# Developments2003 Annual Report



With the beginning of the year, Pandatel AG is listed on the Prime Standard of the JANUARY Frankfurt Stock Exchange, the segment which sets the highest transparency standards in Europe. Pandatel's new orientation aims the spotlight at sector solutions. The company posi-FEBRUARY tions itself as a competent element of an overall solution; OEM products are added to the company's own product developments. At the CeBIT trade fair in Hanover Pandatel presents its new products, such as the MARCH hybrid multiplexer IPV-MUX-M, and stages its annual press briefing as well as an analysts' meeting on the 2002 annual results. Pandatel restructures its sales activities. The new structure supports the orientation APRIL towards end customer demands and project inquiries, which Pandatel processes together with its partners. Some 180 shareholders receive first-hand information at the AGM in Hamburg on the \_MAY strategy of the company and its products. Pandatel bundles its America activities together and relocates the headquarters of JUNE Pandatel Inc. to Sunrise, Florida. All the customers in North and South America are to receive support and services directly from there. Pandatel establishes a development center at Kfar Saba in Israel. Pandatel Ltd. concen-\_JULY trates on developing products for conventional fiber optic networks based on the SDH protocol. E.ON Hanse starts replacing its communication network with DWDM technology. \_AUGUST Pandatel supplies the multiplexers and the optical add-drop modules. Pandatel presents the BM-G, a G.SHDSL modem for particularly efficient and flexible SEPTEMBER data transmission. The modem can be deployed by both enterprises and network operators. The Research and Development division is further expanded: in Germany a competence OCTOBER center is established covering IP networks as well as multiplexers, modems and converters. Two new Pandatel products are launched on the market: the highly scalable inverse NOVEMBER multiplexer INV-MUX-E and the interface converter GM-E; the GM-E makes it easier to connect local networks via standardized lines.

Pandatel broadens its converter segment: the optical converter EC-155 enables local

networks to be linked; the media converter ET-CE transforms electrical signals into

DECEMBER

optical signals.

#### At a Glance

PANDATEL GROUP	1999	2000	2001	2002	2003
(according to US GAAP)	€m	€m	€m	€m	€m
BALANCE SHEET					
Balance sheet total	47.7	58.3	57.4	50.5	45.1
Shareholders' equity	44.0	50.2	50.3	47.9	42.5
Cash and cash equivalents	32.7	25.5	18.1	24.8	22.4
INCOME STATEMENT					
Sales	23.5	36.5	30.6	28.3	20.1
Investments	0.8	1.8	1.9	1.2	1.3
EBIT	7.6	10.4	3.0	-3.8	-8.2
Operating result	7.4	10.6	3.2	-2.4	-8.0
Earnings before taxes	7.7	11.6	4.4	-2.8	-7.5
Net income/loss for the year	3.5	5.6	2.3	-1.4	-5.7
STATEMENT OF CASH FLOW					
Cash flow	4.0	7.1	3.3	0.1	-4.9
OTHER FIGURES					
Earnings per share	€0.59	€0.78	€0.32	€-0.19	€-0.78
Payroll (average)	106	141	162	172	178
Equity ratio	92.2%	86.1%	87.7%	94.9%	94.3%
Closing price at year-end	€65.50	€55.00	€7.95	€3.10	€4.70

Five-Year Overview

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On the illustrated pages in this report we present to you the faces behind our products. Six people – representative of 42 colleagues – and their varied tasks covering all aspects of product development.

## Dear Shareholders,

For Pandatel, the year 2003 was one of the most varied in the company's history. After two years of declining business development in extremely difficult market conditions, we were faced with two choices at the end of 2002; either to radically consolidate the company – along the lines of many rival suppliers – by shedding staff and closing down sites, or to reposition Pandatel and render it fit for the future. Comfortably backed by our liquid resources, we opted for the second choice and used the quiet market phase to radically restructure the company in its core divisions.

#### Efficient structures implemented

In the first half of the year, we started by reorganizing our sales activities. Our focus is now on more intensively addressing end customers and on presenting specific solutions for various sectors and application fields. In the second half of the year, the emphasis of the restructuring measures lay on product development. Having recruited 16 new developers and established an additional development center, we have significantly upgraded the resources of this division. By intensifying our development activities we aim in future to position ourselves again as trend-setter with new niche products tailored to the actual needs of the customers.

#### Sales and earnings lowered due to restructuring

Against the backdrop of this radical reorientation, we were still unable to reach our original goals for sales and earnings in 2003. In the process of implementing the measures, it became clear that more time and resources would be required than budgeted. Furthermore, the market only started showing first signs of stabilization towards the end of the year – and thus later than generally expected. Viewed over the year as a whole, the investments of the telecom companies in network infrastructure tumbled once again by some 10% as price pressure worldwide intensified. In these conditions, Pandatel generated sales of €20.1m and recorded a loss of €5.7m. However, by consistently effecting our strategy we managed to halt the downtrend that was emerging in early 2002. In the second quarter of 2003, we managed to reverse the trend and have been registering slightly rising sales since then.





Heinrich-J. Kraus CEO

Norbert Wienck CFO

#### Foundation laid for future growth

Having strengthened the innovation and sales power, Pandatel is now very well equipped for the expected market upturn. The sights have been set on growth again.

In 2004, Pandatel will take on four major challenges.

We want to:

- 1. substantially upgrade sales with our new sales structure,
- 2. launch 15 new products on the market in a development offensive,
- 3. sell our products as OEM to major industrial companies,
- 4. significantly and sustainably reduce ongoing costs.

Expressed in figures, we want to achieve a sales volume in 2004 of €30m and a balanced result.

We expect a business development of this kind to find reflection in further climbing share prices. Last year, our shares profited from the swing in sentiment on stock markets worldwide and from the especially good performance of the technology stocks: the shares closed the year with a 52% climb. In the first weeks of this year, the positive trend continued – until the end of February the share price had notched up a further gain of 10%.

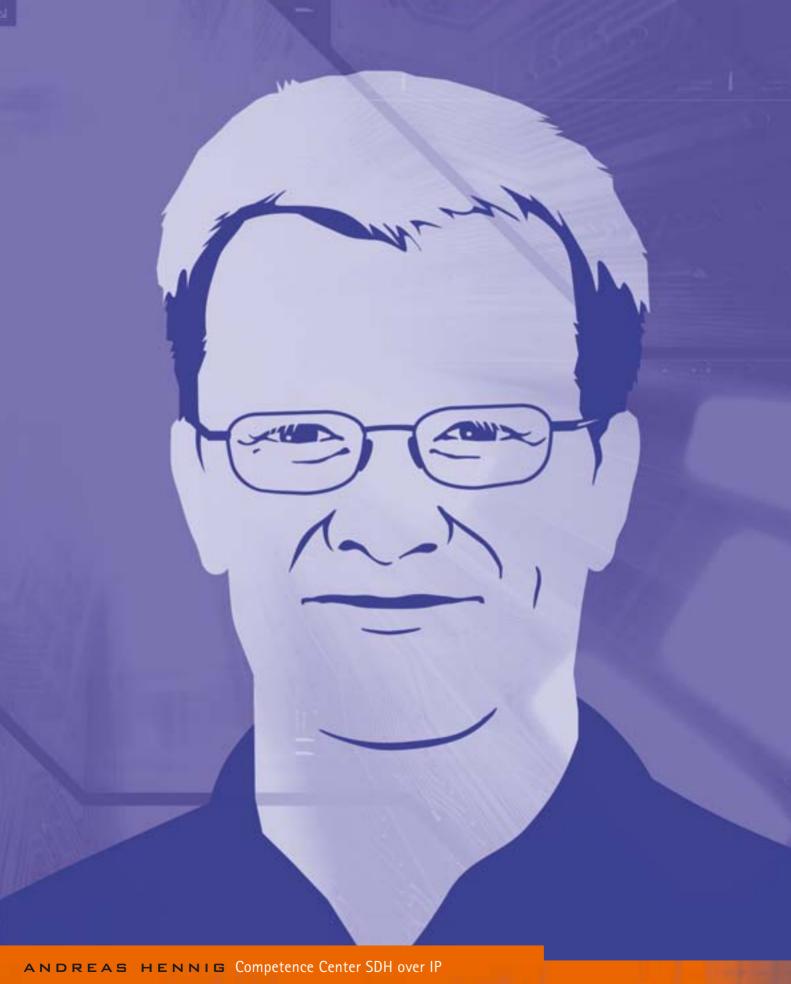
We would like to thank our shareholders, customers and sales partners for working together with us so well and for the trust they show in us even as we reposition the company. We would like to extend our thanks to all our staff members for their hard work last fiscal year and for their exceptional commitment in realizing the new structures.

N. Wunt

The Executive Board

Heinrich-J. Kraus

Norbert Wienck



Andreas Hennig is a hardware developer. His specialist area is the construction of hardware for microprocessor structures. At the moment he is working on the processor board for the TDM over 1P multiplexer and is laying in the process the foundation for further Pandatel products.

sales efficiencies, swifter product

development and growth by way

## Developing the Future

Development – this is the key theme for Pandatel at present. The top priority here is to reinvigorate the company's core competencies in order to lay the foundation for a successful future.

At Pandatel development has two dimensions – on the one side, the development of the company as a whole and, on the other, the development of the products. Both are closely related: with respect to the development of the company, Pandatel aims for the optimal use of all resources and the maximum growth of the company's value. One of the basic conditions for this is the development of the right products. In both of these areas Pandatel still has work to do to secure and expand its market position. Against this backdrop, the company has initiated significant changes and has already made important advances in the past year.

The most crucial innovation in the area of corporate development in 2003: the three-pronged strategy that encompasses sales and product development – the core areas of the company – as well as acquisitions. With this strategy, the company's management wants to enhance Pandatel's innovation and sales capabilities in order to bring the company back to profitable growth. A cost-cutting program will enable Pandatel to reach the breakeven point more quickly, and numerous changes in staff will help optimize the team that will implement the new strategy.

—Three-pronged strategy: greater

#### Growth through acquisitions

Pandatel also strives to grow through the acquisition of compatible companies. However, acquisitions are not the highest priority at the moment. For the time being, the
main objective is to strengthen our own capabilities. In the past year, the Executive Board intensively explored six
takeover possibilities and will continue to be open to opportunities presenting themselves – without wishing to
force the issue.

#### Quick successes with vigorous sales

In the first phase of realizing the three-pronged strategy, we focused on the company's driving force – sales. The objective of the company's sales strategy is to better penetrate existing markets, open up new markets and improve overall sales efficiencies. Specific changes in the past year included the reorganization of our internal sales structure, a stronger sector-specific orientation, targeted and solution-oriented communications with the end customer, as well as comprehensive technology training for the sales staff.

