations in distribution channels, product costs, or mix of products sold;
- the geographical mix of our revenue and the associated impact on gross margin;
- inventory levels exceeding our requirements based upon future demand forecasts;
- our ability to avoid or limit hardware and software defects and other product quality problems; and
- the impact of acquired businesses and technologies.

Should these factors, or any other factors discussed elsewhere herein, materialize, they could have an adverse effect on our business, results of operations, and financial condition. As a consequence, operating results for future periods are difficult to predict, as we have especially experienced in recent periods.

We may inadequately protect proprietary technology

ADVA's proprietary technology is only patent-protected to a limited extent. We currently use a combination of patent, copyright, trade secret, trademark, non-disclosure, and other contractual restrictions on copying and distributing our proprietary technology. We cannot guarantee that our means of protecting our proprietary technology will be adequate, or that others, including our competitors, will not use our proprietary technology without our consent.

We cannot assure that third parties will not claim that our current or future products infringe upon their intellectual property rights. We could incur substantial costs and diversion of management resources to defend any claims relating to our proprietary rights. Even a lawsuit without merit could be costly and time-consuming. These costs and diversions could seriously harm our business. In addition, we could be forced to seek licenses to cover proprietary technology that may not be protected at present. We may not be able to obtain these licenses on commercially reasonable terms or at all. Any failure to obtain these licenses or other rights could lead to substantial liabilities to our customers and seriously harm our business.

We are exposed to product liability and warranty claims

Our products comprise sophisticated, complex hardware and software components. Products as complex as ADVA's may contain latent deficiencies. Because end-users rely on our products both for internal data communications, as well as for external telecommunications and networking, the failure of these products could cause end-users substantial financial loss. If we were found liable for these losses, despite the contractual liability limitations in place, our business and our financial position could be seriously harmed.

Our stock price may be volatile
Our common stock has experienced substantial price volatility, particularly as a result of variations between our actual or anticipated financial results, the published expectations of analysts, and press release announcements by both our competitors and us. In addition, the stock market has experienced extreme price and volume fluctuations, particularly during recent periods, which has affected many technology companies and is often unrelated to actual operating performance. These factors, as well as general economic and political conditions, may materially and adversely affect the market price of our common stock in the future. Additionally, volatility or a lack of positive performance in our stock price may adversely affect our ability to retain key employees, all of whom have been granted stock options.

We may not be able to obtain the necessary additional financing to satisfy our future capital requirements
In the future, we may need to raise additional funds through a capital increase or in the form of outside capital in order to develop new services or products, or to acquire complementary services, businesses, or technologies. Product development and acquisition activities are particularly capital-intensive in our industry. Additional financing may not be available on terms favorable to us, or at all, and we may be forced to delay, reduce, or completely discontinue operations.

We may be exposed to currency fluctuations
ADVA generates a large portion of its revenues in foreign currencies. We are particularly exposed to currency fluctuations between the Euro and the United States Dollar, the British Pound, and the Japanese Yen. We have not entered into any hedging or other arrangements for the purpose of guarding against the risk of currency fluctuations. Although a large portion of our revenue which is generated in foreign currencies is offset by expenses in the same currencies, the translation effect of such fluctuations may have a serious harmful effect on our financial position.

RISK MANAGEMENT
ADVA's management has analyzed these potential risks and taken the appropriate measures. Important aspects of our strategy include a forward-looking product policy to anticipate developments in the marketplace and the future needs of customers, with an emphasis on product development and the technological performance of products. We make ongoing efforts to boost our profile with the relevant target groups, form new business partnerships and alliances, and train third parties who market, sell, and deploy ADVA products. In addition, we implement measures to recruit and retain key personnel, and provide the necessary organizational infrastructure. Risks to ADVA's future development cannot be completely excluded, due to ever-changing market trends and limited planning certainty.

We have established a risk management system in our various divisions to counter the above-described risks. In the context of our strategic controlling activities, we monitor market trends and the activities of competitors on an ongoing basis and also make use of the studies of leading market research companies. ADVA maintains a comprehensive system for project management and quality control in the area of product development, where risk awareness plays a major role. In sales and marketing, order opportunities are constantly being researched, assessed with regard to likelihood, and incorporated into revenue forecasts on a weekly basis. By involving the legal and financial departments at an early stage of the contract negotiations with partners and customers, we are able ensure that the criteria laid down in U.S. GAAP for recognizing revenues are observed from the start.

We have also established a comprehensive system that permits an overview of ADVA's economic situation. Monthly and quarterly reporting ensure that information on business trends is available in a timely manner. In addition to annual budget planning, budgets are reviewed monthly and adjusted if necessary. Ongoing accounting and controlling provide regular information about differences between actual and target figures in the individual areas. In conjunction with the daily-updated sales backlog list and monthly-updated sales forecast, a preview for the current quarter is generated several times a month, although its accuracy cannot be guaranteed in general.

In addition, management regularly analyzes ADVA's financial position and earnings. Weekly meetings of the executive officers, as well as additional routine meetings of managers at regional and departmental levels, ensure that there is sufficient exchange of information and rapid decision-making processes. The executive officers discuss important corporate developments with the Supervisory Board, particularly the Board's Chairman, on a regular basis. Our internal guidelines for insider trading and disclosure ensure that legal requirements and stock exchange regulations, as well as international management standards, are observed. The executive officers intend to continue improving ADVA's risk management system in the future.

OUTLOOK

We expect that we will be able to increase revenues during 2002, despite the continuing weak economic conditions and uncertainty about customer spending patterns in the United States and other countries around the world. Although carriers and service providers have yet to deploy large-scale metro core networks, end customer demand for bandwidth continues to increase and therefore drive deployments of enterprise and metro access networks, as well as smaller project-specific deployments of metro core networks. We anticipate that demand from European carriers and service providers will continue to drive a majority of our revenues, due to our well-established foothold in the market, but a more intense focus and expanded sales resources in the North American and Asia-Pacific markets will increase the volume of revenues in these regions compared to the prior year.

We invested significant effort into 2001 in making our operations and inventory management more efficient. Gross margins are anticipated to remain relatively stable, but may be impacted in the future by lower initial margins from newly-introduced products and pricing pressure from competitors.

We initiated several measures in 2001 to bring our cost structure in line with lower revenue growth, including closing a site, reducing our workforce, and lowering discretionary spending. We intend to make only the necessary investments in our operations and tightly manage selling and marketing, general and administrative, and R&D costs during 2002. Once we are assured that significant and realizable customer demand exists and greater market growth rates are attainable again, we will make investments in selected areas of our organization to enable ADVA to further expand our leading market position.

Non-cash charges relating to our stock option and compensation programs cannot be accurately estimated for future financial periods, but will not affect liquidity or ADVA's operating performance. The amortization of purchased intangible assets relating to the acquisitions made in 2000 will continue to negatively impact future results, but will also not affect liquidity or ADVA's operating performance. Under new U.S. GAAP accounting standards, ADVA will no longer amortize goodwill from acquisitions in 2002. Starting January 1, 2002, the amount of goodwill on our balance sheet will remain constant and be subjected to an impairment test at minimum once per year, or when determined necessary (see Note 2).

We believe that our current cash position and continued utilization of our credit facilities will be sufficient to finance the ongoing business operations, provided that market conditions do not significantly deteriorate and our revenues remain relatively stable.

Our mission is to be the global leader in providing optical networking solutions to enable rapid and cost-effective deployment of high-speed data, storage, voice, and video services for the metro area. Although we face intense competition in the market, we hold a strong position due to our broad and comprehensive product portfolio, low total cost of ownership solutions, proven expertise and experience in working with numerous applications and protocols, strong blue-chip partners, and solid customer base. We believe that we are positioned well in the market against our competitors and will continue to gain market share.

Consolidated balance sheets
as of December 31

(in thousands of EUR, except share data)	**2001**	**2000**
ASSETS		
Current assets		
Cash and cash equivalents	7,417	2,356
Trade accounts receivable	17,330	7,445
Accounts receivable due from related parties	65	90
Inventories	15,758	25,175
Deferred tax assets	207	0
Prepaid expenses and other current assets	1,631	3,044
Total current assets	**42,408**	**38,110**
Non-current assets		
Capital leases	3,092	3,239
Property, plant, and equipment	10,266	9,326
Goodwill, net	10,592	104,417
Intangible assets, net	16,713	49,851
Investments (held-to-maturity securities)	2,100	2,100
Investments accounted for by the equity method	0	705
Deferred tax assets	5,677	2,545
Other non-current assets	85	1,190
Total non-current assets	**48,525**	**173,373**
Total assets	**90,933**	**211,483**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Current portion of capital lease obligations	1,274	1,168
Short-term debt and current portion of long-term debt	321	31
Trade accounts payable	6,740	8,097
Accounts payable due to related parties	149	1,464
Advance payments received	525	163
Accrued expenses	4,064	4,600
Accrued expenses due to related parties	66	155
Deferred revenues	396	0
Notes payable	0	10,000
Other current liabilities	22,995	1,452
Other current liabilities due to related parties	0	73
Total current liabilities	**36,530**	**27,203**
Non-current liabilities		
Long-term debt, less current portion	4,343	4,214
Capital lease obligations, less current portion	1,939	2,117
Other non-current liabilities	652	904
Total non-current liabilities	**6,934**	**7,235**
Stockholders' equity		
Common stock, EUR 1.00 par value per share; 58,911,268 and 47,138,625 shares authorized at December 31, 2001, and 2000, respectively; 33,136,768 and 32,059,845 shares issued and outstanding at December 31, 2001, and 2000, respectively	33,137	32,060
Additional paid-in capital	227,814	221,891
Stock options outstanding	1,837	57,632
Deferred compensation expenses	-1,631	-31,865
Retained earnings (accumulated deficit)	-214,349	-97,995
Accumulated other comprehensive income (loss)	661	-4,678
Total stockholders' equity	**47,469**	**177,045**
Total liabilities and stockholders' equity	**90,933**	**211,483**

See accompanying notes to the consolidated financial statements.

Consolidated statements of operations

for the period January 1 to December 31

(in thousands of EUR, except share and per share data)	**2001**	**2000**
Revenues	**90,017**	**59,539**
Cost of revenues	52,874	43,542
Gross profit	**37,143**	**15,997**
Selling and marketing expenses	9,445	13,297
General and administrative expenses	384	18,576
Research and development expenses	7,386	15,238
Amortization and impairment of goodwill	35,035	10,543
Amortization and impairment of intangible assets	21,492	21,910
Operating loss	**-36,599**	**-63,567**
Interest income (expense), net	-1,159	-36
Loss from equity method investment	-705	-428
Foreign currency exchange gains (losses), net	-200	229
Other income, net	141	-155
Loss before income tax	**-38,522**	**-63,957**
Income tax (benefit) expense	-3,454	-2,128
Net loss from continuing operations	**-35,068**	**-61,829**
Loss from discontinued operations of the component (net of tax benefit EUR 0 in 2001 and 2000)	-81,286	-30,569
Net loss	**-116,354**	**-92,398**
Net loss per share from continuing operations (basic)	-1.08	-1.97
Net loss per share from discontinued operations (basic)	-2.49	-0.98
Net loss per share (basic)	-3.57	-2.95
Weighted average shares outstanding (basic)	32,617,485	31,275,737

See accompanying notes to the consolidated financial statements.

