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PANDATEL

Annual Report 2002

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At a Glance

PANDATEL GROUP (according to US GAAP)	2002 €m	2001 €m	% change
BALANCE SHEET			
Balance sheet total	50.5	57.4	–12.0
Shareholders’ equity	47.9	50.3	–4.7
INCOME STATEMENT			
Sales	28.3	30.6	–7.6
Investments	1.2	1.9	–35.4
EBITDA	–2.5	4.1	–162.1
EBIT	–3.8	3.0	–226.5
Operating result	–2.4	3.2	–175.1
Earnings before taxes	–2.8	4.4	–162.7
Net income for the year	–1.4	2.3	–159.9
STATEMENT OF CASH FLOW			
Cash flow	0.1	3.3	–96.1
OTHER RATIOS			
EBIT margin	–13.5%	9.9%	–
Earnings per share	–€0.19	€0.32	–159.9
Payroll (average)	172	162	+6.2

February

PANDATEL signs a global cooperation agreement with Tellabs Inc., USA. The agreement enables Tellabs to add products from the FOMUX family to its metro DWDM solutions and to market and distribute them via its own distribution network.

March

At the CeBIT trade fair in Hanover, PANDATEL presents FOMUX 500, a modular fiber optic multiplexer that represents a cost-efficient alternative to large systems. The FOMUX 500 is especially suited for smaller fiber optic applications with high connection security, for example in Storage Area Networks (SAN).

July

PANDATEL's quality management system receives certification in compliance with the DIN EN ISO 9001:2000 standard. Certification is maintained by regular audits, and has to be renewed every three years.

August

PANDATEL announces that it will be supplying Alcatel with 90 asynchronous FM multiplexers for railway signal boxes. PANDATEL and Alcatel have been co-operating successfully since 1995.

November

Heinrich-J. Kraus becomes new CEO of the Executive Board of PANDATEL AG following the departure of Henrik Förderer from the Executive Board at October 31. Mr. Kraus, 47, was previously Managing Director of Marketing/Sales at Augusta Technologie AG, Frankfurt/Main.

December

PANDATEL AG releases ET-CG onto the market, a modular and flexible converter which enables large corporate networks to be connected to broadband IP backbones and allows high-speed transmission of data over long distances. The ET-CG converts electrical into optical signals and can be deployed as a modem.

Highlights 2002

March

At its annual press briefing and analysts' meeting in Frankfurt, PANDATEL presents its sales and earnings figures for fiscal 2001: the company generated sales of €30.6m and net income for the year of €2.3m.

May

At the AGM in Hamburg, some 200 shareholders receive information on the annual result and the company's strategy. A resolution is passed to pay out a dividend of €0.14 per share.

September

PANDATEL introduces EMUX-M to the market, a powerful modular access multiplexer for companies and carriers. The system can bundle up to 28 channels into a copper or fiber optic transmission route. Thanks to its variable architecture, it can be adapted and expanded to meet individual requirements.

October

PANDATEL launches S-MUX 155, an attractively-priced multiplexer for connecting small company networks and service providers which can transmit data from up to five applications simulta-neously. The bundled dataflow can overcome distances of up to 50 km.

December

The Frankfurt Stock Exchange admits the PANDATEL AG shares for trade in the Prime Standard segment. On January 1, 2003, PANDATEL switches from the Neuer Markt to the new segment which sets the highest transparency standards in Europe.

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Heinrich-J. Kraus
CEO

Frank Mauritz
CTO

Norbert Wienck
CFO

Dear Shareholders,

For the first time in the company's fifteen-year history, PANDATEL has recorded a negative annual result. How did this come about, and how do we intend to avoid this in the future?

The main reason for the unsatisfactory business development was the still very difficult climate prevailing in the global economy as a whole and, in particular, in telecommunication. In 2002, the market for optical transmission halved once again. Telecom companies and carriers are still having to deal with overcapacities and liquidity problems. Due to these developments, investment in network infrastructure has been wound down again.

Sales and profits on a decline

In 2002, PANDATEL incurred a dropoff in sales of almost 8% in response to the weak state of the market. Furthermore, various non-recurring special effects also squeezed profits by about €5m and culminated in a net loss of €1.4m. For example, we had to mark down our stock on hand considerably, write down a loan to our American subsidiary and make a value adjustment to some of our receivables. The negative result has prompted us to advise against paying out a dividend for 2002 as a way of safeguarding the intrinsic value of the company.

Share overshadowed by general uncertainty

The development of the PANDATEL share also reflects the negative market trend: over the course of the year, 61% was wiped off the value of the share. Nonetheless, it still performed slightly better than the benchmark indices NEMAX All-Share (–63%) and NEMAX Telecommunications (–72%). At €3.10, the share closed below both the book value and the liquidity per share. Evidently, this would suggest that the negative result of the fiscal year has already been factored into the valuation. We therefore believe that our share will profit significantly once the market reaches a turnaround and the company develops positively again. Since January 1, 2003, PANDATEL has been listed in Prime Standard, the quality segment of Deutsche Börse for internationally oriented companies. In this way we ensure that PANDATEL remains interesting for domestic and foreign investors alike.

Strategy for growth and profits

What are we doing to steer PANDATEL back to a profitable growth course? We have put together a strategy package which focuses on distribution, product development and acquisition and which we hope will already contribute this year towards visibly broadening our market position and tangibly upgrading sales and profits.

In future, the spotlight of our sales activities will be placed more noticeably on the final customers and their specific applications, positioning PANDATEL in the process as a solution-oriented partner. What is more, by addressing new target sectors we aim to help counterbalance the downhill slide in the classic telecom market.

In the area of product development, we not only intend to intensify our own efforts in future. We will also be selectively purchasing external development resources as a means of shortening response times and fulfilling the high technological demands of our customers. We also plan to deploy products that have been externally developed.

The conditions for our third strategy focus – expansion by way of acquisition – are especially benign, for company valuations are currently at their lowest levels in years. The gauge for assessing every company to be acquired will be strategic fit, profitability and a good price.

Targets for 2003 and the years to come

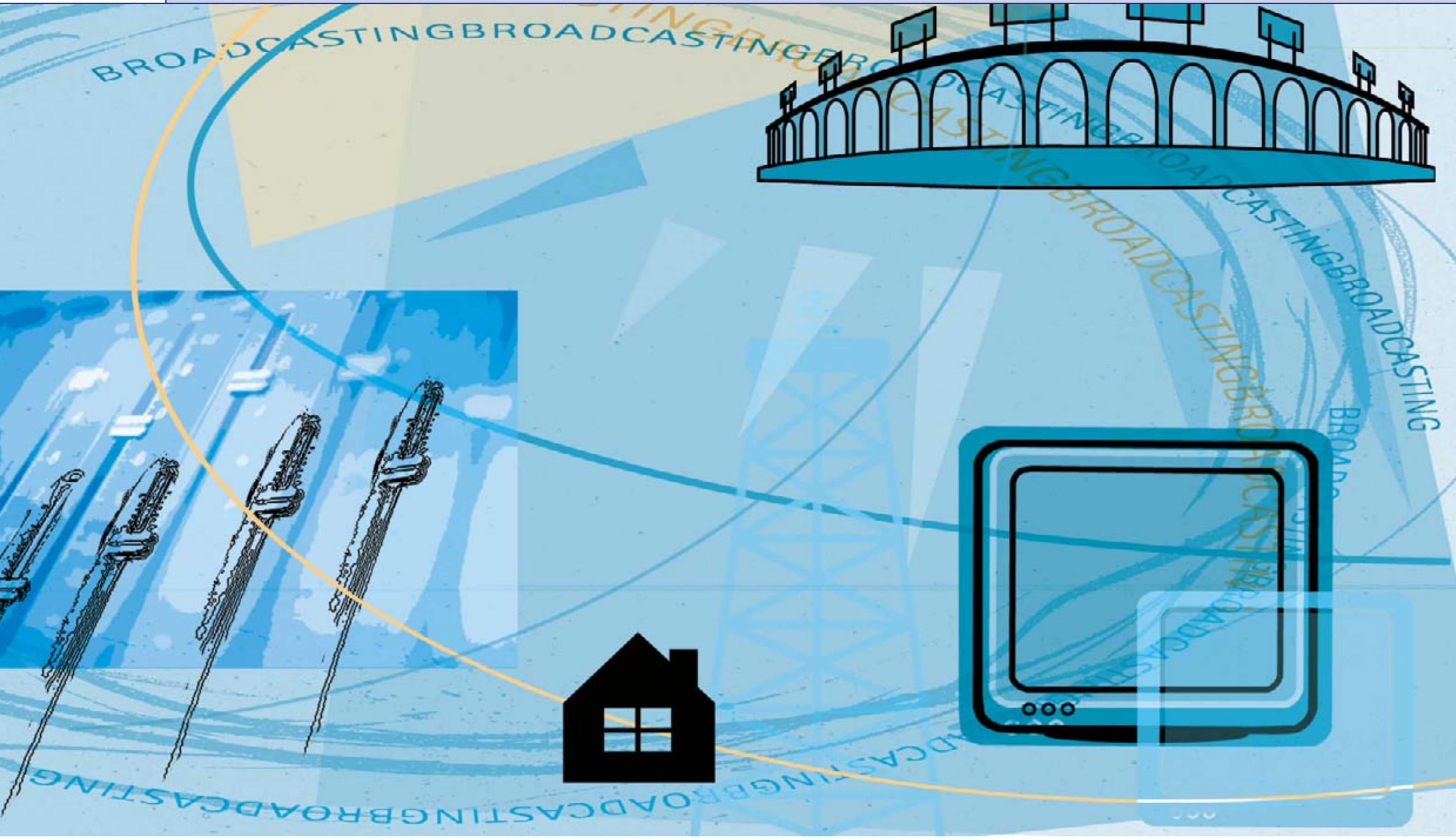
The swift realization of our strategy should enable PANDATEL to already operate profitably again in 2003. Our sales target has been set at some 15%, which does not yet contain the acquisitions. After acquiring the companies that meet our demands, it should be possible in our view to realize a sales volume over the longer term of €200m on an EBIT margin of 7 to 8%.

The Executive Board will put all their energies into further expanding PANDATEL's strategic position as international niche supplier with modern solutions while at the same time offering itself in future to the major multinational system makers as a professional partner. In this way, we also hope to see the share price break away from the negative trend in telecommunication and reach a level that fairly reflects the quality of the company.

We would like to thank all our shareholders, customers and sales partners for the trust they show in us and their willingness to accompany us even when the going gets tough. We would like to extend special thanks to our staff members for their continued readiness to perform well in difficult market conditions.

The Executive Board

Heinrich-J. Kraus | Frank Mauritz | Norbert Wienck



PANDATEL:
Braced for Future Growth

The market for telecommunication has narrowed. In the long term, the only companies with a chance are those which position themselves in the right place at an early stage. Like PANDATEL – an international niche supplier with a high degree of flexibility.

Boom and doom: the telecom market

Yesterday celebrated as the boom market, today embroiled in a serious crisis – the telecommunication market. Many of the former showcase companies now no longer exist. What has happened? Until the mid-1980s, the volume of speech and data grew by an annual 6 to 8%. As personal computers and network technology became more widespread, data traffic soared dramatically, especially via the Internet. One major reason for the increase in speech and data traffic was the deregulation of the markets in the USA and Europe in the eighties and nineties. As competition heightened, interconnection charges spiralled down in response to the surge in demand. The telecommunication market developed into a boom industry. The growth prospects seemed boundless: new telecom companies, carriers and equipment makers – frequently backed by sumptuous capital resources from flotations – mushroomed on the market and invested huge sums in the installation of fiber optic networks and technology. Since the late 1980s, more than 450 million kilometers of cable have been laid – 11,000 times the earth's circumference! In many cases, companies only installed new technology for the simple reason that it was new and created greater capacity, regardless of actual needs. By the mid-nineties, capital investment of US carriers had only accounted for 17 to 20% of sales per year. But in 2000 the investment had rocketed to 33%. By 2001, there were already signs that the anticipated business opportunities could not be realized and that the high investments would not pay off. Data traffic and, in turn, demand for bandwidth continued to climb perceptibly, but not in the assumed degree and not at the predicted pace. Technological progress also dashed the capacity projections of the operators. Suddenly it was possible to upgrade many times over the bandwidth of the available cables, creating as a consequence enormous overcapacities, especially in the long-distance area. The intensive competition between the numerous suppliers caused prices to nosedive, with sales and profits of the telecom companies lagging way behind expectations. A glance at the 100 biggest telecom operators highlights the situation: while sales in 2001 gained by 9%, the companies together recorded a loss of US$50bn – following a net profit of US$44bn in 2000. Profits were especially squeezed by the debt service for financing the investments. Many, above all new companies experienced financial difficulties or were even compelled to file bankruptcy. Examples are Global Crossing, Qwest and Worldcom, to name but a few.

It comes as no surprise to learn that the carriers, in response to these developments, drastically marked down their investments in the years 2001 and 2002. North American service providers lowered their fixed-network investments in 2002 by an estimated 53% to US$34bn. The global market for optical transmission also receded by some 53%, from US$16.1bn to US$7.6bn.[2] All of a sudden, the network equipment makers were faced with a dramatic collapse in demand. In the years 1999 and 2000, they had still been upgrading their production to meet the momentous surge in demand. Now, they were confronted by full warehouses and production overcapacities. As a consequence, prices of components and systems plummeted. Many suppliers had to lay off thousands of employees and incurred record losses.

The networks of the future: manifold services, low costs

The telecommunication market is currently undergoing a radical consolidation. Besides the insolvencies and company sales, the products and technologies on offer are also being given a new slant. What is certain is that demand for bandwidth will grow enormously in the future on the back of strong growth in data communication – especially in the metro area. Examples of data intensive applications are complex websites, business-to-business and business-to-customer services, multimedia applications such as the downloading and streaming of music and videos, e-learning and online games.

As demand for services of this kind grows, carriers and providers will also have to start investing again in their network infrastructure. But with one major difference: new technology will no longer be installed for its own sake, as frequently happened in the past. The motive powering investment today is no longer pure technology but the creation of a network topology which will ensure the long-term provision of various and also completely new services. Speech and data transmission will be more and more integrated in future. Thus, tomorrow's network will have to be even more universal and efficient, featuring even more scalable qualities. Besides the performance factors, another crucial point regarding investments in networks of the next generation is the issue of lower costs for the carriers. Owing to their tight financial situation, carriers will have to use the available network far more efficiently in future and gear it more closely to demand if unnecessary overcapacities and, ultimately, costs are to be avoided. For this to happen, traffic flows will have to be optimized and homogeneous multi-service platforms introduced. Analyses reveal that carriers implementing next-generation solutions of this kind can slice two thirds off their operating expenses and at the same time upgrade earnings by 20%.