#### Sustainable successes with market-oriented product development

However important an effective sales organization may be, product development is the motor driving Pandatel. The range and quality of products are key factors for success at every technology company and thus at Pandatel as well.

Pandatel has a wide portfolio of niche products, especially for access to metro networks and storage area networks (SANs). These products and solutions boost the efficiency of legacy networks, serve as network interfaces and link copper and optical fibers. A more detailed analysis of our product portfolio, however, clearly shows that research and development at Pandatel must follow two paths: first, development time must be shortened and, second, new products must supplement the existing product range appropriately. This is because in an increasingly competitive market, it is important to provide products that meet the actual needs of the customers.

— Pacemaker of the company: high-performance, efficient and market-oriented product developmentIn line with the three-pronged strategy, Pandatel has – parallel to the sales measures – begun to initiate a turnaround in product development. Development changes are more long-term in nature; here concrete results are not seen as quickly as in sales, because it normally takes a year before a new product is ready for market – even when development efficiency is high. Pandatel has laid the basis for accelerated development with

measures like reorganizing the development teams into competence centers and significantly increasing financial and staff resources.

#### An ear to the market

The changes that are underway confirm our basic approach to product development: Pandatel will continue its policy of not carrying out fundamental research. The spotlight will rather be on the faster translation of technological trends and customer requirements into marketable and reliable products at competitive prices.

Accordingly, Pandatel follows the maxim "customer proximity before technological leadership". Pandatel has no intention of setting market trends with radically innovative products at the cutting edge of technology for which there are no competitors on the market but no customers ready to buy the products either. Instead, Pandatel's approach is to rapidly identify current market trends and from these develop and bring products to the market within the shortest time – products which the customer needs at that moment and will therefore buy.

The changes in the area of research and development are not aimed at restructuring our product portfolio in any fundamental way. Pandatel will continue to position itself as a niche player in the network infrastructure market, for example, with special products for the access segment. The company thus has no intentions of going head-to-head against large providers, but instead presents itself as a cooperation partner in the market segments that the big players avoid due to efficiency reasons.

Pandatel's goals and its approach to product development are, to a large extent, in line with current market conditions and present customer requirements: the financial situation of telecoms and many other companies continues to be shaky and characterized by a low rate of investment; however, with the successful reduction of debt the emphasis has started shifting away from financial restructuring to company expansion. Customers have become much more cautious after the experiences of the past.

sion. Customers have become much more cautious after the experiences of the past years. New products and systems are no longer purchased for technology's sake – the decisive factors for positive investment decisions are now whether and to what degree products meet customers' needs, a proven, reliable technology and a fast return on investment. Instead of installing completely new networks, most customers want to con-

Customer-oriented product philosophy: flexible products for cost-conscious network operators

tinue to use the existing infrastructure and expand it with flexible products, thus adjusting it step-by-step to new service requirements. With their modular design, Pandatel's products meet these needs: they offer customers homogeneous solutions for their heterogeneous networks.

#### Shaping up the product portfolio

In order to better satisfy market and customer demands in the future, Pandatel has drawn up a comprehensive agenda for optimizing its product portfolio. The company will

- press ahead with the in-house development of innovative products,
- redesign existing products according to cost and performance factors and
- selectively expand its portfolio to include OEM products from other manufacturers.

To achieve this, the company will track the market's technology trends more precisely and assess them for their applicability in Pandatel's product portfolio. Pandatel also intends to position itself in the field of new technologies as a point of contact for customer inquiries and systematically use feedback from system integrators and customers in its own product development. Monitoring technology trends and the dialog with customers will lead up to a

product strategy with marketable and technologically forward-looking solutions. This product strategy is reflected in the road map, a project plan detailing the specific product developments of the coming months as well as longer-term projects.

In the course of thoroughly restructuring its product portfolio and road map, Pandatel has also reorganized its business areas. Each individual product fits in one of the three business areas: modems and converters for linking two locations and for data conversion are part of "Connectivity Products". Data bundling products that enable access to metro area networks make up the "Access Multiplexers" business area. And "Optical Systems", the business area which specializes in pure fiber optic products, offers complex wavelength multiplex systems for SAN applications (the DWDM and CWDM systems in the FOMUX range) as well as TDM products.

Reliable partner: Pandatel offers solutions based on tried-and-tested as well as new technologies for every user

With the redesign of existing products, Pandatel is pursuing several goals: on the one hand, products are to be modernized, expanded to include additional features and adapted to the projected management system for monitoring and controlling network components. On the other hand, Pandatel intends to lower manufacturing costs, especially for components produced in mass quantities under intense pricing pressure.

This will be made possible, for example, by using new chip sets that boast higher performance and, at the same time, are less expensive. The redesigns enable Pandatel to achieve a double-digit increase in the profit margin of many of its products. To reduce the load on its own development resources, Pandatel outsources the redesign of its products to external development companies.

OEM products also make an important contribution to the optimization of the product portfolio. These are products that other companies have already developed, but which they cannot or prefer not to market themselves. With the purchase of such products, Pandatel further lightens the burden on its own development resources, reduces the time to market to a minimum and can thus quickly generate additional revenues. The marketing of products developed externally makes sense for Pandatel where these supplement its own portfolio and are currently in demand on the market. If these conditions are met, the additional costs for training the sales staff as well as the lower profit margins are justified. In the instances where acceptable revenue growth is generated, it is Pandatel's aim to acquire all rights to these OEM products in order to increase production efficiency and profit margins.



#### FRANK PLESINGER Validation

Frank Plesinger is in charge of the Validation group within Product Development. His team examines whether the developed products fulfill the specifications. At the moment, he is testing the electro-magnetic compatibility of the new rack system RA-G65 for the FOMUX range.

—Unparalleled product offensive: presentation of 15 new products and redesigns in the first half of 2004—

This has been successful, for example, with the fiber optic multiplexer S-MUX-155. Further OEM products that Pandatel added to its portfolio in 2003 are the modular IP multiplexers IPV-MUX-M and IPV-MUX-S, as well as the inverse multiplexer INV-MUX-E.

#### IP and SDH: Competence centers reflect market trends

One of the main trends in the network technology market on which Pandatel orients its development work is the increasing importance of IP data. This is a term used for all types of data – for example, voice, text or multimedia data – that is sent in small packages via the Internet Protocol (IP) transmission standard. Its effective use of bandwidth makes it a very cost-efficient method. While in the past established TDM data – primarily voice data – was the main force in the field of transmission and access, in the future IP data will dominate more and more noticeably due to growing Internet traffic. Currently, the volume of both data formats is approximately at the same level. For transmission and access technology, this means that the trend is moving increasingly away from time-discrete TDM methods to package-oriented IP-based schemes. For the time being, the expanding IP traffic will, for the most part, be transmitted via established SDH backbones; however, in the future, IP transmission technology will be more widely used when bottlenecks occur in the backbone or new systems are installed. Voice and other TDM data will then be integrated in pure IP platforms. Therefore, IP structures will see strong growth over the long term.

SDH structures based on TDM technology will nevertheless continue to predominate for a long while to come. There are two reasons for this: first, these types of systems are currently installed; second, there are still ample capacities in the backbone networks available at the moment. On top of this, network operators currently do not have the means for a completely new installation at their disposal and demand an amortization of their investments within a short period of time.

Pandatel has incorporated this technology trend, among others, in the redefined structure of its competence centers. Each of the development sites in Germany and Israel concentrates on a specific field of technology: in Israel products for SDH structures are developed and in Germany those for IP transmission technology. Pandatel runs each site as a competence center, with each one responsible for developing products and solutions based on one technological platform. This generates synergy effects and shortens development cycles: bundling resources and know-how around specific fields enables each site to focus on its "core business" and supports continuity in the development process.

#### Development road map

#### Priorities of the road map 2004:

- Development of new telecom products focusing on
  - Ethernet and multi-services via SDH networks
  - TDM services and Ethernet via Ethernet networks
  - Last-mile access via copper and fiber optics
  - Support and implementation of new standards
- TDM and xWDM solutions for metro access and SAN
- Redesign of various modems, converters and FME multiplexers

Pandatel set up the Israeli development company in Kfar Saba in summer 2003. Situated close to Tel Aviv, this region is well-known for its high-tech know-how and its highly motivated and well-trained specialists. Pandatel Ltd. focuses on the areas "IP over SDH" and "established services over SDH". Here nine Israeli specialists are developing multiplexers and converters for the transmission of Ethernet and TDM data over SDH networks. One of the products developed by this team is the EC-155, an optical Fast Ethernet converter which makes it easy for companies to connect their networks via existing SDH networks. The Israeli staff is presently working under high pressure to develop the C-MUX-155, based on the successful fiber optic multiplexer S-MUX-155.

The north German development team works according to the motto "everything over IP" – it is responsible for "established services over IP" as well as for "Ethernet over IP". The agenda of the German competence center also includes CWDM and DWDM solutions, converters, modems and multiplexers.

New development competence: two teams for the concerted realization of current technology trends

To expand its competencies in IP technology, Pandatel added six specialists to its development team in Germany in the third quarter of 2003. This is an established team that had already worked together on an IP-based access system. They therefore only needed a minimal initiation period, which in turn helps to significantly reduce development times for the relevant products.

#### In the product pipeline

Pandatel has very specific products on its road map for both its areas of expertise: in the "IP over SDH" segment, for example, the C-MUX-155 and for "TDM over IP" technology an IP multiplexer.

With the C-MUX-155, Pandatel will bring to market in the middle of this year a highly innovative optical multiplexer for simultaneous voice and data applications in SDH networks. The C-MUX-155 will enable carriers with an SDH infrastructure to offer their customers tailored Ethernet and voice services and, at the same time, operate their networks at optimal capacity. As established voice networks, SDH networks are not flexible enough to efficiently transfer Ethernet data. They normally do not exploit the entire bandwidth available, thus making the provision of Ethernet services more cost-intensive. Thanks to virtual concatenation technology, the C-MUX-155 uses the available bandwidth to the full. A carrier can accurately allocate bandwidth in 1 Mbit/s increments, thus providing its customers with exactly the transfer capacity they need at any specific moment.