Consolidated statements of cash flows

for the period January 1 to December 31

(in thousands of EUR)	2001	2000
Cash flow from operating activities		
Net loss	-116,354	-92,398
Adjustments to reconcile net loss to net cash used for operating activities:		
Depreciation and amortization	60,361	34,771
Loss from discontinued operations	81,286	30,569
(Decrease) increase in accruals	-515	3,675
Loss (gain) from disposals of fixed assets	50	-19
Loss from sale of securities	0	39
Foreign exchange gain (loss)	715	-32
Trade receivable write-offs in acquisitions	0	302
Stock compensation expenses (income)	-25,561	24,246
Deferred income taxes (benefit)	-3,493	-2,182
Loss from equity investment	705	428
Changes in operating assets and liabilities, net of effects from acquisition of businesses:		
Decrease (increase) of inventory	9,024	-15,905
Increase of receivables and other assets	-9,921	-2,173
(Decrease)increase of receivables and other assets due from related parties	25	-90
Increase of other liabilities	213	1,420
Decrease (increase) of other liabilities due to related parties	-1,388	992
Net cash used for operating activities	**-4,853**	**-16,357**
Cash flow from investing activities		
Proceeds from disposal of fixed assets	159	82
Purchase of intangible assets	-467	0
Purchase of tangible assets	-4,304	-6,990
Purchase of securities	0	-17,333
Purchase of investments	0	-1,133
Cash paid in acquisitions	0	-1,343
Proceeds from sale of securities	0	20,678
Net cash used for investing activities	**-4,612**	**-6,039**
Cash flow from financing activities		
Proceeds from issuance of common stocks	7,000	0
Proceeds from issuance of convertible bonds	807	0
Proceeds from short-term borrowings	20,000	200
Issuance of note payable	0	10,000
Issuance of long-term debt	669	4,276
Cash repayment of amounts borrowed	-10,031	-2,579
Payments for capital leases	-1,569	-762
Net cash provided by financing activities	**16,876**	**11,135**
Net effect of currency translation in cash and cash equivalents	-41	-38
Cash paid in discontinued component	-2,309	-2,778
Net change in cash and cash equivalents	**5,061**	**-14,077**
Cash and cash equivalents as of January 1	2,356	16,433
Cash and cash equivalents as of December 31	**7,417**	**2,356**

Supplemental disclosures of cash flow information		
Cash paid during the year for:		
Interest	1,326	556
Taxes	0	2
Additions to capital leases	1,267	2,535

See accompanying notes to the consolidated financial statements.

Consolidated statements of stockholders' equity

for the period January 1 to December 31

	Common stock		Add-itional paid-in capital	Stock options outstand-ing	Deferred compen-sation expense	Accum-ulated deficit	Other compre-hensive income	
(in thousands of EUR, except share data)	number of shares	par value						Total
Balance as of Jan. 1, 2000	**5,000,000**	**5,000**	**29,507**	**20,188**	**-16,871**	**-5,597**	**-30**	**32,197**
Issuance of common stock on April 14	157,725	158	121,011					121,169
Stock dividends 1:5 effective on June 29	25,788,625	25,789	-25,789					0
Issuance of common stock on July 13	1,061,862	1,062	86,542					87,604
Contribution to capital by principal stock-holders in acquisitions			4,600					4,600
Issuance of common stock on September 25	51,633	51	6,083					6,134
Contribution to capital by principal stockholders			-63		63			0
Stock options outstanding				37,444	-37,444			0
Deferred compensation expense					22,387			22,387
Realization of unrealized losses on sale of securities							15	15
Net loss						-92,398		-92,398
Other compre-hensive loss								
Foreign currency translation adjustment							-4,663	-4,663
Total other com-prehensive loss								-4,663
Comprehensive loss								-97,061
Balance as of Dec. 31, 2000	**32,059,845**	**32,060**	**221,891**	**57,632**	**-31,865**	**-97,995**	**-4,678**	**177,045**
Balance as of Jan. 1, 2001	**32,059,845**	**32,060**	**221,891**	**57,632**	**-31,865**	**-97,995**	**-4,678**	**177,045**
Issuance of common stock on June 26	1,076,923	1,077	5,923					7,000
Stock options outstanding				-55,795	57,632			1,837
Deferred compensation expense					-27,398			-27,398
Net loss						-116,354		-116,354
Other compre-hensive income								
Foreign currency translation adjustment							5,339	5,339
Total other com-prehensive income								5,339
Comprehensive loss								-111,015
Balance as of Dec. 31, 2001	**33,136,768**	**33,137**	**227,814**	**1,837**	**-1,631**	**-214,349**	**661**	**47,469**

See accompanying notes to the consolidated financial statements.

Notes to the consolidated financial statements
for the year 2001

(1) THE COMPANY

The Company commenced operations in 1994 as ADVA Integration, Service und Entwicklung von optischen Systemen und Komponenten GmbH. On January 25, 1999, the shareholders resolved to transform the Company into a stock corporation. Since that time, the Company has operated under the name ADVA AG Optical Networking (hereafter referred to as “the Company” or “ADVA”). ADVA develops, manufactures, markets, and sells optical networking solutions to deploy, manage, and deliver high-speed data, storage, voice, and video services in the metropolitan area (“metro”). The Company’s systems have been deployed in the networks of telecommunications carriers (“carriers”), other telecommunications service providers (“service providers”), and Fortune 1000 companies, universities, and government agencies worldwide. ADVA’s solutions are sold through an international network of distribution partners, in addition to ADVA’s own direct sales force.

The Company is subject to a number of risks, uncertainties, and other factors which include, but are not limited to, the following: (i) exposure to general economic and market conditions; (ii) operation in rapidly changing markets; (iii) variation in sales to carriers and service providers; (iv) intense competition from current and new competitors; (v) failure to introduce new and enhanced products in a timely manner; (vi) product installation delays, order cancellations, product returns, and damage to the Company’s reputation if ADVA’s products do not operate properly with other equipment in customers’ networks; (vii) dependence on a limited number of third parties who market, sell, and deploy ADVA’s products; (viii) dependence on a limited number of suppliers; (ix) inability to properly manage growth; (x) inability to properly manage international growth; (xi) inability to attract and retain qualified personnel, as well as dependence on key personnel; (xii) fluctuations in operating results; (xiii) inadequate protection of proprietary technology; (xiv) exposure to product liability and warranty claims; (xv) stock price volatility; (xvi) inability to obtain additional financing to satisfy future capital requirements; and (xvii) exposure to currency fluctuations. The accompanying consolidated financial statements of the Company have been prepared in accordance with United States Generally Accepted Accounting Principles (“U.S. GAAP”). In addition, in order to comply with paragraph 292a German Handelsgesetzbuch (“HGB”) requirements, certain additional disclosures have been included within the accompanying notes starting with Note 23.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Principles of consolidation

All companies in which the Company has legal or effective control are consolidated. The consolidated financial statements include ADVA AG Optical Networking and the Company’s wholly-owned subsidiaries: (i) ADVA Optical Networking, Inc. (“ADVA U.S.”), Ramsey, New Jersey, USA; (ii) ADVA Optical Networking Corp. (“ADVA Corp.”), Tokyo, Japan; (iii) ADVA Optical Networking Ltd., York, UK; (iv) ADVA Ltd., Cambridge, UK; and (v) ADVA Optical Networking AS (“ADVA AS”), Oslo, Norway. All significant intercompany balances and transactions have been eliminated in consolidation.

Investments in which the Company has 20% to 50% of the voting rights or the ability to exercise significant influence over operating and financial policies are accounted for by the equity method.

(b) Impact of recently issued accounting standards

In June 1998, the Financial Accounting Standards Board (“FASB”) issued Statement of Financial Accounting Standards (“SFAS”) No. 133, “Accounting for Derivative Instruments and Hedging Activities”, as amended, which became effective for the Company on

January 1, 2001. As the Company did not hold any instruments that fell under the scope of SFAS No. 133, the adoption of this statement did not have any impact on the consolidated financial statements.

In June 2001, FASB issued SFAS No. 141, "Business Combinations", and SFAS No. 142, "Goodwill and Other Intangible Assets", which are required to be adopted by the Company effective January 1, 2002. SFAS No. 141 and No. 142 change the accounting for business combinations and goodwill in two significant ways:

SFAS No. 141 requires the use of the purchase method of accounting for all business combinations initiated after June 30, 2001. Use of the pooling-of-interest method is prohibited.

SFAS No. 142 requires an impairment-only approach to accounting for goodwill. The amortization of goodwill, including goodwill recorded in past business combinations, will cease upon adoption of this statement.

In June 2001, FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations", which is required to be adopted by the Company effective January 1, 2002. The Company does not currently have any obligations that would fall within the scope of SFAS No. 143, and does not expect the adoption of SFAS No. 143 to have a material impact on the consolidated financial statements or future results of operations.

In August 2001, FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" - a replacement of Accounting Principles Board ("ABP") Opinion No. 30, "Reporting the Results of Operations – Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occuring Events and Transactions", and FASB Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of". Because SFAS No. 121 did not address the accounting for a segment of a business accounted for as a discontinued operation, two accounting models existed for long-lived assets to be disposed of. SFAS No. 144 establishes a single accounting model. SFAS No. 144 shall be adopted for financial statements issued for fiscal years beginning after December 15, 2001. FASB encourages the adoption of the statement earlier if applicable. ADVA adopted SFAS No. 144 immediately after the issuance in August 2001. The impact of the early adoption on the consolidated financial statements is described in Note 3.

(c) Special charges

In response to the continuing weak global market conditions, ADVA initiated several measures during the third and fourth quarters 2001 to bring its cost structure in line with lowered revenue levels, including discontinuation of the operations of ADVA Ltd., Cambridge, UK. In addition, the Company performed an assessment of the carrying values of its goodwill and intangible assets during the third quarter 2001. The impact on the full-year 2001 consolidated financial statements is described in Note 3.

(d) Reclassifications

Certain items in the prior year's consolidated financial statements have been reclassified to conform with the current year's presentation.

(e) Revenue recognition

The Company recognizes revenues from sales of products at the time persuasive evidence of an arrangement exists (original equipment manufacturer agreements, value added reseller agreements and/or final signed purchase orders), delivery has occurred (either upon shipment or at time of final acceptance by the end customer), the price to the customer is fixed, and collection is reasonably assured. When these four conditions are met, the Company recognizes revenues as it considers that revenues are realizable or realized and earned. Service revenue consists primarily of training, maintenance, and installation services and is recognized as the services are provided. The Company records a provision for expected sales returns. Due to the lack of historical experience with similar type of sales, the Company recognizes revenues on loaned units (delivered to customers on a try-and-buy basis) once payment is received and the delivered items are finally accepted by the customer.

(f) Cash and cash equivalents

Cash and cash equivalents include short-term, highly-liquid investments with original maturity dates at the time of purchase of three months or less.

(g) Accounts receivable

Accounts receivable are valued at their net realizable value, net of allowances for doubtful accounts of EUR 240 thousand and EUR 226 thousand as of December 31, 2001, and 2000, respectively.

(h) Inventories

Inventories are stated at the lower of cost or market. Cost includes material, labor, and applicable manufacturing overhead, and is determined using the average cost method.

(i) Marketable securities

SFAS No. 115, “Accounting for Certain Investments in Debt and Equity Securities”, requires that all applicable investments be classified as trading securities, available-for-sale securities, or held-to-maturity securities. The Company did not have any investments classified as trading securities during the periods presented. SFAS No. 115 further requires that available-for-sale securities be reported at fair value, with unrealized gains and losses excluded from earnings but reported in a separate component of stockholders’ equity (net of the effect of income taxes) until they are sold. At the time of sale, any gains or losses will be recognized as a component of operating results. During 2000, the Company acquired securities classified as available-for-sale, which were subsequently sold in 2000. Additionally, the Company held certain held-to-maturity securities at December 31, 2001, and 2000, which are stated at cost.

(j) Property, plant and equipment

Property, plant and equipment are stated at cost. Plant and equipment under capital leases are stated at the present value of the minimum lease payments.

Depreciation on plant and equipment is calculated using the straight-line method over the estimated useful lives of the assets. Plant and equipment held under capital leases and leasehold improvements are amortized straight line over the shorter of the lease term or estimated useful life of the asset. Useful lives for plant and equipment range from three to eight years.

(k) Goodwill and intangible assets

Goodwill represents the excess of the purchase price over the fair market value of identifiable net assets acquired in purchase business combinations. Goodwill derived from acquisitions is capitalized and amortized on a straight-line basis over three years. All acquired in-process research and development projects are amortized immediately.

Purchased intangible assets, other than goodwill, are recorded at fair value and are amortized using the straight-line method over their estimated useful lives ranging from two to five years.

