

2004
Annual Report



PAN|DATEL

Pandatel AG

is a high-tech company operating in the telecommunications market of the future. Pandatel is one of the leading suppliers of optoelectronic components and wavelength division multiplexers (DWDM systems). Pandatel is one of the world's few providers with such a wide range of products and systems for data transmission both via copper and fiber optics – and combining the two transmission techniques.

Pandatel products are used wherever new capacities have to be created or where the capacities of existing networks are to be optimized and performance increased.

Pandatel's activities focus on three product categories:

- **Connectivity Products**
- **Access Multiplexers**
- **WDM/Optical Systems**

Since November 1999 Pandatel has been listed at the Frankfurt Stock Exchange and was included in the Prime Standard segment in January 2003.

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Consolidated Financial Statements

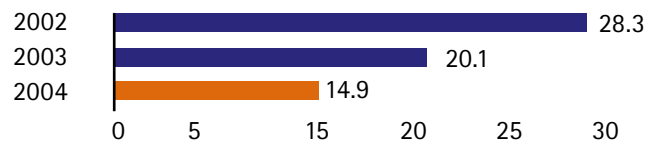
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At a Glance

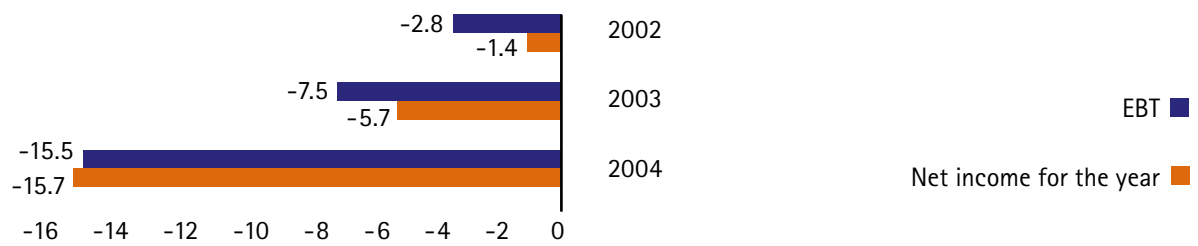
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Pandatel Group (According to US GAAP)	1999 in €m	2000 in €m	2001 in €m	2002 in €m	2003 in €m	2004 in €m
Balance sheet						
Balance sheet total	47.7	58.3	57.4	50.5	45.1	33.0
Shareholders' equity	44.0	50.2	50.3	47.9	42.5	29.5
Cash and cash equivalents	32.7	25.5	18.1	24.8	22.4	9.9
Income statement						
Sales	23.5	36.5	30.6	28.3	20.1	14.9
Investments	0.8	1.8	1.9	1.2	1.3	7.1
EBIT	7.6	10.4	3.0	-3.8	-8.2	-15.8
Operating result	7.4	10.6	3.2	-2.4	-8.0	-12.9
Earnings before taxes	7.7	11.6	4.4	-2.8	-7.5	-15.5
Net income/loss for the year	3.5	5.6	2.3	-1.4	-5.7	-15.7
Statement of cash flow						
Cash Flow	4.0	7.1	3.3	0.1	-3.9	-14.1
Other figures						
Earnings per share	0.59 €	0.78 €	0.32 €	-0.19 €	-0.78 €	-2.08 €
Payroll (average)	106	141	162	172	178	184
Equity ratio	92.2%	86.1%	87.7%	94.9%	94.3%	89.4%
Closing price at year-end	65.50 €	55.00 €	7.95 €	3.10 €	4.70 €	1.10 €

Sales in €m



Earnings in €m



Dear Shareholders,

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2004 was an eventful year for Pandatel, with many challenges. First we found a suitable partner in Lightmaze Solutions AG to extend our range of products to make them future-proof. In the course of the year, however, the downturn in business trends called for further crucial decisions. We intend to consistently pursue the measures introduced to restructure and consolidate all corporate resources in order to create a sound foundation for the future.

Sales and earnings situation tense

Last year, the telecommunications sector succeeded in increasing its turnover, slowly but steadily, thus reflecting general economic trends in Germany. By comparison, Pandatel is in a fundamental consolidation phase. Business trends could not keep up with the positive market trend. In the last financial year we achieved sales of € 14.9 million (€ 20.1 million in the previous year) and earnings before taxes of –€ 15.5 million (–€ 7.5 million in the previous year). The price of the Pandatel share, which still showed a stable trend at the beginning of 2004, followed the unfavorable business development in the course of the year. The share closed down 76.6%. Since the beginning of the year the price has stabilized at a low level, and reached a figure of € 1.70 at the beginning of February. On account of the consolidation measures introduced in October 2004, however, we assume that we have seen the end of this development and have laid a sound foundation for a favorable trend in the future.

Realignment with market potential introduced

In order to counter the downward trend of the past few years, Pandatel initiated the following measures in 2004, among others:

Product offensive at the CeBIT in March

Within the framework of this initiative, Pandatel AG presented new, highly innovative products that meet the requirements of the market. On the one hand there was the C-MUX-155, an optical multiplexer, which, among other things, transmits voice and data applications as well as individual LAN-to-LAN services in highly granulated speed gradations. On the other hand there was also the COP-FE, a TDM multiplexer allowing Pandatel to enter the IP technology sector.

Takeover of Lightmaze Solutions AG in May

After a thorough analysis and evaluation of various options, Pandatel AG decided in favor of a takeover of Lightmaze Solutions AG, which supplements Pandatel's systems and solutions ideally. For example, the YUMIX 4000 system allows us to enter the market for optical technologies in the areas of optical storage area networking and metro networks.

Restructuring measures in autumn

Although Pandatel focused mainly on the development of new products, it did not succeed in achieving the intended sales figures. The reasons for this were postponements of deadlines in product development as well as the inadequate cost-effectiveness of the technologies developed. Pandatel was therefore compelled to significantly reduce the size of its workforce and to subject all processes to a strict examination and optimization.

At the same time we started to fundamentally consolidate all corporate divisions, in particular development, distribution and production, in order to create the foundation for a turnaround in fiscal 2005.

In the course of this process we identified three main fields:

1. Comprehensive cost optimization in the traditional product portfolio
2. Speedy market introduction of the new products originally planned for 2004
3. Aggressive start in the market segments of optical technologies for storage and metro area networks, which are showing healthy growth again



Dr.-Ing. Elke Jahn

Well equipped for the future

On the basis of our new developments as well as the realignment of the company, we are confident that we will be able to stop the current downward trend and bring about a sustained consolidation of the company. Our main task in 2005 is to aggressively enter the market in order to achieve success together with our partners. Against this background, our sales target for the 2005 financial year is € 19 million. Furthermore, we assume that the restructuring measures introduced in 2004 will considerably ease the pressure on the cost side in 2005.

In particular we would like to thank all of our employees, who have stood by us in the past financial year with their outstanding willingness to do their best for the company. The same applies for all shareholders, customers and marketing partners, who, thanks to their continued confidence in us, have made a large contribution towards the consolidation of the company.

The Executive Board



Dr.-Ing. Niraj Agrawal

Executive Board

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Dr.-Ing. Elke Jahn (COO), 39,
board member since 01.07.2004

Dr. Jahn has more than ten years of experience in the optical networking industry. In April 2001, she joined the start-up Lightmaze Solutions AG, which provides systems and solutions for optical networking for the metro, enterprise and SAN market, as CEO. Before that, she worked as head of R&D in the optical networking industry.

Dr. Jahn built up from scratch the R&D department at the then start-up company ADVA AG, which she led as Director of R&D until Q2/2000.

Dr. Jahn received several prestigious awards in the field of optical communications: 1996 she was awarded the „Krone-Preis“ and „VDE-Preis“ for outstanding doctorates. Dr. Jahn acquired her doctorate in Electrical Engineering with fast optical Switches from the Technical University of Berlin (Heinrich-Hertz-Institut), Germany, after studying physics at the University of Würzburg and in the USA.



Dr. -Ing. Niraj Agrawal (CTO), 44,
board member since 01.07.2004

Dr. Agrawal, co-founded the firm Lightmaze Solutions AG in Germany in September 2000. Lightmaze Solutions AG develops, distributes and produces advanced optical networking products for SAN metro and enterprise market segments. Since its inception, he has been the CTO of Lightmaze.

Dr. Agrawal has gained his expertise in the development of components, sub-systems, and protocols for high bit optical networks.

Previously, he has worked at IBM Almaden Research Center in San José (USA), Heinrich-Hertz-Institut in Berlin (Germany), and Lucent Technologies in Holmdel (USA). He has been a frequent speaker at numerous international conferences and an active contributor to various reputed international technical journals.

Supervisory Board

Axel Haas (Chairman)

CEO of AUGUSTA Technologie AG, Frankfurt

Dr.-Ing. Steffen Leistner (Deputy Chairman)

Managing director at Booz Allen Hamilton GmbH,
Berlin

Prof. Dr. Uwe Hannig

Managing Director of Auto-Center Zwickau GmbH,
Autopark Zwickau GmbH, AVM Aktiv Verwaltungs- und
Managementgesellschaft mbH,
Clever CarDiscount GmbH (since January 1, 2004),
Megatrend Gesellschaft für Marktforschung und
Unternehmenskommunikation GmbH and
PreVis Premium Immobilien und Service GmbH.
All the afore-mentioned companies have their business
offices in Zwickau.

Appointments of the Supervisory Board members to the controlling organs of other companies:

Axel Haas is Chairman of the Supervisory Board of ND
SatCom AG, Friedrichshafen.

Prof. Dr. Hannig is Chairman of the Supervisory Board
of the company Terra Limes NRW AG, Willich.

Overview of the year 2004

January:

The then CEO Heinrich-J. Kraus announces that he will resign from his position and will leave the company on 1st April 2004.

February:

Damovo and Pandatel together organized an information event for electric power suppliers. About 20 specialists and executives from the IT sector as well as other interested parties from North Germany attended in order to find out how they could make their networks even more effective.

March:

Pandatel used the CeBIT to present its product offensive (and to draw the attention of its existing customers as well as of potential customers to current developments in network technology). For example, Pandatel presented the new optical multiplexer C-MUX-155. Thanks to virtual concatenation (VCAT), this multiplexer allows not only the transmission of voice and data applications as an integrated access device, but also individually tailored LAN-to-LAN services in highly granulated speed gradations via SONET/SDH networks.

Siemens and Pandatel signed the HiPath Ready Net contract on their CeBIT exhibition stand. With the help of the hardware and software components of the HiPath architecture, highly diverse companies are given the ideal basis for the standardization of their communication and information systems in convergent overall solutions.

Within the framework of the annual press conference on the financial statement and analyst conference, Pandatel AG presented its year-end financial statement and the year-end report for 2003.

April:

The CEO Heinrich-J. Kraus leaves the company as announced. Norbert Wienck is now the sole board member of Pandatel AG.

Pandatel discussed its further corporate strategy in the field of optical systems and solutions.

May:

About 80 shareholders informed themselves at the Annual General Meeting about the future objectives and strategies of Pandatel AG.

In the same month, Pandatel took over 100 percent of the shares of Lightmaze Solutions AG, a technological pioneer in the field of communication solutions for the design of intelligent optical networks. With the product platform of Lightmaze Solutions, Pandatel AG has extended its portfolio by reasonably priced yet powerful modular systems. Lightmaze Solutions offers network operators future-proof intelligent optical network solutions in the storage, metro and inter-regional market segments.

June:

Pandatel brings a new inverse multiplexer with integrated layer-2-switching function and IP routing (layer 3) onto the market, to address the increasingly complex bandwidth requirements of service providers as well as of companies. The INV-MUX-E with its powerful hardware architecture is specially designed for use in IP-based transport and access networks.

Together with Hewlett Packard, Pandatel implements a project in Finland, using an innovative CWDM application.

July:

Within the framework of the takeover of 100% of the shares of Lightmaze Solutions AG, Pandatel enlarges its executive board. Dr.-Ing. Elke Jahn assumes the function of COO (Chief Operating Officer) and Dr.-Ing. Niraj Agrawal the function of CTO (Chief Technical Officer).

The new MACS4000-system presented by Pandatel in this month gives network operators the opportunity to offer their customers a wide range of services, and to realise the simple monitoring of the entire network from one central point. Optical fiber and copper-based modems and converters, as well as multiplexers, can be operated in one subrack.

With the COP-FE, Pandatel presents a TDM multiplexer which can transmit voice data over IP- and Ethernet-based networks which has an attractive price performance ratio. For this reason, the COP-FE is interesting for carriers but also for small and medium-sized businesses.

Together with Avacon, Pandatel AG implements a project in the area of storage applications.

August:

The FOMUX 4000 systems by Pandatel AG were successfully tested with IBM equipment in the IBM TotalStorageProven program. The FOMUX 4000 systems by Pandatel AG can bundle large quantities of data and transmit them over one single optical fiber line, leading to considerable cost reductions on the part of the users.

Pandatel AG, Hamburg, raised its equity capital within the framework of a statutory capital increase from approved capital with cancellation of pre-emption rights for existing shareholders on issues of new shares. With the help of the new shares, part of the purchase price commitment from the takeover of Lightmaze Solutions AG was discharged.

September:

In September, the International Academy of Communications, Arts and Sciences, MerComm, Inc. honored the year-end report 2003 as the „Bronze Winner“ in the category „Interior Design 2003“.

October:

In order to achieve a sustained reduction in operative costs, a substantial cut in the number of employees was carried out. Further restructuring measures are intended to put the company back on a profitable course. Among other things, this includes the comprehensive optimization of the existing product portfolio.

Pandatel delivered the first COP-FE-type appliances to customers in Europe and Asia.

In connection with the consolidation of research and development, the departments merge at one location in Hamburg.

November:

The annual German Equity Capital Forum for investors and analysts took place in Frankfurt am Main; it was also attended by Pandatel.

To stimulate project-based business Pandatel AG increases its technical marketing and participates in major conferences to show presence.

December:

Pandatel terminates operations of the competence center in Israel and transfers its product activities to Hamburg.

At the turn of the year 2004/2005 Pandatel moved its business premises to the present location in Bargkoppelstieg.

At the end of the year the YUMIX 4000 system also passed IBM tests in accordance with the TotalStorageProven program.

Two further devices were approved for series-type production: the C-MUX155 and the COP-FE.

First customers install the new C-MUX-155.

Securing the future

Stabilisation, consolidation and growth objectives determine the activities of Pandatel AG. The company has secured its present market position on this basis and is gearing itself for success in the future

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Pandatel AG is currently going through a difficult phase. Sales and net earnings did not develop as hoped for in 2004, and it was not possible to improve upon the volume of incoming customer orders. This situation requires comprehensive restructuring and reorganisation measures, which the executive board has already initiated and actively implemented. Their main purpose of such measures is to stabilise the existing market position of Pandatel AG. This is accompanied by a reorientation of the company and a focus on key areas in order to address future-oriented markets. This concerted action is intended to stop and reverse the unfavourable trend.

Comprehensive package of measures

The reorientation of Pandatel AG requires a set of coordinated measures and activities covering different areas such as finances, product development and distribution.

The most important measures are:

- optimising costs
- installing lean management
- consolidating the existing product portfolio
- integrating new technologies
- expanding existing market shares
- addressing future-oriented markets

The successful implementation of these measures will make a decisive contribution towards a secure future for Pandatel AG. To what extent have these corrective measures already been implemented and where is the company today? This is described as follows:

Cost optimisation and lean management

The cost factor plays a significant role in the reorientation of Pandatel AG. For this reason the executive board has taken various approaches in order to cut costs in the short and long runs. One approach consists of seriously restricting outsourcing activities and at the same time expanding internal competences in all business areas. In future, product development will be concentrated in three locations in Germany: the headquarters in Hamburg, the Competence Center in Hannover and Lightmaze Solutions AG in Eisingen. For this reason, Pandatel AG has closed down its activities in Israel and transferred them to its headquarter in Hamburg.

Pandatel AG also consolidated the research and development department as well as production and administration in one building at the Hamburg location. The costs connected with separate locations are thus no longer incurred. Additionally, the company benefits from improved internal communication and optimised processes. This means that the core competences of Pandatel AG are concentrated on Germany and are thus quickly available.

This is supported by the introduction of lean management in the entire company: flattened hierarchies and thus faster decision-making determine the new corporate culture; the entire middle management level has been dispensed with.

The American branch Pandatel Inc. was also under close scrutiny from the point of view of cost optimisation. The American market continued to be a difficult one for Pandatel, also in 2004. Among other factors, a further aggravating factor was the strong euro, so

that Pandatel products were subject to enormous price pressures. On account of the disappointing business development and the unfulfilled sales expectations, the executive board reduced the staff of Pandatel Inc. in USA to two persons.

Business areas unchanged

In the future, Pandatel AG will continue to drive its existing business areas, for which the company's portfolio now consists of numerous advanced products with powerful new features. These business areas are:

- **Connectivity products**

In this area, Pandatel AG provides systems and solutions for transmitting and converting data, for example, in order to interconnect two locations and/or to convert data for optimum transmission over the available communication infrastructure.

The product groups relevant to this area are various modems and converters for optical fibres as well as copper cables which in turn are augmented by various rack systems and simple to use management systems.

- **Access multiplexers**

This area comprises all products that are required for connections to a variety of networks. Through so-called data bundling or multiplexing, these products make it possible, among other things, to transmit a large number of data streams over a single channel of the physical medium. With the help of access multiplexers, network operators can, for example, utilise their existing infrastructure better. In case of enterprises such multiplexers allow them to reduce the number of expensive lines which need to be rented from carriers. The product groups in this area are SDH-over-IP multiplexers, IP-over-SDH multiplexers as well as optical fibre based multiplexers.

- **Optical systems**

In this business area, Pandatel AG offers advanced systems for multiplexing various forms of data including those which are used for storage applications. With its highly modular and scalable products Pandatel makes it possible to set up intelligent

optical networks that utilize the network resources with unprecedented efficiency and meet the toughest demands of data throughput and security. The customers benefit from cost-effective and efficient solutions.

The customers of Pandatel AG are network operators, carriers, service providers and corporations which would like to set up new networks for the transmission of voice and data, update and optimise their existing infrastructure to reduce CAPEX and OPEX or are looking for complete solutions from a single source, for example, to set up storage area networks with improved data security or for voice communication using computer networks.

Consolidated product portfolio

In the product sector the management board has taken several measures to reduce the costs related to development and production and to increase the attractiveness and technical capabilities of its various product offerings. Within the defined business areas, therefore, Pandatel AG will in the future concentrate on the products that have proved to be the top performers. This last measure will lead to a significant reduction of the pressure on internal logistics and size of stock. A decision was also taken to streamline the existing product portfolio drastically through consolidation of various products.

In the summer of 2004 Pandatel AG announced the multi access connectivity system MACS4000 within the framework of a product offensive in the area of connectivity products. This new platform consolidates a variety of existing products and connects them to each other in a more economical and practical way. With the new MACS4000 System Key Features (Modularity, versatility, flexibility and in addition simple and comprehensive management), Pandatel is meeting the common and also future requests by numerous network operators for means of centrally monitoring and administering their networks. Such a centralized management system offers network



The MACS4000 system accepts optical fibre and copper modems as well as converters and multiplexers.

operators various advantages: on the one hand, it reduces the amount of service personnel involved, on the other hand it provides their customers with comprehensive services even at moderate to low cost. Moreover, such systems allow the physical media to be more efficiently utilised. In this way, the MACS4000 system allows network operators to benefit from both reduced operating costs and new revenue opportunities.