In the field of IP technology, Pandatel's developers are currently working on a multiplexer that can simultaneously transmit established TDM services and data over IP networks. The idea here is to convert voice and other data into data "packages" and send it via Ethernet connections. On the receiving end, the incoming packages are reassembled to form the original data streams. The advantage: TDM services like telephony or ISDN no longer have to operate over high-quality but relatively expensive TDM connections. Instead, they can be transmitted together with the rest of the data over inexpensive IP lines. This TDM over IP multiplexer is designed for applications in businesses and service providers. Businesses can continue to use their existing infrastructure, like computer networks and telephone systems, but with optimal use of data transfer capacities. And service providers can offer low-priced TDM services on their legacy Ethernet networks.

In addition to IP/SDH, Pandatel also offers products that are in tune with other current market and technology trends. With its TDM and xWDM solutions, for instance, Pandatel is meeting the demand for increased bandwidth for network access. These address, in particular, the metro access and storage segments. New developments for last-mile access are another point of emphasis for Pandatel. Here the SDSL segment for business-to-business solutions is being expanded. One of the latest products is the BM-G copper modem. This technology is in great demand, above all, in Eastern Europe, where copper lines are the norm.

What is more, Pandatel will offer basic and expanded versions of each product so that both small and large companies can implement all products usefully. This will enable Pandatel to tap into new customer groups for whom the company's products until now have been too small or too large.

With its product development strategy, Pandatel orients itself closely to the requirements and financial capabilities of the user. Customers can expect in the future to receive – in a timely and usable fashion – all the latest technologies for network access from one source.



Tawfic Bayyouk is a software developer. His specialist area is the mapping of Ethernet traffic over concatenated SDH channels. The project he is currently working on is the programming for the C-MUX-155, from the level of hardware drivers to the user management interface.



Elroi Marom is head of the competence center in Israel. Vision and continuity are the essential notions on which his task is based. He is responsible as product manager, system architect and development head for the fiber optic multiplexer C-MUX-155.

## Group Management Report of Pandatel AG – Fiscal 2003

For Pandatel, 2003 was marked by the restructuring of the company's core divisions Product Development and Sales. Having effected these measures, the company is now programmed for substantial growth.

#### Market departing the trough

What impacted the global economy in 2003 most were the lraq war, the respiratory disease SARS and the euro's show of muscle. In response to the good leads from the USA, the deflationary scenario at the beginning of the year made way in the second half of the year for an upturn in cyclical activity. Sentiment in the telecommunication industry also brightened after three years of crisis, and signs that the market is gradually stabilizing are accumulating. The major teles are successfully reducing their debt and strengthening their financial position; the balance sheets have been restored to health for the most part. As a result, the decline in investments in telecom infrastructure in the course of 2003 also appears to have halted.

By nature, the recovery of the telecommunication market emerges at the end of the value-added chain, in other words among the service providers and classic telephone companies, and only arrives after a delay at the beginning of the chain, among the suppliers of network infrastructure. Thus, for the equipment makers the market in 2003 was still being molded by a consolidation process. The fierce competition over the low

investment volume of the telcos pushed down prices and sales – viewed over the year as a whole – even further.

—After three lean years, the market is showing signs of revival as companies recover the lost ground in modern network technology—

Investments in telecom infrastructure dropped again in 2003 worldwide by some 10%<sup>1</sup>. The market for optical network equipment contracted by an estimated 6%<sup>2</sup>.

The Asia Pacific region accounted for the largest share in the global market in the third quarter, of 33%, followed by North America at 31% and EMEA (Europe, Middle East, Africa) at 30%. Alcatel was market leader with a 14% share; Lucent, Nortel and Huawei each held a market share of 11%<sup>3</sup>.

For 2004, the telecommunication industry expects altogether significant growth. The main reason for this is that the activity focus of the telecos is increasingly shifting from financial restructuring to business expansion. The hopes of the network equipment makers that the recovery on markets will also gradually feed through to their business

<sup>&</sup>lt;sup>1</sup> FTD, January 7, 2004 <sup>2</sup> KMI Research, July 2003 <sup>3</sup> Infonetics, December 2, 2003



activities is being underscored by positive reports: a number of the major suppliers, such as Marconi, Alcatel, Ericsson, Cisco, Juniper and Lucent, reported climbing sales again at the end of 2003 or even the return to the breakeven before special factors.

#### Sales down in response to weak demand and falling prices

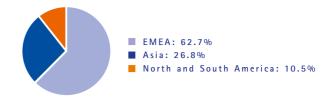
Sales at Pandatel in the course of 2003 moved in tandem with the market trend. Although down on the previous year, sales nonetheless climbed from quarter to quarter, from initially €3.8m to €5.7m. Altogether, Pandatel recorded sales of €20.1m as against €28.3m in the previous year, a decline of 29%. The low sales can be attributed above all to the renewed decline in investment volume of the telcos and to the ongoing drop in the prices of network equipment. Pandatel is countering this development by applying optimization measures in Sales. The changes aim at a more effective penetration of existing markets by implementing a more customer-oriented structure, tapping new markets and altogether heightening the sales power. Pandatel expects the measures initiated in 2003 to already find reflection this year in a marked increase in sales.

—The future structure and better background conditions will enable Pandatel to return to growth this year—

Parallel to sales, new orders fell by 32% to €19.1m (2002: €28.2m). At the recording date December 31, 2003, Pandatel's order backlog amounted to €1.9m compared to €2.8m in the previous year.

Pandatel generated 85.9% of its sales abroad (2002: 89.3%). Similar to last year, the EMEA region accounted for the largest share of total sales, registering a decline of 7.8% from €13.7m to €12.6m. Eastern Europe, France and Austria in particular contributed to the comparatively good performance of this region. A far greater plunge in sales was posted in the Asia Pacific region, from €10.4m to €5.4m. A combination of factors was responsible for this: besides the weakness of the US dollar, the respiratory disease SARS also impacted developments in the first half of the year. Trade fairs had to be postponed as a result of this and business trips cancelled. In the Asian market, price pressure also heightened further. On the American continent sales were halved: sales of €2.1m were posted in the year under review as against €4.2m in the previous year.

The analysis of sales in the three business areas highlights the restraint being shown by customers, especially with regard to investments in the more cost-intensive technologies. The Optical Networks business area (optical multiplexer systems) lowered its share once again, from 13.2% to 11.7%, while the Telecommunications area (products for network access and data transmission) managed almost to keep its share steady at 83.8% (2002: 84.4%).



Sales by region

The third business area, Industrial Communications (industrial data transmission, security and monitoring technology), nearly doubled its share in total sales – from 2.4% to 4.5%. This is a reflection of Pandatel's efforts to gain corporate customers outside the classical telecommunication industry.

With effect from January 1, 2004, Pandatel has restructured its business areas. Reporting will also be adjusted accordingly from this period on.

#### Earnings depressed by sales decline and restructuring measures

The sales decline by €8.2m and the continuous downturn in margins resulted – together with the costs for renewing the company – in Pandatel having to record a negative result for the second time in the company's 15-year history. Before interest and taxes (EBIT), Pandatel recorded a loss of €8.3m as against €3.8m in the previous year. The net loss for the year was €5.7m (2002: €1.4m) and the loss per share €0.78 (2002: €0.19).

ing, Pandatel has already set its
By starting to overhaul the company, especially in the divisions Product Development
and Sales, Pandatel has laid the foundations for a fundamental improvement in sales
and earning power. Since the beginning of 2004, the Executive Board and employees have together been analyz-

and earning power. Since the beginning of 2004, the Executive Board and employees have together been analyzing all the company processes as part of the project "ProVit 2004" in order to identify any potential still available for upgrading efficiency. The aim of the project is to continue significantly improving the result by keeping costs at a permanently low level.

#### Assets position still stable

In spite of the unsatisfactory performance of sales and earnings in fiscal 2003, Pandatel can still boast of a healthy and solid balance sheet structure. At the recording date December 31, 2003, the equity ratio was 94.3%; the balance sheet recorded liquid funds of €22.4m. In the wake of the receding business development, the balance sheet total narrowed from €50.5m to €45.1m. Other large changes related to the increase in deferred taxes from €1.2m to €3.0m and the reduction in the securities item from €5.1m to €2.8m. The deferred taxes shown on the balance sheet at December 31, 2003, were calculated by offsetting the tax loss of Pandatel AG at December 31, 2003, against the budgeted pre-tax earnings of the next five years. The restricted use of the tax loss carryover was taken into account here. The reduction in the securities portfolio can be explained by the sale of investment instruments, the aim being to raise the cash holding for possible acquisitions.



Sales by business area

In fiscal 2003, Pandatel made investments in intangible assets and tangible assets totalling  $\le$ 1.3m. As a percentage of sales, investments came to 6.3% (2002: 4.2%). The largest share of a good  $\le$ 0.7m was invested in research and development. Of this,  $\le$ 0.3m was for the purchase of the rights in S-MUX-155 and nearly  $\le$ 0.4m for testing and measuring instruments.  $\le$ 0.4m was spent on company organization, mostly for software and hardware. Production accounted for nearly  $\le$ 0.2m, and the other part of the investments concerned marketing and sales as well as the Executive Board.

#### Sales: International presence adjusted to market potentials

Pandatel distributes its products and solutions via sales partners and its own offices worldwide in 90 countries. The company is thus represented on all the important telecommunication markets. Given the retreating market development and the cost-saving measures being applied within the company, Pandatel concentrated its international sales activities in fiscal 2003: in the Paris and London offices, the headcount was reduced in each case by one person. The Stockholm representation was closed down, with the Hamburg office now being responsible again for working the Scandinavian market.

In the USA, Pandatel bundled together the sales activities of the subsidiary Pandatel Inc. at the new site in Sunrise, Florida, and closed down the New Jersey and Miami offices. At the same time, the workforce was adjusted to the sales volume currently being generated there and reduced from seven to two employees. With these consolidation

—Globally on site: with offices on three continents Pandatel is permanently sounding out the opportunities of international markets measures now complete, the American Pandatel company is braced for a veritable new beginning. With the US economy gathering momentum again, prime conditions exist in the USA for the business of Pandatel Inc. to develop successfully.

On the Asian market, Pandatel has been represented by a subsidiary in Singapore, Pandatel Asia Pacific Pte Ltd, and by a sales office in Shanghai. At the moment, India is developing into a market with an especially high growth potential<sup>4</sup>. To locally ex-

ploit the opportunities offered by this major market, Pandatel had already forged first contacts last fiscal year with Indian companies and has been making growing use of regional representatives since March 2003.