(l) Research and development (“R&D”)

R&D costs are expensed as incurred. SFAS No. 86, “Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed”, requires the capitalization of certain software development costs incurred subsequent to the date technological feasibility is established and prior to the date the product is available for general release to customers. The Company has not capitalized any software development costs because capitalizable costs meeting the requirements given in SFAS No. 86 have not been significant.

(m) Income taxes

Income taxes are accounted for under the asset and liability method under the provisions of SFAS No. 109, "Accounting for Income Taxes". Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating tax loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income in the period that includes the enactment date. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

(n) Stock-based compensation

As described in Note 11, the Company has elected to follow the accounting provisions of APB Opinion No. 25 for stock-based compensation and to furnish the pro forma disclosures required under SFAS No. 123, "Accounting for Stock-Based Compensation".

(o) Impairment of long-lived assets and long-lived assets to be disposed of

The Company reviews long-lived assets, including goodwill and intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. Estimated fair value is measured by discounted estimated future cash flows.

(p) Foreign currency translation

The assets and liabilities of the Company's foreign operations are translated into Euro at current exchange rates, and revenues and expenses are translated at average exchange rates for the year. Resulting translation adjustments are reflected as a separate component of stockholders' equity. Translation gains and losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency are included in the results of operations as incurred.

(q) Comprehensive income (loss)

Comprehensive income (loss) consists of net loss, foreign currency translation adjustments, and unrealized holding gains (losses) on available-for-sale securities and is presented in the consolidated statements of stockholders' equity.

(r) Governmental grants

During 2001, the Company received several investment grants from the Finanzamt München für Körperschaften and from the Freistaat Thüringen for the acquisition of certain long-lived assets (including capital leases) and for the new research, development, production, and administration site in Meiningen. The grants are recorded as a reduction of the cost basis of the acquired assets to the extent they are earned and the assets qualify for reimbursement. The amounts recorded as a reduction of the cost basis of acquired assets totalled EUR 969 thousand and EUR 0 in 2001 and 2000, respectively.

At the end of the grant period, all government grants are subject to a final audit. Although the government only reimburses qualifying expenditures during the grant period, it is possible that repayments are required for other reasons, such as a requirement that the Company has to continue to manufacture its products from its German manufacturing site in Meiningen for a period of at least three years, beginning with the end of the grant period. At December 31, 2001, the Company does not expect to be required to make any repayment for grants received.

(s) Use of estimates

The Company has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these consolidated financial statements in conformity with U.S. GAAP. Actual results could differ from those estimates. Estimates are used when accounting for items and matters such as long-term contracts, allowance for uncollectible accounts receivable, inventory obsolescence, product warranty, amortization, asset valuations, employee benefits, taxes, restructuring and other provisions, in-process R&D expenses, and contingencies.

(t) Net loss per share

Basic and diluted net loss per share are computed in accordance with SFAS No. 128, “Earnings per Share”. Basic net loss per share is computed using the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed using the weighted-average number of common shares and dilutive potential common shares outstanding during the period, using the treasury stock method for stock options outstanding. All potential common shares have been excluded from the calculation of diluted net loss per share for all periods presented because the net effect would be antidilutive.

(3) SPECIAL CHARGES

(a) Discontinuation of operations

The Supervisory Board of ADVA formally approved the discontinuation of the operations of ADVA Ltd. (formerly Storage Area Networks Ltd., or “Storage Area Networks”), Cambridge, UK, on September 28, 2001. The discontinuation of operations involved cancellation of the DiskLink product and reduction of 19 employees. All discontinuation activities associated therewith are anticipated to be completed by the end of the first quarter 2002. The Supervisory Board’s approval of such measures followed the Company’s decision to focus resources on its core competencies as a systems vendor of metro optical networking solutions for enterprise and service provider networks.

Pursuant to SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets”, the revenues, costs, and expenses of ADVA Ltd. have been segregated in the accompanying consolidated statements of operations, and are reported as “Discontinued Operations”. According to the transition provision of that statement, certain reclassifications have been made in the prior year’s statements of operations to report the results of the component as a separate line item.

The results of discontinued operations, presented in the accompanying consolidated statements of operations, were as follows:

	years ended December 31,	
	2001	**2000**
	TEUR	**TEUR**
Revenues	100	76
Pre-tax loss from discontinued operations	-81,286	-30,569
Net loss from discontinued operations – net	-81,286	-30,569

The loss from discontinued operations for the year ended December 31, 2001, of EUR -1,286 thousand reflects the write-off of goodwill associated with the acquisition of ADVA Ltd. in the amount of EUR 62,534 thousand; the write-off of intangible assets associated with the acquisition of ADVA Ltd. in the amount of EUR 13,368 thousand; other asset write-offs totalling EUR 2,383 thousand; future contractual obligations and estimated liabilities of EUR 195 thousand; and operating losses of EUR 2,806 thousand for the year ended December 31, 2001.

Assets and liabilities of the discontinued operations were as follows.

	December 31, 2001 TEUR	**December 31, 2000 TEUR**
Current assets	127	659
Property, plant and equipment, net	0	605
Current liabilities	329	774

(b) Impairment of goodwill and other long-lived assets

The Company performed an assessment of the carrying value of the Company's long-lived assets to be held and used, including significant amounts of goodwill and other intangible assets recorded in connection with its various acquisitions. The assessment was performed because of the significant negative industry and economic trends affecting both the Company's current operations and expected future sales, as well as the general decline of technology valuations. The conclusion of that assessment was that the decline in market conditions within the Company's industry was significant and other than temporary. As a result, the Company recorded charges of EUR 31,581 thousand to reduce goodwill and other long-lived assets during the third quarter of 2001, based on the amount by which the carrying amount of these assets exceeded their fair value. Of the total write-down, EUR 19,340 thousand is related to the goodwill associated with the acquisitions of the operations of Cellware Breitband Technologie GmbH (“Cellware”) and First Fibre Ltd. (“First Fibre”), and with the balance of EUR 12,241 thousand relating to other long-lived assets. The charge is included in the line item "Amortization and impairment of goodwill" in the consolidated statements of operations, and reflected in the line item “Net loss from continuing operations”. Fair value was determined based on discounted future cash flows for the operating entities that had separately identifiable cash flows. The cash flow periods used were five years using annual growth rates of 0% to 67%, the discount rate used was 21%, and the terminal values were estimated based upon terminal growth rates of 3%. The assumptions supporting the estimated future cash flows, including the discount rate and estimated terminal values, reflect management's best estimates. The discount rate was based upon the Company's weighted average cost of capital as adjusted for the risks associated with its operations.

(4) EQUITY METHOD INVESTMENTS

On July 10, 2000, the Company acquired 1,250,000 common shares (representing a 38.5% non-diluted interest of common stock and 17.1% of voting rights at December 31, 2000) of OptXCon, Inc. (“OptXCon”) for a total of EUR 1,133 thousand. The Company has the ability to exercise significant influence over the operating and financial policies of OptXCon; therefore, the investment in OptXCon is accounted for under the equity method of accounting. For the years ending December 31, 2001, and 2000, OptXCon generated a net loss of EUR 6,629 thousand and EUR 1,670 thousand, respectively, and accrued dividends on preferred stock of EUR 1,086 thousand and EUR 107 thousand, respectively. The carrying value of the investment in OptXCon as of December 31, 2001, and 2000, amounted to EUR 0 and EUR 705 thousand, respectively.

(5)ACQUISITIONS

On April 14, 2000, the Company acquired all outstanding shares of Storage Area Networks for EUR 102,792 thousand. The acquisition was funded through the issuance of 710,994 common shares (118,499 shares prior to 1:5 stock split) of the Company, 50,172 options (8,362 options prior to 1:5 stock split) for the purchase of the Company’s common shares, and EUR 14 thousand in cash. The acquisition of Storage Area Networks was accounted for under the purchase method of accounting and resulted in goodwill of EUR 83,380 thousand, which was being amortized on a straight-line basis over three years. On September 28, 2001, the Supervisory Board of ADVA formally approved the discontinuation of the operations of ADVA Ltd. (formerly Storage Area Networks), Cambridge, UK (see Note 3).

On April 14, 2000, the Company acquired the operations of Cellware for EUR 23,963 thousand. The acquisition was funded through the issuance of 235,356 common shares (39,226 shares prior to 1:5 stock split) of the Company and EUR 450 thousand in cash. The acquisition of Cellware was accounted for under the purchase method of accounting and resulted in goodwill of EUR 17,823 thousand, which is being amortized on a straight-line basis over three years.

On July 13, 2000, the Company acquired all outstanding shares of First Fibre for EUR 88,808 thousand. The acquisition was funded through the issuance of 1,061,862 common shares of the Company, and EUR 11 thousand in cash. The acquisition of First Fibre was accounted for under the purchase method of accounting and resulted in goodwill of EUR 34,750 thousand, which is being amortized on a straight-line basis over three years.

On September 25, 2000, ADVA AS, Oslo, Norway, a 100% subsidiary of the Company and newly founded in 2000, acquired the assets and liabilities of the Telecom Research and Development Division of Siemens Norway ("Siemens Telecom R&D Division") for EUR 6,191 thousand. The acquisition was funded through the issuance of 51,633 common shares of the Company. The acquisition of the Siemens Telecom R&D Division was accounted for under the purchase method of accounting and resulted in goodwill of EUR 3,429 thousand, which is being amortized on a straight-line basis over three years.

The results of operations for each entity acquired are included in the consolidated statements of operations beginning with the date of acquisition.

The following table presents the unaudited pro forma results of continued operations for 2000 as though the acquisitions were consummated at January 1, 2000, including the immediate write-off of EUR 18,170 thousand of in-process R&D expenses, except per share data:

	2000 **TEUR**
Revenues	64,227
Net loss	-110,302
Basic and diluted net loss per share	-3.44

(6) INVENTORIES

A summary of inventories at December 31 follows:

	2001 **TEUR**	**2000** **TEUR**
Raw materials and supplies	7,180	13,295
Work in process	2,602	3,079
Finished goods	5,976	8,801
Total inventories	15,758	25,175

Inventories are stated at the lower of cost or market. Write-downs for potentially obsolete or slow-moving inventory are made based on management's analysis of inventory levels and future sales forecasts. Losses on write-down to market amounted to EUR 3,914 thousand and EUR 6,471 thousand in 2001 and 2000, respectively. Thereof, EUR 4,385 thousand (2001) and EUR 3,588 thousand (2000), respectively, were charged to cost of goods sold, EUR -189 thousand (2001) and EUR 1,369 (2000) thousand, respectively, to selling and marketing expenses, and EUR -282 thousand (2001) and EUR 1,514 thousand (2000), respectively, to R&D expenses.

(7) PROPERTY, PLANT AND EQUIPMENT

A summary of property, plant and equipment at December 31 follows:

	2001 TEUR	2000 TEUR
Land and buildings	5,708	325
Buildings in progress	0	4,653
Technical equipment	4,520	2,890
Office furniture and fixtures	3,670	2,988
Other prepayments	0	0
	13,898	10,856
Less: accumulated depreciation	-3,632	-1,530
	10,266	9,326

Depreciation expense for the years ending December 31, 2001, and 2000, amounted to EUR 2,940 thousand and EUR 1,367 thousand, respectively. Buildings and buildings in progress, respectively, include capitalized interest in the amount of EUR 102 thousand and EUR 102 thousand in 2001 and 2000, respectively.

(8) GOODWILL AND INTANGIBLE ASSETS

A summary of goodwill and intangible assets at December 31 follows:

	Goodwill 2001 TEUR	Intangible assets 2001 TEUR	Total 2001 TEUR	Total 2000 TEUR
Goodwill	139,327	0	139,327	139,382
Purchased workforce		6,811	6,811	6,811
Purchased technology		49,506	49,506	49,506
Purchased customer list		4,030	4,030	4,030
Patents and trademarks		51	51	51
Others		428	428	6
	139,327	60,826	200,153	199,786
Less: accumulated amortization	-129,016	-44,638	- 173,654	-41,058
Plus/Less: foreign currency translation	281	525	806	-4,460
	10,592	16,713	27,305	154,268

Amortization expense for the years ending December 31, 2001, and 2000, amounted to EUR 132,486 thousand and EUR 41,037 thousand, respectively, including amortization due to impairment of goodwill and intangible assets for the years ending December 31, 2001, and 2000, of EUR 82,106 thousand and EUR 0, respectively. In 2000, purchased in-process R&D totalling EUR 18,170 has also been included in amortization of intangibles acquired in the 2000 consolidated financial statements of operations.