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The MACS4000 system accepts optical fibre and copper modems as well as converters and multiplexers. The heart of the MACS4000 system is a new management system with which all local and remote components and sub-systems can be operated, managed, monitored and configured. With the MACS4000 system, network operators can, for example, centrally configure the data transport on various modems, converters and multiplexers installed on the customers' premises, and can define service parameters like bandwidth restrictions and service level agreements. In addition, the components in a rack can be monitored in order to detect harmful failures in the system so that corrective actions can be taken in a timely fashion.

The entire system consists of two different rack types, various plug-in modules (OM-F, CM-G, ET-CA and COP-FE) and the relevant management modules. The central management component is the main agent SC-MC, which manages all MACS plug-in modules. Up to eight additional subracks can be connected using the sub-agent board SC-SC. All in all, up to 90 MACS components and the associated remote devices can currently be centrally managed using a main agent: In the near future using a new 24-slot subrack, this capability would increase to as many as 216 local devices and related remote components.

The management system is accessed using a serial RS232 or an Ethernet interface, thereby allowing the MACS4000 system to be administered/managed using a VT100 terminal, Telnet, SNMP and USB based IP-Forwarding protocols. Remote flash Software updates for all system components are possible via VT100 using an XY modem, or through Telnet, using FTP (File Transfer Protocol)

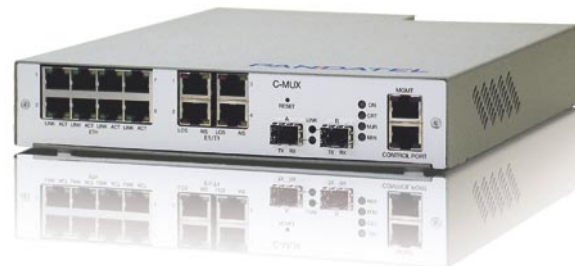
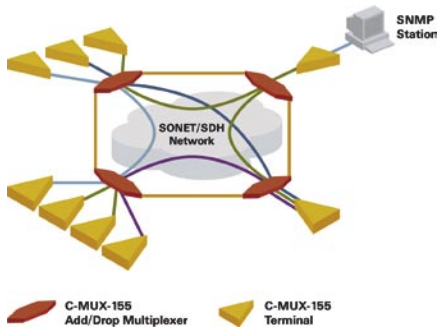
With the new MACSview, the MACS4000 system also offers a web-based management tool which allows the various MACS components to be monitored and configured using a standard web browser. MACSview displays the status of the entire system on a graphical user interface. The graphics automatically show newly installed MACS devices as well as warnings, alarms, and possible faults in the entire system, thereby enabling a quick and easy fault localisation

((Subtitle))

Entry into new market segments

In addition to the consolidation of its existing products, Pandatel also extended its portfolio to include various next generation products. Undertaking of such measures is intended to guarantee entry into future market segments to sustain profitability. This strategy is concretely reflected in several of the new products, which are well matched to the current requirements of growing markets:

Next Generation SONET/SDH Access - the market of the future: On account of new requirements in the past few years, network operators and service providers have registered an increase in bandwidth requirements in their transport networks: while existing networks were predominantly used in the past to transport voice, they are mainly used nowadays to transport data. In the past, the proportion of voice traffic in telecommunication networks was about ninety percent, today it has dropped to only about ten percent. At the same time, the proportion of data in the traffic volume has risen enormously, on account of the Internet, among other things. More and more corporations are also operating their own local area networks (LANs), for example for digital communication by e-mail or for exchanging data with its various branch offices. And since investment costs for internet protocol based technologies have been falling continuously for years, corporations today are increasingly converting their business processes to such technologies.



Versatile connection: thanks to its versatility and flexibility, the C-MUX-155 fits easily into star-type, ring-type and other network topologies

Ethernet is the predominant transport medium for data. As it is reasonably priced as well as easy to implement and to operate in comparison to other technologies, Ethernet will remain the dominating protocol in the future as well. Analysts predict that in the next few years there will be an increasing demand for Ethernet-based services using which the various customers of the carriers will be able to couple their local area networks directly to the city networks or WANs (Wide Area Networks).

Since bandwidth requirements were dominated by voice transmission in the past, carriers have primarily set up TDM networks on the basis of SONET/SDH ring structures for circuit-switched applications. Today, however, a transport network must be able to transmit voice and data equally efficiently, that is, also using the Ethernet protocol. And in technical terms, the classical networks are not prepared for this challenge.

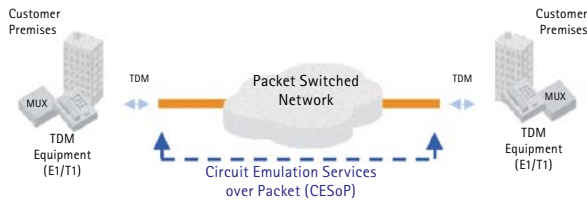
In view of this, network operators will have to optimise their SONET/SDH network utilisation using modern technologies in different fields. However, instead of completely replacing existing infrastructures with packet-oriented (Ethernet-based) networks, for example, most network operators are concentrating on improving the efficiency and flexibility of the existing SONET/SDH networks and adapting them to the new requirements. It is very understandable that the carriers want to protect their existing investments in SONET/SDH networks – about 200 billion US dollars worldwide – and are watching carefully the latest developments and trends in this area. This is where Pandatel AG can help network operators and corporations with its optical multiplexer C-MUX-155, because it is perfectly tailored to meet their today's requirements. Thanks to the virtual concatenation technology (VCAT), the versatile integrated access device (IAD) allows not only the transmission of voice and data applications, but also individually tailored LAN-to-LAN services with fine transmission speed gradations.

The C-MUX-155 is ideal for carriers with a SONET/SDH infrastructure who wish to offer their customers suitably adapted Ethernet and voice services which allows them to achieve optimum utilisation of their transport networks. Furthermore, major corporate customers also benefit from the versatility and flexibility of the C-MUX-155 by coupling the networks of their branch offices in order to transmit data or voice traffic quickly and cheaply using Ethernet, Fast Ethernet or Gigabit Ethernet over carrier networks.

The C-MUX-155 optimises Ethernet-based data transmission via SONET/SDH networks by packing Ethernet packets into virtual containers (VC-12/VT1.5) and linking them up to form one single virtual container by means of virtual concatenation. In this way, the bandwidth of the SONET/SDH connection is optimally utilised; at the same time, the small size of the VC-12/VT1.5 container allows a finely graduated increase in the Ethernet bandwidth in 1 Mbps increments up to the full Fast-Ethernet speed of 100 Mbps. In this way, network operators can provide transmission capacities that are tailored to the individual needs of their customers.

For detailed information on the C-MUX-155 optical multiplexer please refer to the white paper „Efficient data transmission via SONET/SDH networks“, which can be downloaded from the Internet web site of PandatelAG.

Ethernet/IP - the market of the future: The most important trend in this market at the moment is the low-cost telephony using data networks, which more and more corporations are discovering for themselves. No wonder: even for telephone conversations around the globe, only the costs for the internet connections are incurred. For private households this means only the telephone costs for a local call to the next dial-up node into the data network are charged. For corporations with dedicated internet access this implies that no further costs are incurred. Furthermore, telephone numbers are not tied to any location with this technology, and travel with the users, in their luggage, so to



Voice talent: The COP-FE TDM multiplexer by Pandatel for the CESoP standard transmits voice using packet switched networks, thus making Internet telephony possible

say. If you are travelling with your notebook, you can still be reached by phone at your usual number, whether you are in Munich, Paris or Rome – the only precondition is a correctly functioning Internet connection.

Internet telephony is not only suitable for talking to colleagues and workers all over the world very cheaply, but also, for example, for setting up an efficient hotline. If, for example, a customer calls the hotline of a company in Germany, his call is fed into the Internet, forwarded to a call centre abroad and answered by the hotline staff there.

Accordingly, analysts are prophesying lucrative times for the telecom companies that provide their customers with cheap telephony through the Internet and the relevant services and features.

For these reasons, and on account of the trend towards data networks already mentioned in the section „SONET/SDH Access - the market of the future“, many providers would like to switch to data networks in the long term. A precondition for this is a technology that transports the voice over data networks with high quality. A technology that is still young is currently on the up-and-up: Circuit Emulation Service over Packet Switched Network, or CESoP. CESoP offers an ideal migration concept for offering classical voice services on newer packet networks. Since CESoP also takes account of the requirements of Ethernet (metro) networks, it is ideal for network providers. Another factor in favour of CESoP is that the customers of the network providers can continue to use their existing equipment, for example telecommunication systems or dedicatedlines. The new technology also works faster and can transmit more data simultaneously.

Pandatel AG uses this cost saving pioneering CESoP technology in its COP-FE TDM multiplexer, which transmits voice as well as data over a packet backbone. This device is not only interesting for carriers as well as small and medium-sized companies on account of its technical features, but also because of its attractive price-performance ratio: with this device,

low-cost packet-based transport networks in the metro or access sector can be used for any telephony applications, for example call centres, without having to replace existing equipment, such as switches or telephone switchboards. Furthermore, service providers, ISPs and city network providers can use the COP-FE to offer traditional services using cost-effective transport networks and thus gain new customers. Providers of mobile telecommunications networks, for their part, can connect their GSM base stations to the base station control centre using packet switched networks.

The COP-FE transmits voice data from up to four E1/T1 interfaces as well as data from up to two 10/100 BaseT Ethernet LAN interfaces through packet switched networks (PSN). Thanks to port-based double VLAN tagging (Virtual LAN), the data traffic of two different companies can also be transmitted securely and independently using one single unit through the two LAN interfaces.

On the network side, the COP-FE offers two 10/100BaseT copper or 100BaseFX optical fibre interfaces. This allows up to 120 voice lines and up to two LANs to be transmitted using one single Ethernet connection – thus making optimum use of the available bandwidths. Alternatively, the double version of the connection can be used for increased fail-safe characteristics.

For detailed information on the COP-FE TDM multiplexer, please refer to the whitepaper „CESoPSN – Circuit Emulation Service over Packet Switched Network“, which can be downloaded from the Internet web site of Pandatel AG.

Storage networks / City networks / Metro area networks - the market of the future: The development of the access network and the so-called first mile (also frequently called last mile or local loop) is currently one of the greatest challenges for network operators: the distance between the customer and the handover point to the carrier is one of the most important sections in the network with respect to operating costs and investment expenditure.



The YUMIX 4000 hardware platform by Lightmaze Solutions AG allows the reasonably priced setup and operation of extremely flexible infrastructures, even going as far as meshed networks.

There are various reasons for this. For example, the networks of multi-national corporations are becoming more and more complex and are making constantly growing demands on hardware and software. Even today transmission speeds of as large as 1 Gbps are required, and in two to three years speeds of 10 Gbps will be generally available. At the same time, the customers of the carriers are increasingly calling for QoS (Quality of Service) in order to drastically minimise the risk of failure.

A further problem: the variety of data protocols in the networks is increasing and so is the variety of hardware and software. This in turn leads to an increase in the effort and expenditure involved in the design, restructuring and consolidation of customer retention efforts. Globalisation and modern communication applications such as Internet telephony, for example, lead to a constant increase in the quantities of data. For this reason, network operators must be able to provide their customers with additional bandwidth on request. The consequence is: access solutions have to be able to mirror this continuing change in needs at shorter and shorter intervals with as short reaction times as possible.

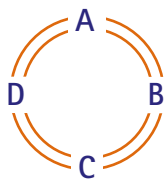
These are not the only challenges providers are facing today: they must provide their customers with individually customized services which allow a demand-based and time-variant allocation of network resources and capacities. With the help of such dynamic services, several users of an optical network can, for example, share one wavelength, which is automatically assigned to them in a specific sequence at defined times; in the event of a line interruption, a dynamic service automatically reroutes the data along a substitute line – a safety measure from which, for example, storage networks can benefit enormously. And with ever larger size of downloads, additional bandwidth could be assigned immediately without the intervention of the administrator.

This shows that carriers and providers today make different demands of an access network: as well as a high level of future orientation and flexibly adaptable topologies with minimum investment expenditure, the main focus is of course on protocol transparency, that is, the independence of the hardware from the type of protocol to be transmitted, as well as the transmission speed, and on the upgrade capability for future product features. In the event of a fault, intelligent network management should support the isolation of the fault. Ideally, irregularities should be detected and reported even before a fault occurs, so that trouble-free operation can be assured pro-actively through precautionary rerouting to redundant lines or hardware components. And finally, carriers and providers would like to offer dynamic services in order to be able to gain new customers and to retain existing customers with new services.

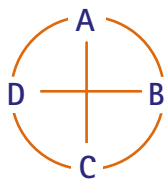
The YUMIX 4000 hardware platform by Lightmaze Solutions AG allows the reasonably priced setup and operation of extremely flexible infrastructures, even going as far as meshed networks. It integrates the most important components of today's optical networks, WDM (Wavelength Division Multiplexing) and TDM (Time Division Multiplexing) with a cross-connect system and combines them with a sophisticated network management system.

Intelligent optical networks on the basis of the YUMIX 4000 hardware differ from conventional optical network structures in various respects which are highly beneficial to the Network operators and providers:

- **Sophisticated redundancy concept** – through the combination of cross-connect and WDM, for example, the data can automatically be rerouted immediately in the event of a line break. This means that in networks with more than three nodes, one-hundred-percent redundancy with double installation can be achieved with only 60 percent of the hardware. Here is an example: a ring with four nodes needs four lines between the individual nodes plus four redundant lines, a total of eight point-to-point (p-t-p) connec-



Ring: 8 links



Mesh: 6 links

tions. If we designate the nodes with the letters A, B, C and D, the ring then has the following connections: A-B, B-C, C-D, D-A. With two further connections, this ring becomes a meshed network: A-C und B-D. This means that there is a total of six p-t-p connections between the nodes. Since the lines do not have to be duplicated, two lines can be saved.

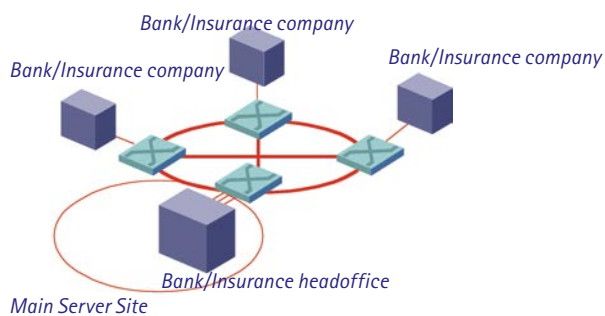
- **Protocol transparency** – YUMIX 4000 systems readily adapt themselves to any new data protocols or services.
- **High flexibility** – thanks to its large bandwidth of 8 Mbps to 2.7 Gbps, the YUMIX 4000 platform can transmit all protocols within this range. At the same time, Quality of Service (QoS) is guaranteed.
- **Support for all types of infrastructure** – YUMIX 4000 supports all types of topologies: point-to-point, point-to-multipoint, ring, and mesh. This means that other locations and nodes can be added without unnecessary additional costs. The system can also be easily integrated in existing structures.
- **Simple expansion of existing infrastructures** – YUMIX 4000 can easily be integrated in existing structures. This significantly simplifies the installation of an infrastructure, thus reducing the costs involved.
- **Intelligent network management** – the integrated management system of the YUMIX 4000 systems monitors and controls every application or wavelength transmitted within the network. In the event of a fault, protection switching is automatically executed and the network provider is sent alarm messages and instructions relating to measures with which the network can be restored to its original state.
- **Dynamic services** – YUMIX 4000 allows new automated dynamic services to be offered, for example day-and-night-switching: during the day, customer A requires a service for running his production. At night, when customer A's production is not active, the same hardware is used for a backup for customer B. These services can be calculated down to the

minute and charged accordingly. Thus operators generate additional revenues.

The core of the YUMIX hardware consists of a cross-connect integrated within a WDM system in one housing. Since the WDM interfaces transmit data at any rate between 8 Mbps and 2.7 Gbps, the network provider gains complete freedom with respect to the applications to be transmitted: hardware which today is used for fast Ethernet, for example, may be used tomorrow for Fibre Channel. Through the integration of a cross-connect, individual applications can be rerouted to at least 20 other neighbouring nodes, as required – this flexibility allows multiple redundancies within any kind of network topology and also enables optimum resource management. In this way, extremely high flexibility is achieved in the physical layer. Besides this redundancy, which is inherent in meshed networks, all levels of hardware redundancy are also available: card, chassis, rack, channel and line protection.

A workstation administers and controls local and remote network nodes. It offers not only conventional element management and network management, but also implements the individual automatic monitoring and control of each individual application or wavelength transmitted within the network. For example, this allows day-night switching to be carried out fully automatically, in order to provide additional resources for backups at night. Network providers can provide individual customers with transmission capacities to meet their requirements, and can invoice them accordingly. And in this way, finally, VPNs (Virtual Private Networks) based on individual transmission channels – that is, wavelengths – can also be set up.

All nodes in a network are linked up with each other, directly or indirectly, by means of an optical supervisory channel. In this way, each node in the network is informed in real time about the status of the entire network. The great advantage here: in the event of a line failure, it is possible to switch to a redundant line in less than 50 milliseconds.



Sights on the storage market: On account of its particular technical features, the YUMIX platform is ideal for setting up reasonably priced and fault-tolerant storage area networks

Switching is effected preferably by means of a matrix switch, which, unlike a fibre switch, does not cause any additional optical power losses. An integrated, redundant matrix switch consistently prevents „Single Points of Failure“ in places with a high level of application bundling, like those that occur in typical fibre switch configurations.

The security concept is rounded off by the optional redundant design of the WDM components, which prevents additional optical power losses caused by duplication. Furthermore, all applications entering and leaving a node are distributed among several independent appliances in order to reduce the risk even further. A maximum of 72 optical channels are possible between one central node and one neighbouring node.

The sophisticated system management of the YUMIX family suppresses unnecessary multiple alarms: in the event of a fault, the network provider immediately receives meaningful alarm messages. At the same time, measures to remedy the fault are initiated fully automatically. The network provider can scan all events that have occurred in chronological order, including the relevant reactions of the network, as well as the current status. Depending on the current network status resulting from the occurrence of a fault and the repair then carried out, suitable manual actions are proposed in order to set the network back into its original, highly secure state.

The YUMIX 4000 platform offers three product series which complement each other and which are designed for different applications: YUMIX 4000 M for metro solutions, E for enterprise solutions and A for access solutions.

The YUMIX 4000 M meets all requirements, from the provisioning of large backbone capacities in large telecommunications networks to the setting up of multi-channel SANs (Storage Area Networks) or VPNs (Virtual Private Networks). The YUMIX 4000 M can easily be integrated in existing networks. In this way, the trans-

mission speed and capacity of the network in question can quickly be increased, depending on requirements.

The YUMIX 4000 E combines the intelligent functions and flexibility of the YUMIX 4000 M systems with the lower cost CWDM interface technology (Coarse WDM). The YUMIX 4000 E unit is thus the ideal solution for regional networks with a smaller number of channels over distances of up to 60 km without signal amplification; with amplification, distances of up to 300 km are possible.

The YUMIX 4000 E is suitable for setting or expanding a SAN as well as for enlarging existing networks, into which it can be seamlessly integrated. Furthermore, at little extra expense this system can be used to set up a VPN by assigning one single customer a fixed channel for any desired duration of time.

The YUMIX 4000 A model is a low-cost CWDM/DWDM solution with 8 channels. The system is specially designed for the „first mile“, that is, the connection of customer site to a carrier network – ideal for the end-to-end provisioning and managing of various services.

On account of its powerful features and the low investment costs involved, the YUMIX 4000 A is ideal as an entry-level solution for setting up an intelligent optical network. All topologies, including meshed networks (mesh) can be realised in conjunction with YUMIX 4000 M or YUMIX 4000 E systems as interconnection points in the branches of a carrier. In this case, the YUMIX 4000 A acts as an access point on the customer site to the public carrier network. Thus the interconnection point can also be set up at the location of the customer – an absolutely unique characteristic of the YUMIX family.