#### Product development: Higher budget and new development company

The development of technologically outstanding products that meet market demands is a decisive success factor for Pandatel. In 2003, the company introduced crucial steps to further strengthen and develop this core competence: for example, Pandatel raised the budget for research and development by €1.7m to €5.6m – or 28% of

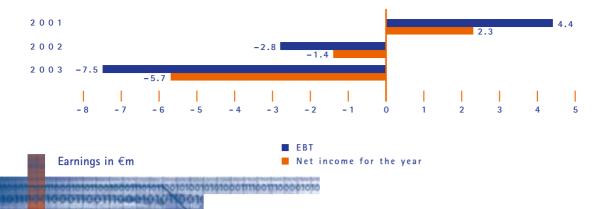
<sup>&</sup>lt;sup>4</sup> Infonetics, December 2, 2003

consolidated sales – and recruited a total of 15 new developers. In August, it founded its own development company in Kfar Saba, Israel. Pandatel Ltd. is a wholly-owned subsidiary of Pandatel AG. The effect of these measures will be felt above all in 2004 as some 15 new products are launched on the market.

As SDH competence center with a staff of 11, the Israeli company concentrates on developing technologies and products for conventional fiber optic networks based on the SDH protocol (SDH = European standard for rapid synchronous transmission of data via fiber optic networks). At the moment, the team is working on a modular multiplexer for parallel transmission of speech and data in SDH networks. The new system will be launched on the market in mid-2004. The company's activities are managed from the Hamburg office. The products developed in Israel will be sold via the existing channels.

In the reporting year 2003, Pandatel also developed and presented a series of new products. With the ET-CE, Pandatel offers a cost-efficient Ethernet converter for connecting copper networks with optical networks. The EC-155 is an optical Fast Ethernet converter which aids companies to link their IP networks via available SDH networks and can bridge distances of up to 100 km. It was developed first and foremost with medium-sized companies in mind, but it also offers functions that are of interest to carriers. With the GM-E, Pandatel offers an interface converter for connecting differently equipped local networks (LANs) with various standards. At the same time, the system ensures that legacy lines are utilized as best —With an impressive product as possible. The GM-E is suitable for network operators, Internet service providers and offensive, Pandatel will return to large industrial companies alike, but is also geared to small and medium-sized comits familiar technological panies with Ethernet networks. Pandatel also presented its new 2-wire G.SHDSL modem strength\_\_\_\_ BM-G. Supporting data rates ranging from 192 Kbit/s to 2.304 Mbit/s and covering a maximum distance of between 3.7 and 7 km, the BM-G enables data to be transmitted particularly efficiently and flexibly. The BM-G can thus be deployed in a broad spectrum of areas for small, medium and large-scale companies as well as for national and international network operators.

Besides its own developments, Pandatel also included four externally-developed multiplexers in its portfolio in 2003. The one-channel multiplexer IPV-MUX-S allows speech or data to be transmitted cost-efficiently by means of IP technology on the basis of the existing infrastructure. The IPV-MUX-S is fully compatible with the modular IPV-MUX-M which offers further application possibilities: this multiplexer allows data services and speech applications to be conducted simultaneously along one line. Both systems were developed with medium and large-scale



companies in mind keen to cost-efficiently connect their branches using legacy networks, or for service providers thus able to offer additional data or speech services. The third externally-developed product is the inverse multiplexer INV-MUX-E. It was designed especially for deployment in IP-based transport and access networks and, with its integrated routing and switching functions, fulfills the more and more complex broadband demands of service providers and companies. Finally, the S-MUX-155 is a compact and cost-efficient fiber optic multiplexer which can simultaneously process data from up to five different channels and was designed with smaller companies and carriers in mind. Pandatel has taken over the S-MUX-155 completely, i.e. it is not only distributed by Pandatel but is also produced by Pandatel in Hamburg. As a result, the production utilization and profit margin of the system have been raised.

The inclusion of selected OEM products into the portfolio is part of Pandatel's product strategy. There are several advantages to purchasing finished products developed by other companies: Pandatel can go easy on its own

development resources, significantly reduce the time-to-market of these products and in the process generate additional sales within a very short time.

—Scalability, high efficiency and low operating costs: Pandatel products ensure swift amortization of the capital employed.

For higher batch sizes, Pandatel examines whether it might make more sense to outsource production steps and, depending on the case at hand, assign production to external service providers. The company's product strategy also includes further devel-

oping existing products. Systems that have been tried and tested are given additional features and adapted to meet the latest market demands. At the same time, these product redesigns, with the benefit of lower production costs, help counter the drop in margins that arise from the ongoing price pressure. In 2003 a total of seven products were modified in this way.

#### Employees: Development focus reflected in workforce structure

In 2003, Pandatel employed an average 178 staff members (2002: 172). 161 persons were full-time employees, 17 part-time employees. A staff of three was employed at the Paris and London offices (2002: 6).

The restructuring of the company in 2003 has also had consequences for the personnel structure: the employee base of the Product Development division has been raised from 30 to 42.

#### **Executive Board reduced**

As at August 21, 2003, Frank Mauritz resigned from the Executive Board. The responsibility for his tasks in Product Development and Production have been assumed since then by the Executive Board members Heinrich-J. Kraus and Norbert Wienck.



#### Risk management

As global operator, Pandatel is exposed to a series of risks which are inextricably linked to its business dealings. A risk is defined as the danger that the company's economic situation could develop negatively in the future. These risks vary greatly and display differing risk potentials. To identify at an early stage and correctly estimate the potential risks occurring within the course of business operations and to design concepts for limiting risk, the company has installed a comprehensive risk management system to recognize in good time, communicate and overcome risks. The auditors examine and judge how well the risk management system functions within the framework of the annual accounts and report the results of their audit to the Executive Board and Supervisory Board.

One 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 systematically identified and assessed at specific intervals. Any risks are recorded and documented with their potential implications and probability of event. Besides market and economic risks, assessments are also made of the operating risks from all areas of the company which could greatly influence business development, the financial situation and result. 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; consideration is also given in the risk assessment to in-depth projects, investments and restructurings.

The overall evaluation of the risk potentials shows that no risks exist from the completed fiscal year and the realization of the planned measures that might endanger the company's existence or could have substantial impact on the assets, financial and earnings position of the company. The current annual report shows that the financial structure of Pandatel is solid and that the existing equity base makes targeted growth possible through investment.

#### Risks from economic influences

Risks from the overall economic development can arise above all from a change in political and economic factors. On the sales side, the general economic development has an influence on business. The current economic slow-down necessitates an adjustment of the cost structure and the optimization of processes and the organization; both these measures were initiated in fiscal 2003 and will be continued in 2004.

#### Risk from changes in market conditions

Besides general and sector-specific trends, the economic and market risks also include new rival suppliers entering the market which enjoy competitive advantages or which result from the merger of various companies (consolidation in the telecommunication industry). The Pandatel Group is countering these risks by adding OEM products to its

product portfolio as well as entering into strategic alliances and sales cooperations. Growing price pressure on the sales markets, particularly in the sales region with US dollar, is necessitating an adjustment to the cost structure and a reduction in production costs.

For its supplies of components, the company is dependent on national and international suppliers. By permanently monitoring the market and examining alternative components, the dependence on single suppliers is limited.

Pandatel views its risks from product liability as low: in the past, no product liability claims have been filed against Pandatel. The company is covered against possible future claims by a product liability insurance. All methods to control and ensure quality are continuously examined and improved. The quality management system has been certified according to international norms.

#### Risks from the loss of competitiveness

From a technological viewpoint, Pandatel's aim is to permanently offer the latest technologies and innovative products and provide its customers with the system solutions of the future. Due to the very short innovation cycles associated with these technologies, a risk exists that a product could become outmoded after a relatively brief period or might need to be modified. To preserve its innovative strength, the company invests in human resources, know-how and technology of the development fields and subjects the product portfolio to permanent monitoring to ensure that it is up-to-date and geared to the future. The roadmap that describes the products to be developed is continuously updated. To achieve progress in new developments and customer-specific developments at the same time and thus fulfill the development road map according to schedule, Pandatel incorporates the services of external developers and has raised its own development capacities by, among other things, founding the development unit Pandatel Ltd. in Israel.

The success of the sales efforts hinges greatly on the sales channels. Pandatel's distribution structure involves the risk of a certain dependence on distributors. By permanently tapping new distribution channels, this risk can be tempered.

#### Further risks

The downturn in the overall economic situation on a number of markets creates financial risks: customer payments can be delayed or difficulties experienced collecting receivables. To minimize these risks, Pandatel examines the customer creditworthiness for each order and only delivers, wherever necessary, upon advance payment.

As a result of its global activities, the company is exposed to currency and interest rate risks, especially from the volatile exchange rate of the US dollar against the euro. For this reason, the risks associated with financial transactions are subject to monitoring by a treasury management in collaboration with the company's principal banks.

The business risks also include risks that could arise from acquisitions, investments as well as from research and development. In view of their forward nature, these activities are vital for the company's future existence. But they also carry substantial risks due to the uncertainties associated with them. Pandatel diligently conducts prior examinations and carries out permanent project controlling in order to control and reduce the operating risks.

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; it also includes the Supervisory Board alongside the Executive Board and – if necessary – the company's General Meeting.

Besides the risks mentioned here, other risks can endanger the business of Pandatel that might not be known about at this juncture or that are deemed to be of no major consequence at the moment.

#### Dependent company report

In view of the existing majority stake held by Augusta Technologie AG of 57.9% at December 31, 2003, Pandatel is obliged pursuant to section 312 German Stock Corporation Act to prepare a dependent company report. This report was compiled by the Executive Board and was examined and certified within the framework of the audit of the annual financial statements. The conclusions of the dependent company report read as follows: "The Executive Board of Pandatel AG hereby declares that – with respect to the legal transactions stated in the dependent company report and the circumstances prevailing at the time the legal transactions were effected and known to the Executive Board – an appropriate counterpayment was received for each legal transaction and that no legal transactions were effected that were detrimental to the Company and no measures were taken that were detrimental to the Company."

#### Special developments after completion of the fiscal year

After initiating the restructuring measures in Sales and Product Development, CEO Heinrich-J. Kraus will depart the company as at March 31, 2004. Norbert Wienck, who has been Executive Board member for years and was previously responsible for Finance, Controlling and Production, will head the company as its sole board member from April 1, 2004.

#### Outlook: Braced for an upswing

Thanks to the successful restructuring of the company's Sales and Product Development divisions commenced in 2003, Pandatel expects to record a tangible expansion of business in 2004. The goals are a sales volume of €30m in the entire group and a balanced result.