(9) FAIR VALUE OF FINANCIAL INSTRUMENTS

The fair value of financial instruments are determined using quoted market prices or discounted cash flows. The fair value of ADVA’s interest-bearing note payable approximates its carrying value as its interest rate approximates those which could be obtained currently. Due to the restrictions in the transferability under ADVA's governmental supported long-term debt arrangements, a fair value other than the carrying value of these loans is not meaningful. The fair value of ADVA's cash and cash equivalents, receivables, payables, and other financial instruments approximates their carrying values due to their short term nature.

(10) MARKETABLE SECURITIES

During fiscal year 1999, the Company purchased EUR 5,499 thousand face value, 12-year, 12-month Euribor plus 1.25% interest bonds. The bonds will mature on June 7, 2011. At December 31, 2001, and 2000, EUR 2,100 thousand and EUR 2,100 thousand, respectively, were deemed by the Company to be held-to-maturity

In 2000, the held-to-maturity securities were pledged as a security for long-term debts related to the financing of the new research, development, production, and administration site in Meiningen, Germany (see Note 20).

(11) STOCK-BASED COMPENSATION

Stock option program (Plan I)

By resolution of the Company's extraordinary shareholders meeting on March 10, 1999, the Management Board of the Company was authorized, with the consent of the Supervisory Board, to adopt a stock option plan ("Plan I") for the benefit of the Company's management as well as employees of the Company. Plan I provides for the grant of option rights to purchase an aggregate of 200,000 common shares of the Company. For the adoption of Plan I, the Company's extraordinary shareholders meeting on March 10, 1999, resolved a conditional capital increase of EUR 200 thousand. This conditional capital was increased from EUR 200 thousand to EUR 1,200 thousand by a resolution of the Company's shareholders meeting on May 24, 2000 (see Note 14). On May 24, 2000, the shareholders meeting of the Company further resolved an additional increase in conditional capital of EUR 150 thousand that may be used to issue up to 150,000 new common shares of the Company.

Each option right under Plan I is granted on a merit basis, which is compensatory in nature, and entitles the individual to purchase one of the Company's common shares.

The options vest as follows:

25% vest two years after grant,
25% vest three years after grant,
25% vest four years after grant, and
25% vest five years after grant.

As a prerequisite to exercise, the quoted market price of the Company's common shares must exceed the exercise price by the following percentages for the last five trading days before the beginning of an exercise period:

30%, two years after grant,
40%, three years after grant,
50%, four years after grant, and
60%, five years after grant.

An employee may exercise vested option rights only for a four-week period following a dividend payment date for a completed fiscal year or publication of a quarterly report. To the extent that exercisable option rights are not exercised within an exercise period, the option rights can be exercised in a subsequent exercise period without the requirement that the prerequisites exist for the current exercise period, provided that all prerequisites to the exercising of the option rights of the respective preceding exercise period are fulfilled.

All options must be exercised by the end of the exercise period immediately following the end of the five-year vesting period, otherwise, the options expire automatically. Additionally, all option rights expire upon employee termination.

Stock option activity during 2001 and 2000 was as follows:

	Number of options outstanding EUR	**Weighted average exercise price EUR**
Options outstanding at January 1, 2000	917,940	8.01
Granted	615,600	47.70
Exercised	0	0
Forfeited	-189,600	17.80
Options outstanding at December 31, 2000	1,343,940	24.80
Granted	242,500	3.60
Exercised	0	0
Forfeited	-637,140	34.93
Options outstanding at December 31, 2001	949,300	7.43

Range of exercise prices	**Options outstanding at December 31, 2001**	**Weighted average remaining contractual life**	**Weighted average exercise price EUR**
EUR 3.60 – EUR 5.33	242,500	3.16 years	3.60
EUR 5.34 – EUR 9.45	390,900	1.25 years	5.54
EUR 9.46 – EUR 22.06	287,400	1.57 years	10.91
EUR 22.07 – EUR 54.96	28,500	1.57 years	30.73

The weighted-average grant date fair value at December 31, 2001, of options granted during 2001 was EUR 1.98 per share. The exercise price of options granted during 2001 equals the market price of the Company`s stock at the grant date.

The following tables provide information about stock options granted during 2000:

Comparison of Exercise Price (“EP”) and Fair Value (“FV”) at the grant date	**Options granted during 2000**	**Weighted average grant date fair value EUR**	**Weighted average exercise price EUR**
EP = FV	0	0	0
EP > FV	62,700	31.52	70.15
EP < FV	552,900	62.84	45.15

Stock option program for selected employees (Plan II)
As of March 10, 1999, selected employees were granted 448,800 stock options from ADVA’s two major shareholders (“Plan II”). Each stock option right was granted on a merit basis, which is compensatory in nature and entitles the individual to purchase one of the Company’s common shares held by the major shareholders for a price of EUR 0.17 each. In general, 50% of the options vested at March 31, 2000, and March 31, 2001, respectively, except for one employee, who was allowed to exercise a part of his first tranche on October 31, 1999. The average exercise price of these options is EUR 0.17

per share, the fair value at grant date is EUR 5.33 per share, and the weighted average remaining contractual life of these options was 0.25 years at December 31, 2000.

In accordance with AICPA Accounting Interpretation No. 1 to APB Opinion No. 25, the Company has accounted for this stock option plan financed by its major shareholders as a contribution to equity (additional paid-in-capital) with the off-setting charge accounted for in the same manner as if the Company had financed the compensation plan.

All 212,200 options outstanding as of December 31, 2000, were exercised in the year ending December 31, 2001.

	Number of options outstanding
Options outstanding at January 1, 2000	375,000
Granted	0
Exercised	-150,600
Forfeited	-12,300
Options outstanding at December 31, 2000	212,100
Granted	0
Exercised	-212,100
Forfeited	0
Options outstanding at December 31, 2001	0

Acquisition-related stock options (Plan III)

As part of the acquisition of Storage Area Networks (see Note 5), the Storage Area Networks employees holding options in Storage Area Networks were given the choice between either (A) exercising 100% of those options and selling these shares to ADVA, or (B) exercising only 80% of those options and assigning the remaining 20% to ADVA. All employees elected alternative B. In return for the sale of shares in Storage Area Networks and the assignment of remaining options, ADVA paid a certain purchase price for the Storage Area Networks shares (in ADVA shares) and granted the right to participate in a special "ADVA Option Scheme" in consideration for the assignment to ADVA of the unexercised 20% of the Storage Area Networks options (“Plan III”).

In accordance with AICPA Accounting Interpretation No. 1 to APB Opinion No. 25, the Company has accounted for this stock option plan financed by a major shareholder as a contribution to equity (additional paid-in-capital) with the off-setting charge accounted for in the same manner as if the Company had financed the compensation plan.

Plan III consists of the following elements: each option right entitles the holder to purchase one of the Company’s common shares held by a major shareholder for a purchase price of EUR 0.17. The options vest over a period of three years as follows:

30% on April 14, 2001,
7.5% at the end of each quarter after April 14, 2001, until April 14, 2002, and
5% at the end of each quarter after April 14, 2002, until April 14, 2004.

There are no performance criteria which must be met for option exercise. An employee may exercise vested option rights only for a four-week period following a dividend payment date for a completed fiscal year or publication of a quarterly report. Option rights that are not exercised by the end of the next exercise period following April 14, 2004, expire automatically.

If the option agreement or the employment contract of an individual is terminated, option rights which are not vested, or which are not exercised by the employee before the termination date, expire upon the termination date; provided, however, that only such option rights expire which exceed 50% of the total amount granted. To the extent the remaining 50% of the option rights granted are not vested or are not exercised by the employee on the termination date, such remaining option rights shall vest at termination date and shall be exercisable according to the rules for exercise stated above.

The Company granted 50,171 options on April 14, 2000. None of these options were exercised or forfeited in 2000. The average exercise price of these options is EUR 0.17 per share, the fair value at grant date was EUR 115.33 per share.

Following the decision to discontinue the operations of ADVA Ltd. in Cambridge, UK, the employment contracts with the employees were terminated. In accordance with the terms of the acquisition-related stock option program, in such a case option rights, which are not vested or which are not exercised by the employee before the termination date, expire upon the termination date; provided, however, that only such option rights expire which exceed 50% of the total amount granted. To the extent the remaining 50% of the option rights granted are not vested or are not exercised by the employee on the termination date, such remaining option rights shall vest at termination date and shall be exercisable according to the rules for exercise stated above.

As part of the discontinuation process, and due to the current stock price of ADVA shares, some of the employees preferred a cash payment instead of receiving ADVA shares. Therefore, 22,058 options were exercised and 28,113 options were forfeited in the year ending December 31, 2001.

On February 8, 2001, the Company held an extraordinary shareholders meeting in Meiningen, Germany. At this meeting, the shareholders ratified four new stock option programs for the management, employees, and the Supervisory Board, in addition to the three existing stock option programs.

2001 stock option program (Plan IV)
The Company’s Management Board was authorized to adopt a stock option program (“Plan IV”) for the benefit of the Company’s Management Board as well as employees of the Company and its affiliates. Plan IV provides for the grant of option rights to purchase an aggregate of 1,380,000 common shares of the Company. For the adoption of Plan IV, the Company’s extraordinary shareholders meeting on February 8, 2001, resolved a conditional capital increase of EUR 1,380 thousand.

Option rights can be issued to the following groups of people entitled to subscribe: 40% to members of the Management Board, 3% to the management of affiliated companies, 42% to Company employees, and 15% to employees of affiliated companies. The Management Board will specify the exact group of those entitled to subscribe and the scope of the respective offer. Subscription rights may not be transferred. Subscription rights may only be exercised if the person entitled to subscribe is employed by, and not under notice to, the Company or to a Company in which the Company holds an indirect or direct participation. Subscription rights issued to apprentices may only be exercised if the apprentice is hired by the Company or by an associated company on a permanent contract. In case of death, inability to work, or retirement of the person entitled to subscribe, special provisions may come into force.

Each option right under Plan IV is granted on a merit basis, which is compensatory in nature, and entitles the individual to purchase one of the Company’s common shares. The subscription price, i.e. the amount to be paid for each ordinary share upon exercising of the option right, is to be calculated as the average market price of the Company's shares at the XETRA final auction on the Frankfurt Stock Exchange on the last ten trading days prior to the issuance of the options.

The options vest as follows:

1/3 vest two years after grant,

1/3 vest three years after grant, and
1/3 vest four years after grant.

As a prerequisite to exercise, the quoted market price of the Company's common shares must exceed the excercise price by the following percentages for the last five trading days before the beginning of an exercise period:

by 10% for the options vesting two years after grant,
by 20% for the options vesting three years after grant,
by 30% for the options vesting four years after grant.

An option holder may exercise vested option rights only during a four-week period following the Company's annual shareholders meeting or publication of the quarterly reports for the second and third quarter. To the extent that exercisable option rights are not exercised within an exercise period, the option rights can be exercised in a subsequent exercise period without the requirement that the prerequisites exist for the current exercise period, provided that all prerequisites to the exercising of the option rights of the respective preceding exercise period are fulfilled.

All options must be exercised by the end of the exercise period immediately following the end of the five-year vesting period. Otherwise, the options expire automatically. Additionally, all option rights expire upon termination of the option holder's employment contract.

Should exercise days fall within a period which begins on a day on which the Company publishes an offer to its shareholders in the Bundesanzeiger to purchase new shares or bonds with conversion or subscription rights, and ends on the day on which the Company shares with subscription rights are listed "ex-subscription rights" on the Neuer Markt on the Frankfurt Stock Exchange for the first time, subscription rights may not be exercised and the relevant exercise deadline is extended by the corresponding number of exercise days immediately after the end of that blocking period. Exercise is not possible within the period 14 days before the end of the Company's financial year.