Thanks to its technical features, the YUMIX 4000 A platform is ideal for the use of optical Ethernet in the first mile. With this system, carriers can exploit the many advantages of the Ethernet protocol: they can offer their customers new services such as optical

The YUMIX 4000 E is suitable for setting or expanding a SAN as well as for enlarging existing networks, into which it can be seamlessly integrated.

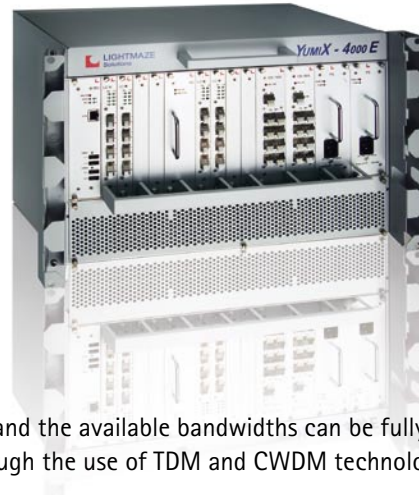
VPNs (Virtual Private Networks) and SANs, or dynamic services such as day-night switching at favourable prices and thus open up new sources of revenues, cut running costs and optimise the deployment process for services.

Communication solutions from a single supplier

A further advantage of the YUMIX platform: it works together smoothly with the rest of the products of Pandatel AG. In this way, Pandatel AG can offer communication solutions for corporations and carriers that are based on carefully matched products from its own portfolio and from the YUMIX family. The main areas here are, for example, solutions for SAN and storage applications, or for metro access.

Communication equipment from a single source offers one decisive advantage: the customer receives a technologically sophisticated, well-rounded, all-in-one solution that meets his/her individual requirements – from one single partner. This saves the customer costs and at the same time guarantees a high level of efficiency, cost-effectiveness and flexibility.

An example of a solution for SAN/storage applications illustrates the advantage of a solution from a single source. It combines TDM multiplexers by Pandatel for the access network with Lightmaze YUMIX 4000 E systems as access points to the carrier network. This combination is specially designed for cost-effective operation: the multiplexers use TDM technology (TDM – Time Division Multiplexing, also called time multiplex) to transmit several independent data streams and the related protocols, time-delayed, using one single channel with a greater bandwidth; if necessary, a conversion from copper to optical fibre cables is also effected. The required bandwidth is provided by the YUMIX 4000 E using CWDM technologies (Coarse Wavelength Division Multiplexing) with optical fibres, the lower-cost WDM version. The advantages of this solution: costs per channel fall, as on the one hand fewer optical components are required and on the oth-



er hand the available bandwidths can be fully utilised through the use of TDM and CWDM technologies.

Communication solutions for MAN access, in turn, combine fibre-optic multiplexers by Pandatel for the access network with Lightmaze YUMIX 4000 M systems as access points to the carrier network. This combination is specially designed for cost-effective operation: the multiplexers transfer several independent data streams, which are provided by copper cable, to the access point via one single optical channel with a greater bandwidth. The connection between the multiplexers and the access point consists of one single pair of optical fibres. The YUMIX 4000 M receives the data stream and feeds it into the carrier network. The user benefits from this solution in different ways: costs per channel fall, since the available bandwidths can be optimally used. At the same time the data are transmitted quickly and securely using optical fibre connections.

Supportive measures

The consolidation of the existing Pandatel's product portfolio as well as the enlargement of its product portfolio with new technologies makes supportive distribution measures necessary*. The conclusion of OEM contracts and the utilisation of existing strategic distribution channels aggressively pushed the market introduction of the C-MUX-155 and the COP-FE. Cooperation partners were given both devices for evaluation purposes. A part of the technical know-how for the development of these devices comes originally from the development centre in Israel, which has meanwhile been closed down. In the field of optical network solutions, the acquisition of Lightmaze Solutions AG helped the company to obtain the relevant know-how. This knowledge is continually being updated and expanded.

With the help of the C-MUX series, Pandatel AG intends to secure and increase its existing market shares in the carrier/access market in all distribution regions. Thanks to the introduction of the COP-FE systems, the company is benefiting from the booming IP/Ethernet

market. The YUMIX platform makes it possible to enter the storage and metro market through the qualification of YUMIX products by existing carriers and partners. In addition, these systems are being used by the first customers of Pandatel AG. Since, as a rule, the evaluation and certification by customers and partners in the carrier and storage environment take three to nine months, the first sales arising from the YUMIX range are expected for the second half of 2005.

Opening up future-oriented markets

In the restructuring process, great attention is paid not only to the product sector but also to distribution. Among other things, great importance is being attached to building up the necessary know-how in order to be able to open up new market segments immediately with the new products.

Pandatel AG has bundled its marketing activities, which are now concentrating on the regions in the world with the highest sales: in view of the existing and planned cooperation with OEM partners in the USA, the company merely reduced the number of employees of Pandatel Inc., and is still represented on the North American continent with the USA branch office. Since the markets in South and Central America are currently growth markets, Pandatel AG is restarting intensive marketing activities there in order to benefit from this trend. Marketing activities in the Middle East are also picking up, and are concentrating mainly on project business with the new products. Furthermore, the marketing sector is building up the storage market once more with the strategic acquisition of new customers.

Facing up to competition

On account of the upward trend of the euro in 2004, Pandatel products were subject to great pricing pressure on the American and Asian markets. Pandatel AG is facing up to this trend with the consolidation of its traditional product portfolio and the resulting cost optimisation, combined with the technical improvement

of its products, which will allow the company to improve its competitiveness in particular in the dollar zone (Asia/USA).

Parallel to this, pricing pressure also increased on the carrier and access markets, mainly due to the growing competition from Asia. Pandatel AG is countering this massive pressure by speeding up its entry into project business with the main emphasis on the storage and metro markets; this business is intended to assure rising margins and increasing sales in future.

Well positioned

Thanks to the comprehensive restructuring and reorganisation measures which the management board introduced and actively accompanied in 2004, Pandatel AG is on the road to stabilisation and consolidation. Through cost optimisation, maintenance and expansion of its existing product portfolio as well as the development of future-oriented markets with the help of new technologies, the company will be able to reinforce its present market position and take the road to success in the long term.

Group management report Pandatel AG

Fiscal 2004

For Pandatel, the year 2004 was characterized by comprehensive reorganization and restructuring measures. The reorientation introduced is intended to stabilize the position of Pandatel on the market and lead to a positive turnaround in sales and net earnings.

Pandatel can look back on an eventful year in 2004. The continued product and marketing offensive in the first half of 2004 did not lead to the expected improvement in the order situation, which, on the contrary, remained below the level of the previous year. Since the negative trend in sales and earnings developments continued, Pandatel introduced radical measures with the intention of reorienting the company. Two main objectives had priority: strategically reorienting Pandatel in future growth markets and lowering costs in the long term.

Pandatel repositioned itself through investment in the growth markets of IP and SDH/SONET technologies. The acquisition of Lightmaze Solutions AG is intended to allow Pandatel to catch up with the continually growing market for storage area networks and with the metro segment, which has gained fresh impetus again. To achieve sustained cuts in costs, Pandatel has, among other things, introduced measures to reduce the workforce, as well as other ongoing restructuring activities. Having repositioned itself in this way, Pandatel hopes to achieve a substantial upward trend in sales and earnings for the year 2005.

Stable development on the market

In 2004, the global economy showed a stable development. Thanks to booming exports, the German economy showed significant growth¹ for the first time after three years of stagnation. This tendency also influenced telecommunications, which is expecting a sustained favorable development in 2005. One indication of the recovery in this sector: more and more telecommunications companies are intensifying their investments in advertising efforts. Various manufacturers are also expecting above-average growth in the industry for the year 2005. Leading network providers like Cisco Deutschland, for example, expect an above-average development in the fields of informa-

tion technology (IT) and telecommunications (TC)². The significance of optical technologies in the storage, telecommunications and IT network markets is also expected to increase: experts forecast an average annual growth rate of almost 20 percent over a period of ten to twelve years³.

The purchasing behavior of system integrators and network operators in 2004 is characterized by various trends: on the one hand they preferred all-in-one network solutions, in order to reduce service and operational expenditures – OPEX – in the long term. On the other hand, purchasing costs are increasingly playing a greater role in making purchasing decisions, since investment costs (Capital Expenditures – CAPEX) can no longer be passed on automatically to the end user, not even in the communications sector.

Sales trends 2004

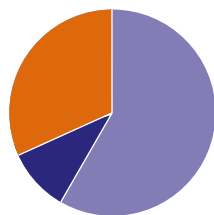
Within the framework of its product offensive, Pandatel announced urgently required new products in 2004; however, the introduction of these into the market has been delayed until the year 2005. Despite the continuing enormous financial investment in the field of development, the sales planned on the basis of new products could not be achieved because of shortcomings with respect to schedule effectiveness and the cost effectiveness of the newly developed technologies. For this reason, the sales developments of the company became decoupled from general market trends last year.

Sales fell once more in comparison to the previous year, and the development of quarterly sales was less definite compared with historical sales trends. In the fourth quarter of 2004, Pandatel experienced an increase in sales of merely € 0.07 million compared to the third quarter of 2004. All in all, annual sales of Pandatel amounted to € 14.9 million, while it had amounted to € 20.1 million in 2003. This corresponds

¹FTD 13.01.2005

²ComputerPartner 07.01.2005

³SmartCaps Juni/Juli 2004



Sales revenues by division in %

■ Connectivity Product:	58.2%
■ Access Multiplexers:	31.8%
■ WDM/Optical Networks:	10.0%

to a drop of 25.9%. The cause of this is presumably the delayed market introduction of new products, some of which have been with cooperation partners since the end of 2004 for evaluation, as well as the enormous price pressure in the networking equipment infrastructure sector which the traditional product portfolio of Pandatel was exposed to.

The number of orders received also declined: in the financial year 2004, Pandatel experienced a reduction in incoming orders of 25.7%, corresponding to € 14.2 million (2003: € 19.1 million). On the cut-off date 31.12.2004, Pandatel had orders in hand amounting to € 1.2 million compared with € 1.9 million in the previous year.

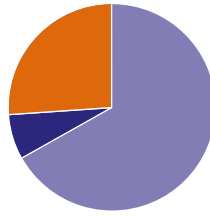
The proportion of foreign sales was 82.9% in 2004 (2003: 85.9%). The EMEA region (Europe, Middle East, Africa) proved to be the front-runner, as it had been the year before. Compared to the other regions it showed a smaller decline in sales of 20.6%, from € 12.6 million to € 10.0 million. The regions of Great Britain as well as France made the largest contributions here. By contrast, the regions of Eastern Europe, the Americas as well as Asia Pacific generated the lowest sales. The two last-named regions reported sales of only € 5.0 million compared with € 7.5 million the year before. This development can be attributed to various reasons: besides the continuing upward trend of the euro, through which Pandatel products were subject to enormous price pressure in the American and Asian markets, the US economy was also predominantly cautious in the run-up to the US elections. In the course of the eastern expansion of the EU in May 2004, many European companies were hesitant to invest, as they were already thinking of relocating their capacities to Eastern Europe, which in turn could lead to an enormous weakening of purchasing power in the „old EU territories“. Percentually, the American continent showed the greatest losses. While sales amounting to € 2.1 million had been achieved in the previous year, this figure dropped to € 1.0 million in 2004. The US market remains difficult for Pandatel, as a medium-sized European manufacturer in the telecommunications sector. Repeated restructuring efforts by the US subsidiary Pandatel Inc. did not lead to the expected result.

Since the development of sales and earnings remained below expectations in the first three quarters of 2004, Pandatel was obliged to take exceptional restructuring measures in October 2004. Under the direction of the executive board, the optimization of all corporate divisions was introduced, in particular in the fields of development, marketing and production. The hierarchy flattening measures introduced by the executive board in the course of this reorganization are intended to allow the company to react more quickly to changes in the market in future.

A turnaround in the direction of rising sales is to be achieved through three measures: firstly by comprehensive cost optimization in the traditional product portfolio (correction/optimization of the range of products), secondly by the rapid market introduction of the new products originally planned for 2004, and thirdly through the aggressive entry into the market segments of optical storage area and metro networks, which are showing signs of healthy growth again and whose technology Pandatel acquired with the takeover of Lightmaze Solutions AG.

Furthermore, the executive board is working on OEM agreements with cooperation partners, with the objective of quickly making the new products available to a broad customer base worldwide. Pandatel expects the first sales from these OEM agreements in the financial year 2005.

At the beginning of the 2004 financial year, Pandatel reclassified its business divisions and replaced the divisions Optical Networks, Telecommunications and Industrial Communications with the divisions Connectivity Products, Access Multiplexers and WDM/Optical Systems. On the whole, expectations in the field of Connectivity Products were not fulfilled. The share of Connectivity Products in total sales amounted to 58.2%, the share of Access Multiplexers was 31.8% and the share of Optical Systems amounted to 10.0%.



Sales revenues by region in %

EMEA:	66.8%
Asia Pacific:	26.2%
The Americas:	7.0%

Result

On account of the further drop in sales of € 5.2 million compared with the year before, the continuing pressure on profit margins as well as the one-time reorganization costs, among other things for the restructuring and personnel measures carried out, the company once more showed an unfavorable result. Before interest and taxes (EBIT), Pandatel suffered losses in the amount of € 15.8 million compared with € 8.2 million in the year before the annual surplus reached –€ 15.7 million (2003: € –5.7 million). Pandatel thus showed net earnings per share of –€ 2.08

(2003: –€ 0.78.) Before account was taken of extraordinary expenditure (TEUR 2,583) net earnings per share amounted to € –1.73.

Essentially, the restructuring costs in the financial year 2004 result from the reduction in the workforce in the entire Pandatel group, from the streamlining of the traditional product portfolio and from reserves for current contractual obligations in the form of rents for buildings and material acceptance obligations. These one-time costs are expected to amount to € 2.6 million, but should ease the overall costs of the company by about € 2.5 million in 2005.

The costs for the Competence Centre in Israel represent an item in the amount of € 1.5 million. In the course of the reorganization measures, the closure of the development location in Israel was initiated and the technical know-how transferred from Israel to the development units in Germany. The costs of € 1.5 million are thus no longer due in 2005, which will further reduce the pressure on the cost side.

With a total of € 0.7 million, the American subsidiary contributed towards the increase in the annual deficit. The cause is the weak business development of Pandatel Inc. In future, the company will act purely as a sales company with a staff of two.

With the consolidation measures introduced in October 2004, Pandatel has laid the foundation for a healthy business trend in fiscal 2005. The executive board and the supervisory board have consulted closely in introducing the reconstruction measures and are closely monitoring the situation.

Financial position

Sales and earnings trends in 2004 clearly fell short of the targets. Nevertheless, Pandatel's financial position is adequate. On 31.12.2004, the capital-to-assets ratio was 89.4%, and the balance refers to liquid funds in the amount of € 9.9 million (without securities). Parallel to the regressive business trend, the balance sheet total fell from € 45.1 million in the previous year to € 33.0 million in 2004. This development is particularly due to the reduction in liquid funds from € 22.4 million to € 9.9 million, although trade accounts receivable fell by € 1.9 million. The purchase price of Lightmaze Solutions AG, also caused the stock of liquid funds to fall accordingly.

In the financial year 2004, Pandatel invested a total of € 7.1 million in intangible assets and tangible assets, corresponding to a propensity to invest of 47.7% (2003: 6.3%). Goodwill in the course of the acquisition of Lightmaze Solutions AG accounted for the largest share of this, € 4.3 million.

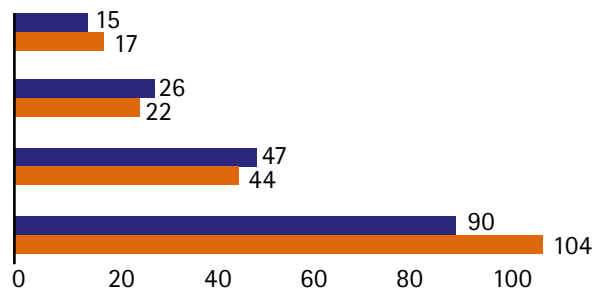
Capital measures

The resolution of the 2004 Annual General Meeting gave the executive board the authorization to raise the equity capital of the company with cancellation of pre-emption rights for shareholders on issues of new shares. In August, the executive board and the supervisory board passed a resolution to raise the equity capital of the company by € 670,806.00 from € 7,225,000.00 to € 7,895,806.00 by issuing 670,806 individual bearer share certificates with cancellation of pre-emption rights for shareholders on issues of new shares. The execution of the capital increase was entered in the Commercial Register of Hamburg Local Court in November 2004. Of the shares issued, the founders and executive board members of Lightmaze Solutions AG, Dr. Elke Jahn and Dr. Niraj Agrawal, each received 335,403 shares. The shares were granted as counter-performance for the acquisition of the shares of Lightmaze Solutions AG. The remaining part of the purchase price was paid in cash. The capital increase having been effected, the approved capital amounts to € 2,929,194.

Employees by corporate division

■ 2003
■ 2004

Purchasing, IT, finance
Administration, executive board
Distribution, marketing
Development, quality assurance, production



External development companies and main technological areas

In July 2003, Pandatel founded the Competence Centre in Kfar Saba, Israel, in order to deal with internal bottlenecks in development capacities. After initial difficulties in transferring the products from Israel to Hamburg, individual sales were made in 2004 on the basis of the technologies developed in Israel. In the course of the concentration on Germany as the development location, the first steps were taken in autumn 2004 to close down the location in Israel.

With the acquisition of Lightmaze Solutions AG, a company specializing in cost-effective optical network solutions, in May 2004, Pandatel expanded its German development capacities by adding competencies in the field of optical data communication.

Today, these measures give Pandatel the opportunity to concentrate its core competencies in Germany. In this way, internal communication paths are shortened and development activities can be streamlined.

Despite the considerable consumption of its liquid funds, Pandatel remains faithful to its policy of modernization of the product portfolio in order to be able to obtain access to future market segments. As the main new products, the C-MUX-155 and the COP-FE were placed at the disposal of cooperation partners for evaluation purposes. The YUMIX 4000 series by Lightmaze was put into use by Pandatel's first customers.

These products meet current market requirements in various categories:

- The optical STM-1 multiplexer C-MUX-155 gives Pandatel access to the SDH/SONET technology. It is particularly suitable for modern Ethernet services. Thanks to virtual concatenation (VCAT), this multiplexer supports not only the transmission of voice and data applications as an integrated access device, but also individually tailored LAN-to-LAN services in highly granulated speed gradations.
- Pandatel is entering the IP technology sector with the COP-FE. This device is a TDM multiplexer (Time Division Multiplexing) for the CESoP (Circuit Emulation Services over Package) standard for the transmission of voice data using packet-based networks.

The COP-FE thus represents a low-cost alternative to VoIP.

- The YUMIX 4000 system gives Pandatel access to optical storage area networking and metro technologies. On account of its outstanding power features and the low investment costs involved, the system is ideal as an entry-level solution for setting up cost-effective, intelligent optical networks: the protocol-transparent platform supports data rates from 8 Mbps to 2.7 Gbps over distances of 60 to 100 kilometers without signal amplification. All in all, distances of up to 300 kilometers are possible.

In order to consolidate its position as system provider of all-in-one solutions and as a reliable partner for major international groups, Pandatel has selected products tested for compatibility, for example with systems by IBM.