Encouraged by the leads coming from the market and by the belief in the new strength of Pandatel, the Executive Board is confident that it will reach these goals. Sentiment in the telecommunication industry has brightened noticeably in past months, and the turnaround appears to have been achieved, even if the peak from the boom year 2000 will certainly no longer be reached in the immediate future. This year, sector observers expect a slight increase in spending on telecom infrastructure again for the first time in four years. Deutsche Telekom, for example, raised its investment budget this year by €1.5bn to €8.5bn<sup>5</sup>. Experts estimate that global spending on network equipment in 2004 will climb by 5% and in the following year by 6%<sup>6</sup>. The strongest stimulus will derive from the re-equipment of fixed networks to IP technology, the growing demand for DSL broadband technology and Metro Ethernet equipment as well as from mobile phone technology<sup>7</sup>.

Having repositioned the company and intensified the development of new products for the current technological trends IP, broadband and Metro Ethernet by stepping up the financial and human resources, Pandatel is superbly equipped for the upswing in the telecom industry as it approaches.

Hamburg, February 13, 2004

Heinrich-J. Kraus

CEO

Norbert Wienck

Member of the Executive Board



Ingo Stolze is a software developer. He designs the second-generation management software that will be deployed in all new systems. The software will enable, for example, the multiplexers of the FME range to be controlled and managed in the future.

## Shaping the Future Together – the Team

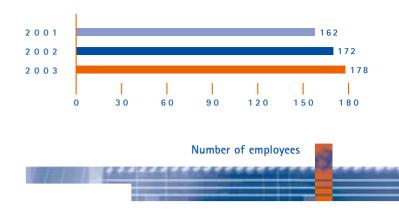
2003 was also and especially for the Pandatel staff a year that was dominated by the overriding issue of the turnaround. The Pandatel team's task is now to get the company's business moving again along the newly set course.

Last year, the company's management initiated the crucial changes in corporate strategy as well as a radical cost-cutting program. However, it is the staff that is the main force powering these measures. Their commitment is crucial for Pandatel's success over the long term. At this point the Executive Board would like to thank all the staff members for their dedicated work in effecting the strategy over the past fiscal year. The achievements can be termed a good performance in the face of the difficult conditions.

#### Challenges in sales and product development

The greatest impact on the actual working situation of many of the staff members derives from the changes in sales and product development. The sales staff are now increasingly seeking and maintaining direct contact with the end customer as a way of gaining an on-the-spot overview of possible applications and nurturing the awareness of Pandatel as supplier. Prior to this, the staff's main contact partners had been the distributors and system integrators. And these persons are still responsible for the realization of the projects. To be successful at approaching customers, Pandatel's sales staff must regularly update their system know-how and continuously deal with the growing number of new products and their new functions and technologies. What is more, the sales structure calls for a close and team-oriented collaboration among all the persons involved in sales.

For the staff of the product development department, the product offensive launched means that within the shortest possible time they have to familiarize themselves with new themes over and again and broaden their technological knowledge to cover additional areas. They must also recognize market and technological trends, process the feedback of their sales colleagues from numerous discussions with customers and translate the accumulated information into Pandatel products and solutions. For product development as a whole to be a success – as with sales – a more intense exchange of experience must take place between the colleagues, not only within but also across the business locations.



#### Corporate culture undergoing transformation

The changes in the various working areas have resulted in a visible transformation in the corporate culture. The demands and expectations being placed on each staff member as well as the possibilities open to them to actively promote the company have risen noticeably. What's needed is entrepreneurial thinking and acting. In future, the workforce will be more greatly incorporated into the decision-making process regarding the product portfolio while at the same time shouldering the responsibility for realizing the portfolio as planned and scheduled. Overall, the corporate culture is characterized by a high pace of work, it has become even more international and technologically innovative.

#### New colleagues on the team

In the wake of setting this new course, a large number of personnel changes have taken place. Almost 30 highly qualified and experienced employees – mainly for sales and product development – have been recruited. As an almost equal number of colleagues departed the company in the course of 2003, the number of staff members altogether has hardly increased. Last fiscal year, Pandatel employed on average 178 persons compared with 172 in 2002.

—Following a phase of the product development – have been recruited. As an almost equal number of colleagues departed the company in the course of 2003, the number of staff members altogether has hardly increased. Last fiscal year, Pandatel employed on average 178 persons compared with 172 in 2002.

— Following a phase of restructuring, the phase of realization begins in 2004—

On the management level, the most significant personnel changes concern the reduction in the Management Board from three to two divisions and the appointment of senior positions in product development, sales and business development. Moreover, Pandatel has hired an additional 15 developers, nine for the subsidiary in Israel and six to be located in Germany. All new employees are excellently qualified and professionally experienced. They therefore only require a minimum initiation period and bring good contacts with them, too. They are also established teams who have already successfully worked together in their specialist areas. In other words colleagues able to move a great deal in a very short time.

#### Success in competition

Similar to 2003, a great deal will also be demanded from the employees this year and in coming years in order to successfully advance together in the transformation process. But in return each staff member can make a crucial contribution towards restrengthening the company. If we all view ourselves as part of a large team – across all divisions – the foundations for this will be laid. With this in mind, the Executive Board call upon all staff members to continue actively supporting the corporate strategy and play a part in shaping the future success of Pandatel.



### The Share

Crash, war, rally, depression and upswing – those were the catchwords on the world's equity markets in 2003. The Pandatel share was also sent on a roller coaster ride and recorded finally a very good performance of +52%.

#### Farewell to three years of slumping markets

Last trading year was one of the most tumultuous in history. Equity markets started the year by continuing the downhill slide they had been on for the past three years. The approaching war in Iraq, widespread concern over the respiratory disease SARS and the fear of a deflationary development impacted markets negatively in the first half year. In March the German equity index DAX plummeted to its lowest level in eight years. Thus, during the longest and most difficult bear market since the global economic crisis of the thirties, investors witnessed €400bn wiped off their portfolios. As the year continued, sentiment was spurred again as the war in Iraq came to a swift conclusion and the global economy entered a visible recovery phase, helping the DAX to embark on a veritable price rally. By December 31, the picture on the equity markets had radically altered throughout the world: after three years of painful losses all major stock markets closed with price mark-ups. The DAX had surged by a good 37% and managed to outshine its rivals in Europe and the USA. Since the low of 2,188 points marked in March, it rocketed by nearly 82% and only just missed the 4,000 point threshold. In the USA the economic depression transformed into economic euphoria, showering gains on the Dow Jones index of 24%. The trading year 2003 was a year of extremes in another sense, too: for the first time since 1968 no single company in Germany ventured the move of going public.

\_\_After dramatic loss years, equity markets staged an impressive comeback in 2003\_\_\_

Technology stocks chalked up above-average gains in 2003 following the especially drastic losses of the previous year. The TecDAX climbed 51% and the NASDAQ index 48%. The shares of telecom companies also profited from this trend. Analysts attribute

this development to successes in restructuring, the – in some case significantly – better results of many companies in the third quarter and the altogether more upbeat sentiment in the sector.

#### Pandatel share gains uplift

The price of the Pandatel share, which has been listed on Prime Standard since the German equity market was newly segmented at the beginning of 2003, also profited from this trend. Over the year as a whole, the stock gained nearly 52%. In the course of the year it tracked the benchmark, the Technology All Share index, which in a comparison at recording date soared 63%. In the first quarter, the Pandatel share started by latching on to the negative development of the previous year, tumbling at the end of March to an all-time low of €2.50. From the second quarter it

Pandatel AG	
Technology All	Share
TecDAX	

Performance of the Pandatel share compared to reference indices in %

The	share	e –
key	data	2003

ISIN	DE 000 691 630 7
Number of shares	7,225,000
Closing price at year-end 2002	€3.10
52-week high	€6.80
52-week low	€2.50
Year-end closing price	€4.70
Market capitalization	
at year-end	€34.0m
Market capitalization	
of free float at year-end	€14.3m
Earnings per share	€-0.78
Shareholders' equity per share	€6.08

then embarked on a steady uphill climb to mark its high of the year in early November of €6.80. By mid-December, the price had way exceeded the benchmark indices TecDAX and Technology All Share. But, especially as institutional investors took profits at year-end, the price slid down again to close the year on December 30, 2003, at €4.70. At the beginning of the year, the technology stocks effortlessly continued the above-average performance of the preceding months in a consistently optimistic economic climate. The price of the Pandatel share also cleared the €5 mark again in the first days of the new year, and by the end of February had already notched up a gain of 10%.

#### Institutionals' interest aroused again

After a relatively quiet start to the year, analysts and investors showed greater interest again in the Pandatel share in the second half year. This was evidenced, for example, by the company's very well-attended presentation at the Equity Forum in Frankfurt in November and the commencement of coverage by Berenberg Bank. Contributing towards the renewed interest in the Pandatel share was, among other things, the higher market capitalization. Thanks to the increase in the free float to 42.1% and the higher share price, the market capitalization at the recording date climbed from nearly €8m to a good €14m.

Last year the Executive Board presented the company and its new strategy at two analysts' conferences, at various roadshows and in numerous individual talks in Germany, Great Britain and Austria. The insight gained from this was the importance of explaining to analysts and institutional investors in this start-up period the new course being pursued by the company and of highlighting the excellent perspective that Pandatel has to offer.

To ensure regular and open communication, Pandatel is also implementing the recommendations and suggestions of the German Corporate Governance Code. The code contains the regulations applicable in Germany for responsible leadership and for monitoring the company at the same time. The aim is to render these rules transparent for national and international investors and thereby strengthen confidence in the management of German companies. You can find a copy of the declaration published by the Executive and Supervisory Boards, including the few exceptions, on the company's homepage www.pandatel.com and by clicking "Investor Relations" (available in German only).

#### Dividend renunciation

As a way of safeguarding the intrinsic value of the company, the Executive Board would like to propose that no dividend distribution be made for 2003. Instead, the available liquidity should be used for the strategic investments in research and development.

## Report of the Supervisory Board

In fiscal 2003, the Supervisory Board advised and regularly monitored the work of the Executive Board and was kept constantly informed by the Executive Board on the business situation at Pandatel AG and its subsidiaries in the form of written and oral reports.

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

The Supervisory Board regards the German Corporate Governance Code as an important step towards developing the practice of company management and control. For this reason, the implementation of the Code was repeatedly an issue at meetings. The Supervisory Board heeded the recommendation of regularly examining the efficiency of its activities by means of a comprehensive questionnaire. In December 2003, the Supervisory Board and Executive Board for the second time jointly submitted a declaration of compliance pursuant to section 161 German Stock Corporation Act. The declaration has been published on the company's Internet page (available in German only).

The following changes took place in fiscal 2003 in the organs of the company compared with a year earlier: at August 21, 2003, Frank Mauritz, member of the Executive Board, responsible for Research and Development, departed the company. No successor was appointed.