Stock option activity during 2001 was as follows:

	Number of options outstanding	**Weighted average exercise price EUR**
Options outstanding at January 1, 2001	0	0
Granted	1,278,300	4.29
Exercised	0	0
Forfeited	-81,100	6.41
Options outstanding at December 31, 2001	1,197,200	4.15

The weighted average remaining contractual life of options outstanding at December 31, 2001, was 2.97 years.

The following tables provide information about stock options granted during 2001:

Comparison of Exercise Price ("EP") and Fair Value ("FV") at the grant date	Options granted during 2001	Weighted average grant date fair value EUR	Weighted average exercise price EUR
EP = FV	561,300	2.24	3.60
EP > FV	485,900	1.72	4.25
EP < FV	213,100	4.71	6.04

UK stock option program (Plan V)
The Company's Management Board was authorized by the Shareholders Meeting to adopt a stock option program ("Plan V") for the benefit of the managing directors and employees of the Company's two UK subsidiaries. Plan V provides for the grant of option rights to purchase an aggregate of 469,500 common shares of the Company. For the adoption of Plan V, the Company's extraordinary shareholders meeting on February 8, 2001, resolved a conditional capital increase of EUR 469,500.

Option rights can be issued to the following groups of people entitled to subscribe: 27% to the managing directors of ADVA Ltd., Cambridge, UK, and ADVA Optical Networking Ltd., York, UK (hereinafter commonly referred to as "ADVA UK"), and 73% to the employees of ADVA UK. The Management Board shall specify the exact group of those entitled to subscribe and the scope of the respective offer. Subscription rights may not be transferred. Subscription rights may only be exercised if the person entitled to subscribe is employed by, and not under notice to, the Company or to a company in which the Company holds an indirect or direct participation. Subscription rights issued to apprentices may only be exercised if the apprentice is hired by the Company or by an associated company on a permanent contract. In case of death, inability to work, or retirement of the person entitled to subscribe, special provisions may come into force.

Each option right under Plan V is granted on a merit basis, which is compensatory in nature, and entitles the individual to purchase one of the Company's common shares. The subscription price, i.e. the amount to be paid for each ordinary share upon exercising of the option right was set at EUR 30.73 for participants who were members of the management team or employees of ADVA Ltd., Cambridge, UK, or ADVA Optical Networking Ltd., York, UK, respectively, at the time the purchase of these companies was completed by ADVA. For all other participants, the purchase price is to be calculated as the average Company share price in the XETRA final auction on the Frankfurt Stock Exchange during the last ten trading days before granting of the option rights. According to the resolution of the Company's annual shareholders meeting on August 28, 2001, in case options from Plan IV are issued after August 28, 2001, the purchase price for all participants is to be calculated as the average market price of the Company's shares at the XETRA final auction on the Frankfurt Stock Exchange on the last ten trading days prior to the issuance of options.

The options vest as follows:

1/3 vest two years after grant,
1/3 vest three years after grant, and
1/3 vest four years after grant.

As a prerequisite to exercise, the quoted market price of the Company's common shares must exceed the exercise price by the following percentages for the last five trading days before the beginning of an exercise period:

by 30% for the options vesting two years after grant,
by 40% for the options vesting three years after grant,

by 50% for the options vesting four years after grant.

An option holder may exercise vested option rights only during a four-week period following the Company’s annual shareholders meeting or publication of the quarterly reports for the second and third quarter. To the extent that exercisable option rights are not exercised within an exercise period, the option rights can be exercised in a subsequent exercise period without the requirement that the prerequisites exist for the current exercise period, provided that all prerequisites to the exercising of the option rights of the respective preceding exercise period are fulfilled.

All options must be exercised by the end of the exercise period immediately following the end of the five-year vesting period. Otherwise the options expire automatically. Additionally, all option rights expire upon termination of the option holder’s employment contract.

Stock option activity during 2001 was as follows:

	Number of options outstanding	**Weighted average exercise price**
Options outstanding at January 1, 2001	0	0
Granted	317,000	26,84
Exercised	0	0
Forfeited	-250,500	30,73
Options outstanding at December 31, 2001	66,500	12,17

Exercise prices	**Options outstanding at December 31, 2001**	**Weighted average remaining contractual life**	**Weighted average exercise price EUR**
EUR 3.60	45,500	3.00 years	3.60
EUR 30.73	21,000	2.44 years	30.73

The following tables provide information about stock options granted during 2001:

Comparison of Exercise Price (“EP”) and Fair Value (“FV”) at the grant date	**Options granted during 2000**	**Weighted average grant date fair value EUR**	**Weighted average exercise price EUR**
EP = FV	45,500	2.26	3.60
EP > FV	0	0	0
EP < FV	271,500	31.28	30.73

2001 employee option bonds (Plan VI)

The extraordinary shareholders meeting on February 8, 2001, authorized the Management Board, upon the approval of the Supervisory Board, to issue on one or more occasions option bonds bearing annual interest of 5% p.a. up to a total par value of EUR 1,600,000 by December 31, 2002, to employees (employees of the Company as well as employees and managing directors of affiliated companies - § 15 Stock Corporation Act) in accordance with the conditions stated below. For the adoption of Plan VI, the Company’s extraordinary shareholders meeting on February 8, 2001, resolved an authorized capital increase of EUR 1,600 thousand.

The option bonds are to be issued at nominal value at denominations determined by the Management Board with the approval of the Supervisory Board. The option bonds may only be issued to employees of the Company or its affiliated companies (§ 15 Stock Corporation Act) who are not under notice. The owners of the option bonds shall be granted the right to subscribe to Company shares in accordance with the following conditions:

a) For each EUR 1.00 of the par value of the option bonds, there is a subscription right to one bearer share in the Company. The shares carry dividend rights from the beginning of the financial year at the time of issue.

b) The issue value of the new shares corresponds to the average Company share price on the Frankfurt Stock Exchange over the last ten trading days prior to granting of the subscription right minus EUR 1.00 ("issue value"), but in all cases it must amount to no less than the lowest issue value. The payment of EUR 1.00 made on the basis of the nominal value of the option bond is not repayable in this case.

Subscription rights may be exercised up to 1/3 of the total number granted one year after issuance of the option bonds, the following thirds can be exercised two or three years after the issuance, respectively. The period by which the subscription rights must be exercised concludes with the end of the fourth year following each respective issue date.

Upon completion of the waiting periods, the subscription rights may only be exercised within exercise periods and only on days on which commercial banks in Frankfurt are open. Each exercise period begins following an annual shareholders meeting of the Company or following the publication of the results for the second and third quarter, and they each have a duration of four weeks.

Exercised subscription rights can be fulfilled at the Company’s discretion either by using the authorized capital created by the shareholder resolution on February 8, 2001, or – insofar as corresponding resolutions have been passed by the shareholders meeting – by using conditional capital specifically created for this purpose or own shares of the Company.

The Management Board is further authorized to stipulate additional details on the conditions of the option bond with the approval of the Supervisory Board. Such details may include, without limitation to the issuance of the option bond and the subscription procedure, as well as regulations concerning exercising and drawing restrictions, adjustment of option bonds in the case of capital increases and capital reductions including issuance of other conversion or option rights, regulations on non-transferability, termination regulations, expiry regulations, more detailed regulations on exercise in the event of acquisitions and other details on the exercising of option rights. In addition, provision may be made for restrictions on exercising option rights in specific circumstances, e.g. the convening of the annual shareholders meeting, the publication of the offer by the Company for subscription in new shares or debenture bonds or profit-participation certificates, and at the end of the financial year. The legal right of shareholders to subscribe is excluded.

On April 18, 2001, the Management Board resolved to offer every employee with a strike price in excess of current share value the opportunity to exchange their existing option contracts for the same number of option bonds from the “2001 employee option bonds” program. Alternatively, employees had the choice to exchange all of their current options for new options, subject to approval of the annual shareholders meeting on August 28, 2001. In the year ending December 31, 2001, the Company issued 741,958 option rights to its employees and employees of affiliated companies at an exercise price of EUR 3.60, of which 429,458 option rights were issued in exchange to existing option contracts. The weighted-average exercise price of this option rights and the weighted-average fair value at December 31, 2001 amounted to EUR 3.60 and EUR 2.08, respectively. The remaining contractual life was 3.00 years.

2001 Supervisory Board convertible bonds (Plan VII)

The extraordinary shareholders meeting on February 8, 2001, resolved to issue a convertible bond with a total nominal value of EUR 75,000 to the members of the Supervisory Board, i.e. one partial convertible bond with a nominal value of EUR 20,000, granting option rights to 20,000 shares, was to be issued to the Chairman of the Supervisory Board; one partial convertible bond for EUR 15,000, granting option rights to 15,000 shares, was to be issued to the Vice Chairman of the Supervisory Board; and four partial convertible bonds, each with a nominal value of EUR 10,000, and each granting option rights to 10,000 shares, were to be issued to the remaining members of the Supervisory Board.

The subscription price, i.e. the amount to be paid for each ordinary share upon exercising of the option right, is to be calculated as the average Company share price on the Frankfurt Stock Exchange on the 10 trading days prior to the issue of the convertible bond to the person entitled to subscription rights, whereby the already paid in and subsequently no longer repayable nominal value of the partial convertible bond amounting to EUR 1.00 per exercised option right is off-set against the subscription price.

The option rights may be exercised as follows:

1/3 vest one year after the granting of the convertible bond,
1/3 vest two years after the granting of the convertible bond, and
1/3 vest three years after the granting of the convertible bond,

provided, however, that the average Company share price on the Frankfurt Stock Exchange on the last five trading days before the respective exercising period exceeds the subscription price:

by at least 10% when exercising option rights exercisable after one year, by at least 20% when exercising option rights exercisable after two years, and
by at least 30% when exercising option rights exercisable after three years.

All option rights must be exercised at the latest seven years after the convertible bonds have been issued.

On April 18, 2001, the Company issued 45,000 convertible bonds at a subscription price of EUR 7.05 each, i.e. one partial convertible bond with a nominal value of EUR 20,000 to Prof. Dr. Albert Rädler; one partial convertible bond for EUR 15,000 to Eric Protiva, and one partial convertible bond with a nominal value of EUR 10,000 to Dr. Wolf-Dieter Bopst. The remaining three members of the Supervisory Board did not accept the convertible bonds assigned to them by the shareholders.

Due to the resignation of two members of the Supervisory Board in June 2001, and the appointment of two new members at the Company's annual shareholders meeting on August 28, 2001, the shareholders resolved that its resolution of February 8, 2001, should be partly rescinded to the extent that it resolved the issuance of convertible bonds to Michael Fitzpatrick and Sanjay Subhedar, and that a convertible bond having a total nominal value of EUR 20,000, divided into two fractional convertible bonds with a nominal value of EUR 10,000 each, shall be issued to the newly elected members of the Supervisory Board, Dr. Yves Dzialowski and Dr. Bernd Jäger.

The conditions governing the convertible bond are identical to the conditions of the 2001 Supervisory Board Convertible Bond, pursuant to the extraordinary shareholders meeting resolution on February 8, 2001, with regard to agenda item 4.

On September 20, 2001, the Company issued two partial convertible bonds at a nominal value of EUR 10,000 each and a subscription price of EUR 3.48 to Dr. Yves Dzialowski and Dr. Bernd Jäger.

The weighted average remaining contractual life of convertible bonds outstanding at December 31, 2001, was 2.83 years.