At this point in time, carriers and providers are still a long way off from a universal network of the next generation. The network standards Optical Ethernet and SDH/SONET in the metro network area are currently jockeying for first position. With budgets tight, existing network structures are being retained and additions made, rather than setting up completely new networks. When mergers are taking place or networks being bought up out of insolvencies and integrated, the different networks available have to be linked up. The variety of present-day standards will therefore remain and will create good openings for niche suppliers such as PANDATEL able to offer products for linking the various standards.

In the metro access area, CWDM systems (CWDM = Coarse Wavelength Division Multiplexing) have asserted themselves as a cost-efficient alternative to the expensive DWDM systems (DWDM = Dense Wavelength Division Multiplexing). Both technologies improve the exploitation of a single fiber optic line by allowing several data channels to be transmitted parallel on different wavelengths. The CWDM technology is particularly attractive for the enterprise backbone area; it can be deployed for connecting locations in cities and conurbations and for dislocating data centers (storage networks). One restricting aspect of the CWDM technology is the maximum number of useable channels. Technically, however, it is possible to gradually occupy each CWDM channel at a later date with up to eight DWDM channels without impairing the other CWDM channels in the process. The operator is offered the highest degree of flexibility and cost advantages as he upgrades his original eight-channel CWDM system step-by-step into a 64-channel DWDM system. PANDATEL's FOMUX multiplexer family includes both DWDM and CWDM modules.

Return to stable growth

Just how quickly and fundamentally the telecommunication market will recover in the various areas and return to healthy growth depends not only on the global and regional economic development. Demand for bandwidth, the financial restructuring of the telecom companies and carriers, inventory liquidation and the completion of the consolidation process among the producers will also play a key role.

Renowned international research institutes predict that the overall market for optical network equipment will decline further in 2003 worldwide by some 12% to US$9.0 bn. This compares with the market for intelligent optical equipment for the metro area, which is expected to grow by 7% to US$4.4 bn[3]. For Germany, the IT industrial association Bitkom expects telecommunication services to register an increase in sales of nearly 5%, with the greatest stimuli deriving from mobile telephony and the Internet. For Internet service companies, the association predicts growth of 16%, despite the continuous decline in prices. Network equipment makers, by contrast, will remain hit in 2003 by the weak investment activity among the network operators in Germany. Here, Bitkom predicts a minus of nearly 1%[4]. Longer-term forecasts point to a marked and fundamental uptrend: between 2002 and 2006, the global market for optical networks is expected to grow altogether by an average 8% yearly, with Asia likely to expand its

[1]Source: FiberSystems International, November/December 2002
[2]Source: Dell'Oro Group, November 21, 2002
[3]Source: Infonetics Research, November 20, 2002
[4]Source: Wirtschaftswoche, December 19, 2002

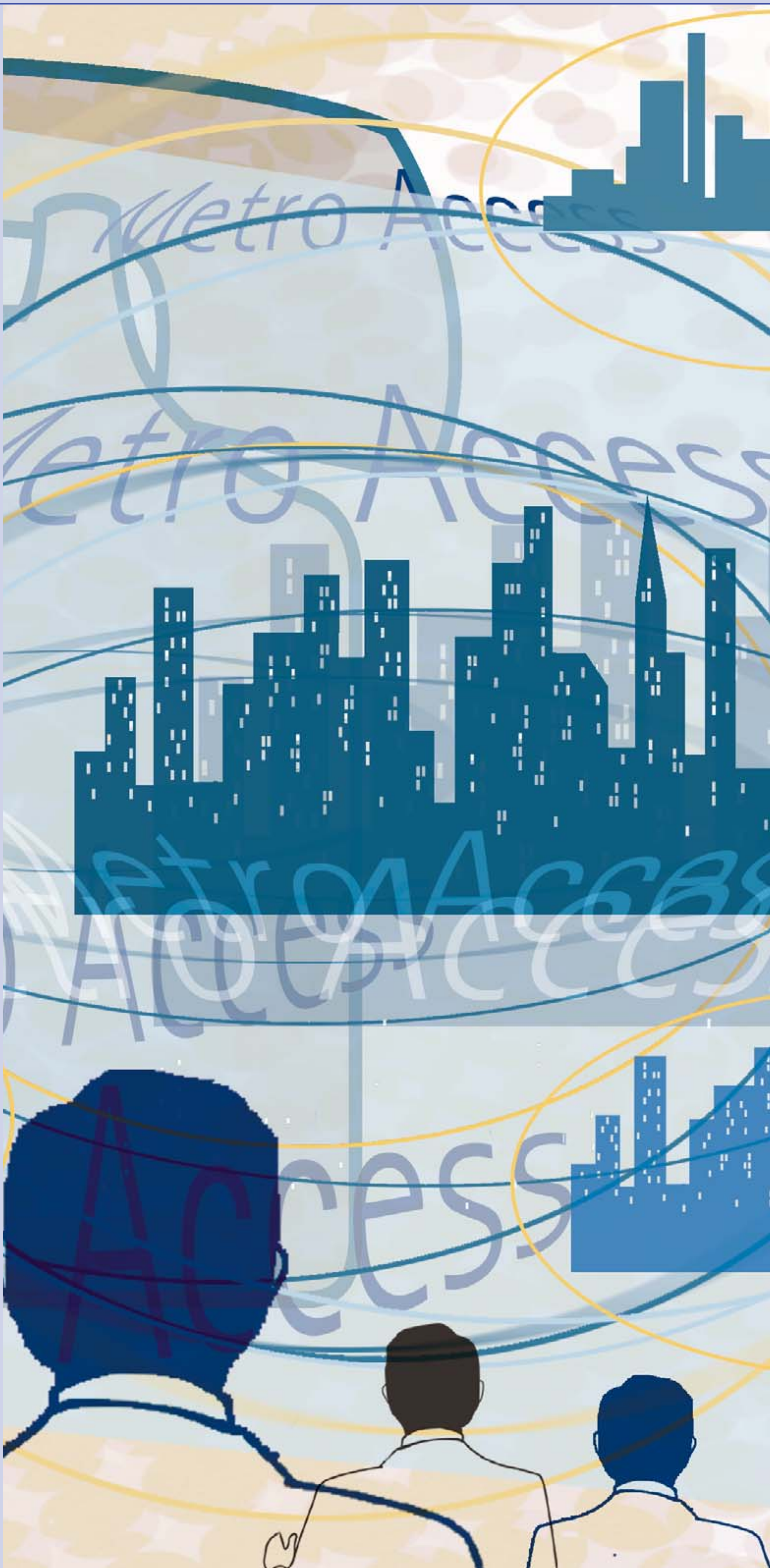
Metro Access

Banks, insurance companies and most small, medium- and large-sized companies regularly exchange data between various locations or with their customers, employing the existing backbones or metro networks for this purpose. Service providers have to link these customers without an infrastructure of their own to the networks. The alternative of laying your own cable as a point-to-point connection is, in most cases, too costly.

As a rule, metro networks consist of fiber optic cables which are based on the SDH/SONET standards or which use the Internet Protocol (IP). They work with bandwidths of up to 10 Gigabit per second. Company networks, on the other hand, frequently consist of copper cables and use different transmission protocols. For the data transmission to nonetheless function, systems are needed which also permit different connection media and standards to be hooked up to the metro network. What is more, these systems have to ensure that large data volumes of all kinds can be transmitted over short and long distances. Typical data intensive applications in the corporate field are data back-up, intranet and extranet applications, telework and video conferences.

The deployment of multiplexers is an efficient solution for accessing metro networks and for transmitting data: multiplexers bundle together various data streams at the access point to the network – for example, from copper networks – and feed them into a fiber optic line. At the destination point of the network, a demultiplexer separates the data back into their original streams and channels them into the copper networks of the receivers.

Since the middle of the 1990s, PANDATEL has been offering products based on this technology, enabling its customers to access broadband networks. The development of efficient fiber optic and access multiplexers – a new product in 2002, for example, was the EMUX-M – is one of PANDATEL's key competences and will be intensified in the future. The systems are scalable; in other words, components can be added to them without problem, and they can be integrated into available installations and adapted to the changing requirements of the customers. Thus, PANDATEL's multiplexer solutions offer secure investment protection and are extremely cost-efficient.



share to 40% ahead of Europe and North America with between 20 and 25% respectively.

Annual growth of an average 10% is predicted for metro equipment for the same period. Sales with technologies of the next generation are even predicted to grow annually by 29%, thereby upgrading this segment's share in total expenditure on optical networks from 27% to 55%[5].

Growth and profitability: PANDATEL's strategy

During the market crisis, PANDATEL held its ground well compared with the sector and performed better than many rival suppliers. The company is excellently positioned strategically to emerge strengthened from the market consolidation.

- We define ourselves as a specialist provider of professional network technology.
- We use all sales channels. Efficiency and customer satisfaction are our prime objectives.
- We operate primarily as developer and manufacturer of our own products.
- We are pursuing an aggressive growth and earnings strategy. We are growing both organically and by way of acquisition, and place our main focus on profitable sales.

With the aim of tangibly expanding our market position and significantly upgrading growth as well as profits, we have taken on a series of major tasks in the coming months in the areas of sales, product development and company expansion.

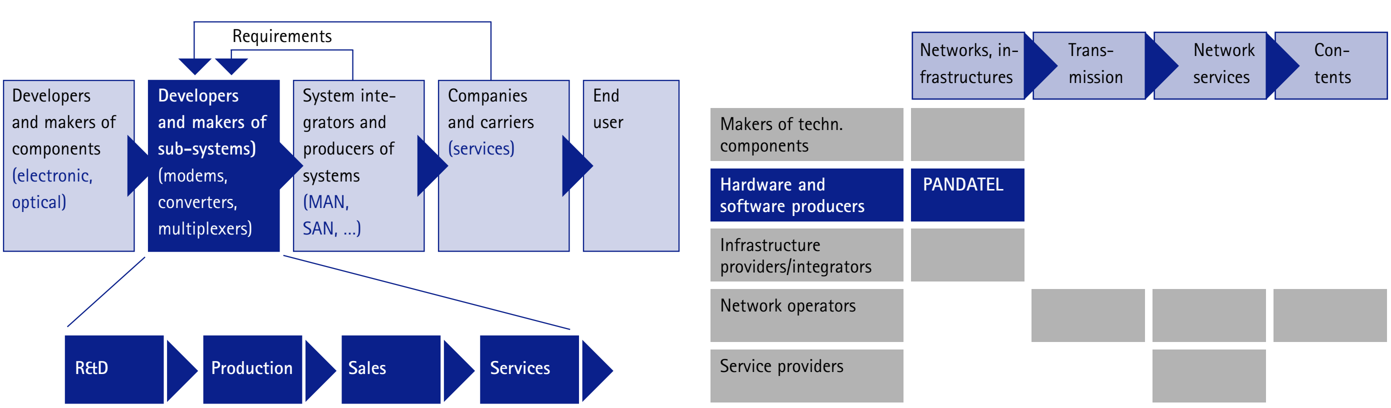
Sales: closer to the customer

Until the mid-eighties, the telecommunication market was dominated by a few large-scale companies. The structures were transparent: on the one hand, the technology suppliers, on the other hand, the telephone companies with their monopolistic character. Companies such as AT&T, Alcatel, Nortel or Fujitsu developed and produced the entire technological infrastructure and installed it at the telephone companies and corporate customers. When telecommunication developed into a boom market and new suppliers started thronging the arena, more and more companies became specialists in the sub-segments of the value chain. Today, the suppliers of network infrastructures include makers of optical and electronic components, suppliers of sub-systems as well as system makers (OEMs), system integrators and distributors. The customer side of the value chain starts with the carriers, in other words the pure network operators. Their customers, in turn, are service providers which offer special telecommunication services such as Internet or multimedia applications, classic telephone companies and corporate customers.

Within this value chain, PANDATEL belongs to the suppliers of sub-systems. The company develops and produces solutions which are suited particularly for use in city and storage networks. The modems, converters and multiplexers are fitted into their systems by system integrators and system makers and in some cases are even installed under their label at the final customer – in other words, into the networks of carriers, telephone companies and other companies. In addition, PANDATEL distributes its products via pure distributors which in turn sell them to system integrators or directly to the final customer.

In the boom phase of the market, PANDATEL's sales structure was primarily geared to the needs of these system integrators, distributors and system makers. Contact with the final customer was only marginal. As a result, PANDATEL became greatly dependent on the feedback and obviously on the selling success of these "mediators". However, in a market characterized by consolidation and investment restraint, it is crucial to maintain close contacts to the users' decision makers. New target sectors, which are not part of the classic telecommunication environment, can also help to compensate the decline in the traditional market.

PANDATEL in the value chain of telecommunication



[5]Source: RHK, Oktober 31, 2002


Storage Area Network
Network Storage Area
work Storage Area Network
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In future, PANDATEL will aim the spotlight more greatly on the final customer and all the areas in which PANDATEL products could be deployed in the customer's environment. For this, the company analyses interesting target sectors and final customers – such as energy utilities, publishing houses, authorities, universities, insurance companies, banks, the military, police and transport. PANDATEL then identifies individual companies, addresses them directly and presents examples of applications which are geared to their needs. Sector-specific solutions are developed for each customer category. To realize these solutions, PANDATEL consults a systems integrator. This is because the goal is not the direct distribution to the final customer. Rather, it is to position PANDATEL as a competent solution partner that not only supplies the products but also understands the sort of problems the customers are having to tackle.

The advantages of maintaining close contacts with the final customer are obvious: PANDATEL employees

- are present wherever the investment decisions are made,
- are present wherever investment decisions are taken,
- observe directly the market development, thereby shortening reaction times,
- heighten their own know-how on the market and trends,
- utilize the user's feedback to improve the existing products and develop new products geared to the customer's needs.

Part of the strategy reorientation also involved optimizing PANDATEL's visual presence on the market. The new logo reflects the modernity of the company. The uniform design of advertisements, catalogues and data sheets as well as the special materials for the various target sectors underscore the professional manner in which customers are being addressed.

Product development: make and buy

In the area of product development, PANDATEL will in future pursue three parallel courses: the in-house development of products, the deployment of external development resources and the purchase of products developed elsewhere. The in-house development of products contributes most to the PANDATEL product portfolio, and will be intensified. Accompanying the focus on the final customer, the spotlight is primarily on products for new application areas. As well as this, PANDATEL will make selective buys of development capacities in order to reduce development times in the event of bottlenecks. Contacts have already been established to suppliers from India and China. The developers there are excellently trained, and particularly Chinese companies are able to develop and produce in extremely competitive conditions.