The financial statements and consolidated financial statements at December 31, 2003, and the management reports of the company and the group for financial 2003, all of which were prepared by the Executive Board, have been examined by the auditors appointed at the Annual General Meeting, Ernst & Young AG, Wirtschaftsprüfungsgesellschaft, Hanover. The auditors found them to concur with the duly maintained accounts and statutory regu-

lations. The auditors have issued an unqualified opinion on the financial statements and the consolidated financial statements. The auditors participated in the Supervisory Board meeting on March 11, 2004, at which the annual accounts were adopted, commented on the findings of the audit and answered questions. The Supervisory Board has examined the financial statements and the consolidated financial statements as well as the management reports of the company and the group on the basis of the auditors' report and has no cause for objection. The Supervisory Board has approved the financial statements and the consolidated financial statements drawn up by the Executive Board. The financial statements for the year have thus been adopted.

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

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

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

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

The Supervisory Board would like to thank the Executive Board for its activities and its commitment to the company. At the same time, the Supervisory Board would like to extend its thanks to all the staff members of Pandatel AG for their dedication in 2003.

Hamburg, March 11, 2004

The Supervisory Board

Axel Haas, Chairman Dr. Steffen Leistner F

Prof. Dr. Uwe Hannig



As a technical editor, Juliana Munzel – along with two other colleagues – writes the customer documentation for all products. The handbooks are the guidelines for installing and configuring the systems at the user.

#### **Consolidated Financial Statements**

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	36 37 38 40

# Consolidated Balance Sheet at December 31, 2003

#### Assets

€ 000			
	Notes*	31/12/2003	31/12/2002
Current assets			
Cash and cash equivalents	(1)	22,425	24,785
Short-term investments/Marketable securities	(2)	2,820	5,111
Trade accounts receivable (net)	(3)	5,547	5,594
Inventories	(4)	7,366	7,752
Deferred taxes	(17)	48	1,225
Prepaid expenses and other current assets	(5)	638	2,540
Total current assets		38,844	47,007
Non-current assets			
Property, plant and equipment (net)	(6)	1,926	2,094
Intangible assets (net)	(6)	1,231	1,312
Deferred taxes	(17)	2,990	0
Other assets	(7)	83	83
Total non-current assets		6,230	3,489
Total assets		45,074	50,496

<sup>\*</sup>The figures in brackets relate to section (C) Explanatory notes p. 48ff.

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

# Liabilities and Shareholders' Equity

€ 000			
	Notes	31/12/2003	31/12/2002
Current liabilities			
Trade accounts payable		969	564
Liabilities against affiliated companies		25	100
Accrued expenses	(8)	873	1,156
Accruals and liabilities for income taxes	(9)	138	138
Other current liabilities	(10)	544	615
Total current liabilities		2,549	2,573
Shareholders' equity	(11)		
No-par value shares with a nominal value of €1.00;			
at December 31, 2003, and December 31, 2002: 10,025,000 units			
authorized, 7,225,000 issued and in circulation		7,225	7,225
Capital reserves		33,408	33,132
Unappropriated profit (incl. retained earnings)		2,014	7,685
Changes in shareholders' equity not affecting earnings		-122	-119
Total shareholders' equity		42,525	47,923
Total liabilities and shareholders' equity		45,074	50,496

# Consolidated Income Statement

€ 000			
	Notes	2003	2002
Sales		20,066	28,278
Cost of production		-11,899	-15,813
Gross profit from sales		8,167	12,465
Sales costs	(12)	-6,500	-7,170
General and administrative expenses	(13)	-4,849	-4,730
Research and development expenses		-5,085	-3,196
Other operating income	(14)	251	220
Operating income		-8,016	-2,411
Interest income	(15)	732	1,063
Losses from foreign exchange	(16)	-233	-1,407
Earnings before taxes		-7,517	-2,755
Income tax	(17)	1,846	1,355
Net loss		-5,671	-1,400
Earnings per share (diluted and undiluted) in €	(18)	-0.78	-0.19

# Consolidated Statement of Cash Flow

€ 000		
	2003	2002
Net loss for the year	-5,671	-1,400
Depreciation on intangible and tangible assets	1,407	1,278
Personnel expenses for stock options	276	278
Profit/loss from sales of tangible assets	47	-27
Cash flow	-3,941	129
Changes in		
trade accounts receivable	47	4.174
inventories	386	4.293
other assets which cannot be classified as investing or financing activities	1,684	-2,943
Changes in		
trade accounts payable	404	-166
deferred taxes	-1,813	-1,311
other liabilities which cannot be classified as investing or financing activities	-402	-2,941
Cash flows from operating activities	-3,635	1,235
Income from disposals of fixed assets	57	69
Payments for investments in tangible assets	-729	-809
Payments for investments in intangible assets	-529	-387
Income from the sale of held-to-maturity securities	2,488	7,582
Payments for investments in financial assets	-12	-15
Cash flows from investing activities	1,275	6,440
Payments to company proprietors (dividends)	0	-1,011
Cash flows from financing activities	0	-1,011
Changes in cash balances impacting earnings	-2,360	6,664
Cash and cash equivalents at beginning of period	24,785	18,121
Cash and cash equivalent at end of period	22,425	24,785
Interest paid	3	1
Tax paid (+)/received (-)	-1,763	6,327

# Statement of Changes in Shareholders' Equity

	SUBSCRIBED CAPITAL			
	Shares	Amount	Capital reserves	
	Units	€ 000	€ 000	
At December 31, 2001	7,225,000	7,225	32,854	
Stock option program	-	-	278	
Allocation to profit reserves	-	-	-	
Net loss for the year	-	-	-	
Dividends	-	-	-	
Unrealized share-price and currency				
differences after deducting taxes of €-68,000	-	-	-	
At December 31, 2002	7,225,000	7,225	33,132	
Stock option plan	-	-	276	
Allocation to profit reverses	-	-	-	
Net loss for the year	-	-	-	
Dividends	-	-	-	
Unrealized share-price and currency				
differences after deducting taxes of €-61,000	-	-	-	
Unrealized share-price and currency differences				
not affecting tax liability	-	-	-	
At December 31, 2003	7,225,000	7,225	33,408	

# OTHER CHANGES IN SHAREHOLDERS' EQUITY NOT AFFECTING EARNINGS

#### Available-Accumulated Total Profit shareholders' exchange rate for-sale Revenue reserves brought forward adjustments securities equity € 000 €000 € 000 €000 € 000 1,295 8,801 121 16 50,312 278 1,728 -1,728 -1,400 -1,400 -1,011 -1,011 -32 -224 -256 3,023 4,662 89 -208 47,923 276 -5,671 -5,671 208 77 -131 -80 -80 3,023 -1,009 **-**42 -80 2,014 -122 42,525

# 40

# Consolidated Statement of Fixed Assets

Ē 000		COST OF ACQUISITION	N AND PRODUCTIO	N
	1/1/2003	Additions	Disposals	31/12/2003
Intangible assets				
Licenses and software	2,423	529	2	2,950
	2,423	529	2	2,950
Tangible assets				
Land and buildings	431	9	0	441
Technical plant and machinery	271	76	0	347
Other plant, factory and				
business equipment	4,433	644	521	4,556
	5,136	729	521	5,344
	7,559	1,258	523	8,294

4	1

CUMULATIVE DEPRECIATION		ВО	OK VALUE		
1/1/2003	Additions	Disposals	31/12/2003	31/12/2003	31/12/2002
1,111	608	0	1,719	1,231	1,312
1,111	608	0	1,719	1,231	1,312
99	45	0	144	297	333
172	35	0	207	140	99
2,771	719	423	3,067	1,489	1,662
3,042	799	423	3,418	1,926	2,094
4,153	1,407	423	5,137	3,157	3,406

# (A)\_The company

Pandatel Aktiengesellschaft, Hamburg, came about from the transformation of Pan Dacom Telekommunikation GmbH, Hamburg, which commenced operations in 1987.

The transformation into Pandatel Aktiengesellschaft, Hamburg, was resolved on March 30, 1999, and entered in the Commercial Register of the Hamburg District Court on May 14, 1999, under registration number HRB 71126.

The object of Pandatel Aktiengesellschaft, Hamburg, is to develop, produce and trade in telecom systems and all activities directly or indirectly related to this.

Pandatel develops, produces and distributes active components for network access and network transmission. Examples of products are multiplexers, modems and the software for managing these systems.

Two operating facilities are maintained in Hamburg and one in Hanover; the company also has representative offices in France and the UK as well as subsidiaries in Singapore, the USA and Israel. The subsidiary in Israel was founded at July 1, 2003, and serves as one of the competence centers for research and development.

# (B)—Summary of the main accounting and valuation principles

#### Accounting principles

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

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

#### Scope of consolidation

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

#### Consolidation principles

The statements of the individual companies were drawn up in line with uniform accounting and valuation principles in order to facilitate their inclusion in the consolidated financial statements. All companies included in the consolidation use the same recording date for the statements. The capital consolidation has been undertaken by offsetting the cost of acquisition against the proportionate stake in the shareholders' capital of the subsidiary at the time of first inclusion in the consoli-

dation. 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.

#### Translation of financial statements into foreign currency

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

#### Estimates used in preparing the financial statements

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

#### **Currency translation**

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

#### Cash and cash equivalents

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

## Financial derivatives

Pandatel Aktiengesellschaft applies the Statement of Financial Accounting Standards (SFAS) 133 "Accounting for Derivative Instruments and Hedging Activities" in the version currently valid. These accounting standards require that all financial derivatives are shown at market value, regardless of the purpose or intention underlying the transaction. Changes in the market value of the financial derivatives are recorded on an accrual basis either in the operating result or shown in the shareholders' equity (as part of the other changes in the shareholders' equity which do not affect the operating profit), depending on whether a fair value hedge is concerned or a cash flow hedge. Until now, Pandatel Aktiengesellschaft has only made limited use of financial derivatives.

#### **Securities**

In the period under review, the short-term investments/marketable securities that had been classified as available-for-sale securities were sold. The company has no speculative intentions as regards the securities held, nor does it intend to retain these until maturity. The realized gains and losses were shown under the item "Income from securities" or "Losses from the disposal of securities".