The following tables provide further information about convertible bonds granted during 2001:

Comparison of Exercise Price (“EP”) and Fair Value (“FV”) at the grant date	**Convertible bonds granted during 2001**	**Weighted average grant date fair value** EUR	**Weighted average exercise price** EUR
EP = FV	0	0	0
EP > FV	20,000	1.91	3.48
EP < FV	45,000	6.93	7.05

Stock compensation expense for continuing operations recognized for the periods ending December 31, 2001, and 2000, was as follows:

	2001 TEUR	**2000** TEUR
Plan I	-25,869	21,695
Plan II	131	691
Plan IV	109	0
Plan V	6	0
Plan VI	59	0
Plan VII	3	0
	-25,561	22,386

Stock compensation expenses for discontinued operations recognized under Plan III amounted to EUR 1,454 thousand and 1,860 thousand in 2001 and 2000, respectively. Had compensation expense been determined based on the fair value provisions of SFAS No. 123, the Company’s pro forma net loss and loss per share from continued operations would have been as follows:

	2001 TEUR	**2000** TEUR
Net loss		
As reported	-116,354	-92,398
Pro forma	-147,741	-75,906
Basic and diluted loss per share	**EUR**	**EUR**
As reported	-3.57	-2.95
Pro forma	-4.53	-2.43

The fair value of each option is estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions used for grants in 2001 and 2000:

	2001 %	**2000** %
Dividend yield	0	0
Expected volatility	127.31	111.15
Risk-free interest rate	4.00 - 6.00	5.00

Furthermore, earliest possible exercise is assumed.

(12) RELATED PARTY TRANSACTIONS

The following parties are considered to be related to ADVA: the EGORA Group, JDS Uniphase Corp., and Linklaters Oppenhoff & Rädler. EGORA Holding GmbH and its subsidiaries ("the EGORA Group", formerly the AMS Group) held a 31.7% ownership stake in ADVA at December 31, 2001. JDS Uniphase Corp. ("JDS Uniphase", formerly E-TEK Dynamics Inc., a wholly-owned subsidiary of JDS Uniphase Corp. following acquisition in 2000) held a 27.8% ownership stake in ADVA at December 31, 2001. Prof. Dr. Rädler, Chairman of ADVA's Supervisory Board, is a tax consultant at Linklaters Oppenhoff & Rädler.

Revenues
During 2001 and 2000, ADVA sold products and provided services to the EGORA Group amounting to EUR 28 thousand and EUR 18 thousand, respectively.

Purchases
During 2001 and 2000, the Company purchased components from the EGORA Group totalling EUR 170 thousand and EUR 5,433 thousand, respectively, and from JDS Uniphase totalling EUR 2,348 thousand and EUR 5,945 thousand, respectively.

Other services provided
The Company has entered into several agreements with the EGORA Group under which the Company in 2001 and 2000 was entitled to make use of certain facilities and services of the EGORA Group for total fees of EUR 862 thousand and EUR 849 thousand, respectively.

For legal and consulting services, the Company paid EUR 151 thousand and EUR 29 thousand to Linklaters Oppenhoff & Rädler in 2001 and 2000, respectively.

A summary of transactions with related parties during the years ended December 31, 2001, and 2000, follows:

	2001 TEUR	2000 TEUR
Revenues generated from related parties:		
EGORA Group	28	18
Purchases from related parties:		
EGORA Group	170	5,433
JDS Uniphase	2,348	5,945
	2,518	11,378
Other services provided by related parties:		
EGORA Group	862	849
Linklaters Oppenhoff & Rädler	151	29
	1,013	878

Related party receivables at December 31, 2001, and 2000, consist of the following:

	2001 TEUR	2000 TEUR
EGORA Group - trade	38	90
JDS Uniphase - trade	27	0
	65	90

Related party payables at December 31, 2001, and 2000, consist of the following:

	2001 TEUR	2000 TEUR
JDS Uniphase – trade	0	901
EGORA Group – trade	149	563
	149	1,464

Accrued expenses to related parties at December 31, 2001, and 2000, consist of the following:

	2001 TEUR	2000 TEUR
EGORA Group	57	127
Linklaters Oppenhoff & Rädler	9	28
	66	155

Other current liabilities to related parties at December 31, 2001, and 2000, consist of the following:

	2001 TEUR	2000 TEUR
JDS Uniphase	0	17
EGORA Group	0	56
	0	73

The Company has also entered into certain equity transactions with related parties (see Note 14) and the Company's major shareholders have provided certain stock-based compensation programs to employees of the Company (see Note 11).

(13) INCOME TAXES

Income taxes comprise of corporate income tax, solidarity surcharge and trade tax.

The components of total income tax expense (benefit) follows:

	2001 TEUR	2000 TEUR
Total income taxes		
Current	39	2
Deferred	-3,493	-2,130
Total income taxes	-3,454	-2,128

The amount of income tax benefit in 2001 and 2000 of EUR 3,454 thousand and EUR 2,128 thousand, respectively, was fully allocated to continuing operations, because only a portion of the tax loss carried forward from continuing operations is expected by the Company to be used in the near future. The Company does not expect to utilize tax losses carried forward resulting from discontinued operations in the near future.

Pre-tax income (loss) from continuing operations by domestic and foreign sources follows:

	2001 TEUR	2000 TEUR
Domestic	8,783	-33,204
Foreign	-47,305	-30,753
Total pre-tax loss	-38,522	-63,957

In 2000, the German government enacted new tax legislation which, among other changes, reduces the Company's statutory corporate tax rate for German companies from 40% on retained earnings and 30% on distributed earnings to a uniform 25%, effective for the Company's fiscal year beginning January 1, 2001. Including the solidarity surcharge and the trade tax, the total statutory income tax rate amounted to 37.1% and 50.6% in 2001 and 2000, respectively.

The Company calculated deferred taxes at December 31, 2001, and 2000, using the enacted income tax rate of 37.1% in both 2001 and 2000, applicable for temporary differences between the Company`s tax balance sheet and the U.S. GAAP balance sheet. The effects of the reduction in the tax rate and other changes on the deferred tax assets and liabilities of the Company were recognized in the year of enactment, as required by SFAS No. 109. As a result, a deferred tax expense of EUR 781 thousand is included in the consolidated statements of operations in 2000.

A reconciliation of income taxes determined using the expected German income tax rate of 37.1% in 2001 and of 50.6% in 2000 is presented below. Income tax expense (benefit) attributable to loss from continuing operations differs from the amount computed by applying the combined statutory rates to pre-tax income due to the following:

	2001 **TEUR**	**2000** **TEUR**
Expected statutory tax benefit	-14,292	-32,362
Foreign tax rate differential	-1,626	1,191
Permanent difference – investment grants	-89	0
Non-tax deductible stock compensation expenses	-9,483	12,268
Amortization of non-tax deductible goodwill and intangibles	18,248	12,680
Non-tax deductible expenses	91	61
Amortization charges based solely on tax provisions	-64,818	0
Effect of change in tax rate	0	781
Valuation allowance for deferred tax assets	67,945	2,765
Other	570	488
Income tax expense (benefit)	-3,454	-2,128
Effective tax rate	8.97%	2.25%

Deferred income tax expense (benefit) allocated to other comprehensive income totalled EUR 0 and EUR 16 thousand for the fiscal years 2001 and 2000, respectively.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31 follows:

	2001 **TEUR**	**2000** **TEUR**
Deferred tax assets:		
German tax loss carryforward	73,120	2,106
Foreign tax loss carryforward	5,625	1,951
Purchased intangibles	1,150	1,292
Other	466	273
Total gross deferred tax assets	80,361	5,622
Less: valuation allowance	-67,945	-2,765
Net deferred tax assets	12,416	2,857
Total gross deferred tax liabilities	-6,532	-524
Net deferred tax asset	5,884	2,333

The foreign tax loss carryforward at December 31 is comprised as follows:

	2001 TEUR	2000 TEUR
ADVA Ltd., Cambridge, UK	2,156	1,129
ADVA Optical Networking Ltd., York, UK	2,256	343
ADVA Optical Networking Inc., Ramsey, New Jersey, USA	862	89
ADVA Optical Networking AS, Oslo, Norway	0	390
ADVA Optical Networking Corp., Tokyo, Japan	-351	0
Foreign tax loss carryforward	5,625	1,951

In Germany, as well as in UK, tax losses can be carried forward indefinitely. According to the U.S. Tax Act, tax losses carried forward by ADVA Inc. expire after 20 years. According to the Norwegian Tax Act, tax losses carried forward by ADVA AS expire after 10 years. According to the Japanese Tax Act, tax losses carried forward by ADVA Corp. expire after 5 years.

Deferred tax assets and liabilities at December 31 are recorded as follows:

	2001 TEUR	2000 TEUR
Current:		
Deferred tax asset	479	0
Deferred tax liability	-272	-212
Net current deferred tax asset (liability)	207	-212
Non-current:		
Deferred tax asset	11,937	2,857
Deferred tax liability	-6,260	-312
Net non-current deferred tax asset	5,677	2,545

In assessing the realizability of deferred tax assets, the Company has considered whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. The Company has considered the scheduled reversal of deferred tax liabilities and projected future taxable income in making this assessment. Based upon the level of historical taxable income and projections for future taxable income over the periods in which the deferred tax assets would be deductible, the Company believes that the difference between the gross deferred tax assets of EUR 80,361 thousand (2000: EUR 5,622 thousand) and the future realizable value of EUR 12,416 thousand (2000: EUR 2,857 thousand), which equals a valuation allowance of EUR 67,945 thousand (2000: EUR 2,765 thousand), will more than likely not be realized.

(14) STOCKHOLDERS' EQUITY

Common stock

The Company had 33,136,768 non-bearer EUR 1.00 par value shares issued and outstanding at December 31, 2001.

Authorized and conditional share capital

In addition to the issued common stock, the Company's articles of association authorize the Management Board to increase common stock with the Supervisory Board's consent by issuing new shares. The Management Board may use this authorization through January 31, 2004, and May 23, 2005, respectively, to issue new shares as follows:

- authorized share capital I: in an aggregate amount of up to EUR 1,000,000 to issue 1,000,000 common shares in exchange for cash contributions or contributions in kind. With the Supervisory Board’s consent, the pre-emptive rights of existing shareholders may be excluded in certain circumstances;

- authorized share capital II: in an aggregate amount of up to EUR 14.0 million to issue 14.0 million new common shares in exchange for cash contributions or contributions in kind. With the Supervisory Board’s consent, the pre-emptive rights of existing shareholders may be excluded as follows:

    - pre-emptive rights are excluded up to an amount of EUR 3.0 million to issue new shares in exchange for cash contributions if the grant price is not significantly lower than the Company’s then current stock price, and

    - pre-emptive rights are excluded up to an amount of EUR 10.0 million to issue new shares in exchange for contributions in kind related to new acquisitions.

At the extraordinary shareholders meeting on February 8, 2001, the Company’s shareholders resolved an authorized share capital III in an aggregate amount of up to EUR 1,600 thousand to issue new common shares in exchange for cash contributions. With the Supervisory Board’s consent, the pre-emptive rights of existing shareholders may be excluded. This authorized capital can only be used in conjunction with the conversion of issued convertible option bonds.

At the annual shareholders meeting on August 28, 2001, the Company’s shareholders resolved that § 4 para. 4 (authorized share capital II) of the articles of association of the Company should be rephrased in a sense that only authorized share capital I exists and that the new authorized capital I amounts to EUR 14,900,000. The Management Board shall now be authorized, with the approval of the Supervisory Board, to increase the Company's capital, once or several times, until August 28, 2006, by up to EUR 14,900,000 through the issuance of new non-bearer shares in exchange for cash or contributions in kind (new authorized capital I). With the Supervisory Board’s consent, the pre-emptive rights of existing shareholders may be excluded as follows:

- pre-emptive rights are excluded up to an amount of EUR 3.3 million to issue new shares in exchange for cash contributions if the grant price is not significantly lower than the Company’s then current stock price, and

- pre-emptive rights are excluded up to an amount of EUR 11.6 million to issue new shares in exchange for contributions in kind related to new acquisitions.

On March 10, 1999, the Company´s shareholders meeting resolved a conditional capital increase up to EUR 200 thousand that may be used to issue up to 200,000 new common shares in connection with the exercise of options granted to the Management Board and employees of the Company and its affiliates (conditional capital I). This conditional capital was increased from EUR 200 thousand to EUR 1.2 million by a resolution of the Company’s shareholders meeting on May 24, 2000. The conditional capital will be increased only to the extent the options granted in accordance with the authorization resolved on March 10, 1999 are exercised. The new shares issued based on options exercised will have dividend rights from the beginning of the fiscal year in which they are issued.