Greater proximity to the final customer, further deployment areas within and new target sectors outside telecommunication, products developed externally, acquisitions ... – PANDATEL is exploring new territories in 2003.

Along the lines of make-or-buy, PANDATEL will be supplementing its product portfolio in future with individual products which have been entirely developed externally. OEM agreements of this kind will enable PANDATEL to quickly and efficiently seize new market opportunities.

What is more, PANDATEL itself is increasingly profiting from the trend among the large-scale producers to outsource to smaller companies the production of niche technologies which they themselves are no longer able to produce profitably. In this instance, PANDATEL is not acting as a rival but as supplier and partner of the big players. Tellabs, for example, a leading provider of innovative telecom solutions and CNT, a top supplier of storage area networks, both use products from PANDATEL's FOMUX family. PANDATEL is supplying Cisco with opto-electronic sub-systems for the company's metro system used for the transmission of speech, video and integrated data. Further partnerships and supply agreements exist with IBM and Alcatel.

By stepping up its collaboration with the big players of the sector, PANDATEL is underscoring its strategy of positioning itself as niche supplier of sub-systems for the MAN and SAN areas, and here, in particular,

SAN – Storage Area Network

Many companies and administrations today work with huge databases which have to be permanently accessible at various locations. Examples include telephone companies, banks and insurance companies. They attach the highest priority to the swift accessing of customer data from various desktops right round the clock and to the security of critical data.

The availability of data is guaranteed by a flexible storage concept and by the redundant layout of all key components. For this, data is continuously mirrored onto hard discs managed at separate locations. The data exchange is effected through a storage area network (SAN). A disaster recovery system prevents data from being lost in the event of downtime or disasters and enables data processing to be resumed without delay.

In times of e-business and the complex process chains accompanying this, demand among companies and administrations for modern storage technologies such as SANs is greater than ever. Interactive web services which automatically call up business data from the back end will increase demand yet further for permanently accessible data.

PANDATEL's FOMUX multiplexers are able to meet the high requirements placed on storage networks. Thanks to their flexible, modular construction, FOMUX systems can be deployed in a wide range of applications. Additional channels can be subsequently hooked up to the system – even while it is running. Integrated management functions monitor, control and maintain the system from a remote location, guaranteeing maximum system protection. PANDATEL's FOMUX solutions represent a secure investment and are extremely cost efficient. They make a substantial contribution towards ensuring the operational security of telecommunication systems and the continuity of business operations.

Industrial Communication

Industrial applications frequently place special demands on the performance and layout of data networks. Here, the focus lies on the uninterrupted transmission and conversion of video, audio and data signals on fiber optic lines over short and long distances – in some cases, in extreme environmental conditions.

In railway and traffic technology, for example, data for operating the points, signals and level crossings have to be transported with one hundred percent reliability, no matter the weather. In major airports, highly sensitive data have to be securely transmitted between a large number of individual stations and the control centers. Security companies must rely on the uninterrupted transmission of data from the surveillance cameras. Other examples of industrial applications are automation, remote control, process control, energy supply, building technology and medicine.

High-performance multiplexers guarantee that data is transmitted securely and reliably. At one and the same time, they are able to convey various independent data streams down a single channel. Another typical area in which multiplexers are applied in the industrial environment is in the interfacing of different types of networks: frequently, copper networks have to be hooked up to a fiber optic infrastructure, or different, very special transmission standards and protocols have to be combined together. Converters which, for example, transform electrical signals into optical signals have to be installed at the delivery points to enable data to flow without disruption.

With its multiplexers and converters, PANDATEL offers efficient solutions for a broad range of industrial applications. The fiber optic multiplexers feature a modular structure and serve all conventional interfaces and fiber optic standards in the industrial area. They also offer a high degree of protection against downtime. The fiber optic, ethernet, interface and video converters guarantee that the various signals are reliably converted, prepared and amplified. In some cases, the converters display an integrated management module which enables them to be maintained and any problems diagnosed comfortably from a remote location.

for network access. The overcapacities elaborated earlier on still exist in the long-distance area; in metro networks, however, considerable bottlenecks can still be found, especially in the access area. This is due to the steady increase in data volume and, in turn, the growing demand for bandwidth in cities and conurbations. Besides this, external storage networks – thanks to their data back-up functions – are one of the market segments with the highest growth rates.

PANDATEL's comparatively good performance in this crisis-ridden market can also be attributed to the fact that its products take account of the current requirements of carriers and providers. At this moment, the demand being registered by these two groups is not so much for the latest technologies as for flexible optimization technologies for available platforms. What is needed are solutions with active and configurable components which upgrade the intelligence and efficiency of the existing networks, support the convergence of speech and data and guarantee the scalability as well as offer investment security.

The sector trend will pick up. The only question is when. But one thing is certain: PANDATEL is the reliable solution-oriented technology partner in the data transmission market. And interesting for investors all over the world.

PANDATEL products are particularly competitive in terms of the total cost of ownership. For some of the greatest advantages they offer, besides the low start-up price, are the high level of operating security, the ease with which they can be monitored and, above all, their modular expandability. If required, they can be readily and swiftly adjusted to meet rising performance demands. Thus, the solutions are not only extremely flexible, they are above all cost-efficient. Investments only have to be made whenever an upgrade is required. This means that no capacity has to be held in reserve if it is not needed.

Acquisition: the right time for a good buy

One of the declared targets of PANDATEL since its flotation in 1999 is not only to grow organically but also by way of acquisitions. In the last three years, the company examined various acquisition possibilities, but was unable to make out a suitable company at an acceptable price. Now, the time is right for a favorable strike: PANDATEL has liquidity to draw on of nearly €30m (including marketable securities). Company valuations are at the lowest level in years, and the current quiet market phase gives the management time to thoroughly analyse and examine the various options.

There are various potential models for a strategic acquisition: a stake in a company with a similar technological bias as a way to round off PANDATEL's product portfolio with high-end or basic technology. Or the acquisition of a company with a suitable complementary technology to expand the process chain as a means of tapping new markets. Finally, acquisitions could also be made in the core area in the form of a regional expansion or the acquisition of development capacities.

For each of these options, a potential candidate must fulfill three conditions: it must have a sound corporate strategy which fits in with PANDATEL, operate profitably and be available for purchase at a favorable price based on the usual valuation criteria. The first acquisition has been planned for the first quarter 2003.

With this bundle of measures for sales, products and company growth, PANDATEL is positioning itself strategically at an early stage in order to participate dynamically from a market upswing.

Heinrich-J. Kraus

2003 – and Beyond

Interview with PANDATEL's new CEO Heinrich-J. Kraus

Since November 1, 2002, you have been CEO at PANDATEL AG. You've taken over the ship's rudder in what are clearly difficult waters: for the last two years, the market for network equipment companies has been heading down, and in 2002 PANDATEL also slipped into the loss zone for the first time. What motivates you in conditions of this kind?

I would say PANDATEL itself, and the many potentials I see in this environment. PANDATEL is a company with years of experience in telecommunication – unlike the start-ups with their grand ideas but no real products. PANDATEL is strategically very well positioned in the market as an international niche supplier. We offer solutions which meet the latest requirements of network operators and companies. And precisely our two niche areas, metro networks which connect local and company networks, and storage networks which transmit data between servers and storage media, belong to the market segments which will very soon be recording higher growth rates again.

What changes do you intend to make to bring PANDATEL back on course for growth?

My intention is to position PANDATEL in the market as a solution-oriented, qualified partner and not only as a producer of first-rate products. We must put a greater focus on our final customers than we have done so far.

They should receive qualified advice from PANDATEL that is geared to their needs and to the kind of problems they have. Another of our aims is to strengthen the relations to our customers by establishing a basis of trust: in future, all our distribution partners and our top 50 customers will receive regular briefings on our product roadmap for the next twelve months. By intensifying dialogue in this way, PANDATEL in return will acquire valuable input for its product roadmap for future years.

This brings us to the issue of technology. How does PANDATEL intend to develop here, above and beyond customer feedback?

Our core market is and certainly will remain the access area, and by that I mean access to networks. Here we rank among the few suppliers also able to offer sound competence in linking up copper and fiber optic networks. However, you might compare our corporate strategy with a drive down a freeway: you know your destination but, depending on the situation, you might prefer to use the left lane, the middle lane or the right lane. Our desire is to be flexible within a given direction; for a company of our size, that's even a necessity. As regards technology, our aim will be to explore various options, particularly as far as the planned acquisitions are concerned. For example, we could round off our technology portfolio from the top with high-end technologies of the next generation – or from below by acquiring basic technologies. We could also envisage adding a complementary technology like, for example, satellite communication. Not only that, we are also exploring the possibilities of regional expansion in the core area, for example with a company similar to PANDATEL in the USA.

You have just radically streamlined your subsidiary there. How does that fit into a potential acquisition in the USA?

We have trimmed down our office in the USA in order to adjust costs to the current sales development. But by no means does this mean that we are seeking to withdraw from the American market. What we have done is lay the foundations for a new start from a realistic basis. Our successes to date in the USA can be attributed primarily to the OEM alliances with CNT and Tellabs. By acquiring an established American company with a broad customer base, we would both stabilize PANDATEL's market position in the USA and widen it.

Asia at the moment counts as the biggest growth region. Besides the subsidiary already established in Singapore, PANDATEL opened a representative office in Shanghai last year. What opportunities do you see for PANDATEL on the Chinese market?

China's size alone and the still relatively low penetration level clearly make it very interesting as a market for the classic PANDATEL products as well as for the basic technologies and, in some cases, for high-end products. Our aim, though, is not just to participate in the market growth. We've also set our sights on China because of its potential as a development and production site. The engineers there are well-trained and the conditions are extremely competitive. To be successful as a foreign company in China, you have to forge good contacts to the local decision makers. We already have an excellent network of contacts and our Shanghai office will be responsible for expanding and fostering these relations. Within the next two years, we plan to start setting up a PANDATEL works in China.

That's a fair amount you've taken on for the future development of the company. Which concrete goals will you personally use to gauge your performance in three years' time?

Regardless of which development options we finally realize, my goal for PANDATEL for the next three years is to generate a sales volume of 200 million euros at a profitability of seven to eight percent.

It’s the Individuals That Make a Team – Our Staff

The many faces of a company: staff members at PANDATEL’s eight offices

A highly-motivated workforce is the key asset of any company. Thanks to its manageable size and flexible structures, PANDATEL is able to respond to the specific needs of each individual member of staff. This is reflected in the outstanding quality of our work.

For the first time, PANDATEL is including a separate section on its staff in the annual report. Why? Simply because PANDATEL would not be where it is today without the determination and commitment of its workforce. After a quite exceptional boom phase, our staff have spent the last three years fighting the effects of an equally exceptional slump on the markets. They have played a key part in ensuring that PANDATEL has achieved above-average results even in this most difficult environment. The management would like to take this opportunity to express its heartfelt thanks to all the company’s staff for their tireless efforts.

Motivation

The exceptional motivation shown by the staff undoubtedly has much to do with PANDATEL’s flexible structures. The manageable size of the company, its flat hierarchies and direct communication routes enable management to respond to the individual needs of the employees. It is hardly surprising, then, that the staff identify so closely with their company. Suggestions for improvements are implemented quickly and without red tape. This means that all the staff can make an important contribution without having to go through tiresome bureaucratic processes.

The company’s strong belief in greater individuality and self-determination is also reflected in the choice of the staff’s place and hours of work. In many departments, it is now possible for them to organize their working hours flexibly on a basis of trust, i.e. without timekeeping systems. The company also offers a variety of part-time working options. And relocation to the company’s overseas offices offers further scope for personal development: our Singapore office, for example, was set up by a colleague from Hamburg.

Communication

One of management’s key concerns is to strengthen internal communication. A number of steps have been taken here: staff information has been improved by developing the intranet and launching a new company magazine. Furthermore, the management will also be arranging more frequent joint meetings to keep the staff informed of the company’s strategy and goals, and to provide a forum for discussion.

Although sales were lower in 2002 than in the previous year, PANDATEL has not cut its workforce. On the contrary: there has been a slight rise in the number of employees. Over the year as a whole, the average number of people employed by the company was 172, which is ten more than in the previous year. 20 members of staff are currently employed at the overseas offices in Singapore, Miami, Paris, London, New Jersey, Stockholm and Shanghai. PANDATEL’s international orientation can also be seen in the fact that the Hamburg office employs an above-average number of qualified foreign staff compared with other companies of similar size (11%). These members of staff come from twelve different countries, and work principally in international sales of PANDATEL products. The workforce is not only highly international, it is also relatively young, with an average age of 36.7 years.

The future

In an environment dominated by consolidation and technological reorientation, PANDATEL faces many challenges in the years to come. The changes taking place within the company and in the wider market will require a high degree of mental flexibility from the workforce: in sales, for example, where new tasks will arise as the focus shifts increasingly from individual products to solutions. Or in product development, where it will be crucial to maintain a high level of technological competence and to develop innovative solutions that respond to increasingly sophisticated client requirements. Or in the implementation of acquisitions, which may lead to the introduction of completely new product lines and will necessitate the integration of new colleagues. These future challenges will not just place new demands on the company’s workforce. They will also give each member of staff the opportunity to develop individually and flexibly.

Two Britons, one Croat, one Cuban, one Dane, three Frenchman, one Jordanian, one Malaysian, four Poles, five Singaporeans, one Spaniard, one Tunisian, one Turk, six US Americans, one Vietnamese ...

The Share

The crisis mood on securities markets also pushed the PANDATEL share deeper into the loss zone last fiscal year. However, when equity markets start rebounding, the share price should profit to an above-average degree on the back of a positive company development.

Equity markets on a downhill slide

Throughout the world, 2002 will be remembered as a year of unfavorable economic conditions. Compounding this was the weak economic trend and the uncertainty stirred up in people by the political crises and terrorist threats. Equity markets worldwide, overshadowed by these developments, also continued to slide downhill: the leading indices in the USA, Asia and Europe lost between 17 and 35% in the course of the year. The downbeat sentiment on European securities markets was not only reflected in the decline in the STOXX 50; the DAX® also dropped for the third consecutive year. Chalking up the weakest annual performance in 2002 since its launch, the index plummeted 44%.

Throughout Europe, the technology and telecommunication sector had to cope with a massive downslide in share prices. There seemed to be no end to the flow of negative reports from the sector: sales declines in the double-digit region, record losses running into billions, financial scandals and bankruptcies among what were once the darlings of the sector.

Issuers and investors on the retreat

Going public was not an option for companies last year: following the 130 IPOs in the record year 2000 and 21 in 2001, a total of six companies ventured to go public in 2002, with only one company being floated on the Neuer Markt.