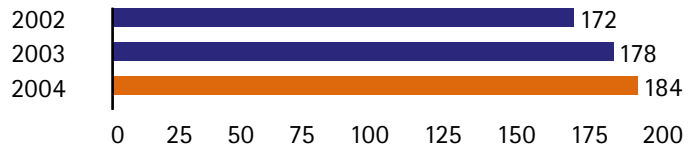
With the intention of facing up to the world pricing pressure, Pandatel always carries out cost redesigns of its traditional product portfolio and is going over to outsourcing standard production processes.

Staff

In fiscal 2004, the Pandatel Group employed an average of 184 staff, not counting the executive board (2003: 178). These figures do not yet completely reflect the restructuring measures taken, since they only become legally effective at the end of the 2004 financial year or at the end of the second quarter of 2005. There were 169 staff in full-time employment and 15 in part-time employment. In Paris and London, as well as in Madrid, the company has 4 employees (2003: 3).

Classified according to the individual corporate divisions, Pandatel employed 60 persons in research and development, 3 persons in quality assurance, 41 persons in production, 17 persons in the field of purchasing, IT and finance, 19 persons in administration and warehousing, as well as 44 persons in distribution and marketing. This list does not include the three members of the executive board. The personnel figures of Lightmaze Solutions AG have been included in these statistics since 01.07.2004. The annual average, of the number of employees at Lightmaze was 26. In the third

Average number of employees by year



quarter of 2004 the figure was 26, in the fourth quarter of 2004 it was 24.

Changes in the executive board

Heinrich-J. Kraus left the executive board with effect as per 1st April 2004. Norbert Wienck therefore acted as sole board member until 30th June 2004. After the acquisition of Lightmaze Solutions AG, the number of members of the executive board rose to 3 persons on 1st July 2004. Dr.-Ing. Elke Jahn assumed the function of COO (Chief Operating Officer) and is responsible for the areas of marketing and distribution. Dr.-Ing. Niraj Agrawal assumed the function of CTO (Chief Technical Officer) and is responsible for the divisions of research and development.

its worldwide business dealings. The company has installed a comprehensive risk management system for the early detection, communication and overcoming of risks.

An essential component of Pandatel's risk management system is early risk detection: with the help of a matrix, individual risk factors are systematically identified and assessed at intervals. Any risks detected are recorded and documented with respect to their possible effects and the likelihood of their occurrence. Besides market and economy-related risks, company-related risks from all areas of the company that may have a great effect on business trends, financial situation and net earnings are assessed. Incoming orders, economic data and the results of market studies by international research institutes contribute to the assessment of the forecasts and the likelihood of their occurrence; wide-ranging projects, investment and restructuring are also taken into account in the assessment of risk.

The overall assessment of the risk potentials from the past financial year and the implementation of the planned projects show that only the current situation of AUGUSTA Technologie AG has an indirect influence on the assets, finance and earnings situation of the company and therefore on its continued existence:

Current situation of AUGUSTA Technologie AG as sole parent company

The principal shareholder AUGUSTA Technologie AG, which has a 51.43% holding in the company, is currently undergoing financial restructuring measures. The main reason is a convertible bond with a nominal volume of 75 million euro due for repayment on 15th February 2005.

AUGUSTA Technology AG could not meet this financial commitment, so that a concept for restructuring the convertible bond was worked out in 2004; on the basis of this concept, the bond holders are to waive their rights and claims arising from the individual portions held by them of the convertible bond, against the acceptance of young shares (debt-equity swap), within the framework of a waiver offer. On 4th November 2004 a creditors' meeting agreed to extend the bond

Corporate governance

In the sense of regular and open communication, Pandatel also implements the recommendations and suggestions of the German Corporate Governance Code. This code summarizes the rules applicable in Germany for responsible management and simultaneous monitoring of a company. The objective is to make these rules transparent for national and international investors and to reinforce confidence in the management of German companies. We largely follow the very latest versions of the recommendations and implement them in the Pandatel group accordingly. Pandatel explains deviations from the recommendations in detail in the Statement of Compliance, most of which derive from circumstances in the company. Pandatel has published the Statement of Compliance by the executive board and the supervisory board, with its few exceptions, on its homepage at www.pandatel.de >Investor Relations.

In accordance with the resolution passed at the last Annual General Meeting, Pandatel has implemented a further recommendation of the Code and imposed an age limit of 65 years for members of the Supervisory Board.

Risk management

As a globally operating company, Pandatel is exposed to a number of risks inseparably connected with its entrepreneurial activities, within the framework of

by three years and to reduce the interest rate to 0%. This took place under the suspensive condition that (1) an extraordinary general meeting of the company should pass an increase in the non-monetary capital of the company, ruling out the subscription right of the shareholders, by 15th January 2005, in the course of which the bond holders shall be able to convert their bonds into shares of the company and (2) that an acceptance rate of the waiver offer of at least 95 % of the outstanding nominal value of the bond should be achieved. The necessary capital measures for the implementation of the offer were passed at an extraordinary company general meeting on 7th January 2005.

A further creditors' meeting on 11th February 2005 reformulated the resolutions of the creditors' meeting of 4th November 2004 and also resolved to reduce the acceptance rate to at least 80 %. This rate was reached on 14th February 2005, so that the maturity period of the convertible bond has now been extended until 4th November 2007, with simultaneous reduction of the interest rate to 0 % up to but not including 15th February 2007.

These resolutions are subject to the dissolving condition that the capital measures that were passed at the general meeting of 7th January 2005 should be entered into the Commercial Register by 30th June 2005.

The suspension of the financial commitment arising from the convertible bond, in consideration of the aforesaid condition, has thus been resolved, and AUGUSTA Technologie AG has thus averted the short-term insolvency risk.

Risks arising from economic influences

Risks arising from overall economic trends may especially result from changes in political or economic factors. On the sales side, the general economic development has an influence on business. The current weakness of the economy and the enormous pressure on the US dollar require an adaptation of the cost structure and the optimization of the processes and of the organization.

Risks arising from changes in the market environment

Economic and market risks include not only the general economy and the economy in specific sectors, but also the appearance on the market of new competitors which have competitive advantages or which are created through the merger of different companies (consolidation in the telecommunications sector). Pandatel counters these risks by including OEM products in its product portfolio, and by entering into strategic alliances and distribution cooperation agreements. Increasing pricing pressure on sales markets, in particular in distribution territories with the US dollar as the trading currency, requires a suitable cost structure and reduced production costs.

The company is reliant on national and international suppliers for obtaining components. Dependence on individual outside suppliers is limited by permanent market observation and the examination of alternative components. Risks arising from product liability are regarded as low. In the past, no product liability claims were filed against Pandatel; Pandatel has a product liability insurance. All quality assurance and protection measures are subject to constant observation and optimization. The quality management system is certified in accordance with international standards.

Risks arising from the loss of competitiveness

The traditional product portfolio of Pandatel is subject to increasing pricing pressure from low-wage suppliers from Asia. From a technological point of view, Pandatel's objective is to position itself on the market as a reasonably priced, innovative manufacturer through the modernization and reorientation of its range of products. Since the innovation cycles are very short in these technologies, there is a risk that a product may be out of date after a relatively short period of time and is thus in need of modernization. In order to maintain its innovative strength, the company is investing in technical know-how as well as leaner and shorter development cycles (time-to-market). The roadmap, which describes the products to be developed, is constantly being updated. In order to be able to carry out new developments and customer-specific developments at the same time, in accordance with the sched-

ules defined in the development roadmap, Pandatel is using third-party development less and less frequently. This allows Pandatel to guarantee its customers an increasingly uniform, high-quality product portfolio, in technical terms, as well as fast reactions for customer-specific adaptations.

The success of distribution is closely linked to the distribution channels. The distribution structure of Pandatel involves the risk of a limited dependency on distributors. The permanent opening up of new distribution channels contributes towards minimizing this risk. Pandatel is currently developing new products, and at the same time entry into future-oriented markets, the IP/Ethernet market, the SONET/SDH market and the optical SAN/metro market is being pushed. For the further development of Pandatel, it is important that these measures should begin to take effect in 2005.

Further risks

The cautiously favorable, but still sensitive overall economic situation on some markets also involves various financial risks in future: for example delays in payment by customers or difficulty in collecting receivables. In order to minimize these risks, Pandatel examines the credit standing of customers and if necessary supplies its products against cash in advance. On account of its worldwide activities, the company is exposed to currency and interest rate risks, in particular because of the exchange rate fluctuations of the US dollar against the euro. Risks arising from financial transactions are subject to monitoring by a treasury management body in conjunction with the house banks. Derivatives were not concluded in the financial year 2004.

Business risks also include those resulting from acquisitions, investments as well as research and development. These activities are necessary for the continued existence of the company on account of their future orientation, but they are also risky because of the related uncertainties. Operative risks are controlled and reduced by careful examinations in advance and by permanent project controlling.

Acquisitions and strategic alliances are always fraught with risks, since employees, technologies and products

have to be integrated and coordinated with each other. There is also a risk that the acquired technologies may lose value on account of unforeseen business or market developments. In order to limit these risks, clear processes have been defined for acquisitions; these processes include not only the executive board but also the supervisory board, and if required also the Annual General Meeting of the shareholder.

Pandatel's business may be threatened not only by the risks mentioned above but also by risks which are unknown at the present point in time or which are currently regarded as negligible.

Dependence report

On account of the present majority holding of currently 51.43% by AUGUSTA Technologie AG, Pandatel is obliged to draw up a dependence report in accordance with § 312 German Stock Corporation Law. This report was drawn up by the executive board of the company and examined and attested within the framework of the year-end audit.

The result of the dependence report is as follows: „The executive board of Pandatel hereby states, in accordance with § 312 German Stock Corporation Law, that in the legal transactions listed in the dependence report, according to the facts that were known at the point in time the legal transactions were effected, the company received reasonable counter-performances in each legal transaction, was not discriminated against, and no measures were taken to the disadvantage of the company.“

Special events after the end of the financial year

In January 2005 the CEO Norbert Wienck departed the executive board. The board members Dr.-Ing. Elke Jahn and Dr.-Ing. Niraj Agrawal shall remain in the executive board and assume the executive board duties of the departed CEO. Ralph Breuling, who, since Mid-January, performs the function of Commercial Director in the company, shall assume responsibility for the commercial management of the company.

In order to further reduce running costs and to improve internal communication, Pandatel moved its business premises to the present location in Bargkoppeltstieg at the turn of the year 2004/2005 and gave up its premises in Fasanenweg. This shortens internal communication paths within the company and improves coordination processes considerably.

Within the framework of the capital increase registered in 2004, the new shares are expected to be admitted to the Prime Standard of the Frankfurt Securities Exchange in March 2005. Price setting and inclusion of the new shares in the official listing is expected to take place in March 2005. The equity capital of Pandatel Aktiengesellschaft is now 7,895,806.00 euro and is divided into 7,895,806 individual bearer share certificates with a calculated nominal value of 1.00 euro each. After this capital increase has been effected, the approved capital amounts to 2,929,194.00 euro. On 10th January 2005 the executive board passed a resolution to effect the merger of Lightmaze Solutions AG with Pandatel AG retroactively with effect from 1st January 2005. To finally implement the merger, appropriate resolutions by the supervisory board and the General Meeting of Lightmaze Solutions AG, as well as the entry of the merger in the Commercial Register, are necessary. Within Pandatel AG, Lightmaze Solutions AG will assume responsibility for the field of research and development.

Developments in 2005

Since Pandatel had already taken various optimization measures at the end of the financial year, e.g. personnel measures as well as restructuring in distribution and development, the company expects a significant reduction of the pressure on the cost side of approx. € 2.5 million in 2005. The management of the company has made a total sales figure of € 19 million its target for the financial year 2005. With the market introduction of new products and the creation of the relevant distribution channels in 2005, the executive board of Pandatel intends to open up new market segments in order to achieve its sales targets. For example, the establishment of distribution channels geared mainly to op-

tical networks for project transactions is planned, with the main focus on the storage and metro markets. With the products of Lightmaze Solutions AG, Pandatel has currently submitted offers in the amount of € 11 million. Of this, the company expects an award rate of 20%.

Many providers in the telecommunication sector are looking confidently into the future. Leading providers expect that the IT and telecom sectors will show above-average growth. This is likely to lead to a further strengthening of the market. For the financial year 2005, analysts expect growth in investment in the telecommunications infrastructure to continue. The main focus here is on system solutions in the field of metro access, DSL technology on an optical fiber basis as well as the expansion of next-generation mobile telephone networks (UMTS).

After a general streamlining, Pandatel is concentrating on the cost optimization of the traditional product portfolio and on access to future-oriented markets through new products, since the traditional product portfolio of the company is facing massive pricing pressures from Asia. Pandatel intends to regain the confidence of its customers in Pandatel as a high-tech company with the help of innovative products. Future strategic alliances with cooperation partners will establish the recently introduced reorientation of the company on an increasingly stable sales basis. In this way, Pandatel intends to stabilize and expand its present position on the telecommunications market, but at the same time speed up its entry into the future-oriented markets of IP/Ethernet, SDH/SONET and optical storage/metro markets.

Hamburg, 28th February 2005

Dr.-Ing. Elke Jahn (COO)
Member of the Executive Board

Dr.-Ing. Niraj Agrawal (CTO)
Member of the Executive Board

The Share

The German stock market was relatively quiet in 2004, and only threatened to nose downwards after the terrorist attack in Madrid. By comparison, the Pandatel share went down more or less sharply in the course of the year and closed down 76.6% at the end of the year.

The German stock market

Last year the German stock market was spared major turbulence, since the general global economy also showed a stable development. The German share index DAX reported a rise of 7.3% for the year. In the last quarter, the falling prices for crude oil as well as greater earnings expectations for 2005 contributed particularly to this trend. This also led to greater basic stability on the market. The DAX fluctuated within a narrow corridor from 3,700 to 4,200 points throughout the whole year. This single-digit increase in value is near the historical mean of 6.8 percent which was established by the Deutsche Aktieninstitut (German Share Institute). The only exceptions to this are the erratic upward and downward price movements in the DAX's recent past. During this period, the fluctuations were in the double-digit percentage range, which represent-

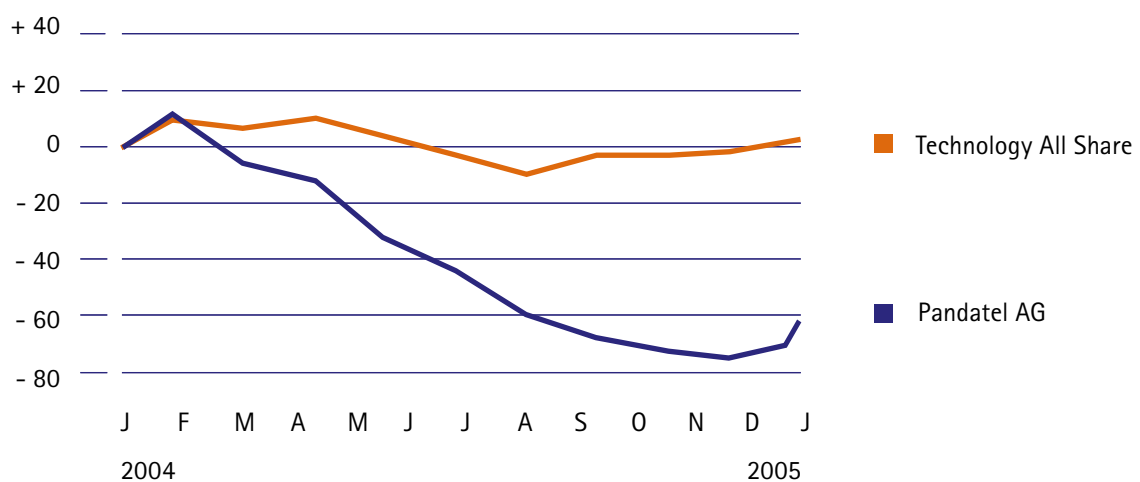
ed a fairly unusual development. The American market also closed the 2004 stock market year with a slight increase (9%), which can be attributed, among other things, to the drop in the oil price.

After a successful stock market year in 2003, the TecDAX lost about 6% in value last year. In contrast, the NASDAQ was able to register a slight increase of about 6%. While technology equities still proved to be the motor of the stock market in 2003, earnings this year have mostly been up and down. However, most of these shares recovered in the fourth quarter.

The Pandatel share

The curve of the Pandatel share price in 2004 reflects the unfavorable events of the past financial year. At the end of the year the share registered a drop in value of 76.6%, while the Technology All Share Index

Performance of the Pandatel share compared to reference indice in %



showed a stable development in 2004 with a slight increase of only 2.48%. The declining trend of the Pandatel share price hit its all-year low on 29.12.2004 with a value of € 1.09. On 30.12.2004 the share closed at a price of € 1.10. After the end of the financial year, the share hit a new low of € 1.06 on 04.01.2005. Since then it has stabilized at a low level, and is showing a slight upward trend with a growth of € 0.50 by 07.02.2005. In this period the TecDAX also showed moderate growth, corresponding to the generally cautious yet nevertheless slightly optimistic mood on the market.

Analysts and investors

The interest on the part of analysts in the Pandatel share in 2004 focused on several significant events, for example the changes in the executive board, the takeover of Lightmaze, the increase in capital stock, the sales forecasts as well as the restructuring and reorientation of the company initiated in October. With the entry in the Commercial Register of the capital increase decided on in August 2004 because of the

Lightmaze takeover, the holding of AUGUSTA Technologie AG was diluted from 56.2% to 51.43%. In view of the muted interest, the market capitalization of Pandatel was about € 8 million on the target date. Last year, two analysts' conferences were held by the executive board, and numerous individual discussions were conducted with securities analysts. Much interest was paid in particular to the presentation of the reorientation of the company as well as to the restructuring measures introduced. In its reports, Pandatel always tries to be as transparent as possible and to satisfy the interest of the investors.

No dividend payout

In order to further maintain the substance of the company, the executive board intends to dispense with the distribution of a dividend in 2004. Instead, it intends to use the existing liquidity to effect the necessary investment in development as well as in sales and marketing, and thus to ensure significantly improved earnings for the company.

The share key data	2004
ISIN	DE 000 691 630 7
Number of shares	7,225,000
Closing price yearend	4.70 €
52-week high	5.99 €
52-week low	1.09 €
Yearend closing price	1.10 €
Market capitalization at yearend	8.0 Mio. €
Market capitalization of free floats at yearend	3.5 Mio. €
Earnings per share	-2.08 €
Shareholder's equity per share	4.08 €

Corporate Governance

To ensure regular and open communication, Pandatel is also implementing the recommendations and suggestions of the German Corporate Governance Code. The code contains the regulations applicable in Germany for responsible leadership and for monitoring the company at the same time. The aim is to render these rules transparent for national and international investors and thereby strengthen confidence in the management of German companies. Most of the recommended rules have already been an integral part of corporate communications as practiced at Pandatel for quite some time. Any deviations from these recommendations will most likely result from practical considerations based on circumstances within the Company, and will be explained in detail in the declaration of compliance. You can find a copy of the declaration published by the Executive and Supervisory Boards, including the few exceptions, on the company's homepage www.pandatel.com and by clicking "Investor Relations".

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In accordance with the decision reached at previous year's Annual General Meeting, Pandatel now complies with even one more standard of the Codex: Pandatel introduced an upper age limit of 65 years for members of the Supervisory Board and revised its Articles of Association accordingly.

Declaration of compliance in accordance with art. 161 of the stock corporation act (AktG)

Declaration by the Executive Board and Supervisory Board of Pandatel AG, Hamburg, on the recommendations of the „Government Commission on the German Corporate Governance Code“ in accordance with Art. 161 of the Stock Corporation Act (AktG)

According to the Executive Board and the Supervisory Board, Pandatel AG complies with all recommendations of the „Government Commission on the German Corporate Government Codex“ as amended on 21 May 2003 published by the Federal Ministry of Justice in the official part of the Federal Gazette („Bundesanzeiger“) on 4 July 2003 excluding the following:

Sub-paragraph 3.8

The German Corporate Government Codex recommends to agree upon an appropriate deductible when taking out a Directors & Officers Insurance. The insurance policy taken out for the board members of Pandatel AG does not provide for a deductible.