On May 24, 2000, the shareholders meeting of the Company further resolved a conditional capital increase (conditional capital II) up to EUR 150 thousand that may be used to issue up to 150,000 new common shares in connection with the exercise of options granted to the Management Board and employees of the Company and its affiliates.

On February 8, 2001, the Company's shareholders resolved to conditionally increase the capital (conditional capital III) by up to EUR 1,380 thousand that may be used to issue up to 1,380,000 new common shares in connection with the exercise of options granted to the Management Board and employees of the Company and its affiliates.

Additionally, the Company´s shareholders resolved at the extraordinary shareholders meeting on February 8, 2001, a conditional capital increase (conditional capital IV) up to EUR 469.5 thousand that may be used to issue up to 469,500 new common shares in connection with the exercise of options granted to employees of the Company and its affiliates. Additionally, a conditional capital increase (conditional capital V) up to EUR 75 thousand was approved, that may be used to issue up to 75,000 new common shares and a conditional capital increase (conditional capital VI) up to EUR 6,000 thousand that may be used to issue up to 6,000,000 new common shares in exchange for convertible option bonds to be issued to the Supervisory Board and to the Management Board and employees of the Company and its affiliates, respectively.

Capital transactions

On April 14, 2000, ADVA completed both the acquisition of Storage Area Networks and Cellware. In conjunction with these acquisitions, the Company issued 157,725 common shares, resulting in an increase of common stock outstanding of EUR 157,725 and an increase of additional paid-in capital of EUR 121.0 million.

On July 12, 2000, ADVA executed a capital increase from reserves against issuance of new shares. This measure was approved at the annual shareholders meeting on May 24, 2000. Similar to a stock split in a 1:5 ratio, shareholders received five new shares in addition to each existing share, without making any further contributions. As a result, the number of shares outstanding increased from 5,157,725 shares to 30,946,350 shares. This capital increase was entered into the Commercial Register on June 29, 2000, and distribution of new shares occurred on July 12, 2000. This stock split has been reflected retroactively, as appropriate, in the accompanying consolidated financial statements. Accordingly, all appropriate references to common stock and per share information have been restated to reflect the authorization and issuance of the additional 25,788,625 common shares.

In conjunction with ADVA's purchase of First Fibre on July 13, 2000, the Company issued 1,061,862 common shares resulting in an increase of common stock outstanding of EUR 1,061,862 and an increase of additional paid-in capital of EUR 86.5 million.

In conjunction with ADVA's purchase of the Siemens Telecom R&D Division, the Company issued 51,633 common shares resulting in an increase of common stock outstanding of EUR 51,633 and an increase of additional paid-in capital of EUR 6.1 million.

On June 22, 2001, the Management and Supervisory Boards of ADVA resolved to increase the share capital of the Company from approved capital in an amount of EUR 1,076,923 for 1,076,923 common shares against a total cash contribution of EUR 7.0 million. Pre-emption rights of current shareholders were excluded. All newly-issued shares were subscribed for by the EGORA Group, Munich, Germany. Through this capital increase, ADVA's number of shares outstanding increased from 32,059,845 to 33,136,768.

(15) SEGMENT REPORTING

The Company adopted SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information", starting with the year 1999. Under the provisions of SFAS No. 131 the method for determining what information to report is based on the way management organizes the operating segments within a company for making operation decisions and assessing financial performance.

The Company's Management Board is the chief operating decision maker, which uses financial data for operating the business. The Company has determined that it operates in a single operating segment: the development and sale of optical networking equipment.

Geographic information
A summary of sales by geographic region is as follows:

	2001 TEUR	2000 TEUR
Germany	21,937	8,999
Rest of Europe, Middle East, and Africa ("EMEA")	40,061	12,991
Americas	25,537	35,817
Asia-Pacific	2,482	1,732
	90,017	59,539

Net sales are attributed to the countries in which shipments are made.

A summary of long-lived assets by geographic region is as follows:

	2001 TEUR	2000 TEUR
Germany	11,668	10,009
Rest of EMEA	1,449	2,422
Americas	205	85
Asia-Pacific	36	49
	13,358	12,565

Long-lived asset information is based on the physical location of the assets.

(16) MAJOR CUSTOMERS AND CONCENTRATION OF RISKS

At December 31, 2001, and 2000, 3 customers and 2 customers accounted for 71% and 63% of accounts receivable trade, respectively, including these customers subsidiaries.

During fiscal year 2001 and 2000, 4 customers and 2 customers accounted for 75% and 80% of sales, respectively, including these customers subsidiaries.

Sales per product were as follows:

2000: OCM 1%, CELL-ACE 3%, FSP 500 5%, FSP-I 11%, FSP-II 77%, Other 3%
2001: Cell-Ace 3%, FSP 500 12%, FSP-I 11%, FSP-II 51%, FSP 1000 1%, FSP 2000 8%, FSP 3000 11%, Other 3%

At December 31, 2001, no individual supplier accounted for more than 10% of total accounts payable trade. At December 31, 2000, 3 suppliers accounted 34% of accounts payable trade.

During fiscal year 2001, the Company did not purchase more than 10% from any individual supplier. During fiscal year 2000, the Company purchased 28% of its components from 2 suppliers.

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash equivalents and trade accounts receivable. The Company invests primarily in money market accounts and marketable securities with high-quality financial, government, or corporate institutions. Management believes that the Company is exposed to minimal credit risk related to accounts receivable as the majority of its business is conducted with major international companies.

(17) LEASES

The Company leases certain plant and equipment under various capital leases that expire at various dates during the next 4 years. At December 31, 2001, and 2000, the gross amount of plant and equipment and related accumulated amortization recorded under capital leases were as follows:

	2001 TEUR	2000 TEUR
Plant and equipment	5,477	4,533
Less: accumulated amortization	-2,385	-1,294
	3,092	3,239

Amortization of assets held under capital leases for the years ended December 31, 2001, and 2000, amounted to EUR 1,347 thousand and EUR 805 thousand, respectively.

The Company also has noncancelable operating leases, primarily for cars, that expire over the next 3 years. Rental payments include monthly rentals plus charges for maintenance and motor vehicle tax. Rental expenses for operating leases during 2001 and 2000 totalled EUR 289 thousand and EUR 163 thousand, respectively.

Future minimum lease payments under noncancelable operating leases (with initial or remaining lease terms in excess of one year) and future minimum capital lease payments as of December 31, 2001, are:

Year ending December 31,	**Capital leases TEUR**	**Operating leases TEUR**
2002	1,456	360
2003	1,191	254
2004	752	79
2005	129	0
Total minimum lease payments	3,528	693
Less: amount representing interest (at rates ranging from 5% to 7%)	-315	
Present value of net minimum capital lease payments	3,213	
Less: current installments of obligations under capital leases	1,274	
Obligations under capital leases, excluding current installments	1,939	

(18) COMMITMENTS AND CONTINGENCIES

From time to time, the Company may be subject to legal proceedings and claims in the ordinary course of business. At December 31, 2001, the Company was not aware of any legal proceedings or claims that the Company believes will have, individually or in the aggregate, a material adverse effect on the Company's business, financial condition, or results of operations.

In 2000, ADVA granted a customer an incentive, subject to certain limitations and conditions, to replace certain 2000 product purchases with new products of the Company. The right of replacement relates to this customer's purchases in 2001. Based on historical sales prices, the Company estimated the volume of returned products could amount to a maximum of EUR 1.7 million, which will be accounted for as a reduction of the sale price for new products actually purchased in 2001. At December 31, 2001, products in the amount of EUR 394 thousand were returned. Credit notes were issued accordingly and in the same period revenue with the new products was recognized.

On April 23, 2001, ADVA signed an amendment to an original equipment manufacturer Hardware (with Software) License and Purchase Agreement with one of ADVA's major customers. The amendment granted this customer the right, subject to certain conditions and limitations, to return certain ADVA products up to an amount of USD 4.5 million ordered by and shipped between January 1, 2000, and December 31, 2000. The customer's right to return equipment purchased during 2000 is contingent on the customer's purchase volume of a new product in 2001. Based on purchases by the customer in 2000, the maximum incentive was estimated to be USD 4.5 million. At December 31, 2001, products in the amount of EUR 3,132 thousand were returned. Credit notes were issued accordingly and in the same period revenue with the new products was recognized.

As of December 31, 2001, the Company has entered into various commitments to purchase components and test equipment during 2002 amounting to EUR 2,924 thousand and EUR 174 thousand, respectively.

(19) SIGNIFICANT NON-CASH TRANSACTIONS

Significant non-cash transactions are a result of the following acquisitions in 2000:

	Purchase cost	**Amortization / depreciation**	**Foreign currency translation**	**Dec. 31, 2000**
	TEUR	**TEUR**	**TEUR**	**TEUR**
Storage Area Networks				
Goodwill	83,380	-20,845	-3,118	59,417
Intangible assets	19,132	-5,764	-614	12,754
Tangible assets	329	-72	-20	237
Working capital	-49	0	0	-49
	102,792	-26,681	-3,752	72,359
Cellware				
Goodwill	17,823	-4,456	0	13,367
Intangible assets	5,496	-4,025	0	1,471
Tangible assets	544	-102	0	442
Working capital	100	0	0	100
	23,963	-8,583	0	15,380
First Fibre				
Goodwill	34,750	-5,792	-325	28,633
Intangible assets	51,290	-17,596	-364	33,330
Tangible assets	1,353	-253	-19	1,081
Working capital	1,415	0	0	1,415
	88,808	-23,641	-708	64,459
Siemens Telecom R&D Division				
Goodwill	3,429	-429	0	3,000
Intangible assets	2,600	-304	0	2,296
Tangible assets	325	-27	0	298
Working capital	-109	0	0	-109
	6,245	-760	0	5,485
Total	221,808	-59,665	-4,460	157,683

Purchase costs stated above include a total of EUR 475 thousand paid in cash as part of the purchase price, as well as transaction costs totalling EUR 2,109 thousand which were also paid in cash. The remaining purchase costs were paid through the issuance of common shares (see Note 5).

(20) DEBT

At December 31, 2001, and 2000, the Company borrowed EUR 20.0 million and EUR 10.0 million, respectively, under its credit facility with Deutsche Bank AG ("DB"), mainly used for financing the Company's continuing growth. The interest rate applicable to borrowings is 4.70% to 5.00% in 2001 and 5.69% in 2000, respectively. The total credit facility amounted to EUR 20.0 million and expires on December 31, 2002. One of the Company's primary shareholders, the EGORA Group, has guaranteed the credit facility.

In 2000, DB and HypoVereinsbank AG ("HypoVereinsbank"), collectively, extended the Company an overdraft line totalling EUR 3.0 million which was unsecured and had no fixed expiration date. At December 31, 2000, EUR 200 thousand of the overdraft line was used. On June 30, 2001, DB and HypoVereinsbank, collectively, removed their overdraft lines of EUR 3.0 million.

Long-term debt is comprised of the following:

	2001 TEUR	**2000 TEUR**
Bank loans	289	0
City Council of Meiningen	31	31
Total current portion of long-term debt	320	31
Bank loans	4,343	3,964
City Council of Meiningen	219	250
Total non-current portion of long-term debt	4,562	4,214

Long-term debt was granted for the financing of the Company's new research, development, production, and administration site in Meiningen, Germany. Bank loans totalling EUR 4,632 thousand were granted as a European Recovery Program ("ERP") loan and through the federal-owned Kreditanstalt für Wiederaufbau ("KfW"), of which at December 31, 2001, and 2000, EUR 4,632 thousand and EUR 3,964 thousand were used, respectively. The loans are secured by the Company's held-to-maturity securities amounting to EUR 2,100 thousand and a mortgage. Effective interest rates for these securities range from 5.4% to 5.9%.