In response to the losses of the past two years, many investors have also pulled out of equity markets and regrouped their capital in lower-risk investments. In Germany, the crisis of confidence has been further exacerbated by the government's plans to tax trading in equities. The problems already evident on the Neuer Markt in 2001, with share prices tumbling to penny stock levels, low turnover, countless bankruptcies and some companies even pursuing fraudulent activities, assumed crisis proportions in 2002. Investors' loss in confidence was so great that the stock exchange operator Deutsche Börse decided to abolish the Neuer Markt.

Prime Standard for more quality

Since January 1, 2003, Deutsche Börse has reorganized the equity market and now operates only two market segments in which all companies are listed: Prime Standard and General Standard. Prime Standard is the quality segment for internationally oriented companies which – compared with General Standard – sets substantially broader requirements with regard to publicity and accounting standards. PANDATEL meets all these requirements in full and is listed in the quality segment. The company thus remains interesting for both domestic and foreign investors.

Until September 22, the PANDATEL share had been a member of the Neuer Markt index NEMAX 50, which lists the largest stocks of the segment. The company's departure from the selection index can be attributed solely to the low market capitalization of its free float and had nothing to do with quality. PANDATEL remained represented in the indices NEMAX All-Share and NEMAX Telecommunications.

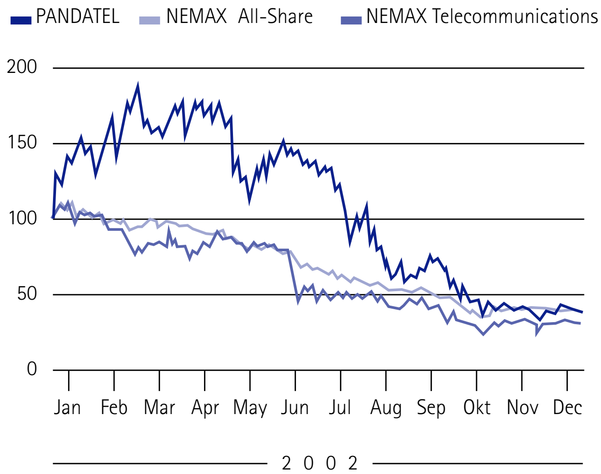
Share price below book value

Similar to the two preceding years, the price of the PANDATEL share shadowed the general trend on equity markets and, in particular, that of the telecom sector. Having practically doubled in value in the first two months of the year, the share price slid continuously down in the course of the year to an all-time low of €2.77 in December. Altogether, the performance of the share was 61% down on the closing price at year-end 2001. The benchmark indices also closed down on their respective 2001 year-end prices; the NEMAX All-Share by 63%, the NEMAX 50 by 69% and the NEMAX Telecommunications by 72%. In the first weeks of this year, the share moved sideways for the most part, marking the year-end price in mid-February of €3.10m.

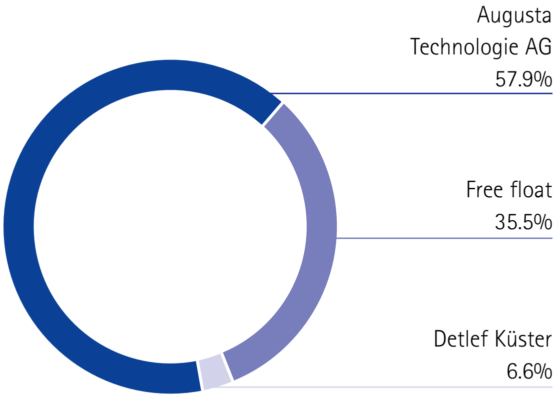
A comparison of the share price with the liquidity available at December 31, 2002 of €4.14 per share and the current book value of €6.65 per share confirms the depth of the uncertainty of investors. Evidently, investors expect further losses at PANDATEL and have already factored them into the share price. This also means, though, that significant potential exists for price increases if the company meets or even outstrips its targets.

PANDATEL share in comparison with relevant indices

Performance in %



Shareholder structure



Communication more important than ever

Precisely when times are tough, PANDATEL places emphasis on up-to-date information and open communication with the financial community. For this is the only way the company can strengthen investor confidence in the PANDATEL share. The long-term goal is to make the share so well-known as to set it apart from the overall market and allow its price to reflect the value of the company and not the sentiment towards the sector.

PANDATEL regularly holds analysts' meetings and conference calls to present and elaborate the quarterly figures. Moreover, the management conducts individual discussions with analysts and investment companies in Germany and the UK in order to introduce the company. The current offer of information on our website – since March 2003 in the company's new corporate design – is particularly popular with private investors. Last year, among other things, a multimedia press review was added to the investor relations section in the Internet as well as a detailed listing of all directors' dealings. Furthermore, a video recording of the AGM can be viewed for the first time in the Internet.

German Corporate Governance Code implemented

PANDATEL supports the recommendations of the Government Commission on the German Corporate Governance Code of August 30, 2002, and fulfills the recommendations in nearly all points. The declaration of fulfillment, which lists the few exceptions, can be found (in German) in the Internet under www.pandatel.de > investor relations.

No dividend distribution as a way to safeguard the intrinsic value

The negative result has prompted the management to recommend not to make a dividend distribution for the year 2002 (previous year: €0.14 per share).

Share key figures 2002

ISIN	DE 000 691 630 7
Number of shares	7,225,000
Closing price at year-end 2001	€7.95
52-week high	€14.70
52-week low	€2.77
Year-end closing price	€3.10
Market capitalization at year-end	€22.4 m
Market capitalization of free float at year-end	€7.95 m
Average daily trading volume	20,000 units (on Xetra)
EPS	–€0.19
Cash flow per share	€0.02
Shareholders' equity per share	€6.63
PER	–16.3
Price/cash flow ratio	155
Segment	Neuer Markt (until December 31, 2002) Prime Standard (from January 1, 2003)
Indices	NEMAX All-Share NEMAX Telecommunications NEMAX 50 (until September 22, 2002) Prime All-Share-Index (from March 2003)

Report of the Supervisory Board

In fiscal 2002, 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 associated companies in the form of written and oral reports.

The Supervisory Board also 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. Matters which required the involvement of the Supervisory Board were duly addressed in accordance with legislative regulations and the Articles of Association.

In the twelve months under review, the Supervisory Board convened at four ordinary meetings and one extraordinary meeting. 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 direction of the company's strategic and international policy.

In addition to these 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 following key resolutions were made at the meetings:

- **Approval of the financial statements for 2001**
- **Resolution to issue warrants to members of the Executive Board and employees of PANDATEL AG**
- **Passage of the corporate governance principles**
- **Approval of the budget for fiscal 2003**

The following changes took place in fiscal 2002 in the organs of the company compared with a year earlier: at October 31, 2002, Henrik Förderer, Spokesman for the Board, Managing Director responsible for Marketing and Sales, departed the company at his own request and in mutual consent. At November 1, 2002, the Supervisory Board nominated Heinrich-J. Kraus as new CEO. Prior to this, Mr. Kraus had been Managing Director responsible for Marketing/Sales at Augusta Technologie AG.

The financial statements at December 31, 2002, and the management report, both of which were prepared by the Executive Board, have been examined by the auditors appointed at the Annual General Meeting, Ernst & Young Deutsche Allgemeine Treuhand AG Wirtschaftsprüfungsgesellschaft, Hanover. 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. The Supervisory Board has examined the financial statements and management report on the basis of the auditors' report and has found no cause for objection. The financial statements have been approved by the Supervisory Board.

The auditors furnished the following opinion on the report of the Executive Board on the relations to the affiliated companies in accordance with Sec 312 German Stock Corporation Law:
"Having duly conducted our examination and assessment, we hereby confirm that

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

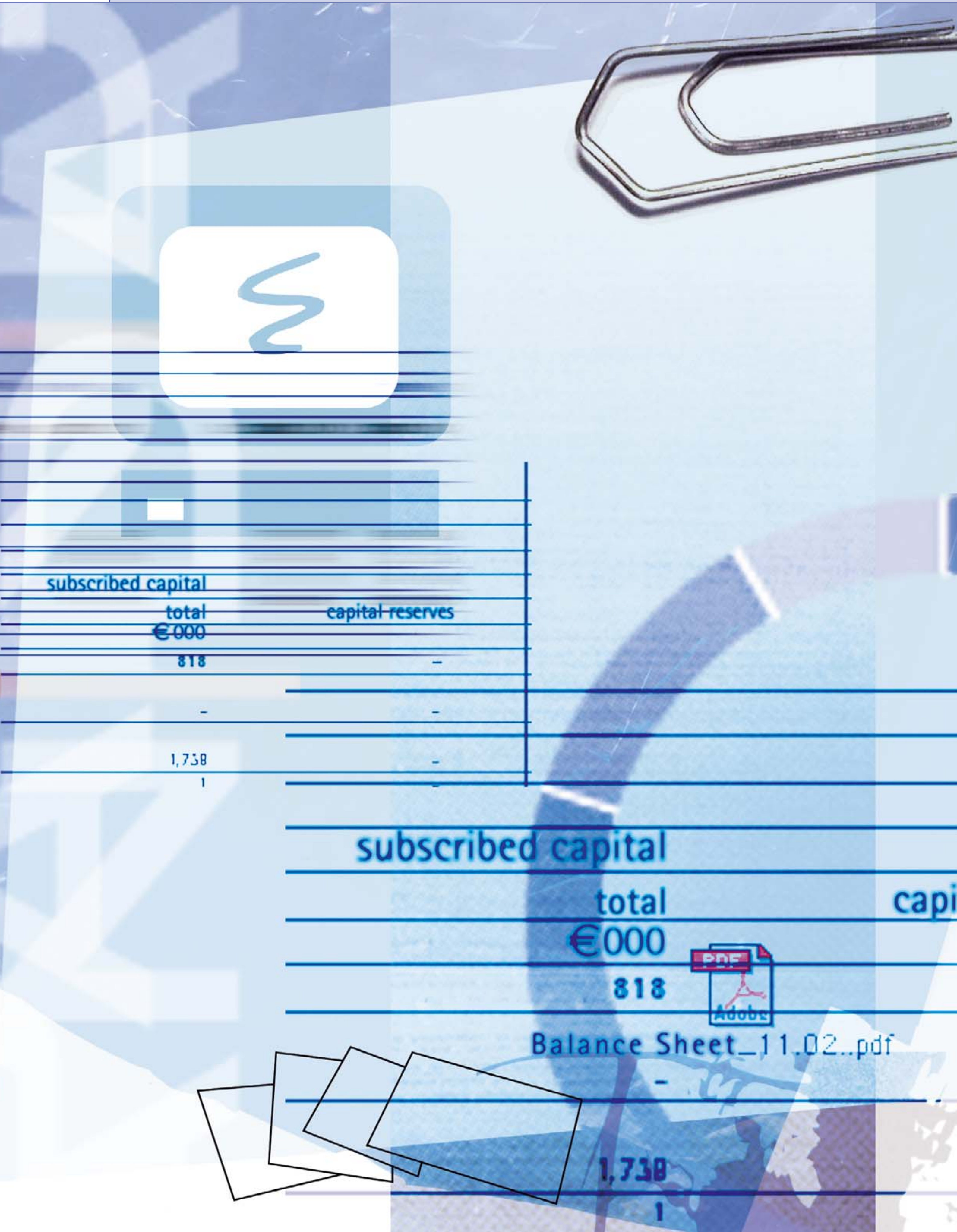
The Supervisory Board concurs with the auditors' report. Following the final examination of the audit by the Supervisory Board, we raise no objections to the explanation by the Executive Board at the end of the report regarding the relations to the associated companies.

The Supervisory Board would like to thank the entire 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 excellent work in fiscal 2002.

Hamburg, March 10, 2003

The Supervisory Board

Axel Haas, Chairman — Dr. Steffen Leistner — Prof. Dr. Uwe Hannig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Consolidated Financial Statements of PANDATEL AG

Group Management Report PANDATEL AG – Fiscal 2002

For PANDATEL, 2002 has been the most difficult year in the company's history to date. Sales dropped 8%, and for the first time the company recorded a negative overall result. PANDATEL is, however, a healthy and well-positioned company and will consistently pursue its strategy to return to a success course in 2003.

Further deterioration in background conditions

In 2002, the global economy entered a cyclical trough. The telecommunication market was especially affected, and also had problems of its own to tackle: the high investments of recent years failed to bear fruit and resulted instead in overcapacities, tumbling prices and liquidity bottlenecks. In this situation, carriers and telephone companies felt compelled to drastically lower their investments in network infrastructure. As a consequence, the market for network equipment makers – such as PANDATEL – literally collapsed.

North American service providers, for example, reduced their fixed network investments in 2002 by an estimated 53%. The overall global market for optical transmission also tumbled by some 53%, from US$16.1bn to US$7.6bn[1]. The optical components segment of the market is even predicted to plummet by 65%, from US$4.4bn to US$1.5bn[2].

In the first three quarters of 2002, five producers covered altogether 59% of the market for optical equipment: Alcatel topped the league with 15%, followed by Nortel, Fujitsu, Lucent and Siemens[3].

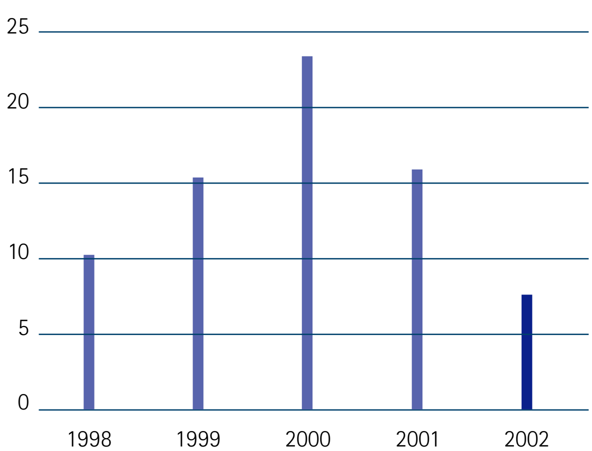
[1]Source: Market research institute Dell'Oro Group, November 21, 2002

[2]Source: Market research institute RHK, November 21, 2002

[3]Source: Market research institute Infonetics Research, November 21, 2002

Global market for optical transmission

in US$ bn



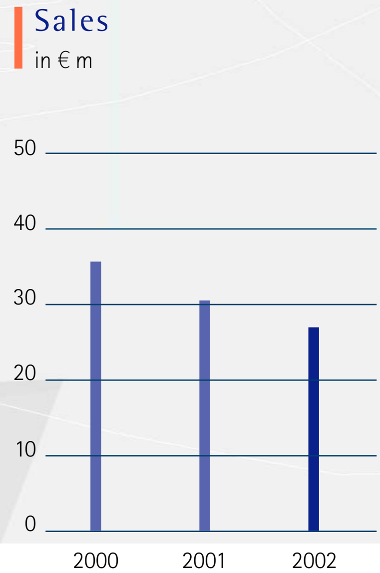
Source: Dell'Oro Group, July 29 and November 20, 2002

Sales hit by falling demand

As a result of the bad market situation, PANDATEL recorded a decline in sales for the second consecutive year. Developments in 2002 were unlike previous years: in the past, the last few months of a year had always been the strongest, but this time they were the weakest. When PANDATEL realized that it would fail to maintain the uptrend of the first half-year, the Executive Board revised down its sales target for the PANDATEL group in November, from €30.6m to €28m. In the end, this goal was slightly exceeded: altogether, sales of the PANDATEL group reached €28.3m and were therefore down on the previous year by 7.6% (2001: €30.6m). In addition to the weak demand, the dropoff in sales can also be attributed to the fall in selling prices. In tandem with sales, new orders also dropped to a similar degree. At €28.2m, they were 4.2% down on the previous twelve months (€29.4m). The order backlog of €2.8m at December 31, 2002 (2001: €3.0m) reflects the investment behavior of customers at the moment, characterized by exceptional restraint and decisions made at short notice.