Pandatel holds other securities available-for-sale. The company can draw on these 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 or excess inventories, 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 machinery	5-13
Fixtures, furnitures and office equipment	3-14
Vehicle pool	5-6
Office installations	3-13
Tools	5
Minor-value goods	1

#### Intangible assets

Intangible assets include software, licenses and similar rights. In July 2001, the Financial Accounting Standards Board (FASB) passed the Statement of Financial Accounting Standards (SFAS) 141 "Business Combinations", and SFAS 142 "Goodwill and Other Intangible Assets". Since January 1, 2002, in accordance with these new regulations, the company writes down the intangible assets with limited useful life using the straight-line method over a probable useful life (3 to 10 years) to the residual book value. 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 realized with the rendering of services in accordance with the conditions agreed. Sales revenues take discounts, customer bonuses and cash discounts into account. Reserves were formed for sales-or-return transactions in the appropriate amount. The basis for this is the ratio of returns of the last two fiscal years to the corresponding sales.

#### Product-related expenses

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

#### Sales costs

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

#### Research and development expenses

Research and development expenses are also credited directly to the income. Development costs for software designated for sale or other marketing are also charged to expenditure if the criteria of SFAS 86 are not fulfilled.

## 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 reduce the diluting effect on earnings.

## Implications of new accounting principles

In June 2002, the FASB issued Standard SFAS 146 "Accounting for Costs Associated with Exit or Disposal Activities". This concerns the method of recording restructuring costs and similar costs in the balance sheet. SFAS 146 replaces the earlier accounting regulations, especially Emerging Issues Task Force (EITF) Issue No. 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 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred. The statement also establishes that fair value is the objective for initial measurement of the liability. Under Issue 94-3, a liability for an exit cost as defined in Issue 94-3 was recognized at the date of an entity's commitment to an exit plan. Restructuring measures that were initiated after December 31, 2002, are shown in accordance with SFAS 146. None of these measures had any significant implications for the operating result and financial situation of the company.

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

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

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

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

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

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

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

# (C)\_Explanatory notes

## (1) Cash and cash equivalents

€ 000		
	31/12/2003	31/12/2002
Current account	1,025	1,094
Overnight money US dollars	0	191
Overnight money euros	200	400
Time deposits	21,200	23,100
	22,425	24,785

At the balance sheet date, non-realized losses from exchange rates were derived of €5,000 (2002: €3,000).

#### (2) Short-term investments/Marketable securities

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

€ 000				
	Cost of	Stock exchange	Unrealized	Unrealized
	acquisition	or market value	profits	losses
Papers securitizing outside capital	2,900	2,820	0	80

The short-term investments/marketable securities available at the balance sheet date relate solely to euro floaters (maturing 2009). In 2003, domestic fund shares (unlimited maturity) with original acquisition costs of €2,560,000 were sold at a market value of €2,470,000. These are two different securities. The profit that accrued from this amounted to €16,000, the loss to €106,000. No profits or losses from the sale of short-term investments/marketable securities accrued in the previous year. At the balance sheet date December 31, 2003, unrealized price losses were recorded of €80,000 (2002: €349,000 unrealized price losses). No deferred taxes are to be recorded for 2003, as the value adjustment of the securities has already been made in accordance with the German Commercial Code (HGB). In the previous year, the unrealized price losses minus deferred taxes of €-141,000 were recorded under "Other changes in equity capital not affecting earnings".

## (3) Trade accounts receivable (net)

€ 000		
	31/12/2003	31/12/2002
Gross receivables	6,071	6,981
less value adjustments	524	1,387
	5,547	5,594

The value adjustments primarily concern customers from Europe.

## (4) Inventories

The inventories are comprised as follows:

€ 000		
	31/12/2003	31/12/2002
Raw materials and auxiliaries	3,562	3,769
Unfinished goods and work in progress	1,986	1,888
Finished goods and services	1,608	2,095
Merchandise	210	0
	7,366	7,752

In fiscal 2003, write-downs were furnished for marketability, ranges, etc. amounting to €3,838,000 (2002: 3,299,000).

## (5) Pre-paid expenses and other current assets

€ 000		
	31/12/2003	31/12/2002
Tax refund claims		
(VAT and income taxes)	508	2,286
Pre-paid expenses	56	86
Interest receivable	29	74
Other	45	94
	638	2,540

## (6) Tangible and intangible assets, financial assets

The structure and movement 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 product rights, other modules of the ERP software proAlpha as well as database programs and other software for application programs.

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

	€ 000
2004	522
2005	522
2006	187
2007	0

In 2002, the write-down on intangible assets amounted to €487,000.

The additions to the tangible fixed assets largely relate to the purchase of measurement and test equipment, cars, as well as fixtures, furniture and office equipment.

In fiscal 2003, a profit resulted from the disposal of fixed assets of  $\in$ 47,000 (2002:  $\in$ 43,000) and losses of  $\in$ 5,000 (2002:  $\in$ 16,000). These are shown under other expenses/income.

## (7) Other assets

€ 000		
	31/12/2003	31/12/2002
Rent deposits	8	22
Cash deposited as collateral	41	49
Other	34	12
	83	83

## (8) Accrued expenses

€ 000		
	31/12/2003	31/12/2002
Outstanding staff remuneration	203	448
Holiday entitlement not taken	185	178
Guarantees	57	81
Other	428	449
	873	1.156

The guarantee reserves amount to 0.3% of sales at Pandatel Aktiengesellschaft of the last twelve months. The calculation takes place via the cost accounting. Beginning in 2004, the calculation will be based on a two-year period.

## (9) Accruals from taxes

€ 000		
	31/12/2003	31/12/2002
Accruals for pre-tax costs of flotation	138	138
	138	138

#### (10) Other current liabilities

€ 000		
	31/12/2003	31/12/2002
Social insurance contributions	217	185
VAT and retained taxes	194	104
Other	133	326
	544	615

#### (11) Shareholders' equity

## Capital stock

The subscribed capital amounts to  $\[ \in \]$ 7,225,000 (2002:  $\[ \in \]$ 7,225,000) and breaks down into 7,225,000 no-par value shares with an arithmetical share in the capital stock of  $\[ \in \]$ 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  $\leq$ 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  $\leq$ 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 Aktiengesellschaft. Each option entitles the holder to subscribe to an ordinary share in Pandatel Aktiengesellschaft in line with the details of the stock option plan resolved by the General Meeting.

#### Own shares

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

#### Proposal on the allocation of retained earnings

The Executive Board and the Supervisory Board propose to carry over to next fiscal year's accounts the balance sheet loss for fiscal 2003 amounting to €4,327,115.29.

#### Stock options

At December 31, 2003, stock options had been granted in five tranches. The first tranche (from 1999) covers 54,163 stock options, and of this figure 24,999 stock options were held by members of the Executive Board. These options could be exercised on December 1, 2001, at the earliest. The second tranche (from 2000) covers 55,199 stock options; of this figure, 24,999 stock options were awarded to members of the Executive Board. The options in the second tranche were returned without exception and without claim to compensation on January 31, 2001. The third tranche (from 2001) covers 60,199 stock options, of which 24,999 stock options were awarded to members of the Executive Board. The options from the third tranche could be exercised at the earliest following the Annual General Meeting in May 2003. The fourth tranche (from 2002) covers 56,999 stock options of which again 24,999 stock options were awarded to members of the Executive Board. The fourth tranche can be exercised at the earliest following the Annual General Meeting in May 2004. The fifth tranche (from 2003) covers 123,150 stock options of which 75,000 stock options were awarded to members of the Executive Board. The fifth tranche can be exercised at the earliest following the Annual General Meeting in May 2005. The stock options from the first, third, fourth and fifth tranches can only be exercised if the price of the Pandatel ordinary share exceeds the issue price (€22.00 for the first tranche) by 20% or the reference price (€36.10 for the third tranche, €12.41 for the fourth tranche and €2.96 for the fifth tranche), and the price of the Pandatel ordinary share during the period between issue and exercise of the option rights has at least kept pace during the same period with the trend of a combination of the Neuer Markt index (All Share Index) with a one-third weighting and the weighted sector index comprising Adva AG, Augusta Technologie AG, BinTec AG, CeoTronics AG, euromicron AG, teles AG and transtec AG with a two-third weighting. The maximum maturity of the options from the three tranches is 7 years, the expected maturity is 4.5 years. A fluctuation was taken into account after the fourth tranche of an annual 5%, owing to the fact that holders departed the company before the stock option plan came to an end.

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

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

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

€ 000					
	1st tranche	3rd tranche	4th tranche	5th tranche	Total units
Outstanding options					
at January 1, 2003	41,247	46,159	54,499	0	141,905
Weighted average					
remaining maturity at					
January 1, 2003, in months	47	62	74	0	61
Weighted average					
exercise price at					
January 1, 2003, in €	22.00	36.10	12.41	0	22.90
Outstanding options					
at December 31, 2003	41,247	37,826	46,166	98,150	223,389
Exercisable options					
at December 31, 2003	41,247	37,826	0	0	79,073
Options					
issued 2003	0	0	0	123,150	123,150
Options					
exercised in 2003	0	0	0	0	0
Expired/returned					
options in 2003	0	8,333	8,333	25,000	41,666
Options					
expiring 2003	0	0	0	0	0
Weighted average					
remaining maturity					
at December 31, 2003,					
in months	35	50	62	74	55
Weighted average					
exercise price at					
December 31, 2003, in €	22.00	36.10	12.41	2.96	14.04

From 1999 to 2003 126,321 stock options were returned. These were not awarded again.

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

€ 000		
	2003	2002
Cost of goods sold	7	6
Sales costs	125	117
Research and development expenses	39	67
General administrative expenses	105	88
	276	278

## (12) Sales costs

€ 000		
	2003	2002
Advertising costs	559	534
Trade fair costs	152	353
Other sales costs	5,789	6,283
	6,500	7,170

## (13) General and administrative expenses

The general administrative expenses contain the costs in connection with the company's stock exchange listing of €332,000 (2002: €421,000). These relate to investor relations advice, remuneration for the designated sponsors, the listing fees payable to Deutsche Börse AG, the costs for the annual general meeting and the costs for the quarterly reports and the consolidated financial statements.