At December 31, 2001, the amounts are due for repayment as follows:

Year ending December 31,	**ERP TEUR**	**KfW TEUR**
2002	187	102
2003	375	204
2004	375	204
2005	375	204
2006	375	204
2007	375	204
2008	375	204
2009	375	204
2010	187	103
	2,999	1,633

Additionally, long-term debt includes a loan from the city of Meiningen for the financing of the land related to the new research, development, production, and administration site. The loan is non-interest bearing and repayable in 10 equal annual installments, each amounting to EUR 31 thousand. Repayment commenced in 2000.

(21) WARRANTY ACCRUALS

In 2001 and 2000, the Company has accrued a provision for expected warranty claims within one year in the amount of EUR 1,541 thousand and EUR 1,560 thousand, respectively. Additionally, EUR 295 thousand and EUR 788 thousand are considered non-current liabilities in 2001 and 2000, respectively, for similar warranty provisions.

(22) SUBSEQUENT EVENTS

Given the challenges of the global communications sector and the difficulty for a one-product optical company to become a successful independent entity, the Management Board of OptXCon passed a resolution on March 5, 2002, to merge OptXCon with another entity. To prepare for this probable transaction, OptXCon plans to reduce the number of employees to a core team necessary for the transaction to take place. The carrying value of the investment of OptXCon in the Company`s consolidated balance sheet as of December 31, 2001, amounted to EUR 0. Therefore, the resolution of the Management Board of OptXCon is expected to have no negative impact on the Company`s 2002 financial statements.

(23) ADDITIONAL DISCLOSURE IN ACCORDANCE WITH § 292A HGB

To comply with § 292a HGB, the accompanying consolidated financial statements of the Company have been prepared in accordance with U.S. GAAP. The Company maintains its financial records in accordance with German Law, which represents generally accepted accounting principles in Germany ("German GAAP"). German GAAP varies in certain significant respects from U.S. GAAP. Accordingly, the Company has recorded certain adjustments in order that these consolidated financial statements are in accordance with U.S. GAAP.

Equity consolidation
The carrying values of the common stocks of the subsidiaries owned by the Company are eliminated against the amounts which these common stocks represent in the equity of the subsidiaries in accordance with the method described in § 301, (1) No. 2 HGB at the time of acquisition of these subsidiaries. The time of acquisition agrees to the first-time consolidation of equity of all subsidiaries. The amount of goodwill resulting from the acquisition of the subsidiaries was also determined at the time of acquisition.

Liabilities
Liabilities due within one year are classified as current, liabilites due after one year are classified as non-current. Liabilities due after more than 5 years amounted to EUR 2,027 thousand.

Contingent liabilities
Contingent liabilities to suppliers and from rental and lease obligations with a maturity date between one and five years are as follows:

	2002 TEUR	2003 TEUR	2004-2006 TEUR	Total TEUR
Purchase of test equipment	174	0	0	174
Operating lease obligations	360	254	79	693
Purchase of components	2,924	0	0	2,924
Other	747	384	1,035	2,166
	4,205	638	1,114	5,957

Personnel expenses
Personnel expenses, according to § 275 (2) No. 6 HGB, for the years ending December 31, 2001, and 2000, amounted to EUR 1.2 million and EUR 40.4 million, respectively.

Employees
On average, ADVA employed 412 employees in 2001 and 286 in 2000. These employees were divided into the following departments:

	2001	2000
Research and development	148	109
Procurement and production	105	75
Quality management	16	11
Sales, marketing, and tech support	87	55
Management, administration, finance, IT	56	36
	412	286

In 2001 and 2000, OptXCon employed 19 and 3 personnel on average, respectively.

Remuneration of the Management Board
Total remuneration granted to members of the Management Board during 2001 and 2000 amounted to EUR 785 thousand and EUR 675 thousand, respectively.

ADVA shares held by and options granted to the members of the Management Board as of December 31, 2001, are as follows:

Name	Stock	Options
Brian L. Protiva, Chief Executive Officer	1,000	220,000
Jürgen Hansjosten, Chief Sales Officer	0	125,000
Brian P. McCann, Chief Marketing & Strategy Officer	124,018	130,000
Stephan Offermanns, Chief Operating Officer	0	130,000
Andreas G. Rutsch, Chief Financial Officer	0	250,000

These options entitle the Management Board to purchase an equal number of common shares of the Company once the vesting period is reached. The exercise price of the options granted ranges from EUR 2.92 to EUR 10.79.

Remuneration of the Supervisory Board
Total remuneration granted during 2001 and 2000 amounted to EUR 38 thousand and EUR 38 thousand, respectively. In addition, insurance premiums in the amount of EUR 26

thousand and EUR 8 thousand were paid by the Company on behalf of the Supervisory Board members in 2001 and 2000, respectively.

Name	Stock	Convertible bonds
Prof. Dr. Albert J. Rädler, Chairman	11,480	20,000
Eric Protiva, Vice Chairman	5,935	15,000
Dr. Wolf-Dieter Bopst, Member	0	10,000
Peter Chung, Member	0	0
Dr. Yves Dzialowski, Member	0	10,000
Dr. Bernd Jäger, Member	0	10,000

Management Board

Name	Residence	Position	External board positions
Brian L. Protiva	Munich, Germany	Chief Executive Officer	Chairman of the Board of INNOBASE AG, Munich, Germany; Member of the Board of AMS Technologies GmbH, Munich, Germany
Jürgen Hansjosten (since October 1, 2001)	Munich, Germany	Chief Sales Officer	
Brian P. McCann (since July 3, 2000)	Suffern, NY, USA	Chief Marketing & Strategy Officer	Member of the Board of OptXCon Inc., North Carolina, USA; Member of the Board of Super Vision International, Inc., Florida, USA
Claus-Georg Müller (until July 3, 2000)	Feldafing, Germany	Chief Technology Officer	
Stephan Offermanns	Munich, Germany	Chief Operating Officer	
Andreas G. Rutsch	Munich, Germany	Chief Financial Officer	

Supervisory Board

Name	Residence	Position	External board positions
Prof. Dr. Albert J. Rädler	Vaterstetten, Germany	Chairman of the Board	Tax Consultant at Linklaters Oppenhoff & Rädler, Munich, Germany; Chairman of the Board of AIFOtec AG Fiber Optics, Munich, Germany; Member of the Board of INNOBASE AG, Munich, Germany; Member of the Board of TeraGate AG, Munich, Germany
Eric Protiva	Atherton, California, USA	Vice Chairman	Managing Director and Member of the Board of EGORA Holding GmbH, Munich, Germany; Chairman of the Board of AMS Technologies AG, Munich, Germany; Member of the Board of AIFOtec AG Fiber Optics, Munich, Germany; Member of the Board of INNOBASE AG, Munich, Germany; Member of the Board of TeraGate AG, Munich Germany; Member of the Board of Elforlight Ltd., UK
Dr. Wolf-Dieter Bopst	Feldafing, Germany	Member	Managing Director of OSRAM GmbH, Munich, Germany; Member of the Board of numerous companies within the OSRAM Group worldwide
Peter Chung	Palo Alto, California, USA	Member	General Partner of Summit Partners L.P., California, USA; Member of the Board of Ditech Communications Corp., California, USA; Member of the Board of E-Commerce Exchange Inc., California, USA; Member of the Board of IDEAglobal Ltd., Singapore; Member of the Board of Sirenza Microdevices Inc., California, USA; Member of the Board of Somera Communications Inc., California, USA

Dr. Yves Dzialowski (since August 28, 2001)	Princeton, New Jersey, USA	Member	Chairman of the Board of Princeton Optronics, New Jersey, USA; Member of the Board of Quake Technologies, Ontario, Canada
Dr. Bernd Jäger (since August 28, 2001)	Bonn, Germany	Member	Managing Director TTM Investor GmbH, Bonn, Germany; Vice Chairman of the Board of Celox GmbH, Essen, Germany; Vice Chairman of the Board of Infigate GmbH, Bonn, Germany
Michael J. Fitzpatrick (until June 20, 2001)	Hillsborough, California, USA	Member	General Partner of Seabury Partners Inc., California, USA
Sanjay Subhedar (until June 19, 2001)	Saratoga, California, USA	Member	General Partner of Storm Ventures Inc., California, USA; Member of the Board of Chahaya Optronics Inc., California, USA; Member of the Board of DowsLake Microsystems Inc., California, USA; Member of the Board of ECTone Inc., Pennsylvania, USA

Fixed asset schedule for the business year 2001

	Historical cost						Accumulated depreciation 12/31/2001	Book value		Depreciation 2001
	Balance as of 1/1/2001	Additions	Retirements	Reclassifications	Currency translation adjustments	Balance as of 12/31/2001		Balance as of 12/31/2001	Balance as of 12/31/2000	
	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR	TEUR
I. Intangible assets										
1. Goodwill	135,939	0	55	0	3,724	139,608	129,016	10,592	104,417	97,568
2. Concessions, trademarks, patents, licenses and software	59,387	384	45	83	1,542	61,351	44,638	16,713	49,851	34,918
	195,326	384	100	83	5,266	200,959	173,654	27,305	154,268	132,486
II. Leased equipment	4,533	1,267	122	-212	11	5,477	2,385	3,092	3,239	1,347
III. Tangible assets										
1. Land and buildings	325	901	0	4,398	84	5,708	270	5,438	325	219
2. Technical equipment and machinery	2,890	1,890	559	233	66	4,520	1,496	3,024	2,263	1,124
3. Factory and office equipment	2,988	1,384	907	151	54	3,670	1,866	1,804	2,085	1,597
4. Payments on account and assets under construction	4,653	0	0	-4,653	0	0	0	0	4,653	0
	10,856	4,175	1,466	129	204	13,898	3,632	10,266	9,326	2,940
IV. Financial assets										
1. Participations in affiliated companies	705	0	0	0	0	705	705	0	705	705
2. Securities	2,100	0	0	0	0	2,100	0	2,100	2,100	0
	2,805	0	0	0	0	2,805	705	2,100	2,805	705
	213,520	5,826	1,688	0	5,481	223,139	180,376	42,763	169,638	137,478

Independent auditors' report

Independent auditors' report

We have audited the consolidated financial statements, comprising the balance sheet, the income statement and the statements of changes in stockholders' equity and cash flows as well as the notes to the financial statements and the group management report prepared by ADVA AG Optical Networking, Meiningen, for the business year from January 1 to December 31, 2001. The preparation and the content of the consolidated financial statements including the group management report in accordance with United States Generally Accepted Accounting Principles (U.S. GAAP) are the responsibility of the Company's management. Our responsibility is to express an opinion on the consolidated financial statements based on our audit.

We conducted our audit of the consolidated financial statements in accordance with German auditing regulations and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftspruefer (IDW). Those standards require that we plan and perform the audit such that it can be assessed with reasonable assurance whether the consolidated financial statements are free of material misstatements. Knowledge of the business activities and the economic and legal environment of the Group and evaluations of possible misstatements are taken into account in the determination of audit procedures. The evidence supporting the amounts and disclosures in the consolidated financial statements are examined on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements give a true and fair view of the net worth, financial and profit situation as well as cash flows of ADVA AG Optical Networking, Meiningen, for the business year in accordance with United States Generally Accepted Accounting Principles.

Our audit, which also extends to the group management report prepared by the Company's management for the business year from January 1 to December 31, 2001, has not led to any reservations. In our opinion, on the whole the group management report provides a suitable understanding of the Group's situation and suitably presents the risks of future development. In addition, we confirm that the consolidated financial statements and the group management report for the business year from January 1 to December 31, 2001 satisfy the conditions required for ADVA AG's Optical Networking, Meiningen, exemption from its duty to prepare consolidated financial statements and the group management report in accordance with German law.

Halle (Saale), March 22, 2002

Deloitte & Touche GmbH
Wirtschaftspruefungsgesellschaft

(Reiss)
Wirtschaftspruefer

(ppa. Sauer)
Wirtschaftspruefer

Deloitte & Touche GmbH Wirtschaftsprüfungsgesellschaft
WIRTSCHAFTS-PRÜFUNGS-GESELLSCHAFT
SIEGEL
Düsseldorf