The export quota of 89.3% remained very high (2001: 91.9%). The EMEA region (Europe, Middle East, Africa) accounted for the lion's share of total sales of 48.3%. Sales in this region were upgraded by 1.6%, from €13.4m to €13.7m, with Germany, the UK and Italy performing especially well. The Asian region failed to maintain the extremely good level of the previous year, forfeiting 12.6% of its sales (decline from €11.9m to €10.4m). Its share in total sales dropped to 36.9%. In the Asia-Pacific region, however, PANDATEL still sees very good growth opportunities. The American continent registered a loss of 20.1%, contributing €4.2m or 14.8% to sales (2001: €5.2m).

Sales by business division also reflects the current market situation. Customers are investing less in cost-intensive optical systems for expanding capacities – such as PANDATEL's FOMUX-DWDM multiplexer family – preferring more cost-efficient solutions for supplementing and optimizing the available networks, such as channel cards, modems and converters from the Telecommunications business area (products for network access and data transmission). Thus, Telecommunications raised its share in total sales from 76.1% to 84.4%, while the share of the Optical Networks business area (optical multiplexer systems) contracted from 21.3% to 13.2%.



€12m to €7.8m. Trade accounts receivable dropped by €4.2m. The reduction in financial assets by €10.4m can be attributed to the sale of bonds amounting to €7.5m. The securities were sold in November 2002 at a favorable price in order to replenish the liquidity reserves for the proposed acquisitions. The transaction raised the liquid funds item accordingly. Also contributing to the reduction in financial assets was the regrouping of investment securities of €2.9m to the current assets. The balance sheet total slipped from €57.4m last year to €50.5m in fiscal 2002. However, with liquid funds of €24.8m and an equity ratio of 94.9%, PANDATEL can still boast of a healthy balance sheet structure.

In the twelve months under review, PANDATEL made investments totaling €1.2m. Administration accounted for €0.8m of this amount, mainly relating to computer software and hardware. €0.3m were spent in the development area, primarily for test and measurement equipment. In production, €0.1m were invested in test and measuring appliances. The remaining investments relate to sales. Leaving aside the financial assets, an investment quota is derived in relation to sales of 4.1% compared with 6.0% in 2001.

The third business area, Industrial Communications (industrial data transmission, security and surveillance technology), contributed 2.4 % to sales (2001: 2.6 %).

Sales decline and special effects squeezing profits

In response to the weak market conditions, PANDATEL recorded a negative result for the first time in its history. Earnings before interest and taxes (EBIT) were minus €3.8m compared with €3.0m last year. A net loss was recorded for 2002 of €1.4m compared with last year's net income of €2.3m. This translates into a loss per share of €0.19.

The unsatisfactory earnings development in both operations and in the net result can be attributed not only to the decline in sales but above all to the various non-recurring special effects. The largest item in this regard concerns stock on hand: in 2001, it seemed necessary to build up inventories as there were signs of shortages on the procurement market. However, after the volume of sales failed to meet the original budget, it became clear in 2002 that the extent and age structure of the inventories were no longer commensurate with the medium-term realizable sales. In addition, a number of value adjustments had to be made for insolvencies and open receivables, largely affecting South and Central America. Despite hedging, high currency losses were recorded in fiscal 2002 owing to the marked fall in the US dollar exchange rate.

Balance sheet structure still sound, liquidity high

The special effects mentioned above also filtered through to the corresponding balance sheet items. Inventories declined after stock-taking, from

Presence on all key markets worldwide

PANDATEL is represented on the three continents most important for telecommunication, offering support and services to corporate customers in more than 80 countries. In Europe, besides the head office in Hamburg, the company also maintains representative offices in London, Paris and Stockholm. On the American continent, PANDATEL operates a subsidiary in New Jersey and has a representative office in Miami. A subsidiary in Singapore works the Asia-Pacific market, backed by a representative office in Shanghai.

The development of the subsidiary PANDATEL Inc. in the USA failed to live up to expectations in 2002. This can be attributed on the one hand to the especially weak market conditions and on the other hand to the flat customer structure with only a few major buyers. For this reason, we streamlined our offices in New Jersey, adjusting it to the current potential sales volume. However, PANDATEL still views this location as an important starting point for expanding the North American market again and exploiting business opportunities on the spot and with short response times.

Last fiscal year, the subsidiary PANDATEL Asia Pacific Pte Ltd started tapping further sales markets like Sri Lanka and Vietnam. The newly-opened office in Shanghai sounded out the Chinese market and forged first contacts. China is of interest to PANDATEL not only because of its auspicious sales market but also due to the development and production site potential it offers thanks to the extremely competitive conditions there.

Product development geared to new demands

PANDATEL has further intensified its development work in 2002 so that the solutions currently in demand can be offered quickly, particularly in this difficult market phase. In order to fulfill this demand, the company has hired ten new employees in its development department. Besides this, a number of individual projects have been outsourced to external developers as a way of further reducing the response times.

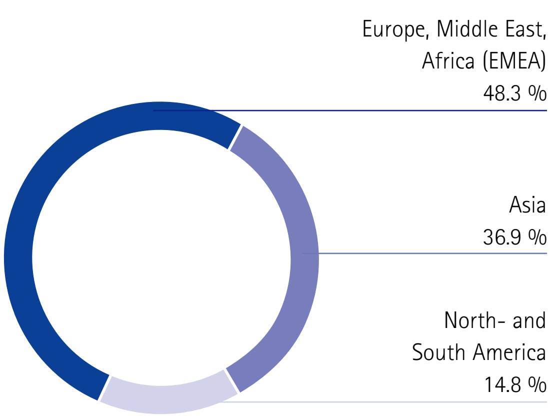
PANDATEL products take great account of the current requirements of carriers, telecom companies and corporate customers: right now, customers are especially demanding investment security and are paying increasing attention to issues such as cost efficiency and total cost of ownership.

In the Optical Networks business area, PANDATEL presented in 2002 its fiber optic multiplexer FOMUX 500 which, thanks to its two channels, is especially suited for smaller applications of carriers or for companies' own storage networks (SANs).

At the moment, Optical Networks is working on, among other things, developing a CWDM multiplexer. The CWDM technology (coarse WDM) – similar to the DWDM technology – uses various wave lengths of light for the parallel transmission of several data channels on a single fiber optic line. The bandwidth of CWDM systems is, compared with DWDM systems, considerably lower. However, where capacities only have to be doubled, for example, and not raised ten-fold, this technology is more than adequate. The great advantage of CWDM systems is their comparatively attractive price. They therefore represent a cost-efficient alternative to DWDM systems, especially in the access area. The application focus lies on the enterprise backbone, and here specifically the connection of locations within a city area and the relocation of data centers (e.g. SANs).

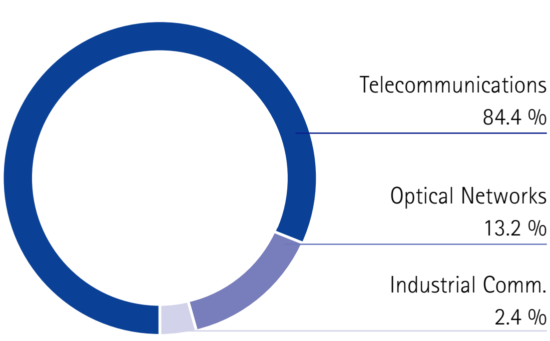
Sales by region

in %



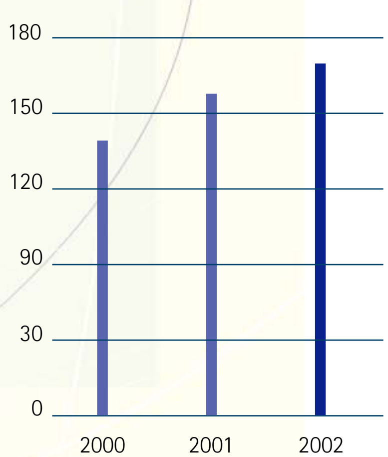
Sales by business area

in %



In the Telecommunications business area, PANDATEL has developed new multiplexers and converters. The access multiplexer EMUX-M bundles 16 channels together along a single copper or fiber optic line. It is especially interesting for large companies and carriers. The fiber optic multiplexer S-MUX 155, on the other hand, is geared more to small and medium-sized companies. It simultaneously transmits speech and data applications along a joint connection at speeds of 155 Mbps. PANDATEL's ET-CG Gigabit Ethernet media converter is another product developed for linking copper and fiber optic cables. The ET-CG is deployed for linking networks to broadband IP backbones and for transmitting large data volumes over distances of up to 70 kilometers.

Number of employees



Cooperation agreement signed with Tellabs

In February, PANDATEL signed a long-term cooperation agreement with Tellabs, Inc., USA. Tellabs is a top supplier of technology which supports the establishment of converging networks of the future for speech, data and video transmission. Tellabs operates on a global scale and can look back on years of relations maintained to the key service providers worldwide. The agreement allows Tellabs to use the PANDATEL products for expanding its DWDM systems. The integrated solution, which is also suited for deployment in SANs, gives service providers the possibility of offering new services by optimizing the data transmission capacities of the network infrastructure they already have. In this way, they can tap additional income sources and simultaneously lower operating costs. The cooperation with Tellabs is of particular strategic significance for PANDATEL in the field of product development as it has given PANDATEL the opportunity to broaden its own product range while developing the products for Tellabs. An example is the CWDM system FOMUX 2500, which is scheduled for presentation in the first half of 2003.

The cooperation between PANDATEL and Tellabs was launched in conditions that could not have been worse and has therefore developed more sluggishly in 2002 than anticipated. The DWDM components in particular have experienced a disastrous collapse, tumbling by an estimated 74%. Over the medium term, though, PANDATEL still sees a very positive future for the cooperation with Tellabs: after another weak year, double-digit growth rates for DWDM components are predicted again from 2004[4].

Additions to employee base

In 2002, PANDATEL employed an average 172 staff members, ten more than last year. 152 persons were full-time employees and 20 part-time employees.

PANDATEL Asia Pacific Pte Ltd employed eight persons as average for 2002, with seven deployed in Singapore and one in the Shanghai representative office. Seven persons were employed at PANDATEL Inc., with three colleagues at the New Jersey office and four in the Miami representative office. At the Paris, London and Stockholm offices, three, two and one persons respectively were employed.

[4]Source: RHK, November 12, 2002

Heinrich-J. Kraus new Spokesman for the Executive Board

At October 31, 2002, Henrik Förderer resigned from the Executive Board of PANDATEL. At November 1, 2002, the Supervisory Board nominated Heinrich-J. Kraus as new CEO. Mr. Kraus, aged 47 and holding a university degree in computer studies, occupied managerial posts between 1982 and 1999 at, among other companies, Philips and Toshiba, finally as Managing Director of Sony Deutschland GmbH responsible for the capital goods business. From 2000, he had been Managing Director at Augusta Technologie AG responsible for Marketing/Sales and Acquisitions.

Risk management

The fact that PANDATEL operates globally means that it is exposed to a series of risks which are inextricably linked to its business dealings. The company has installed a comprehensive risk management system as a means of identifying and assessing these risks and developing the appropriate measures for surmounting them.

A key feature of PANDATEL's risk management system is its ability to recognize risks at an early stage: with the aid of a matrix, single risk factors are identified and assessed at specific intervals. The risk areas listed here serve as a check list for dangers that could jeopardize the continued existence of the company. Besides market and economic risks, assessments are also made of the operating risks from all areas of the company – technology, finance and others – which could greatly influence business development, the financial situation and profits. New orders, economic data and the results of market studies of international research institutes also flow into the estimate of the forecasts and probability of event; besides this, consideration is also given to in-depth projects, investments and restructurings when evaluating the risks.

According to the assessment of the management, there are no acute risks at the moment which could endanger the existence of the company.

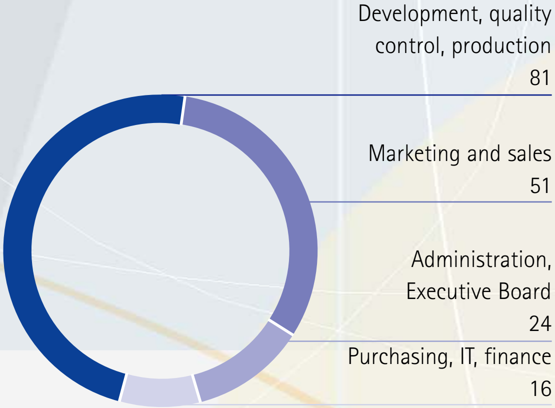
Besides the conditions in the overall economy and the industrial sector, the economic and market risks also include new rival suppliers penetrating the market, which could come about from several companies merging, and the new competitve conditions which PANDATEL could face from serving other market segments. Increasing price pressure is a further factor in this regard. The current economic slowdown is causing PANDATEL to adjust its cost structure and optimize its organization.

From a technological viewpoint, PANDATEL's aim is to adapt to the permanent developments taking place in telecommunication and to the growing requirements of the customers. Owing to the fact that the innovation cycles in these technologies are very short, there is a risk that a product could become outmoded after a relatively brief period or might need to be modified. In order to preserve our innovative strength, we invest in human resources, know-how and technology of the development fields, and subject our product portfolio to permanent monitoring to ensure that it is up-to-date and geared to the future.

In our view, the product liability risks are low. In the past, no claims have been filed against PANDATEL. The quality control methods are continuously examined and improved. In order to further limit the risks, the company took out a product liability insurance.