Pandatel AG is not of the opinion that the recommended deductible would improve the motivation and responsibility with which the members of the Managing Board and the Supervisory Board fulfil their obligations.

Sub-paragraph 4.2.3

The German Corporate Government Codex recommends to report the compensation of the members of the Executive Board as well as details of a stock option program or comparable instruments containing long-term incentive components and components with risk character on the company's internet page in a suitable form and to specify them in the annual report. Pandatel discloses neither the compensation system of the members of the Executive Board on its internet page nor in its annual report. The compensation system does not comprise a stock option program or comparable components.

Since the compensation system of the Executive Board does not comprise a stock option program or comparable components Pandatel does not disclose any related information.

Sub-paragraph 4.2.4

The German Corporate Government Codex recommends to report the compensation of the members of the Executive Board in the Notes of the Consolidated Financial Statements. The figures should be individualized. Pandatel publishes the compensation of the members of the Executive Board not individualized, but as total sum.

In the opinion of Pandatel AG such individualized disclosure infringes the Executive Board members' rights to privacy.

Sub-paragraph 5.3.1

The German Corporate Government Codex recommends the Supervisory Board to form committees with sufficient experience depending on the specifics of the enterprise and the number of its members. The Supervisory Board of Pandatel AG consists of three members and does not form any committees.

Since the Supervisory Board has only three members, it does not consider it necessary to establish committees.

Sub-paragraph 5.3.2

The German Corporate Government Codex recommends that the Supervisory Board shall set up an Audit Committee. The Supervisory Board of Pandatel AG did not set up an Audit Committee.

Pandatel's Supervisory Board convenes regular meetings to keep its members informed. Therefore, the Supervisory Board does not consider it necessary to establish Audit Committees.

Pandatel AG Hamburg, December 2004

Executive Board Supervisory Board

*For further information please visit the following web site:
<http://www.corporate-governance-code.de/index-e.html>*

Report of the Supervisory Board

In fiscal 2004, the Supervisory Board advised and regularly monitored the work of the Executive Board and was kept constantly informed by the Executive Board on the business situation at Pandatel AG and its subsidiaries in the form of written and oral reports.

Matters which required the involvement of the Supervisory Board were duly addressed in accordance with legislative regulations and the Articles of Association. The Supervisory Board examined all the relevant business occurrences and, in the course of regular meetings with the Executive Board, discussed the business development, strategy and the main events of the company. In the twelve months under review, the Supervisory Board convened at four ordinary meetings and four extraordinary meetings. The meetings were attended by all Supervisory Board members. At these meetings, among other things the business situation at Pandatel AG and its associated companies was discussed as well as the future corporate policy and questions relating to acquisitions and the strategic direction of the company. The Executive Board made detailed, up-to-date and in-depth reports on the development of business, the situation of the company as well as the strategy and future planning. In addition to the scheduled meetings, the members of the Supervisory Board and the Executive Board repeatedly met to exchange ideas and information. The Supervisory Board was therefore kept permanently informed on business developments.

The Supervisory Board regards the German Corporate Governance Code as an important step towards developing the practice of company management and control. For this reason, the implementation of the Code was repeatedly an issue at meetings. The Supervisory Board heeded the recommendation of regularly examining the efficiency of its activities by means of a comprehensive questionnaire. In December 2004, the Supervisory Board and Executive Board for the sec-

ond time jointly submitted a declaration of compliance pursuant to section 161 German Stock Corporation Act. The declaration has been published on the company's Internet page.

The following changes took place in fiscal 2004 in the organs of the company compared with a year earlier: at March 31, 2004, Heinrich-J. Kraus, CEO of Pandatel, left the company. A few months later only after the takeover of Lightmaze Solutions AG, its founders Dr.-Ing. Elke Jahn, now COO, and Dr.-Ing. Niraj Agrawal, now CTO, joined the Executive Board.

The financial statements and consolidated financial statements at December 31, 2004, and the management reports of the company and the group for financial 2004, all of which were prepared by the Executive Board, have been examined by the auditors appointed at the Annual General Meeting, Dr. Ebner, Dr. Stolz und Partner GmbH Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Hannover. The auditors found them to concur with the duly maintained accounts and statutory regulations. The auditors have issued an unqualified opinion on the financial statements and the consolidated financial statements. The auditors participated in the Supervisory Board meeting on March 9, 2005, at which the annual accounts were adopted, commented on the findings of the audit and answered questions. The Supervisory Board has examined the financial statements and the consolidated financial statements as well as the management reports of the company and the group on the basis of the auditors' report and has no cause for objection. The Supervisory Board has approved the financial statements and

the consolidated financial statements drawn up by the Executive Board. The financial statements for the year have thus been adopted.

The auditors furnished the following opinion on the report of the Executive Board on the relations to the affiliated companies in accordance with section 312 German Stock Corporation Act:

"Having duly conducted our examination and assessment, we hereby confirm that

- the factual statements made in the report are correct,
- the company's performance in the legal transactions enumerated in the report was not inappropriately high."

The Supervisory Board concurs with the auditors' report. Following the final examination of the audit by the Supervisory Board, we raise no objections to the explanation by the Executive Board at the end of the report regarding the relations to the associated companies.

The Supervisory Board would like to thank the Executive Board for its activities and its commitment to the company. At the same time, the Supervisory Board would like to extend its thanks to all the staff members of Pandatel AG for their dedication in 2004.

The Supervisory Board

Frankfurt, March 9, 2005

Axel Haas, Chairman

Dr. Steffen Leistner

Prof. Dr. Uwe Hannig





Consolidated Financial Statements

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Consolidated Balance Sheet at December 31, 2004

Assets		31/12/2004	31/12/2003
	Notes	€ 000	€ 000
Current assets			
Cash and cash equivalents	(1)	9,879	22,425
Short-term investments/Marketable securities	(2)	3,858	2,820
Trade accounts receivable (net)	(3)	3,640	5,547
Inventories	(4)	4,604	7,366
Deferred taxes	(18)	0	48
Prepaid expenses and other current assets	(5)	313	638
Total current assets		22,294	38,844
Non-current assets			
Property, plant and equipment (net)	(6)	2,352	1,926
Intangible assets (net)	(6)	5,816	1,231
Deferred taxes	(18)	2,066	2,990
Other assets	(7)	459	83
Total non-current assets		10,693	6,230
Total assets		32,987	45,074

<u>Liabilities and Shareholders' Equity</u>			
		31/12/2004	31/12/2003
	Notes	€ 000	€ 000
<u>Current liabilities</u>			
Trade accounts payable		599	969
Liabilities against affiliated companies	(8)	15	25
Accrued expenses	(9)	1,760	873
Accruals and liabilities for income taxes	(10)	147	138
Deferred taxes	(18)	263	0
Other current liabilities	(11)	717	544
Total current liabilities		3,501	2,549
<u>Shareholders' equity</u>			
	(12)		
No-par value shares with a nominal value of € 1.00; at December 31, 2004: 2,929,194 (2003: 2,800,000) units authorized, 7,895,806 (2003: 7,225,000) issued and in circulation			
		7,896	7,225
Capital reserves		21,471	33,408
Unappropriated profit (incl. retained earnings)		0	2,014
Changes in shareholders' equity not affecting earnings		119	-122
Total shareholders' equity		29,486	42,525
Total liabilities and shareholders' equity		32,987	45,074

Consolidated Income Statement

	Notes	2004 € 000	2003 € 000
Sales		14,907	20,066
Cost of production		-11,922	-11,899
Gross profit from sales		2,985	8,167
Sales costs	(13)	-4,836	-6,500
General and administrative expenses	(14)	-4,314	-4,849
Research and development expenses		-6,995	-5,085
Other operating income	(15)	234	251
Operating income		-12,926	-8,016
Interest income	(16)	288	732
Losses from foreign exchange	(17)	-285	-233
Earnings before taxes		-12,923	-7,517
Income tax	(18)	-187	1,846
Earnings from ordinary business operations		-13,110	-5,671
Extraordinary expenses	(19)	-2,583	0
Net loss		-15,693	-5,671
Earnings per share (diluted and undiluted) in EUR	(20)	-2.08	-0.78
Earnings per share before extraordinary expenditures (diluted and undiluted) in EUR	(20)	-1.73	-0.78

Consolidated Statement of Cash Flow

€ 000	2004	2003
Net loss for the year before payment of extraordinary expenses	-14,778	-5,671
Depreciation on intangible and tangible assets	1,313	1,407
Personnel expenses for stock options	254	276
Profit/loss from sales of tangible assets	3	47
Disbursement from extraordinary items	-915	0
Cash flow	-14,123	-3,941
Changes in		
trade accounts receivable	1,907	47
inventories	3,067	386
other assets which cannot be classified as investing or financing activities	131	1,684
Changes in		
trade accounts payable	-364	404
deferred taxes	653	-1,813
other liabilities which cannot be classified as investing or financing activities	1,111	-402
Changes in cash and cash equivalents of limited availability	-393	-41
Cash flows from operating activities	-8,011	-3,676
Income from disposals of fixed assets	71	57
Payments for investments in tangible assets	-1,137	-729
Payments for investments in intangible assets	-3,862	-529
Income from the sale of available-for-sale securities	0	2,488
Payments for investments in financial assets	0	-12
Cash flows from investing activities	-4,928	1,275
Payments to company proprietors (dividends)	0	0
Cash flows from financing activities	0	0
Changes in cash balances impacting earnings	-12,939	-2,401
Cash and cash equivalents at beginning of period	22,384	24,785
Cash and cash equivalent at end of period	9,445	22,384
Cash and cash equivalents at end of the period comprise the following items:		
Cash deposits	9,879	22,425
Less Cash and cash equivalents of limited availability	-434	-41
	9,445	22,384
Interest paid	4	3
Tax paid (+)/received (-)	-56	-1,763
Investing activities not affecting costs:		
Acquisition of subsidiaries:		
Goodwill	1,688	
Purchase of assets	920	
Cash acquired	397	
Liabilities transferred	-448	
Purchase price obligations not affecting costs	2,160	

Statement of Changes in Shareholders' Equity

	Shares	SUBSCRIBED CAPITAL Amount € 000	Capital reserves € 000
At December 31, 2002	7,225,000	7,225	33,132
Allocation to profit reserves	-	-	-
Dividends	-	-	-
Stock option program	-	-	276
Net loss for the year	-	-	-
Unrealized share-price and currency differences after deducting taxes of € -68,000	-	-	-
Unrealized share-price and currency differences after deducting taxes of € 0	-	-	-
At December 31, 2003	7,225,000	7,225	33,408
Non-cash capital contribution	670,806	671	1,489
Stock option program	-	-	254
Net loss for the year	-	-	-
Offsetting the net loss for the year against the revenue reserves	-	-	-
Offsetting the net loss for the year against the capital reserves	-	-	-13,680
Unrealized share-price and currency differences after deducting taxes of € 266,000	-	-	-
Unrealized share-price and currency differences after deducting taxes of € 0	-	-	-
At December 31, 2004	7,895,806	7,896	21,471

OTHER CHANGES IN SHAREHOLDERS' EQUITY NOT AFFECTING EARNINGS

Revenue reserves € 000	Profit brought forward € 000	Accumulated exchange rate adjustments € 000	Available-for-sale securities € 000	Total shareholders' equity € 000
3,023	4,662	89	-208	47,923
-	-	-	-	-
-	-	-	-	276
-	-5,671	-	-	-5,671
-	-	-131	208	77
-	-	-	-80	-80
3,023	-1,009	-42	-80	42,525
-	-	-	-	2,160
-	-	-	-	254
-	-15,694	-	-	-15,694
-3,023	3,023	-	-	-
-	13,680	-	-	-
-	-	283	-	283
-	-	-	-42	-42
-	-	241	-122	29,486
-	-	119	-	-

Consolidated Statement of Fixed Assets

	COST OF ACQUISITION AND PRODUCTION			
	1/1/2004	Additions from the acquisitions of Lightmaze Solutions AG	Additions	Disposals
	€ 000	€ 000	€ 000	€ 000
I. Intangible assets				
1. Licenses and software	2,950	983	263	614
2. Goodwill	0	4,349	0	0
	2,950	5,332	263	614
II. Tangible assets				
1. Land and buildings incl. Buildings on external premises	441	0	56	230
2. Technical plant and machinery	347	0	377	130
3. Other plant, factory and business equipment	4,556	699	333	276
	5,344	699	766	636
	8,294	6,031	1,029	1,250

Reclassification	CUMULATIVE DEPRECIATION						BOOK VALUE		
	31/1/2004	1/1/2004	Additions from the acquisitions of Lightmaze Solutions AG	Additions	Disposals	Reclassification	31/1/2004	31/1/2004	31/12/2003
€ 000	€ 000		€ 000	€ 000	€ 000	€ 000	€ 000	€ 000	€ 000
0	3,582	1,719	98	648	350	0	2,115	1,467	1,231
0	4,349	0	0	0	0	0	0	4,349	0
0	7,931	1,719	98	648	350	0	2,115	5,816	1,231
0	267	144	0	46	85	0	105	162	297
0	594	207	0	29	72	0	164	430	140
0	5,312	3,067	115	590	220	0	3,552	1,760	1,489
0	6,173	3,418	115	665	377	0	3,821	2,352	1,926
0	14,104	5,137	213	1,313	727	0	5,936	8,168	3,157

Notes to the Consolidated Financial Statements

(A) The company

Pandatel Aktiengesellschaft, Hamburg, came about from the transformation of Pan Dacom Telekommunikation GmbH, Hamburg, which commenced operations in 1987. The transformation into Pandatel Aktiengesellschaft, Hamburg, was resolved on March 30, 1999, and entered in the Commercial Register of the Hamburg District Court on May 14, 1999, under registration number HRB 71126. The object of Pandatel Aktiengesellschaft, Hamburg, is to develop, produce and trade in telecom systems and all activities directly or indirectly related to this.

Pandatel develops, produces and distributes active components for network access and network transmission. Examples of products are multiplexers, modems and the software for managing these systems. Two operating facilities are maintained in Hamburg and one in Hanover; the company also has representative offices in France and the UK as well as subsidiaries in Singapore, the USA, Germany and Israel. The subsidiary in Germany was acquired in May 2004. The subsidiary in Israel was closed on December 31, 2004. It served as one of the competence centers for research and development.

The technical know-how as well as the fixed assets were transferred from Israel to the development units in Germany.

(B) Summary of the main accounting and valuation principles

Accounting principles

These consolidated financial statements have been prepared in line with US Generally Accepted Accounting Principles (US GAAP) and are denominated in euro (€).

These financial statements release the company from its duties under section 292a HGB (German Commercial Code). The individual financial statements of Pandatel Aktiengesellschaft pursuant to HGB and the consolidated financial statements of the Pandatel group pursuant to US GAAP will be published in the German Federal Gazette.

Scope of consolidation

The consolidated financial statements include not only Pandatel Aktiengesellschaft but also the following companies in which Pandatel Aktiengesellschaft has a controlling financial interest (100% of the voting rights): Pandatel Inc. USA, Pandatel Asia Pacific Pte Ltd, Singapore, Pandatel Ltd., Israel, as well as Lightmaze Solutions AG, Eisingen.

In May 2004, Pandatel acquired 100% of Lightmaze Solutions AG, Eisingen, Germany, specialist in the development of optical network solutions, for the purchase price of € 6,000,000. The purchase price is composed of a cash payment of € 3,840,000 and a non-cash capital contribution of € 2,160,000. Through this acquisition, Pandatel expanded its development capacities and competences in the field of optical data communication. Lightmaze Solutions AG was included in the consolidated financial statement for the first time on 1st July 2004 (point in time of the economic transfer). The following assets and liabilities were included in the consolidated balance sheet on the initial effective consolidation date:

Assets:		
- Short-term assets		
- Liquid funds	€ 000	397
- Stocks	€ 000	797
Other short-term assets	€ 000	22
- Long-term assets		
Tangible fixed assets	€ 000	697
Goodwill	€ 000	4,349
Other intangible assets	€ 000	983
Total assets	€ 000	7,245
Liabilities:		
- Short-term liabilities		
Trade creditors	€ 000	17
Operating reserves	€ 000	93
Liability reserves and liabilities from taxes	€ 000	20
Deferred taxes	€ 000	1,084
Other short-term liabilities	€ 000	31
Total liabilities	€ 000	1,245

The other intangible assets essentially contain three patents. Depreciation shall be effected over a service life of five years. Lightmaze Solutions AG and the goodwill are to be assigned to the region EMEA and the business unit Optical Systems (see also the Section „Notes on Business Units“). The earnings contribution of Lightmaze Solutions AG to the consolidated earnings amounted to € -338,000 in the financial year. Pandatel Ltd., Israel, was closed as per December 31, 2004.

Consolidation principles

The statements of the individual companies were drawn up in line with uniform accounting and valuation principles in order to facilitate their inclusion in the consolidated financial statements. All companies included in the consolidation use the same recording date for the statements. The capital consolidation has been undertaken by offsetting the cost of acquisition against the proportionate stake in the shareholders' capital of the subsidiary at the time of first inclusion in the consolidation. A difference remained as a result of the first consolidation of Lightmaze Solutions AG amounting to € 4,348,749.47. Loans and other receivables and liabilities between the consolidated companies are offset against each other.

Income from intra-group sales as well as other intra-group income is offset against the corresponding expenses. Interim earnings or losses have been eliminated.

Translation of financial statements into foreign currency

Assets and liabilities carried by the foreign subsidiaries included in the consolidation whose functional currency is the respective local currency have been translated into euro at the exchange rate valid on the recording date. The shareholders' equity was translated at the exchange rate valid on the date of the respective transaction. For the purposes of the consolidated financial statements, the income statement and the statement of cash flow of these foreign subsidiaries were translated into euro at the average exchange rate of the fiscal year.

Notes to the Consolidated Financial Statements

Estimates used in preparing the financial statements

In order to prepare the financial statements, the Executive Board must make estimates and assumptions on matters that affect the amounts of the assets and liabilities in the balance sheet, the items in the income statement and the statement of cash flow, as well as on the statements in the explanatory notes. These estimates and assumptions can deviate from actual occurrences.

Currency translation

Receivables, cash and cash equivalents and liabilities in foreign currencies were translated at the exchange rate valid on the date of acquisition. Short-term receivables and liabilities have been entered at the rate applicable on the balance sheet date.

Cash and cash equivalents

Cash and cash equivalents include cash balances, current balances with banks, as well as time deposits with original terms of up to three months. Cash and cash equivalents which serve as collateral and to which the company has no access are not contained in the cash and cash equivalents. They are shown under other non-current assets. For the purposes of the statement of cash flow, cash and cash equivalents with limited access have not been included in the cash and cash equivalents.

Financial derivatives

Pandatel Aktiengesellschaft applies the Statement of Financial Accounting Standards (SFAS) 133 "Accounting for Derivative Instruments and Hedging Activities" in the version currently valid. These accounting standards require that all financial derivatives are shown at market value, regardless of the purpose or intention underlying the transaction. Changes in the market value of the financial derivatives are recorded on an accrual basis either in the operating result or shown in the shareholders' equity (as part of the other changes in the shareholders' equity which do not affect the operating profit), depending on whether a fair value hedge is concerned or a cash flow hedge. No derivative financial instruments were used in the financial year 2004.