The downturn in the overall economic situation on a number of markets creates financial risks – delays in payments on the part of customers or difficulties collecting receivables. To overcome these risks, we examine the customer's creditworthiness for each order and only deliver, wherever necessary, upon advance payment. Our global operations mean that we

Employees by function



are exposed to currency and interest rate risks, especially from the volatile exchange rate of the US dollar against the euro. Prices in US dollars can only be adjusted to the euro exchange rate in certain intervals. This means that when the dollar is weak, the margin would sink. Our treasury management is responsible for supervising the risks from financial transactions, supported by PANDATEL's principal banks.

We rely on national and international suppliers for the supplies of our components. However, we are able to limit our dependence on single suppliers by closely monitoring the market and examining alternative components, and can therefore avoid the need to redesign our products.

The success in our sales efforts hinges greatly on our sales partners. PANDATEL's sales entail a certain risk of dependence on distributors. To minimize this risk, we bind our partners and distributors by way of contract and constantly examine new distribution channels.

Acquisitions and strategic alliances generally involve risks, as they necessitate the integration and harmonization of employees, technologies and products. Another risk is that the acquired technologies could decline in value in response to unforeseen business and market developments. To curb these risks, the procedure for acquisitions has been clearly defined. Before an acquisition is made, a four-stage due diligence (examination and valuation of the company) has to be carried out.

This due diligence program first covers the classic financial due diligence, which plays a crucial role in determining the purchase price and is based on the company's figures and financial statements as well as on budgeted figures. The market due diligence takes a close look at the company's market and technological potential. A legal due diligence is then carried out which takes account of contracts with customers, suppliers and partners, patents and process risks. Finally, a human resources due diligence is carried out to expose any personnel risks. In many companies, knowledge is the most important resource. The human resources due diligence analyses the "intellectual capital" of a company. Management potential and leadership efficiency are also assessed here. A process has been defined for the execution of acquisitions which also incorporates the Supervisory Board alongside the Executive Board and – if necessary – the company's General Meeting.

Report on dependent companies

In view of the existing majority stake of at present 57.9% held by Augusta Technologie AG, PANDATEL is obliged pursuant to Sec 312 German Stock Corporation Act to prepare a dependent company's report. This report was compiled by the Executive Board and examined and certified in the framework of the audit of the annual financial statements.

The conclusions of the dependent company's report read as follows: "The Executive Board of PANDATEL AG hereby declares that, as defined by Sec 312 German Stock Corporation Act, no legal transactions were effected to the detriment of the company and no measures were taken to the detriment of the company."

Outlook: Sound strategy for growth and profits

The medium-term prospects for PANDATEL's core markets are currently viewed in a muted-optimistic light. While the sector expects the market for telecom equipment to contract again in 2003 by a further 10 to 15%[5], a less marked decline or even a slight growth is being predicted for regional and technological sub-markets. In Germany, for example – a key market for PANDATEL with a sales share of some 10% – the industrial association Bitkom expects a loss of 1%. For the metro segment in Europe, strong growth is already expected in 2003. This is because particularly in local conurbations broadband applications, demand for new services and data traffic are on the increase[6].

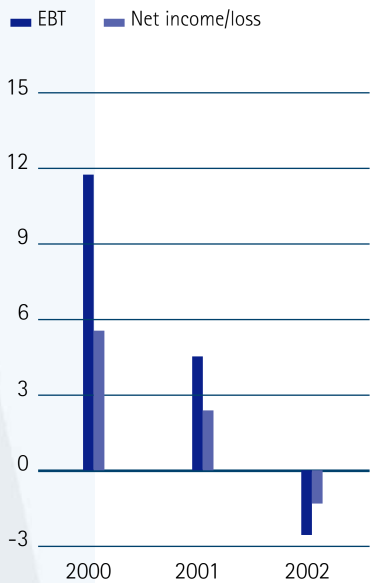
[5]Source: Financial Times Deutschland, January 15, 2003

[6]Source: FibreSystems Europe, December 2002

[7]Source: RHK, October 31, 2002

EBT and net income/loss for year

in € m



For metro equipment, the market research institute RHK forecasts an annual increase worldwide from 2002 to 2006 of an average 10%. The overall market for optical networks is also signaling a marked and fundamental uptrend in its longer-term forecasts: between 2002 and 2006, it is expected to grow on average each year by 8%[7]. PANDATEL also expects lasting growth stimuli from the Asian region – here specifically China.

There can be no doubt that PANDATEL continues to operate in difficult conditions. However, thanks to its very good positioning as international supplier of technological niche products, PANDATEL is set to profit from the market consolidation and participate to an above-average degree in a recovery. The Executive Board is convinced that the course chosen will lead the company back to a growth course within a short period of time. Significant growth and a return to profitability are to be achieved by a three-pronged strategy: the reorientation of distribution, the expansion and acceleration of product development, additional expansion by way of acquisition. Thanks to a healthy balance sheet structure with high liquidity, PANDATEL has the appropriate financial resources to tackle the tasks it faces and seize the market opportunities as they emerge.

For 2003, the Executive Board has already targeted a sizeable sales gain – even irrespective of acquisitions – and the passing of the profit threshold.

Hamburg, February 2003

Heinrich-J. Kraus
CEO

Frank Mauritz
Member of the Executive Board

Norbert Wienck
Member of the Executive Board

Consolidated Balance Sheet at December 31, 2002

Assets

€ 000	Notes*	31/12/2002	31/12/2001
Current assets			
Cash and cash equivalents	(1)	24,785	18,121
Short-term investments/marketable securities	(2)	5,111	2,587
Trade accounts receivable (net)	(3)	5,594	9,768
Inventories	(4)	7,752	12,045
Deferred taxes	(17)	1,225	0
Prepaid expenses and other current assets	(5)	2,540	751
Total current assets		**47,007**	**43,272**
Non-current assets			
Property, plant and equipment (net)	(6)	2,094	2,154
Intangible assets (net)	(6)	1,312	722
Goodwill (net)		0	641
Investments (net)	(6)	0	10,445
Other assets	(7)	83	76
Total non-current assets		**3,489**	**14,088**
Total assets		**50,496**	**57,360**

*The figures in brackets relate to section (C) Explanatory notes p. 43ff

Liabilities and Shareholders' Equity

€ 000	Notes	31/12/2002	31/12/2001
Current liabilities			
Trade accounts payable		564	730
Liabilities against affiliated companies		100	3
Accrued expenses	(8)	1,156	1,215
Accruals and liabilities for income taxes	(9)	138	4,620
Deferred taxes	(17)	0	87
Other current liabilities	(10)	615	393
Total current liabilities		**2,573**	**7,048**
Shareholders' equity	(11)		
No-par value shares with a nominal value of €1.00; at December 31, 2002, and December 31, 2001: 10,025,000 units authorized, 7,225,000 issued and in circulation		7,225	7,225
Capital reserves		33,132	32,854
Unappropriated profit (incl. retained earnings)		7,685	10,096
Changes in shareholders' equity not affecting earnings		–119	137
Total shareholders' equity		**47,923**	**50,312**
Total liabilities and shareholders' equity		**50,496**	**57,360**

The attached notes form an integral part of the consolidated financial statements.

Consolidated Income Statement

€ 000	Notes	2002	2001
Sales		28,278	30,616
Cost of production		−15,813	−15,158
Gross profit from sales		**12,465**	**15,458**
Sales costs	(12)	−7,170	−6,331
General and administrative expenses	(13)	−4,730	−3,765
Research and development expenses		−3,196	−2,335
Amortization of goodwill		0	−92
Other operating income/expenses	(14)	220	275
Operating income		**−2,411**	**3,210**
Interest income/expenses	(15)	1,063	1,374
Gains/losses from foreign exchange	(16)	−1,407	−191
Earnings before taxes		**−2,755**	**4,393**
Income tax	(17)	1,355	−2,054
Net income/loss		**−1,400**	**2,339**
Earnings per share (diluted and undiluted) in €	(18)	−0.19	0.32

The attached notes form an integral part of the consolidated financial statements.

Consolidated Statement of Cash Flow

€ 000		
	2002	**2001**
Net income/loss	–1,400	2,339
Depreciation on intangible and tangible assets	1,278	1,069
Personnel expenses for stock options	278	–130
Profit/loss from sales of tangible assets	–27	22
Cash flow	**129**	**3,300**
Changes in		
trade accounts receivable	4,174	1,362
inventories	4,293	232
other assets which cannot be classified as investing or financing activities	–2,943	81
Changes in		
trade accounts payable	–166	–1,611
deferred taxes	–1,311	131
other liabilities which cannot be classified as investing or financing activities	–2,941	457
Cash flows from operating activities	**1,235**	**3,952**
Income from disposals of fixed assets	69	210
Payments for investments in tangible assets	–809	–209
Income from disposals of intangible assets	0	3
Payments for investments in intangible assets	–387	–642
Income from the sale of held-to-maturity securities	7,582	0
Payments for investments in financial assets	–15	–7,545
Cash flows from investing activities	**6,440**	**–9,183**
Payments to company proprietors (dividends)	–1,011	–2,142
Cash flows from financing activities	**–1,011**	**–2,142**
Changes in cash balances impacting earnings	**6,664**	**–7,373**
Cash and cash equivalents at beginning of period	**18,121**	**25,494**
Cash and cash equivalents at end of period	**24,785**	**18,121**
Interest paid	1	9
Tax paid	6,327	1,338

The attached notes form an integral part of the consolidated financial statements.

Development of Share Capital

	Subscribed capital		
	Shares	**Amount**	**Capital reserves**
	Units	€ 000	€ 000
At December 31, 2000	**7,225,000**	**7,225**	**32,984**
Dividends	–	–	–
Stock option program	–	–	–130
Net income for the year	–	–	–
Unrealized share-price and currency differences after deducting taxes of €32,000	–	–	–
At December 31, 2001	**7,225,000**	**7,225**	**32,854**
Allocation to profit reserves	–	–	–
Dividends	–	–	–
Stock option program	–	–	278
Net loss for the year	–	–	–
Unrealized share-price and currency differences after deducting taxes of –€ 68,000	–	–	–
At December 31, 2002	**7,225,000**	**7,225**	**33,132**

		Other changes in shareholders' capital not affecting earnings		
		Accumulated	Available-	Total
	Profit	exchange rate	for-sale	shareholders'
Revenue reserves	brought forward	adjustments	securities	capital
€ 000	€ 000	€ 000	€ 000	€ 000
1,295	**8,604**	**31**	**25**	**50,164**
–	–2,142	–	–	–2,142
–	–	–	–	–130
–	2,339	–	–	2,339
–	–	90	–9	81
1,295	**8,801**	**121**	**16**	**50,312**
1,728	–1,728	–	–	–
–	–1,011	–	–	–1,011
–	–	–	–	278
–	–1,400	–	–	–1,400
–	–	–32	–224	–256
3,023	4,662	89	–208	
	7,685		**–119**	**47,923**

The attached notes form an integral part of the consolidated financial statements.

Group Statement of Fixed Assets

€ 000					
	Cost of acquisition and production				
	1/1/2002	Additions	Disposals	Transfers	31/12/2002
I. Intangible assets					
1. Concessions, commercial rights, similar rights and assets as well as licenses to such rights and assets	1,307	387	188	917	2,423
2. Goodwill	917	0	0	–917	0
	2,224	**387**	**188**	**0**	**2,423**
II. Tangible assets					
1. Land and buildings including buildings on land owned by third parties	367	65	0	0	432
2. Technical plant and machinery	273	2	4	0	271
3. Other plant, factory and business equipment	4,015	742	324	0	4,433
	4,655	**809**	**328**	**0**	**5,136**
III. Investments					
Investments held as fixed assets	**10,445**	**0**	**7,545**	**–2,900**	**0**
	17,324	**1,196**	**8,061**	**–2,900**	**7,559**

Cumulative depreciation					Book value	
1/1/2002	Additions	Disposals	Transfers	31/12/2002	31/12/2002	31/12/2001
535	487	187	276	1,111	1,312	772
276	0	0	–276	0	0	641
811	**487**	**187**	**0**	**1,111**	**1,312**	**1,413**
56	43	0	0	99	333	311
134	42	4	0	172	99	139
2,311	706	246	0	2,771	1,662	1,704
2,501	**791**	**250**	**0**	**3,042**	**2,094**	**2,154**
0	**0**	**0**	**0**	**0**	**0**	**10,445**
3,312	**1,278**	**437**	**0**	**4,153**	**3,406**	**14,012**

The attached notes form an integral part of 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; the company also has representative offices in France, the UK, Sweden, and the United States (Miami/Florida, until April 2002) as well as subsidiaries in Singapore and the United States (Jamesburg/New Jersey). The representative office in Miami was incorporated into the US subsidiary from May 2002. The subsidiary in Singapore was founded at July 1, 2001. In 2002, this company opened a representative office in China.

(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 AG 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 PANDATEL Inc., USA and PANDATEL Asia Pacific Pte Ltd, Singapore in which PANDATEL Aktiengesellschaft had a controlling financial interest (100% of the voting rights).

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 in line with the so-called book value method 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. No difference remained as a result of the consolidation.

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 are offset against the corresponding expenses. Interim earnings or losses have been eliminated.

Conversion of financial statements in foreign currency

Assets and liabilities carried by the foreign subsidiaries included in the consolidation whose functional currency is the respective local currency have been converted into euro at the exchange rate valid on the recording date. The shareholders' equity was converted 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 converted into euro at the average exchange rate of the fiscal year.

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 conversion

Receivables, cash balances and liabilities in foreign currencies were converted 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 AG 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' capital which do not affect the operating profit), depending on whether a fair value hedge is concerned or a cash flow hedge. Until now, PANDATEL AG has only made limited use of financial derivatives.

For more information on the risk management strategies and their implications for the consolidated financial statements, please see „Other information on financing instruments".

Securities

In the period under review, securities that were to be held-to-maturity were sold.

The remaining securities under this item were classified under the current assets and valued at the original cost of acquisition. The securities of the current assets are not held for speculative purposes but are intended to be available for sale. The company can drawn on the available-for-sale securities as required. They are valued at market value at the end of the fiscal year. Unrealized profits and losses are shown less any deferred taxes as components of "Other changes in the shareholders' equity not affecting earnings". 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.

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, appropriate deductions for storage have been charged. 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 generally 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 equipment	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 goodwill, patents, 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 (3 to 10 years) to the residual book value. Goodwill and other intangible assets with unlimited useful life do not exist. Prior to January 1, 2002, intangible assets including goodwill were valued at cost of acquisition, and were written down over the customary useful life of 3 to 10 years.

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.

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 deemed to have been realized with the issue of an invoice and dispatch of the merchandise or when services are rendered. Sales revenues take discounts, client bonuses and cash discounts into account.

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
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 are 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 have an earnings-diluting effect.

Implications of new accounting principles

In August 2001, the FASB issued SFAS 144 "Accounting for the Impairment or Disposal of Long-Lived Assets". The standard covers accounting and disclosure requirements for unscheduled write-downs and disposal of long-lived assets. The standard replaces FASB statement No. 121 as well as the regulations laid out in APB 30 regarding the accounting and recording rules for the disposal of a business area. The standard also amends ARB 51 "Consolidated Financial Statements" to the extent that it supercedes the exemption from a duty to include participations in the consolidation in which a controlling interest is only held for a temporary period. The regulations apply for fiscal years commencing after December 15, 2001.

In April 2002, the FASB passed standard SFAS 145 "Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections". This supercedes the standards SFAS 4 "Reporting Gains and Losses from Extinguishment of Debt", SFAS 44 "Accounting for Intangible Assets of Motor Carriers" and SFAS 64 "Extinguishments of Debt Made to Satisfy Sinking-Fund Requirements". At the same time, it also effects a change in the standard SFAS 13 "Accounting for Leases". These amendments remove the inconsistency between the required accounting of sale-leaseback transactions and specific changes in rentals, the economic repercussions of which are similar to those of sale-leaseback transactions. The companies are obliged to apply SFAS 145 for fiscal years commencing after May 15, 2002.

In July 2002, the FASB published SFAS 146 "Accounting for Costs Associated with Exit or Disposal Activities", which supercedes Emerging Issues Task Force (EITF) Issue 94-3 "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)". SFAS 146 prescribes that expenses which result from the exit or disposal of activities are only recognized as income when an obligation exists vis à vis a third party and not when the company's management agrees to a concrete exit of activities or disposal plan. The expenses referred to here include specific redundancy payments to employees, costs for the premature termination of contracts and costs in connection with the merger or closure of production sites or the deployment of staff members to other sites. SFAS 146 also stipulates that the obligation is to be valued at market value and accordingly adjusted in the event of changes in the estimated cash flows. The regulations of the new standard are to be applied prospectively for the cessation or sale of activities which were initiated after December 31, 2002; an earlier application is possible.

The standard SFAS 147 "Acquisitions of Certain Financial Institutions" became effective in October 2002. This standard relates to the definition directives for applying the purchase method when acquiring financial institutions. At the same time, it serves as an addendum to the FASB Standards 72 and 144 and Interpretation 9. In future, transactions of this kind must be recorded commensurate with Standards 141 "Business Combinations" and 142 "Goodwill and Other Intangible Assets". The standard SFAS 147 is to be applied for the first time for acquisitions which took place after October 1, 2002.

In December 2002, the FASB passed Standard 148 "Accounting for Stock-Based Compensation – Transition and Disclosure". This standard is a revised version of the publication requirements in connection with stock-based compensation systems which had previously been regulated under Standard 123 "Accounting for Stock-Based Compensation". The new standard also regulates the transition to the fair-value based accounting method of stock-option plans. The aim is to align the US GAAP accounting methods to those of the IAS by endeavoring to use the same fair-value calculation of stock-based compensation plans at the issue date with the costs being spread over the term. SFAS 148 applies for fiscal years commencing after December 15, 2002.

According to current estimates of PANDATEL AG, no major repercussions arise for the consolidated financial statements as a result of these new regulations.

(C) Explanatory notes

(1) Cash and cash equivalents

€ 000	31/12/2002	31/12/2001
Current account	1,094	4,364
Overnight money US dollars	191	216
Overnight money euros	400	1,160
Time deposits	23,100	12,381
	24,785	**18,121**

At the balance sheet date, non-realized losses from exchange rates were derived of €3,000 (€0).

(2) 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.

€ 000	Cost of acquisition	Stock exchange or market value	Unrealized profits	Unrealized losses
Papers securitizing outside capital	**5,460**	**5,111**	**13**	**362**

The marketable securities carried at the balance sheet date relate to units in German investment funds (unlimited duration) and to euro floaters (maturing 2009). In 2001, the euro floaters were shown under the held-to-maturity securities in the fixed assets. Due to the fact that the bonds amounting to €7,545,000 also contained in this item were sold in 2002 contrary to original expectations, the euro floaters with a nominal value of €2,900,000 and a market value of €2,610,000 have been regrouped at their original cost of acquisition from the fixed assets to the current assets. At the balance sheet date December 31, 2002, the balance of unrealized losses from exchange rates was €349,000 (2001: €27,000 unrealized exchange-rate gains). Less the deferred taxes of minus €141,000 (2001: €11,000), these have been shown under other changes in the shareholders' equity not affecting earnings. Profits or losses from the sale of marketable securities were not incurred either in the twelve months under review or in the previous year.

(3) Trade accounts receivable (net)

€ 000	31/12/2002	31/12/2001
Gross receivables	6,981	9,982
./. less value adjustments	1,387	214
	5,594	**9,768**

The value adjustments primarily concern customers from South and Central America.

(4) Inventories

The inventories are comprised as follows:

€ 000	31/12/2002	31/12/2001
Raw materials and auxiliaries	3,769	7,482
Unfinished goods and work in progress	1,888	2,584
Finished goods and services	2,095	1,979
	7,752	**12,045**

In fiscal 2002, write-downs were furnished for marketability, ranges, etc. amounting to €3,299,000 (2001: €438,000).

(5) Pre-paid expenses and other current assets

€ 000	31/12/2002	31/12/2001
Tax refund claims (VAT and income taxes)	2,286	451
Receivables from staff members	0	6
Interest receivable	74	97
Pre-paid expenses	86	164
Other	94	33
	2,540	**751**

(6) Tangible and intangible assets, financial assets

The structure and movements of the fixed assets are presented in the consolidated statement of fixed assets in this report.

The additions to the license rights result from the purchase of other modules of the ERP Software Pro Alpha as well as database programs and other software for application programs.

The rebooked item in the intangible assets concerns the requalification of amounts hitherto shown as goodwill as other depreciable intangible assets in connection with the first-time application of SFAS 141.

The disposals of intangible assets concern scrappings.

In future, the write-downs on intangible assets are expected to comprise the following amounts:

	€ 000
2003	400
2004	400
2005	400
2006	112
2007	0

The additions to the tangible fixed assets largely relate to the installation of an alarm system as well as the acquisition of various measurement and test equipment as well as cars.

The German bonds shown under financial assets in 2001 amounting to €7,545,000 were sold in November 2002 in connection with the aim of raising the liquidity reserves for planned acquisitions. In addition, €2,900,000 were reclassified to the marketable securities.

In 2002, a profit resulted from the disposal of fixed assets of €43,000 (2001: €15,000) and losses of €16,000 (2001: €37,000). These are shown under other expenses/income. In fiscal 2002, €38,000 (2001: €0) related to gains from the sale of held-to-maturity securities.

(7) Other assets

€ 000	31/12/2002	31/12/2001
Rent deposits	22	19
Cash deposited as collateral	49	57
Other	12	0
	83	**76**

(8) Accrued expenses

€ 000	31/12/2002	31/12/2001
Outstanding staff remuneration	448	554
Holiday entitlement not taken	178	175
Guarantees	81	91
Other	449	395
	1,156	**1,215**

(9) Accruals and liabilities from income taxes

€ 000	31/12/2002	31/12/2001
Accruals for trade tax	0	2,149
Accruals for corporation tax	0	2,333
Accruals for pre-tax costs of flotation	138	138
	138	**4,620**

The accruals for trade tax and corporation tax at December 31, 2001 related to the assessment periods 2000 and 2001. Both years were assessed in 2002.

(10) Other current liabilities

€ 000	31/12/2002	31/12/2001
Social insurance contributions	185	161
VAT and retained taxes	104	97
Other	326	135
	615	**393**

(11) Shareholders' equity

Capital stock
The subscribed capital amounts to €7,225,000 (2001: €7,225,000) and breaks down into 7,225,000 unit shares without par value with an arithmetical share in the capital stock of €1.00. All shares were issued and are in circulation.

Authorized capital
The Executive Board is authorized to raise the capital stock of the company once or on several occasions until July 31, 2004 with the consent of the Supervisory Board by issuing new shares against contributions in kind or in cash by a maximum total of €2,800,000.00. At the consent of the Supervisory Board, the Executive Board is empowered to exclude the statutory subscription rights of the shareholders for a total of up to €560,000.00 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 AG. Each option entitles the holder to subscribe to an ordinary share in PANDATEL AG in line with the details of the stock option plan resolved by the Annual 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.

With the consent of the Supervisory Board, the Executive Board can use its own shares as a counterpayment to third parties for a non-cash contribution. No acquisition of own shares was made.

Proposal on the allocation of retained earnings
The Executive Board and the Supervisory Board will propose to carry over to next fiscal year's accounts the balance sheet profit for fiscal 2002 amounting to €3,456,439.61.

Stock options
At December 31, 2002, stock options had been granted in four 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 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 can 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 can be exercised at the earliest following the Annual General Meeting in May 2004. The stock options from the first, third and fourth 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 and €12.41 for the fourth 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 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, euromicron AG, Teles AG and transtec AG with a two-third weighting during the same period. 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.

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

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 expenses relating to the second tranche were annulled in 2001 as these were returned to the company by the holders without exception and without claim to compensation. The expenses incurred by the holders who left the company in fiscal 2001 were written off in 2001 as the options could not be exercised by the time the persons departed the company.

	1st tranche	2nd tranche	3rd tranche	4th tranche	Total units
Outstanding options at January 1, 2002	43,747	0	60,199	0	**103,946**
Outstanding options at December 31, 2002	41,247	0	46,159	54,499	**141,905**
Exercisable options at December 31, 2002	41,247	0	0	0	**41,247**
Options issued in 2002	0	0	0	56,999	**56,999**
Options issued in 2002	0	0	0	0	**0**
Expired/returned options in 2002	2,500	0	14,040	2,500	**19,040**
Options expiring in 2002	0	0	0	0	**0**

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

€ 000		
	2002	**2001**
Cost of goods sold	6	–5
Sales costs	117	–31
R & D costs	67	–60
General administrative expenses	88	–34
	278	**–130**

(12) Sales costs

€ 000		
	2002	**2001**
Advertising costs	534	832
Trade fair costs	353	433
Other sales costs	6,283	5,066
	7,170	**6,331**

(13) General and administrative expenses

The general administrative expenses contain the costs in connection with the company's stock exchange listing of €421,000 (2001: €362,000). These relate to investor relations advice, remuneration for our 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 financial statements.

(14) Other income/other expenses

€ 000		
	2002	**2001**
Accounting profit from disposal of fixed assets	43	15
Non-cash remuneration	88	104
Income from the release of reserves and accruals	30	195
Other	112	60
	273	**374**
less accounting losses for disposals of fixed assets	–16	–37
less other operating expenses	–34	–58
less other taxes	–3	–4
	220	**275**

(15) Interest income/expenses

€ 000	2002	2001
Income from securities and lendings carried as financial assets	401	196
Other interest and similar income	17	21
Interest income from fixed-term deposit	528	1,025
Other interest and similar income from associated companies	118	142
Total interest income	**1,064**	**1,384**
Interest expense for short-term liabilities	–1	–9
Guarantee	0	–1
Total interest expense	**–1**	**–10**
	1,063	**1,374**

(16) Currency gains/losses

€ 000	2002	2001
Currency gains from foreign investments, loans and deposits	648	1,338
Currency gains from open foreign-currency receivables and liabilities	3	95
Currency losses from open foreign-exchange receivables and liabilities	–180	–76
Currency losses from foreign investmens, loans and deposits	–1,878	–1,548
	–1,407	**–191**

(17) Income tax

The earnings before income tax of all the companies included in the consolidated financial statements for 2002 amount to minus €2,755,000 (2001: €4,393,000). The result is subject to taxation in the Federal Republic of Germany, Singapore and the USA. PANDATEL AG and the subsidiary in the USA recorded a loss in 2002, the subsidiary in Singapore a profit.

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

€ 000	2002	2001
Current taxes	–135	1,921
Deferred taxes	–1,220	133
	–1,355	**2,054**

Due to a corporation tax loss carryback of €512,000, a tax credit was recorded in Germany for 2002.

In 2002, the company was subject to corporation tax at a rate of 25% on retained profits plus the German solidarity surcharge of 5.5% of the tax bill. This results in a combined tax rate of 26.375% for 2002 (2001: 26.375%).

Moreover, the company is subject to trade tax which is deducted when calculating the profit subject to corporation tax. Thus, the effective trade tax rate was 14.005% for 2002 (2001: 14.005%). The combined tax rates for 2002 are 40.38% (2001: 40.38%).

In September 2002, the Solidarity Law for the Flood Victims was published. As a result of this law, the corporation tax rate for fiscal 2003 has risen from 25% to 26.5% only for this year. This will have a marginal tax effect on the consolidated financial statements for fiscal 2002.

In the case of disbursements, the corporation tax and solidarity surcharge are reduced by one sixth of the disbursement. This led to a reduction of €178,000 compared with the previous year. This reduction will only be taken into account for the tax bill in the year in which the disbursement is made.

The following presentation explains the key differences between the expected tax bill for the corporation tax plus German solidarity surcharge for 2002 and 2001 and the actual tax bill incurred:

€ 000		
	2002	**2001**
Expected tax earning/expense	–1,112	1,774
Non-deductible expenses		
– Depreciation intangible assets	21	37
– Stock option plan	112	–53
Corporation tax reduction owing to		
– value adjustment loan subsidiary	–678	0
– planned dividend	0	–178
– financial investment outside Germany	0	–105
Value adjustment for deferred tax losses brought forward	447	617
Release value adjustment for deferred tax loss brought forward from previous year	–117	0
Deviating tax rate in 2003	–37	0
Other	9	–38
	–1,355	**2,054**
Effective tax rate	49.2%	46.8%

At the balance sheet date, corporation tax loss carryovers existed for PANDATEL AG of €2,346,000 (2001: €0) as well as trade tax loss carryovers of €2,857,000 (2001: €0). These can be carried over in full.

In the USA, loss carryovers exist of some €3m (2001: some €1m). Full value adjustments were made here as there was some doubt over whether the tax authorities would recognize this. The loss carryovers expire in the years 2010 to 2022.

For 2002, the subsidiary in Singapore recorded a profit. After offsetting the loss carryover of €117,000, a tax loss carryover remains of €100,000, which can be used indefinitely.

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

Unlike the previous year's estimate, value adjustments of €95,000 were released and used, as well as a further €22,000 released due to the fact that the subsidiary in Singapore is now generating profits.