Securities

Pandatel AG holds available-for-sale securities in its floating assets. These are made available to the company as required and are evaluated at market value at the end of the financial year. Unrealised profits and losses less any deferred taxes payable on them are shown success-neutrally as components of the „Result-neutral changes in the shareholders' equity“. Unrealized losses that are not only of a temporary nature necessitate a write-down on the securities that is shown in the income statement. Pandatel does not hold any securities for trading purposes. In the period under review, no securities from the floating assets were sold.

Receivables

Receivables are shown at their nominal value, less value adjustments for expected defaults.

Inventories

Raw materials and auxiliary operating materials as well as merchandise are entered at cost of acquisition at the lower of cost or market. Finished goods are valued at cost of production. Cost of production encompasses the cost of materials and wages entailed in production, as well as the material and production overheads, which have to be carried as assets according to tax law. Interest on borrowed capital is not shown as an asset. To the extent that risks to inventories exist, for example for lower usability after longer warehousing or excess inventories, appropriate deductions for storage have been charged. From 1st July 2006, products containing leaded components may no

longer be used. For this reason, in the year under review, Pandatel for the first time effected depreciation of products containing leaded components that will presumably not have been used up or sold by 30th June 2006. With the exception of the customary retention of title, inventories are not subject to the rights of third parties.

Tangible assets

Tangible assets are valued at cost of acquisition or cost of production and are written down across their useful lives according to the straight-line depreciation method. The following useful lives have been assumed:

	Years
External plants and leasehold fixtures	10
Technical plant and machinery	5 - 13
Fixtures, furniture and office equipment	3 - 14
Vehicle pool	5 - 6
Office installations	3 - 13
Tools	5
Minor-value goods	1

Intangible assets

Intangible assets include software, licenses and similar rights. In July 2001, the Financial Accounting Standards Board (FASB) passed the Statement of Financial Accounting Standards (SFAS) 141 "Business Combinations", and SFAS 142 "Goodwill and Other Intangible Assets". Since January 1, 2002, in accordance with these new regulations, the company writes down the intangible assets with limited useful life using the straight-line method over a probable useful life to the residual book value. These calculations are based on the following service durations:

	Years
Website	3
Software	3
Firmware	3 - 10

The full amount of the licences acquired from the merger with the former 100% subsidiaries Pan Dacom Produktion GmbH and Pan Dacom Elektronik-Entwicklung GmbH was written off in the year under review. In addition, other intangible assets exist with unlimited useful economic life. They comprise the goodwill for Light-maze Solutions AG, Eisingen, acquired in 2004, which is subject to an annual impairment test.

Value impairment of durable and intangible assets

Long-term and intangible assets are examined for value impairment if events or changes have arisen that indicate that the net book value of the asset could no longer be obtained through sale. Should facts or circumstances lead us to conclude that value impairment has indeed occurred, the net book value of the asset is then compared with future estimated income from its sale. If necessary, the figure is written down to the lower value.

Financial assets

The financial assets are shown at cost of acquisition.

Notes to the Consolidated Financial Statements

Reserves and liabilities

Reserves are formed for uncertain liabilities and impending losses if there is a likelihood that an obligation exists and the amount of the claim or loss can be estimated with sufficient accuracy.

Liabilities are carried at the amounts repayable. Short-term liabilities in foreign currency are valued at the exchange rate valid at the end of the fiscal year.

Realization of sales

Sales are realized with the rendering of services in accordance with the conditions agreed. Sales revenues take discounts, customer bonuses and cash discounts into account. Reserves are formed, if essential, for sales-or-return transactions in the appropriate amount. The basis for this is the ratio of returns of the last two fiscal years to the corresponding sales.

Product-related expenses

Outlays relating to unit sales are entered in the income statement at the time they are incurred. Accruals for guarantees are formed at the time of the sale of the product.

Sales costs

Advertising costs and other sales expenses are credited directly to the income.

Research and development expenses

Research and development expenses are also credited directly to the income.

Remuneration in the form of stock options

The company carries its stock options in accordance with the market value method. Accordingly, personnel expense for the period through to the date on which the options can no longer expire is calculated on the basis of the market value of the option at the subscription date. The expense thus calculated is possibly not indicative of the corresponding burdens of future reporting periods.

Income taxes

Taxes on income are calculated on the basis of the so-called liability method in line with the Statement of Financial Accounting Standards 109 "Accounting for Income Taxes". Deferred taxes are computed for the expected future tax bill from differences in the valuation of assets and liabilities for tax purposes and the values carried in the financial statements. The valuation of these deferred taxes relies on the tax rates applicable at the time of reporting. The impact of changes in the tax rates is factored into the income statement in the year in which the alterations take effect. Depending on future feasibility, value adjustments are made, if necessary, on the tax deferrals.

Earnings and diluted earnings per share

The earnings per share are calculated from the weighted number of outstanding ordinary shares, including equity-like securities. Equity-like securities for remuneration in the form of stock options are not included in the calculation if they reduce the diluting effect on earnings.

Implications of new accounting principles

In November 2002, the Emerging Issues Task Force EITF adopted Issue 00-21 "Accounting for Revenue Arrangements With Multiple Deliverables". The EITF decided that the breakdown of sales in contractual relationships with multiple deliverables and revenue components must be shown in separate units of accounting if the individual elements have value to the customer on a standalone basis, an objective record exists of the fair value of the goods and services yet to be delivered and no return rights or additional payment guarantees exist on the part of the company. EITF Issue No. 00-21 is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The application of regulations in accordance with EITF Issue 00-21 did not have any significant implications for the operating result and financial situation of the company.

In November 2002, the FASB issued FASB Interpretation 45 "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" (FIN 45). FIN 45 demands that the guarantor recognizes a liability when issuing a guarantee in the amount of the time value of the obligation from the guarantee. The introduction of these directives concerning contents and valuation did not have any influence on the operating result and financial situation of the company.

In December 2002, the FASB published SFAS 148 "Accounting for Stock-Based Compensation. Transition and Disclosure", an addition to SFAS 123 "Accounting for Stock-Based Compensation". The changes according to SFAS 148 aim to create alternative transition methods for a change to the fair value method when entering employee stock-based compensation into the accounts. This statement also has implications for the disclosure regulations in the annual and interim reports with regard to the accounting methods for employee stock-based compensation and with regard to the effect of the methods used in accounting. The application of regulations according to SFAS 148 did not have any repercussions for the financial statements of Pandatel Aktiengesellschaft.

In January 2003, the FASB issued FASB Interpretation No. 46 "Consolidation of Variable Interest Entities" (FIN 46) and adopted a revised version of this interpretation in December 2003. It deals with the consolidation of companies that are not controlled by voting rights or where the shareholders do not carry the loss risk. According to the new interpretation, the assets, liabilities and earnings of a business unit, which represents a "Variable Interest Entity" according to the definition in FASB Interpretation No. 46, are included in the consolidated financial statements if a company owns a majority financial stake in this company. The Interpretation provides guidance on how to identify "Variable Interest Entities" and how to value a company's influence in a business unit of this kind in order to decide whether this business unit should be included in the group's income statement. The regulations of FIN 46 are to be immediately applied to all "Variable Interest Entities" which came into existence after January 31, 2003. "Variable Interest Entities" which existed before February 1, 2003, must be consolidated if the company was the primary beneficiary in the fourth quarter of fiscal 2003. The application of the regulations in accordance with FASB Interpretation No. 46 had no implications for the financial statements of Pandatel Aktiengesellschaft.

In April 2003, the FASB issued SFAS No. 149 "Amendment of Statement 133 on Derivative Instruments and Hedging Activities". This statement amends and clarifies financial accounting and reporting for derivative instruments under SFAS 133:

Notes to the Consolidated Financial Statements

"Accounting for Derivative Instruments and Hedging Activities", including certain derivative instruments embedded in other contracts and for hedging activities. SFAS 149 must be applied for all derivative instruments, including those embedded in certain contracts that were entered into or modified after June 30, 2003; and for hedging relationships designated after June 30, 2003. The adoption of SFAS 149 did not have any significant implications for the operating result and financial situation of the company.

In May 2003, the FASB published SFAS 150 "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity". This statement amends the accounting regulations for certain financial instruments which could be employed by the issuer as equity capital according to the previous directives to the extent that these particular financial instruments must now be recorded as liabilities. SFAS 150 must be applied to all agreements on financial instruments entered into or modified after May 31, 2003. Otherwise the regulations become effective from the beginning of the first interim period which begins after June 15, 2003. The accounting method according to SFAS 150 did not have any significant implications for the operating result and financial situation of the company.

In December 2003 the FASB published the revision of SFAS 132 „Employers' Disclosures about Pensions and Other Postretirement Benefits", which lays down the disclosures of the employer with respect to obligations arising from pension plans and other postretirement benefits. This standard does not change the approach and evaluation of such obligations. SFAS 132 (revised) basically retains the disclosures of the original statement FAS 132 and revises some selected disclosures. In addition, further disclosures relating to the affected assets, obligations, cash flows and pension expenditure of the financial year arising from pensions and other postretirement benefits are required. This is of no relevance for Pandatel.

On 24th November 2004 the FASB published SFAS 151 „Inventory Cost – an amendment of ARB No 43, Chapter 4", new provisions concerning the evaluation of inventories. SFAS 151 confirms the necessity for unusually high expenditure for vacancies, waste, freight and processing in the period concerned to be collected to affect net income. Furthermore, fixed costs are to be allocated to production on the basis of normal production capacity in future. The new standard is potentially mandatory for financial years beginning after 15th June 2005, whereby prior application is permitted. Accounting in accordance with SFAS 151 has no appreciable effect on the operating results and the financial situation of the company.

In December 2004 the FASB published SFAS 152 „Accounting for Real-Estate Time-Sharing Transactions – an amendment of FASB Statements No. 66 and 67", which deals with time sharing transactions in the property sector. This is of no relevance for Pandatel.

In December 2004 the FASB also published SFAS 153 „Exchanges of Nonmonetary Assets – an amendment of APB Opinion No 29", which applies for financial years beginning after 15th June 2005. This standard stipulates that non-monetary assets acquired through exchange should always be evaluated on the basis of the fair value of the exchanged objects. Accounting in accordance with SFAS 153 has no appreciable effect on the operating results and the financial situation of the company.

In December 2004 a revised SFAS 123 „Share-Based Payment" was also published; this provides for the expense-effective registration of share-based payment systems such as stock options. The revised standard has no significant influence on the operating results and the financial situation of the company.

(C) Explanatory notes**(1) Cash and cash equivalents**

€ 000	31/12/2004	31/12/2003
Current account	6,684	1,025
Overnight money euros	0	200
Time deposits	3,195	21,200
	9,879	22,425

No non-realized losses from exchange rates were derived of at the balance sheet date (2003: € 5,000). Funds of limited availability, in the amount of € 434,000 (previous year: € 41,000) are shown under miscellaneous other current assets.

(2) Short-term investments/Marketable securities

The company has no speculative intentions as regards the securities held, nor does it intend to retain these until maturity. The securities are therefore classified as available for sale and can be sold as required.

€ 000	Cost of acquisition	Stock exchange or market value	Unrealized profits	Unrealized losses
Papers securitizing outside capital	3,900	3,858	0	42

The marketable securities available on the balance sheet date relate to euro floaters (maturing 2009) as well as to one guarantee index certificate directly relating to Dow Jones Euro Stoxx 50 (maturing 2007). The guarantee index certificate directly related to Dow Jones Euro Stoxx 50 was purchased in 2004. In addition, domestic fund shares (unlimited life) with original acquisition costs of € 11,410,000 were obtained and sold at a market value of € 11,468,000. These are two different securities. The profit that accrued from this amounted to a total of € 58,000. No losses occurred.

Profits or losses from the sale of marketable securities accrued in the previous year in the amounts of € 16,000 (profits) and € 106,000 (losses).

On the balance sheet date December 31, 2004, unrealized price losses exist in the amount of € 42,000 (2002: € 80,000). No deferred taxes are to be recorded for 2004 and the previous year, as the value adjustment of the securities has already been made in the tax balance sheet.

Notes to the Consolidated Financial Statements

(3) Trade accounts receivable (net)

€ 000	31/12/2004	31/12/2003
Gross receivables	4,245	6,071
less value adjustments	605	524
	3,640	5,547

The value adjustments primarily concern customers from Europe.

(4) Inventories

The inventories are comprised as follows:

€ 000	31/12/2004	31/12/2003
Raw materials and auxiliaries	2,337	3,562
Unfinished goods and work in progress	524	1,986
Finished goods and services	1,417	1,608
Merchandise	133	210
Deposits paid	193	0
	4,604	7,366

The depreciation of stocks amounts to € 5,164,000 (previous year: € 3,838,000), of which € 1,213,000 (previous year € 0) relates to the depreciation of products with leaded components.

(5) Pre-paid expenses and other current assets

€ 000	31/12/2004	31/12/2003
Tax refund claims (VAT and income taxes)	231	508
Interest receivable	6	29
Pre-paid expenses	38	56
Other	38	45
	313	638

(6) Tangible and intangible assets

The structure and movement of the fixed assets are presented in the consolidated statement of fixed assets in this report. The increase in goodwill results from the acquisition of Lightmaze Solutions AG in 2004. The acquisition cost was € 6,000,000. This goodwill is subject to an annual impairment test and is not subject to regular write-downs.

The impairment test in 2004 was based on planning according to which Lightmaze Solutions AG will in future be solely responsible for the development activities of Pandatel AG; no further sales activities of its own are planned. In this connection, Lightmaze Solutions AG is to merge with Pandatel AG retroactively with effect from 1st January 2005. To this extent, the value of the participating interest in Lightmaze Solutions AG can only be assessed by taking account of the business development of Pandatel AG. The value of the goodwill of Lightmaze Solutions AG is substantiated by means of a DCF-based determination of the earning power of Pandatel AG, which is based on the agreed targeted goal. An additional confirmation of plausibility was effected on the basis of the estimated future earnings contributions of the then merged Lightmaze Solutions AG. Unfavourable deviations from the targeted goal could influence the value of the goodwill revealed.

The additions to the license rights result from the purchase of product rights, other modules of the ERP software proAlpha as well as database programs and other software for application programs. In future, the write-downs on intangible assets are expected to comprise the following amounts:

The full amount of the licences acquired from the merger with the former 100% subsidiaries Pan Dacom Produktion GmbH and Pan Dacom Elektronik-Entwicklung GmbH (book value on 1st January 2004: € 264,000) was written off in the year under review within the framework of the reorientation of the company. Regular depreciation (€ 53,000) was shown in the cost of sales, extraordinary depreciation (€ 211,000) was shown in the extraordinary expenditure.

	€ m
2005	0.7
2006	0.7
2007	0.3
2008	0.2
2009	0.1

In 2003, the write-down on intangible assets amounted to € 608,000. The increase in tangible fixed assets largely relate to the purchase of measurement and test equipment, cars, as well as fixtures, furniture and office equipment.

Since the location in Fasanenweg, Hamburg, was given up, the tenants' installations there (144,000) were fully written off out of schedule. On account of the connection with the restructuring measures, verification of depreciation is shown in extraordinary expenses.

In fiscal 2004, a profit resulted from the disposal of fixed assets of € 11, 000 (2003: € 46,000) and losses of € 14,000 (2003: € 5,000). These are shown under other expenses/income.

Notes to the Consolidated Financial Statements

(7) Other assets

€ 000	31/12/2004	31/12/2003
Rent deposits	4	8
Cash deposited as collateral	434	41
Other	21	34
	459	83

(8) Liabilities towards associated companies

There are liabilities in the amount of € 15,000 (previous year: € 25,000) vis-à-vis Augusta Technologie AG.

(9) Accrued expenses

€ 000	31/12/2004	31/12/2003
Outstanding staff remuneration	0	203
Holiday entitlement not taken	141	185
Guarantees	42	57
Reserves for restructuring measures	1,313	0
Other	264	428
	1,760	873

The reserves for restructuring measures related primarily to discharges within the restructuring.

Furthermore, liabilities include liability reserves for legal aid costs as well as impending loss reserves for the empty building in Fasanenweg, Hamburg, in the amount of € 473,000. These comprise rent payments for the years 2005 to 2008, assuming that at least part can be rented out from the middle of 2005. Other impending loss reserves were formed for premises of Pandatel Inc., USA, which are no longer in use (€ 57,000).

The guarantee reserves amount to 0.3% of sales at Pandatel Aktiengesellschaft of the last twelve months. The calculation takes place via the cost accounting.

(10) Accruals from taxes

€ 000	31/12/2004	31/12/2003
Accruals for pre-tax costs of flotation	138	138
Other	9	0
	147	138

(11) Other current liabilities

€ 000	31/12/2004	31/12/2003
Social insurance contributions	176	217
VAT and retained taxes	146	194
Other	395	133
	717	544

(12) Shareholders' equity**Capital stock**

The subscribed capital amounts to € 7,895,806.00 (2003: € 7,225,000.00) and breaks down into 7,895,806 (2003: 7,225,000) no-par value shares with an arithmetical share in the capital stock of € 1.00. On 10 November 2004, a capital increase was entered into the commercial register, Hamburg, amounting to € 670,806.00 that break down into 670,806 no-par value shares in connection with the acquisition of Lightmaze Solutions AG.

Authorized capital

The Executive Board is authorized, with the consent of the Supervisory Board, to raise the capital stock once or on several occasions until May 26, 2009, by issuing new shares made out to bearer against contributions in kind or in cash, by a maximum total of € 3,600,000.00. Use was made of this right within the framework of the acquisition of Lightmaze Solutions AG in the amount of € 670,806.00 so that approved capital in the amount of € 2,929,194.00 remains. With the consent of the Supervisory Board, the Executive Board is empowered to exclude the statutory subscription rights of the shareholders for newly issued bearer shares to a total of up to 720,000 new bearer shares, should the issue amount of the shares not be substantially lower than the share price on the stock market.

Contingent capital

The Extraordinary General Meeting of September 22, 1999, resolved a conditional increase in the capital stock of up to € 350,000.00 by issuing up to 350,000 new ordinary bearer shares in the form of unit shares. This capital increase is connected with the granting of option rights in several tranches to members of the Executive Board, divisional heads and group leaders at Pandatel Aktiengesellschaft. Each option entitles the holder to subscribe to an ordinary share in Pandatel Aktiengesellschaft in line with the details of the stock option plan resolved by the General Meeting.

Own shares

Pursuant to the resolution of the Annual General Meeting of May 30, 2002, the company was authorized until November 29, 2003, to acquire its own shares by up to 10% of the capital stock. It did not avail itself of this right.

Allocation of retained earnings

The deficit for the year in the amount of € 15,693,000 as well as the accumulated losses brought forward in the amount of € 1,009,000 were offset against the revenue reserves (€ 3,023,000) as well as the capital reserves (€ 13,680,000). The net result for the year is € 0.

Stock options

At December 31, 2003, stock options had been granted in five tranches.

The first tranche (from 1999) covers 54,163 stock options, and of this figure 24,999 stock options were held by members of the Executive Board. These options could be exercised on December 1, 2001, at the earliest.

The second tranche (from 2000) covers 55,199 stock options; of this figure, 24,999 stock options were awarded to

Notes to the Consolidated Financial Statements

members of the Executive Board. The options in the second tranche were returned without exception and without claim to compensation on January 31, 2001.

The third tranche (from 2001) covers 60,199 stock options, of which 24,999 stock options were awarded to members of the Executive Board. The options from the third tranche could be exercised at the earliest following the Annual General Meeting in May 2003.

The fourth tranche (from 2002) covers 56,999 stock options of which again 24,999 stock options were awarded to members of the Executive Board. The fourth tranche could be exercised at the earliest following the Annual General Meeting in May 2004.

The fifth tranche (from 2003) covers 123,150 stock options of which 75,000 stock options were awarded to members of the Executive Board. The fifth tranche can be exercised at the earliest following the Annual General Meeting in May 2005.

The stock options from the first, third, fourth and fifth tranches can only be exercised if the price of the Pandatel ordinary share exceeds the issue price (€ 22.00 for the first tranche) by 20% or the reference price (€ 36.10 for the third tranche, € 12.41 for the fourth tranche and € 2.96 for the fifth tranche), and the price of the Pandatel ordinary share during the period between issue and exercise of the option rights has at least kept pace during the same period with the trend of a combination of the Neuer Markt index (All Share Index) with a one-third weighting and the weighted sector index comprising Adva AG, AUGUSTA Technologie AG, BinTec AG, CeoTronics AG, euro-micron AG, teles AG and transtec AG with a two-third weighting. The maximum maturity of the options from the three tranches is 7 years; the expected maturity is 4.5 years. A fluctuation was taken into account after the fourth tranche of an annual 5%, owing to the fact that holders departed the company before the stock option plan came to an end.

In the report prepared by the Institut für Wirtschaftsmathematik und betriebliche Altersversorgung GmbH, the fair value was calculated by way of simulation (Monte-Carlo Method). The trends underlying both the Pandatel share price and the comparison portfolio, which are assumed to correlate positively, have been calculated using the Black-Scholes Model.

	1 st tranche	3 rd tranche	4 th tranche	5 th tranche
Fair Value in €	14.25	10.01	4.29	1.29
based on the following assumptions:				
- Mean maturity in years	4.5	4.5	4.5	4.5
- Fluctuation rate	0%	0%	5%	5%
- Dividend	none	none	none	none
- Risk-free interest	5.575%	4.76%	4.90%	5.4%
- Volatility	37.79%	42.39%	46.45%	78.79%

The value of the options is spread across the conversion period as an expense and booked as a counter-position to the capital reserves. The second tranche was returned to the company in 2001. The expenses incurred by the holders who departed the company before the blocking period of the issued option expired were reversed in the year of exit.

€ 000	first tranche	second tranche	third tranche	fourth tranche	fifth tranche	total units
Outstanding options at January 1, 2004	41,247	0	37,826	46,166	98,150	223,389
Weighted average remaining maturity at January 1, 2004, in months	35	0	50	62	74	55
Weighted average exercise price at January 1, 2003, in €	22.00	0	36.10	12.41	2.96	14.04
Outstanding options at December 31, 2004	41,247	0	37,826	43,666	67,650	190,389
Exercisable options at December 31, 2004	41,247	0	37,826	43,666	0	122,739
Options issued 2004	0	0	0	0	0	0
Options exercised in 2004	0	0	0	0	0	0
Expired/returned options in 2004	0	0	0	2,500	30,500	33,000
Options expiring 2004	0	0	0	0	0	0
Weighted average remaining maturity at December 31, 2004, in months	23	0	38	50	62	43
Weighted average exercise price at December 31, 2004, in €	22.00	0	36.10	12.41	2.96	15.84

From 1999 to 2004 159,321 stock options were returned. These were not awarded again.

Notes to the Consolidated Financial Statements

The expenses in connection with the stock option plan relate to the functional areas as follows:

€ 000	2004	2003
Cost of goods sold	2	7
Sales costs	139	125
Research and development expenses	29	39
General administrative expenses	84	105
	254	276

(13) Sales costs

€ 000	2004	2003
Advertising costs	387	559
Trade fair costs	136	152
Other sales costs	4,313	5,789
	4,836	6,500

(14) General and administrative expenses

The general administrative expenses contain the costs in connection with the company's stock exchange listing of € 284,000 (2003: € 332,000). These relate to investor relations advice, remuneration for the designated sponsors, the listing fees payable to Deutsche Börse AG, the costs for the annual general meeting and the costs for the quarterly reports and the consolidated financial statements.

(15) Other income/Other expenses

€ 000	2004	2003
Accounting profit from disposals of fixed assets	11	46
Non-cash remuneration	73	85
Income from the release of reserves and accruals	91	67
Other	77	93
	252	291
less accounting losses for disposals of fixed assets	-14	-5
less other taxes	-4	-4
less other operating expenses	0	-31
	-18	-40
	234	251

(16) Interest income/expenses

€ 000	2004	2003
Income from securities and lendings carried as financial assets	0	95
Other interest and similar income	15	13
Interest income from fixed-term deposits	277	627
Total interest income	292	735
Interest expense from short-term liabilities	-1	-2
Guarantees	-3	-1
Total interest expenses	-4	-3
	288	732

(17) Currency gains/losses

€ 000	2004	2003
Currency gains from foreign investments, loans and deposits	282	754
Currency gains from open foreign-currency receivables and liabilities	0	180
Currency losses from open foreign-currency receivables and liabilities	-6	0
Currency losses from foreign investments, loans and deposits	561	-1.167
	-285	-233

Other Gains/Losses

The item Other Gains/Losses contains the devaluations of the stock value that exceed the usual devaluations. In particular, this affects the devaluation of parts and components that are not lead-free.

(18) Income tax

The earnings before income tax of all the companies included in the consolidated financial statements for 2004 amount to € 15,506,000 (2003:€ 7,517,000). The result is subject to taxation in Germany, Singapore, the USA and Israel. Pandatel Aktiengesellschaft and the subsidiaries in Germany, the USA and Singapore recorded a loss in 2004, the subsidiary in Israel a profit.

The income tax bill is made up of current and deferred taxes:

€ 000	2004	2003
Current taxes	37	43
Deferred taxes	150	-1,889
	187	-1,846

Notes to the Consolidated Financial Statements

The German parent company accounts for the major part of the loss. The following tax rates apply in Germany:

In 2004, the company was subject to corporation tax at a rate of 25% (2003: 26.5%) on retained earnings plus the German solidarity surcharge of 5.5% of the tax bill. This results in a combined tax rate of 26.375% for 2004 (2003: 27.958%).

Moreover, the company is subject to trade tax, which is deducted when calculating the profit subject to corporation tax. Thus, the effective trade tax was 19.028% (2003: 19.028%). The combined tax rates for 2004 are 40.38% (2003: 41.67%) taking into account the deductibility of the trade tax.

The following presentation explains the key differences between the expected tax bill for corporation tax plus German solidarity surcharge for 2004 and 2003 and the actual tax bill incurred:

€ 000	2004	2003
Expected tax yield/expenditure	-6,261	-3,132
Non-deductible expenses		
- Depreciation intangible assets	185	22
- Stock option plan	103	115
Other	18	0
Corporation tax reduction owing to		
- Value adjustment for loan to subsidiary	-208	-630
- Value adjustment for deferred tax losses brought forward	6,241	1,613
Deviating tax rate abroad	71	0
Deviating tax rate 2003/2004	0	139
Other	38	27
	187	-1,846
Effective tax rate	-1.2%	24.6%

At the balance sheet date, corporation tax loss carryovers existed for Pandatel Aktiengesellschaft of € 23,361,000 (2003: € 10,038,000) as well as trade tax loss carryovers of € 23,872,000 (2003: 10,549,000). These can be carried over in full. Minimum taxation in accordance with § 10d German Income Tax Law must be observed.

In the USA, loss carryovers exist of some € 4,513,000 (2003: € 3,864,000). The full amount of applicable active deferred taxes was valuation-adjusted in each case, since it appears uncertain that the tax authorities will recognise the accumulated losses brought forward. The loss carryovers expire in the years 2011 to 2023.

The subsidiary in Singapore reported a loss for 2004 of € 402,000 (2003: € 116,000). For 2004, a tax loss carryover of € 618,000 (2003: € 216,000) remains, which can be used unlimitedly.

The increase in value adjustments affects the deferred taxes carried as assets on losses in Pandatel Aktiengesellschaft as well as the US subsidiary.

Deferred taxes carried as assets and liabilities result from the following items:

€ 000	31/12/2004	31/12/2003
Deferred taxes carried as assets:		
Inventories	19	60
Intangible assets	0	31
Accruals	191	0
Loss brought forward AG	9,533	4,151
Loss brought forward USA	1,805	1,545
Loss brought forward Singapore	136	48
Receivables	2	4
	11,686	5,839
Value adjustments	-9,009	-2,767
	2,677	3,072
Deferred taxes carried as liabilities:		
Inventories	282	0
Trade accounts payable	2	5
OCI* unrealized price gains from securities	0	29
Tangible fixed assets	233	0
Intangible fixed assets	357	0
	874	34
Deferred taxes (net)	1,803	3,038
	(Assets)	(Assets)

*OCI: Other Comprehensive Income

Deferred taxes carried as assets or liabilities are entered in the balance sheet as follows:

€ 000	31/12/2004	31/12/2003
Deferred taxes carried as assets:		
Short-term	21	48
Long-term	2,656	3,024
	2,677	3,072
Deferred taxes carried as liabilities:		
Short-term	284	0
Long-term	590	34
	874	34
	1,803	3,038
	(Assets)	(Assets)

Notes to the Consolidated Financial Statements

Balancing of Balance sheet	31/12/2004	31/12/2003
short-term (assets)	0	48
long-term (assets)	2.066	2.990
short-term (liabilities)	263	0
	1.803	3.038

(19) Extraordinary expenditure

Extraordinary expenditure contains expenditure for restructuring measures. In particular, these include personnel costs for severance payments and layoffs of workers (€ 1,572,000), tenant installations in Fasanenweg, Hamburg, (€ 144,000) as well as licences (€ 211,000). Furthermore, other operating costs for impending loss reserves for rent payments (€ 530,000) and legal aid costs (€ 120,000) are included.

On account of the extraordinary expenditure, the accumulated tax losses brought forward increased by € 1,899,000 as per the balance sheet date.

(20) Earnings per share

The following table shows the calculation of the diluted earnings per no-par value share:

€ 000	2004	2003
Numerator		
Group net loss/profit for the year in € 000	-15,693	-5,671
	-15,693	-5,671
Numerator		
Weighted average of outstanding no-par value shares in units	7,560,403	7,225,000
	7,560,403	7,225,000
Loss per no-par value shares in €/unit	-2.08	-0.78

Before extraordinary expenditure in the amount of € 2,583,000, this means a loss per individual share certificate of € -1.73 (previous year: € -0.78). If the issue price of the options exceeds the average market price, these options are not taken into account. Until the year 2010, a maximum of 190,389 options can lead to a dilution effect.

(D) Other information**Cost of materials**

€ 000	2004	2003
Expenses of raw materials, auxiliaries and goods purchased	7,576	9,582
Expenses for services rendered	972	907
	8,548	10,489

Personnel expenses

€ 000	2004	2003
Wages and salaries	8,519	7,885
Social insurance contributions	1,181	1,256
Expenses for pension provision	7	6
	9,707	9,147

Rentals and other financial obligations

The company uses rented business premises as well as leased fixed assets. Assuming that the rent contracts currently existing continue in accordance with the extension option, other financial obligations arise from rental and leasing contracts in the full amount as follows:

	€ 000
2005	1,031
2006	986
2007	986
2008	956
2009	674
after 2009	674

Total rental expense for fiscals 2004 and 2003 amounted to € 1,090,000 and € 1,202,000.

Information on the business areas

The company steers its operations both according to the regional segments and according to the business areas. For the purpose of geographical representation, sales are allocated to the country in which the respective customer is based.

The following regional segments exist:

- EMEA (Europe, Middle East and Africa)
- The Americas
- Asia Pacific

Notes to the Consolidated Financial Statements

Furthermore, the reporting is carried out according to the individual business areas.

This breakdown is based on the products made and distributed:

In accordance with the reorientation of Pandatel AG, the previous business areas Telecommunications, Optical Networks and Industrial Communications were reclassified on 1st January 2004 into the following business areas:

- Connectivity Products
- Access Multiplexers
- Optical Systems

The business area Connectivity encompasses products for converting data or for linking companies. For example, rack systems including management for modems and converters are deployed.

Products for data bundling and accessing metro networks, e.g. SDH over IP or IP over SDH multiplexers, are classified in the Access Multiplexers business area.

Complex xWDM systems for SAN applications are covered by the Optical Systems segment. These concern FOMUX DWDM and CWDM systems and TDMs.

The segment results for 2004 are as follows:

€ 000	Year	External sales	in %	Intragroup sales	in %	EBT	in %
EMEA	2004	9,956	66.8	4,032	100.0	-14,732	95.0
	2003	12,591	62.7	6,739	100.0	-6,916	92.0
The Americas	2004	1,041	7.0	0	0.0	-372	2.4
	2003	2,097	10.5	0	0.0	-472	6.3
Asia Pacific	2004	3,910	26.1	0	0.0	-402	2.6
	2003	5,378	26.8	0	0.0	-130	1.7
Group	2004	14,907	100.0	4,032	100.0	-15,506	100.0
	2003	20,066	100.0	6,739	100.0	-7,518	100.0

Total assets break down in the regions as follows: EMEA € 31,129,000 (2003:€ 42,465,000), The Americas € 156,000 (2003:€ 373,000)and Asia Pacific € 1,702,000 (2003:€ 2,236,000).

In Germany sales of € 2,552,000 (2003: € 2,830,000) were generated.

The calculation of the consolidated internal sales is based on the amounts charged in each case.

Depreciation of tangible fixed assets and intangible assets amounts to € 43,000 for The Americas region, € 117,000 for the Asia Pacific region and € 1,153,000 for the EMEA region. Investment in tangible fixed assets and intangible assets amounts to € 7,019,000 for the EMEA region and € 41,000 for the Asia Pacific region.

Net interest income of € 288,000 (2003:€ 732,000)was generated in the EMEA region. Of this, € 292,000 related to interest income (2003: € 735,000) and € 4,000 related to interest expenses (2003: € 3,000).

Extraordinary expenditure affects the EMEA region in the amount of € 2,497,000 and The Americas region in the amount of € 86,000.

The intra-group invoicing prices bear comparison with external prices.

€ 000	Year	Sales	in %	Gross result	in %
Connectivity Products	2004	8,672	58.2	3,354	56.5
	2003	12,446	62.1	6,511	61.4
Access Multiplexers	2004	4,743	31.8	1,903	32.1
	2003	5,184	25.8	2,588	24.4
Optical Systems	2004	1,492	10.0	674	11.4
	2003	2,436	12.1	1,506	14.2
Group	2004	14,907	100.0	5,932	100.0
	2003	20,066	100.0	10,605	100.0

Gross earnings were calculated as the difference between the sales revenues and the relevant individual product costs of the business area in question.

The goodwill arising from the acquisition of Lightmaze Solutions AG can be ascribed to the EMEA region as well as to the business unit Optical Systems. Extraordinary depreciation of the licences affects the EMEA region as well as the business area Connectivity Products.

Business relations to affiliated persons

AUGUSTA Technologie AG holds 51.43% of the shares. Thus, the associate company Pandatel Aktiengesellschaft is controlled by AUGUSTA Technologie AG. Business relations with AUGUSTA Technologie AG and its subsidiaries only existed to a minor extent.

Information on financial instruments

As part of its business operations, the company is exposed, among other things, to risks from changes in foreign currency exchange rates against the euro. Risks arising from financial transactions are subject to treasury management in collaboration with Pandatel's principal banks.

In 2004, Pandatel made no use of currency futures or currency options as hedge against foreign exchange risks.

Key accounts

Sales were generated in the fiscal year with the three largest customers of € 2,423,000 (2003: € 1,358,000), € 1,389,000 (2003: € 633,000) and € 1,057,000 (2003: € 1,415,000).

The sales of these customers related to the segments Connectivity Products at € 2,911,000 (2003: € 2,207,000), Optical Systems at € 6,000 (2003: € -71,000) and Access Multiplexers € 1,952,000 (2003: € 1,270,000).

Notes to the Consolidated Financial Statements

Payroll

The average payroll of the fiscal year changed compared with the previous year as follows:

	2004	2003
Salaried staff	146	139
Wage earners	38	39
	184	178

The changes in comparison to the previous year can mainly be attributed to the acquisition of Lightmaze Solutions AG as per 1st July 2004, together with the arrival of 26 employees, as well as the redundancies of 38 employees within the framework of the restructuring measures. The employees were laid off especially in the final quarter of the financial year.

Company boards

At the recording date, the Executive Board consisted of three members who jointly represent the company.

Norbert Wienck, Kaltenkirchen, Chief Executive Officer

Dr.-Ing. Elke Jahn, Hamburg, Member of the Executive Board (since July 01, 2004)

Dr.-Ing. Niraj Agrawal, Hamburg, Member of the Executive Board (since July 01, 2004)

Heinrich-J. Kraus, Mönchengladbach, Chief Executive Officer (until March 31, 2004)

Norbert Wienck is also Chairman of the Supervisory Board of Lightmaze Solutions AG, Eisingen (since July 23, 2004).

Dr.-Ing. Jahn and Dr.-Ing. Agrawal do not have any appointments to external supervisory boards.

In 2004, the emoluments of the Executive Board totaled € 484,000 fixed and € 50,000 guaranteed management bonus (2003: € 742,000 fixed and € 94,000 variable). Moreover, no (2003: 75,000) stock options were awarded. Dr.-Ing. Jahn took over responsibility for Sales and Production, Dr.-Ing. Agrawal for Technology.

The Supervisory Board consists of the following persons:

Axel Haas (Chairman), CEO of AUGUSTA Technologie AG, Frankfurt

Dr.-Ing. Steffen Leistner (Deputy Chairman), Managing Director at Booz Allen Hamilton GmbH, Berlin

Prof. Dr. Uwe Hannig, Managing Director of Auto-Center Zwickau GmbH, Autopark Zwickau GmbH, AVM Aktiv Verwaltungs- und Managementgesellschaft mbH, Clever CarDiscount GmbH (since January 1, 2004), Megatrend Gesellschaft für Marktforschung und Unternehmenskommunikation GmbH and PreVis Premium Immobilien und Service GmbH. All the afore-mentioned companies have their business offices in Zwickau.

Appointments of the Supervisory Board members to the controlling organs of other companies:

Axel Haas is Chairman of the Supervisory Board of ND SatCom AG, Friedrichshafen.

Prof. Dr. Hannig is Chairman of the Supervisory Board of the company Terra Limes NRW AG, Willich.

The members of the Supervisory Board have been elected until the end of the AGM, which will vote on their general release for the fourth fiscal year after the commencement of the period of office. The election of the Supervisory Board will take place in 2005.

Remuneration for expenses incurred by the members of the Supervisory Board for 2004 totaled € 36,000 (2003: € 36,000) of which Axel Haas receives € 16,000, Dr.-Ing. Leistner € 12,000 and Prof. Dr. Hannig € 8,000.

	Number of unit shares = amount of capital stock		Share in capital stock in %	Stock options	
	31/12/2004	31/12/2003		31/12/2004	31/12/2003
Executive Board					
Norbert Wienck	0	0	0.00	49,999	49,999
Dr. Elke Jahn	335,403	0	4.25	0	0
Dr. Niraj Agrawal	335,403	0	4.25	0	0
Heinrich-J. Kraus	0	0	0.00	0	25,000
Supervisory Board					
Axel Haas	50,000	50,000	0.63	0	0
Dr. Steffen Leistner	1,145	1,145	0.01	0	0
Prof. Dr. Uwe Hannig	1,000	200	0.01	0	0
Total	722,951	51,345	9.15	49,999	74,999

Special developments after completion of the fiscal year

In January 2005 the CEO Norbert Wienck retired from the executive board. The board members Dr.-Ing. Elke Jahn and Dr.-Ing. Niraj Agrawal shall remain in the executive board and assume the executive board duties of the retired CEO. Ralph Breuling, who performs, since Mid-January 2005, the function of Commercial Director in the company, shall assume responsibility for the commercial management of the company.

In order to further reduce running costs and to improve internal communication, Pandatel moved its business premises to the present location in Bargkoppelstieg at the turn of the year 2004/2005 and gave up its premises in Fasanenweg.