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

€ 000		
	31/12/2002	**31/12/2001**
Deferred taxes carried as assets:		
Inventories	66	0
Intangible assets	16	0
Trade accounts payable	1	31
Other accruals and liabilities	0	64
Knock-on effect OCI* unrealized price gains from securities	112	6
Loss brought forward AG	1,074	0
Loss brought forward USA	1,171	500
Loss brought forward Singapore	22	117
	2,462	**718**
Value adjustments	–1,171	–617
	1,291	**101**
Deferred taxes carried as liabilities:		
Receivables	37	73
Other accruals and liabilities	0	98
OCI* unrealized price gains from securities	29	17
	66	**188**
Deferred taxes (net)	**1,225**	**87**
	(Assets)	(Liabilities)

*OCI: Other Comprehensive Income

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

€ 000		
	31/12/2002	**31/12/2001**
Deferred taxes carried as assets:		
Short-term	1,291	101
Long-term	0	0
	1,291	**101**
Deferred taxes carried as liabilities:		
Short-term	66	188
Long-term	0	0
	66	**188**
Deferred taxes (net)	**1,225**	**87**
	(Assets)	(Liabilities)

(18) Earnings per share

The following table shows the calculation of the usual and the diluted earnings per ordinary share:

	2002	**2001**
Numerator		
Group net loss/income for year in € 000	–1,400	2,339
Potential stock option expense in € 000	0	0
	–1,400	**2,339**
Denominator		
Weighted average of outstanding oridnary shares in units	7,225,000	7,225,000
Diluted shares due to stock option plan	0	0
	7,225,000	**7,225,000**
Loss/earnings per ordinary share in €/unit	–0.19	0.32
Diluted loss/earnings per ordinary share in €/unit	–0.19	0.32

If the issue price of the options exceeds the average market price, these options are not taken into account.

(D) Other information

Cost of materials

€ 000	2002	2001
Expenses for raw materials, auxiliaries and goods purchased	12,958	13,238
Expenses for services rendered	348	147
	13,306	**13,385**

Personnel expenses

€ 000	2002	2001
Wages and salaries	8,038	7,638
Social insurance contributions	1,158	1,214
Expenses for pension provision	5	6
	9,201	**8,858**

Rentals and other financial obligations

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

	€ 000
2003	1,138
2004	1,014
2005	985
2006	985
after 2006	985

Total rental expense for fiscals 2002 and 2001 amounted to €1,188,000 and €816,000.

First-time application of the Statement of Financial Accounting Standards (SFAS) 141 and FAS 142

€ 000		
	2002	**2001**
Group net loss/income for the year	–1,400	2,339
Depreciation on goodwill from capital consolidation	0	92
Corrected group net loss for the year	–1,400	2,431
Corrected earnings in €		
• per share without dilution	–0.19	0.34
• per share with dilution	–0.19	0.34

Information on the business units

The company does not have the possibity of dividing up the operating expenses on the business unit level. As a result, the Executive Board has neither the possibility to determine profit or loss by segment nor to calculate the success of the product groups. Consequently, insufficient information is available to measure the results or to make allocation decisions relating to the individual areas.

PANDATEL is currently preparing to report by separate business unit. The company plans to introduce the following segments on the basis of the products made and distributed:

- Telecommunications
- Optical Networks
- Industrial Communications

In the Telecommunications segment, converters, multiplexers and modems are implemented as network transmission products, while in the Optical Networks segment fiber optic wave multiplexers are used with WDM/ DWDM technology (Dense Wavelength Division Multiplexing).

Customer-specific products in particular are served by the Industrial Communications segment, which deploys special systems components. These include FD fiber optic multidrop networks and other types of networks featuring copper or fiber optic interfaces.

The sales of the individual units break down as follows:

€ 000	2002	2001
Telecommunications net	22,635	23,198
Consolidation	1,218	102
Telecommunications gross	**23,853**	**23,300**
Optical Networks net	3,547	6,492
Consolidation	191	28
Optical Networks gross	**3,738**	**6,520**
Industrial Communications net	653	792
Consolidation	34	4
Industrial Communications gross	**687**	**796**
	28,278	**30,616**

For the purposes of geographical presentation, sales have been allocated to the country in which the respective customer is based.

€ 000	2002	2001
EMEA (Europe, Middle East and Africa)	13,657	13,443
Asia Pacific	10,434	11,934
The Americas	4,187	5,239
	28,278	**30,616**

In Germany, sales amounting to €3,022,000 (2001: €2,469,000) were generated.

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

Business relations to affiliated persons

AUGUSTA Technologie AG holds 57.9% of the shares.

Thus, the associate company PANDATEL AG 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 as well as to risks from interest-rate changes. Risks arising from financial transactions are subject to treasury management in collaboration with PANDATEL's principal banks.

In 2002, PANDATEL made use of currency futures to hedge receivables in foreign currency. In the period under review, two US dollar put options were bought. The right was purchased against payment of an option premium to convert an agreed amount in US dollars into euro at a pre-determined date. The aim of this option is to avoid a deterioration beyond the defined price. In return, by not exercising the option it is possible to participate in full from price developments in the opposite direction. No option trades were open at the balance sheet date.

Gains amounting to €45,000 (2001: €0) and losses of €0 (2001: €0) from currency futures are shown in the item „Foreign currency gains/losses". Fees for these transactions came to €26,000 (2001: €0). They are included in the administrative expenses.

In the period under review, held-to-maturity securities were sold. The securities remaining in this item were regrouped to the current assets.

Key accounts

Sales were generated in the fiscal year with the three largest customers of €5,124,000 (2001: €4,448,000), €3,770,000 (2001: €3,804,000) and €1,848,000 (2001: €2,685,000) respectively.

The sales of these customers related to the segments Telecommunications at €10,464,000 (2001: €9,529,000), Optical Networks at €273,000 (2001: €1,366,000) and Industrial Communications at €5,000 (2001: €42,000).

Payroll

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

€ 000	2002	2001
Salaried staff	132	120
Wage earners	40	42
Trainees and participants in job experience schemes	0	0
	172	**162**

Company boards

The Executive Board consists of three members who jointly represent the company.

Mr. Henrik Förderer, Spokesman for the Executive Board, Hamburg (until 31/10/2002)
Mr. Heinrich J. Kraus, Spokesman for the Executive Board, Mönchengladbach (from 1/11/2002)
Mr. Frank Mauritz, Hamburg
Mr. Norbert Wienck, Kaltenkirchen
Mr. Kraus is also Chairman of the Supervisory Board of ND SatCom AG, Friedrichshafen and committee member of Märtens Communications GmbH & Co. KG, Hanover.

In 2002, the emoluments of the Executive Board totaled €864,000 fixed and €118,000 variable (2001: €787,000 fixed and €253,000 variable). Moreover, in the fiscal year under review 24,999 (2001: 24,999) stock options were awarded. Mr. Heinrich J. Kraus joined the Executive Board at November 1, 2002, taking over as successor of Mr. Henrik Förderer who departed the company at October 31, 2002 at the joint consent of the Supervisory Board.

The Supervisory Board consists of the following persons:
Mr. Axel Haas (Chairman), CEO of AUGUSTA Technologie AG, Frankfurt
Dr. Ing. Steffen Leistner (Deputy Chairman), Managing Director at Booz Allen & Hamilton, Munich
Prof. Dr. Uwe Hannig, Managing Director of AVM GmbH, of Auto-Center Zwickau GmbH, of Megatrend GmbH, of PreVis GmbH and of Autopark Zwickau GmbH. All the afore-mentioned companies have their business offices in Zwickau.
Dr. Leistner is also member of the Supervisory Board of Euflex AG, Düsseldorf.
Prof. Dr. Hannig is member of the Supervisory Board of Terra Limes NRW AG, Düsseldorf.

Remuneration for expenses incurred by the members of the Supervisory Board for 2002 totaled €24,000 (2001: €24,000).

	Number of unit shares = amount of capital stock		Share in capital stock in %	Number of stock options	
	31/12/2002	31/12/2001		31/12/2002	31/12/2001
Executive Board					
Henrik Förderer	0	0	0.00	24,999	16,666
Heinrich-J. Kraus	0	0	0.00	0	0
Frank Mauritz	0	0	0.00	16,666	8,333
Norbert Wienck	0	0	0.00	24,999	16,666
Supervisory Board					
Axel Haas	50,000	11,000	0.07	0	0
Dr. Steffen Leistner	1,145	1,145	0.02	0	0
Prof. Dr. Uwe Hannig	200	200	0.00	0	0
	51,345	**12,345**	**0.09**	**66,664**	**41,665**

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

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

	Current shares in %
Augusta Technologie AG	57.9
Detlef Küster	6.6

Declaration regarding the Corporate Governance Kodex

In December 2002, the Executive Board and Supervisory Board submitted the declaration of fulfillment as defined in Sec 161 German Stock Corporation Law which can viewed by shareholders on the PANDATEL AG homepage under www.pandatel.com.

Group membership

PANDATEL AG is a 57.9% subsidiary of Augusta Technologie AG, Frankfurt. This company prepares consolidated financial statements in which the annual financial statements of PANDATEL AG are included.

The consolidated annual financial statements of Augusta Technologie AG are deposited with 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 group 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 AG 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 asset and liability method, but only the remaining liability balances may be entered in the consolidated financial statements. Moreover, deferred taxes carried as assets resulting from tax losses brought forward may not be entered in the 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 assessing 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' capital, 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 "Accounting for Stock-Based Compensation", the value of the options established by 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 2003

Heinrich-J. Kraus	Frank Mauritz	Norbert Wienck
CEO	Member of the	Member of the
	Executive Board	Executive Board

Audit Opinion

"We have duly examined the consolidated financial statements of PANDATEL Aktiengesellschaft, Hamburg, which consist of 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, 2002. 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, 2002 – 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, 2002 fulfill the conditions for releasing the company from its duty to prepare consolidated financial statements and a group management report under German law."

Hanover, February 17, 2003

Ernst & Young
Deutsche Allgemeine Treuhand AG
Wirtschaftsprüfungsgesellschaft

Steinke
Auditor

Huskobla
Auditor

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Product groups

Systems | Optical multiplexers (TDM/DWDM/CWDM | Back-up

Advantages

- Swift data transmission
- Transmission of large data volumes
- High transmission security
- Better use of existing fiber optic infrastructure
- Cost savings as no new fiber optic lines have to be laid
- Easy to upgrade thanks to modular architecture

Areas of use

- Back-up data storage (Storage Area Networks – SANs)
- Computer centers and company networks
- Data transmission
- Metro access

Customers

- Multinational companies (e.g. banks, insurance companies), telcos, Internet service providers and OEMs

Multiplexers | Modems | Converters

Advantages

- Transmission via copper **and** fiber optic lines
- Cost-effective expansion of existing networks
- Cost-efficient connection of various standards
- Compatibility of PANDATEL products and systems with each other
- Swift data transmission
- Tailored solutions for industrial applications

Areas of use

- Speech and data transmission, Internet/intranet, multimedia
- Optimized fixed-network data transmission over the "last mile"
- Connection of various networks
- Process management and automation

Customers

- Multinational companies, telcos, ISPs, OEMs
- Energy utilities, railways and airports

Management | Racks, housings, accessories

Advantages

- SNMP management and Graphical User Interface (GUI)
- Modular system
- High quality

Areas of use

- With all PANDATEL products

Customers

- All PANDATEL customers

PANDATEL is an international provider of professional network technologies. As a high-tech corporation, the company has been developing and manufacturing optical network access and data transmission components for 15 years. The products for copper and fiber optic data transmission upgrade the efficiency of existing networks and optimize the total cost of ownership. Some 160 employees at the head office in Hamburg, the subsidiaries in New Jersey and Singapore and the representative offices in London, Miami, Paris, Shanghai and Stockholm offer support and services to corporate customers in more than 80 countries. Since November 1999, the PANDATEL share has been listed on the Neuer Markt segment of Deutsche Börse. In January 2003, it switched to the newly-created Prime Standard segment.

Our offices

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Glossary

Backbone	Powerful, supra-regional main data line that links up many sub-networks
Back end	Support components of a computer system; mostly refers to the management system that accommodates and administers the data
Bandwidth	Transmission capacity of communication systems; the more data can be transmitted per second, the greater the bandwidth
Broadcast	Simultaneous transmission of data from one single point to several receivers
Carrier	In telecommunication, companies that act as network operators and provide services to other companies for a fee
Converter	System that converts data set in a particular format into another format
CWDM	*Coarse Wavelength Division Multiplexing* – Method that uses broader channels and is therefore more cost-efficient than > WDM or > DWDM
Disaster Recovery	Retrieval of network and data information after a disaster such as earthquake or fire
Download	Process of loading a file, document or program from another computer onto one's own computer
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
E-learning	*Electronic learning* – Online provision of learning material via Internet or intranet
Enterprise Backbone	Powerful main data cable (> Backbone) in a company
Ethernet	Transmission protocol for local area networks (LANs); generic term for a series of baseband networks
Extranet	Network for a closed user group (traders, suppliers) with data transfer via the Internet
Gigabit Ethernet	Ethernet technology (> Ethernet) with a transmission speed of up to 1 Gigabit per second
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
MAN	*Metropolitan Area Network* – Telecommunication network that covers a city or region
Metro Access	Access to a metro network (> MAN)
Metro network	> MAN
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-service platform	System that combines the functionalities of conventional > multiplexers and other functions, contributing to reducing the number of network components
Network topology	Architecture of a network; the ways and means of linking the network nodes
Next generation network	Network concept that comprises various networks linked together via gateways and conveys different transmission methods for speech, data and video into a single network
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
Optical transmission	Data transmission via fiber optic or plastic cable using light as the signal medium
Protocol	> Transmission protocol
SAN	*Storage Area Network* – Centrally-managed high-speed storage network which provides several servers with simultaneous direct storage access and increases error tolerance thanks to its structure
SDH	*Synchronous Digital Hierarchy* – European standard for the synchronous, high-speed transmission of data via fiber optic networks
Service provider	Company that provides communication or storage services with network access, e.g. Internet service provider
SONET	*Synchronous Optical Network* – North American equivalent of the European > SDH
Storage network	> SAN
Streaming	Transmission of picture and sound files via the Internet in which the playing already begins in the course of > downloading; can be used for the live transmission of events
TDM	*Time Division Multiplexing* – Technology in which signals for different messages are transmitted in a time-interleaved pattern down a single channel
Total Cost of Ownership	Total operating costs of a system during its entire useful life, consisting of cost of acquisition plus accumulating costs for technical support, adjustments and administration
Transmission protocol	Pre-defined agreement on the way in which information is to be exchanged between two systems: all the rules, formats and qualities which contribute towards a complete, error-free and effective data transmission
Video converter	Converts the electrical signals of a camera into optical signals and thus enables long transmission distances to be covered
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