On 10th January 2005 the executive board passed a resolution to effect the merger of Lightmaze Solutions AG with Pandatel AG retroactively with effect from 1st January 2005. To finally implement the merger, appropriate resolutions by the supervisory board and the General Meeting, as well as the entry of the merger in the Commercial Register, are necessary. Within Pandatel AG, Lightmaze Solutions AG will assume responsibility for the field of research and development.

Disclosure in accordance with section 25 (1) German Securities Trading Act

The following reports on shareholdings of more than 5% stakes in Pandatel Aktiengesellschaft have been disclosed:

Shares at Shareholder	31/12/2004 in %
AUGUSTA Technologie AG	51.43
*Dr.-Ing. Elke Jahn & Dr.-Ing. Niraj Agrawal	8.50

*The shares each contain 335,403 voting rights (4.25 percent) of the other board member, apportioned to the respective board member, according to Article 22 Para 2 WpHG.

Notes to the Consolidated Financial Statements

Declaration regarding the Corporate Governance Code

In December 2004, the Executive Board and Supervisory Board submitted the declaration of fulfillment as defined in section 161 German Stock Corporation Act, which can be viewed by shareholders on the Pandatel Aktiengesellschaft homepage under www.pandatel.com (available in German only).

Group membership

Pandatel Aktiengesellschaft is a 51.43% subsidiary of AUGUSTA Technologie AG, Frankfurt. This company prepares consolidated financial statements in which the annual financial statements of Pandatel Aktiengesellschaft are included. The consolidated financial statements of AUGUSTA Technologie AG are disclosed at the Frankfurt/Main District Court under file no. HRB 41371.

(E) Additional information

The following statements are made in connection with the German Accounting Standard No. 1 (DRS 1). They exceed the scope of explanatory notes as required by US GAAP.

Explanation of the main differences between US GAAP and German accounting principles:

Contents and preparation

A consolidated balance sheet in line with the German Commercial Code ("HGB") is generally structured according to section 266 HGB. This presentation is prescribed by German law. Thus, no distinction is made for the assets and liabilities in terms of the period for which they are tied down or for their maturity. According to US GAAP, assets and liabilities shall be distinguished according to the period for which they are tied down and/or their maturity and entered as "short-term liabilities" in distinction from the long-term items in the balance sheet.

A consolidated income statement is structured in terms of the cost-of-sales method in accordance with section 275 (3) HGB. There is no consistent division in this case of operative costs from other costs. According to US GAAP, costs shall be posted in line with the function within the company which gives rise to them. Moreover, the Pandatel Aktiengesellschaft income statement also distinguishes operating functions from other costs.

Deferred taxes on income

According to HGB, deferred taxes must be calculated in line with the so-called "timing concept", but only the remaining liability balances may be entered in the consolidated financial statements. According to a definition of the German Standardization Council (Deutscher Standardisierungsrat) in DRS 10, deferred taxes carried as assets resulting from tax losses brought forward may at least be entered in the consolidated balance sheet.

According to US GAAP, deferred taxes shall be calculated for temporal valuation differences arising from the method used for assets and liabilities in the tax balance sheet and the consolidated financial statements on the basis of the legal tax rate to be expected at the point in time when the differences are reversed. According to US GAAP, deferred taxes would also have to be calculated for tax losses brought forward if the company possessed such losses brought forward. Should the deferred taxes carried as assets have no value, then the value of these must be corrected. The decisive point in this regard is to assess the likelihood that these items are actually realizable in the future.

Costs of capital procurement

According to HGB, the cost of procuring capital may not be deferred or offset against the financing resources raised. According to US GAAP, the costs of procuring shareholders' equity, e.g. IPO costs, less the impact of their tax deductibility, can be deducted from the gross sum raised and thus reduce the capital reserves. Costs of raising outside capital are deferred across the term of the debt.

Securities

According to HGB, securities may be entered at acquisition cost or at the lower of cost and market. In line with US GAAP, Pandatel carries at market value the securities, which are not held for trading purposes and are available for sale. Unrealized gains and losses are immediately allocated to the shareholders' equity. Should unrealized losses not be of only a temporary nature, a write-down is made which cannot be subsequently reversed by an allocation recognized as income.

Accruals

According to HGB, accruals for uncertain obligations shall be set up in line with due commercial discretion. According to US GAAP, recourse must be likely and the amount reasonably accessible before such an item can be carried as a liability.

Currency gains

Short-term receivables, bank balances and liabilities in foreign currency shall be posted according to HGB at the exchange rate on the day they arise. Foreign currency earnings as at the date of the balance sheet shall not be considered. According to US GAAP, gains on exchange rates shall be realized.

Stock option plan

When applying SFAS No. 123 "Share-based payment", the fair value of the options calculated by means of mathematical methods is treated as an expense for the period of their validity. As matching position, a sum is allocated to the capital reserves. According to HGB, this expense shall not be considered.

Hamburg, February 28, 2005

Dr.-Ing. Elke Jahn

Member of the Executive Board

Dr.-Ing. Niraj Agrawal

Member of the Executive Board

Auditors' Opinion

"We have duly examined the consolidated financial statements of Pandatel Aktiengesellschaft, Hamburg, which consist of group balance sheet, income statement, statement of changes in shareholders' equity, statement of cash flow as well as explanatory notes, for the fiscal year January 1 to December 31, 2004. The company's Executive Board is responsible for preparing the statements and for their contents. Our task is to judge on the basis of our examination whether the consolidated financial statements correspond to US GAAP, the Generally Accepted Accounting Principles in the United States.

We undertook our examination of the consolidated financial statements in accordance with German audit regulations and in line with the German principles on due and proper auditing as laid down by the Institut der Wirtschaftsprüfer (IDW). The examination had to be planned and conducted such as to enable us to judge with sufficient certainty whether the financial statements were free of substantially erroneous statements. When deciding which audit actions to take, a knowledge of the group's operations, as well as overall business and legal conditions facing the group, but also expectations as regards possible errors must be brought to bear. In the context of the examination, documentation on figures and statements in the financial statements are examined by means of random checks. The examination likewise entails assessing the accounting principles applied and the key estimates made by the group's legal representatives as well as providing an assessment of the overall presentation of the consolidated financial statements. We are of the opinion that our audit provided a sufficiently certain basis for our judgment.

It is our conviction that in keeping with US GAAP the consolidated financial statements provide a true and fair view of the group's assets, financial and earnings position as well as the flow of funds in the fiscal year in question.

Our examination – which also included the group management report prepared by the Executive Board for the fiscal year January 1 to December 31, 2004 – led to no objections. It is our opinion that overall the group management report presents an accurate picture of the group's position and of the risks innate in future developments. Moreover, we confirm that the consolidated financial statements and group management report for the fiscal year January 1 to December 31, 2004, fulfill the conditions for releasing the company from its duty to prepare consolidated financial statements and a group management report under German law."

Hanover, March 7, 2005

Dr. Ebner, Dr. Stolz & Partner GmbH
Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft

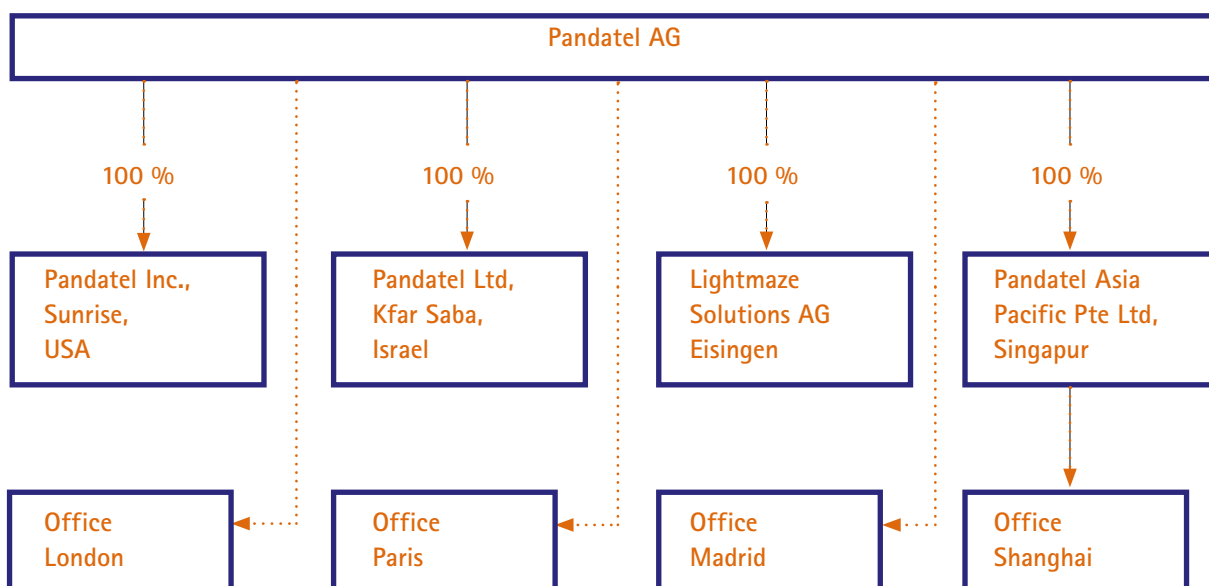
Wilfried Steinke
German Public Auditor

Hans-Peter Möller
German Public Auditor



Backbone	Powerful supra-regional main data line that links up many sub-networks
Bandwidth	Transmission capacity of communication systems, measured in data per second
Broadband technology	Transmission method in which the bandwidth of the transmission medium is broken down into several frequency bands that specific tasks (sending/receiving) or types of communication are allocated to
Carrier	Network operator that provides transport services to other companies for a fee
CESoP	Circuit Emulation Services over Package – technology for transporting TDM data streams via packet-based networks
C-MUX-155	Optical multiplexer which transmits voice and data information via SDH/SONET networks in very fine speed gradations with the help of >Virtual Concatenation Technology
Connectivity	Ability of systems to communicate with each other via a network
Converter	System that converts data set in a particular format into another format
COP-FE	TDM multiplexer for the >CESoP standard, which transmits voice and data information via IP/Ethernet networks
Cross-connect	Optoelectronic component which switches between two optical channels depending on individually definable parameters
CWDM	Coarse WDM – Method that uses broader channels and is therefore more cost-efficient than >WDM or >DWDM
DSL	Digital Subscriber Line – Transmission technology for broadband Internet access via the telephone network
DWDM	Dense Wavelength Division Multiplexing – Special form of >WDM where the individual wavelengths are positioned very close to one another and thus ensure even more efficient use of the fiber optic cable
Ethernet	Transmission protocol for local area networks (>LANs)
First mile access	>Last mile access
G.SHDSL	>SHDSL; the "G" stands for a standardization series of the International Telecommunication Union
Gigabit Ethernet	Ethernet variant with a maximum transmission rate of 1,000 Mbit/s, corresponding to 1 Gbit/s
GSM	Global System for Mobile Communications – European mobile radio telephone standard
Integrated Access Device	Integrated device for network access – multifunctional device
Interface converter	>Converter for the copper area; converts electronic signals from one interface to another
Internet Protocol (IP)	Non-manufacturer-specific >transmission protocol for cross-network communication
Internet Service Provider	>Service provider for Internet access, abbreviated ISP
Inverse multiplexer	>Multiplexer that splits a high-speed channel into several independent channels with low transmission speed or combines several independent data streams to form one broadband channel
LAN	Local Area Network – Computer network that is installed at the user's end and is geographically limited
Last-mile access	The last mile is the connection range between the network exchange and the home exchange; frequently what is meant is the copper line between telephone company and end customer
MACS4000	Management system for Pandatel products with which all local and remote components in a network can be centrally operated, monitored and configured
Mbit/s	Megabit per second – Data transmission speed in million bits per second
Meshed network	Meshed networks – In a meshed network, the nodes of a network can be linked to each other at random; the data can reach their destination using any routes, and these routes can be individually defined
Metro Ethernet	Metro networks equipped with >Ethernet-based services; virtual >LANs, for example, can be established by means of Ethernet connections, allowing several company locations to be integrated into a homogeneous network
Metro network	Metropolitan Area Network – Telecommunication network that covers a city or region
Modem	Modulator/Demodulator – Device that converts digital data into suitable signals for transmission over analog lines and at the other end converts the signals back into digital data
Multiplexer	System that enables the simultaneous transmission of several mutually-independent data streams down one and the same physical channel (copper cable, fiber optic line)
Multi-services	Merging of different solutions in convergent networks
Network management	System for managing a network as well as its resources and components
Network nodes	Connecting point between more than two transmission routes in a computer network, for example a >multiplexer or >router

Network operator	Organization or company which operates and maintains a network and which places it at the disposal of third parties for use – usually for a charge
OEM	Original Equipment Manufacturer – Manufacturer that buys products from other manufacturers and integrates them into its own products; sometimes the original manufacturer is termed OEM
OEM product	Product from an external manufacturer that a company includes into its own product portfolio and sells under its own label
Optical systems	Instruments and systems that enable the >optical transmission of data
Optical transmission	Data transmission via fiber optic line or synthetic fiber with light as the signal carrier
Packet-based networks	Networks for the fast and reasonably priced transport of large quantities of data. In packet-based networks, >Ethernet technologies and the >IP protocol are mainly used today
PSN	The abbreviation for „Packet Switched Network“
QoS	Quality of Service in communication networks
Redundancy	This designates the additional presence of the functionally identical or comparable resources of a technical system which are not required in normal operation and are only used in the event of a fault
Routing	In telecommunications: a method of conveying news between networks; routers convey data packages in the best possible way from one network to another
SAN	Storage Area Network – Centrally-managed high-speed storage network which provides several servers with simultaneous storage access and increases error tolerance thanks to its structure
SDH	Synchronous Digital Hierarchy – Standard for the high-speed transmission of data via fiber optic networks
SDSL	Symmetric Digital Subscriber Line – >DSL with symmetric transmission speed, i.e. upload and download speed are identical
Service provider	Company that provides communication or storage services with network access, e.g. Internet service provider
SHDSL	Single Pair High Bit Rate Digital Subscriber Line – Symmetric >DSL method for copper double cores
SONET	Synchronous Optical Network – international standard for single-level multiplexing of high-speed networks with transmission rates of 44 Mbit/s and higher; basis of the SDH standard
Storage Area Network	>SAN
Switching	Means by which a transmission path is switched between sender and receiver
TDM	Time Division Multiplexing – Technology in which signals for different messages are transmitted in a time-interleaved pattern down a single channel
Topology	In a computer network, the topology represents the structure of the connections between the individual >network nodes
Transceiver	Acronym derived from Transmitter/Receiver – a combined transmitter and receiver
Transmission protocol	Definition of the way in which information is to be exchanged between two systems
Value added reseller	Reseller with additional service ((??))
Virtual concatenation	Technology that allows the efficient transport of large data bandwidths via >SDH
VoIP	Voice over IP – Abbreviation for IP telephony; designation for telephony using a computer network on the basis of the >Internet Protocol (IP)
WDM	Wavelength Division Multiplexing – Technology which uses laser light of different wavelengths (colors) to simultaneously transmit several communication channels down a single fiber optic line
xWDM	Collective term for the multiplexing technologies >WDM, >CWDM and >DWDM
YUMIX	Product platform for intelligent optical networks, by the Pandatel subsidiary Lightmaze Solutions



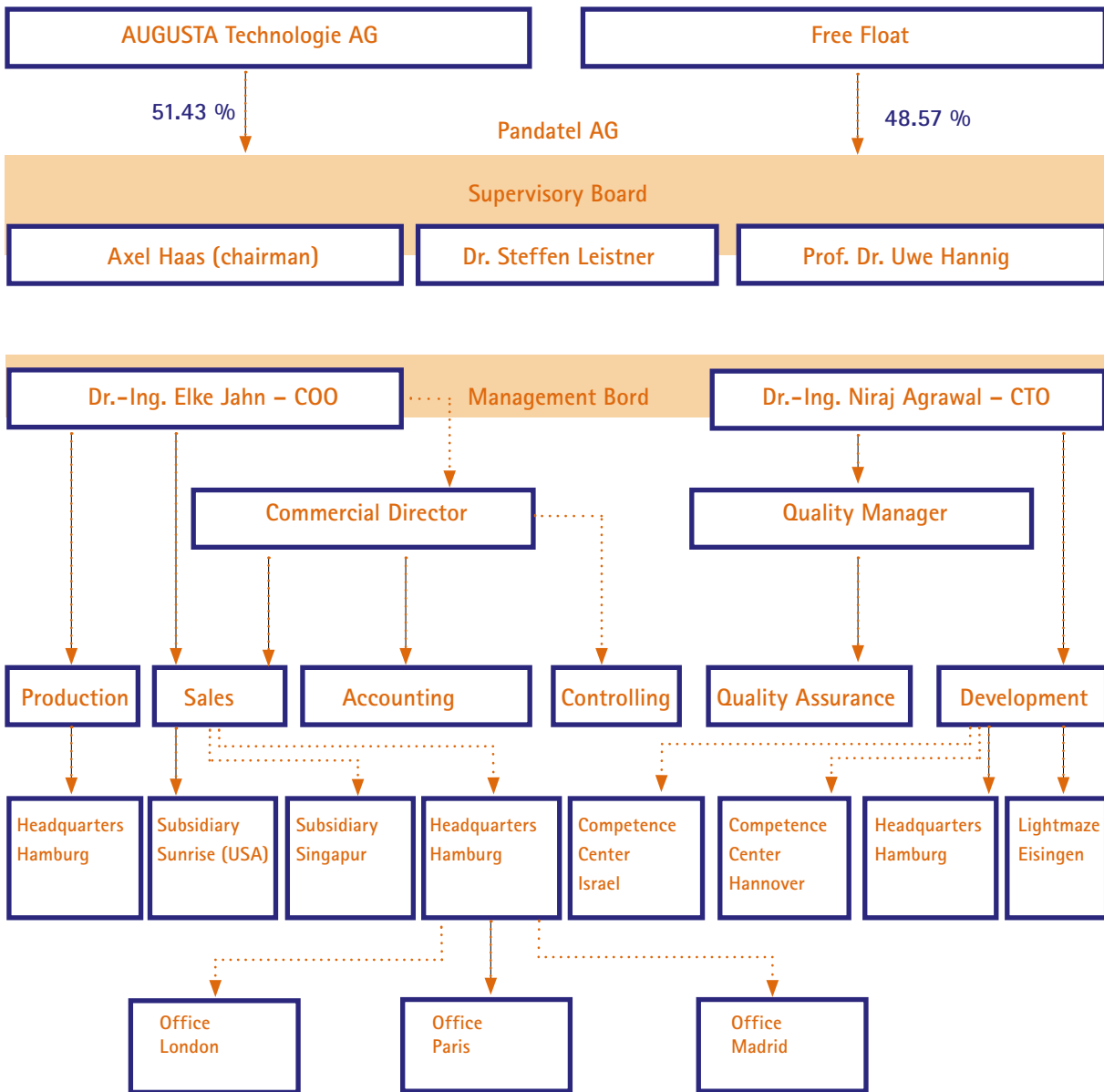
Financial Calendar 2005

Annual report 2004 published	March 21, 2005
Press conference	March 21, 2005 (Frankfurt)
Analyst meeting	March 21, 2005 (Frankfurt)
Annual general meeting	May 19, 2005 (Hamburg)
Quarterly report I	May 11, 2005
Quarterly report II	August 10, 2005
Quarterly report III	November 10, 2005

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Pandatel AG
Bargkoppelstieg 14
22145 Hamburg
Germany

www.pandatel.com

Investor Relations
Phone: +49 (0) 40-644 14-187
Fax: +49 (0) 40-644 14-10187
Email: ir@pandatel.com