# (14) Other income/Other expenses

€ 000		
	2003	2002
Accounting profit from disposals of fixed assets	46	43
Non-cash remuneration	85	88
Income from the release of reserves and accruals	67	30
Other	93	112
	291	273
less accounting losses for disposals of fixed assets	-5	-16
less other operating expenses	-31	-34
less other taxes	-4	-3
	251	220

# (15) Interest income/expenses

€ 000		
	2003	2002
Income from securities and lendings carried as financial assets	95	401
Other interest and similar income	13	17
Interest income from fixed-term deposits	627	528
Other interest and similar income from associated companies	0	118
Total interest income	735	1,064
Interest expense from short-term liabilities	-2	-1
Guarantees	-1	0
Total interest expense	-3	-1
	732	1,063

## (16) Currency gains/losses

€ 000		
	2003	2002
Currency gains from foreign investments, loans and deposits	754	648
Currency gains from open foreign-currency receivables and liabilities	180	3
Currency losses from open foreign-currency receivables and liabilities	0	-180
Currency losses from foreign investments, loans and deposits	-1,167	-1,878
	-233	-1,407

## (17) Income tax

The earnings before income tax of all the companies included in the consolidated financial statements for 2003 amount to  $\in$ -7,517,000 (2002:  $\in$ -2,755,000). The result is subject to taxation in the Federal Republic of Germany, Singapore, the USA and Israel. Pandatel Aktiengesellschaft and the subsidiary in the USA recorded a loss in 2003, the subsidiary in Israel a profit.

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

€ 000		
	2003	2002
Current taxes	-43	-135
Deferred taxes	-1,889	-1,220
	-1,846	-1,355

In 2003, the company was subject to corporation tax at a rate of 26,5% on retained earnings plus the German solidarity surcharge of 5.5% of the tax bill. This results in a combined tax rate of 27.958% for 2003 (2002: 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 was 19.028% (2002: 19.028%). The combined tax rates for 2003 are 41.67% (2002: 40.38%) taking into account the deductibility of the trade tax.

The following presentation explains the key differences between the expected tax bill for corporation tax plus German solidarity surcharge for 2003 and 2002 and the actual tax bill incurred:

€ 000		
	2003	2002
Expected tax yield/expenditure	-3,132	-1,112
Non-deductible expenses		
– Depreciation intangible assets	22	21
- Stock option plan	115	112
Corporation tax reduction owing to		
value adjustment for loan to subsidiary	-630	-678
Value adjustment for deferred tax losses brought forward	1,613	447
Release of value adjustment for deferred tax loss brought		
forward from previous year	0	-117
Deviating tax rate 2003/2004	139	-37
Other	27	9
	-1,846	-1,355
Effective tax rate	24.6%	49.2%

At the balance sheet date, corporation tax loss carryovers existed for Pandatel Aktiengesellschaft of  $\\eqref{10,038,000}$  (2002:  $\\eqref{2,346,000}$ ) as well as trade tax loss carryovers of  $\\eqref{10,549,000}$  (2002: 2,857,000). These can be carried over in full.

In the USA, loss carryovers exist of some €3,864,000 (2002: €2,927,000). Full 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.

The subsidiary in Singapore reported a loss for 2003 of €116,000 (2002: profit of €192,000). For 2003, a tax loss carryover of €216,000 (2002: €100,000) remains, which can be used unlimitedly.

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

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

€ 000		
	31/12/2003	31/12/2002
Deferred taxes carried as assets:		
Inventories	60	66
Intangible assets	31	16
Trade accounts payable	0	1
Knock-on effect OCI* unrealized price gains from securities	0	112
Loss brought forward AG	4,151	1,074
Loss brought foward USA	1,545	1,171
Loss brought forward Singapore	48	22
Receivables	4	0
	5,839	2,462
Value adjustments	-2,767	-1,171
	3,072	1,291
Deferred taxes carried as liabilities:		
Receivables	0	37
Trade accounts payable	5	0
OCI* unrealized price gains from securities	29	29
	34	66
Deferred taxes (net)	3,038	1,225
	(Assets	(Assets)

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

€ 000		
	31/12/2003	31/12/2002
Deferred taxes carried as assets:		
Short-term	48	1,291
Long-term	3,024	0
	3,072	1,291
Deferred taxes carried as liabilities:		
Short-term	0	66
Long-term	34	0
	34	66
	3,038	1,225
	(Assets)	(Assets)
*OCI: Other Comprehensive Income		

## (18) Earnings per share

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

	2003	2002
Numerator		
Group net loss/profit for the year in € 000	-5,671	-1,400
	-5,671	-1,400
Denominator		
Weighted average of outstanding ordinary shares in units	7,225,000	7,225,000
Diluted shares due to stock option plan	34,242	0
	7,259,242	7,225,000
Loss/earnings per ordinary share in €/unit	-0.78	-0.19

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

Until the year 2010, a maximum of 223,389 options can lead to a dilution effect.

# (D)\_Other information

Cost of materials

€ 000		
	2003	2002
Expenses of raw materials, auxiliaries and goods purchased	9,582	12,958
Expenses for services rendered	907	348
	10,489	13,306

## Personnel expenses

€ 000		
	2003	2002
Wages and salaries	7,885	8,038
Social insurance contributions	1,256	1,158
Expenses for pension provision	6	5
	9,147	9,201

## Rentals and other financial obligations

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

	€ 000
2004	1,228
2005	1,196
2006	1,162
2007	1,137
2008	1,115
after 2008	1,115

Total rental expense for fiscals 2003 and 2002 amounted to €1,202,000 and €1,188,000.

## Information on the business areas

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

The following regional segments exist:

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

Furthermore, the reporting is carried out according to the individual business areas. This breakdown is based on the products made and distributed:

- Telecommunications
- Optical Networks
- Industrial Communication

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

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.

With effect from January 1, 2004, Pandatel has reorganized its activities according to the following new business areas:

- Connectivity Products
- Access Multiplexers
- Optical Systems

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

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

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

The segment results for 2003 are as follows:

€ 000							
				Intra-			
		External		group			
	Year	sales	in %	sales	in %	EBT	in %
EMEA	2003	12,591	62.7	6,739	100.0	-6,915	92.0
	2002	13,657	48.3	11,512	100.0	-2,533	91.9
The Americas	2003	2,097	10.5	0	0	-472	6.3
	2002	4,187	14.8	0	0	-270	9.8
Asia Pacific	2003	5,378	26.8	0	0	-130	1.7
	2002	10,434	36.9	0	0	48	-1.8
Group	2003	20,066	100.0	6,739	100.0	-7,517	100.0
	2002	28,278	100.0	11,512	100.0	-2,755	100.0

Total assets break down in the regions as follows: EMEA €42,465,000 (2002: €46,290,000), The Americas €373,000 (2002: €984,000) and Asia Pacific €2,236,000 (2002: €3,222,000).

Net interest income of €732,000 (2002: €1,063,000) was generated in the EMEA region. Of this, €735,000 related to interest income (2002: €1,064,000) and €3,000 related to interest expenses (2002: €1,000).

In Germany sales of €2,830,000 (2002: €3,022,000) were generated.

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

€ 000					
	Year	Sales	in %	Gross result	in %
Telecommunications	2003	16,812	83.8	8,483	80.0
	2002	23,853	84.4	12,573	84.0
Optical Networks	2003	2,339	11.7	1,533	14.4
	2002	3,738	13.2	1,997	13.3
Industrial Communications	2003	915	4.5	589	5.6
	2002	687	2.4	402	2.7
Group	2003	20,066	100.0	10,605	100.0
	2002	28,278	100.0	14,972	100.0

The gross result was calculated as the difference between the sales revenues and the relevant individual product costs of the particular business area.

The sales of the individual units break down as follows:

€ 000		
	2003	2002
Telecommunications net	16,105	22,635
Consolidation	708	1,218
Telecommunications gross	16,812	23,853
Optical Networks net	2,083	3,547
Consolidation	256	191
Optical Networks gross	2,339	3,738
Industrial Communications net	889	653
Consolidation	26	34
Industrial Communications gross	915	687
Total	20,066	28,278

## Business relations to affiliated persons

Augusta Technologie AG holds 57.9% of the shares. Thus, the associate company Pandatel Aktiengesellschaft is controlled by Augusta Technologie AG. Business relations with Augusta Technologie AG and its subsidiaries only existed to a minor extent.

## Information on financial instruments

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

In 2003, 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 translate 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 its 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 €16,000 (2002: €45,000) and losses of €0 (2002: €0) from currency futures are shown in the item "Foreign currency gains/losses". Fees for these transactions came to €22,000 (2002: €26,000). They are included in the administrative expenses.

#### Key accounts

Sales were generated in the fiscal year with the three largest customers of €4,246,000 (2002: €3,770,000), €1,415,000 (2002: €1,683,000) and €1,358,000 (2002: €1,848,000).

The sales of these customers related to the segments Telecommunications at €6,593,000 (2002: €6,954,000), Optical Networks at €-75,000 (2002: €130,000) and Industrial Communications at €501,000 (2002: €217,000).

#### **Payroll**

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

	2003	2002
Salaried staff	139	132
Wage earners	39	40
	178	172

In 2003 there were 12 participants in job experience schemes at the company.

## Company boards

At the recording date, the Executive Board consisted of two members who jointly represent the company. Heinrich-J. Kraus, Chief Executive Officer, Mönchengladbach

Norbert Wienck, Kaltenkirchen

Frank Mauritz, Hamburg (until August 21, 2003)

Heinrich-J. Kraus was also Chairman of the Supervisory Board of ND SatCom AG, Friedrichshafen (until November 10, 2003). Norbert Wienck and Frank Mauritz do not have any appointments to external supervisory boards.

In 2003, the emoluments of the Executive Board totalled €742,000 fixed and €94,000 variable (2002: €864,000 fixed and €118,000 variable). Moreover, 75,000 (2002: 24,999) stock options were awarded.

Frank Mauritz departed the company on August 21, 2003. Heinrich-J. Kraus took over responsibility for Technology, Norbert Wienck for Production.

The Supervisory Board consists of the following persons:

Axel Haas (Chairman)

CEO of Augusta Technologie AG, Frankfurt

Dr. Ing. Steffen Leistner (Deputy Chairman)

Managing Director at Booz Allen & Hamilton, Munich

Prof. Dr. Uwe Hannig

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

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

Axel Haas has been Chairman of the Supervisory Board of ND SatCom AG, Friedrichshafen, since November 11, 2003.

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

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

Remuneration for expenses incurred by the members of the Supervisory Board for 2003 totalled €36,000 (2002: €24,000).

	N	umber of unit shares			Number of
	= am	ount of capital stock			stock options
			Share in		
	31/12/2003	31/12/2002	capital stock in %	31/12/2003	31/12/2002
Executive Board					
Heinrich-J. Kraus	0	0	0.00	25,000	0
Norbert Wienck	0	0	0.00	49,999	24,999
Frank Mauritz	0	0	0.00	0	16,666
Supervisory Board					
Axel Haas	50,000	50,000	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
Total	51,345	51,345	0.09	74,999	41,665

## Special developments after completion of the fiscal year

After initiating the restructuring measures in Sales and Product Development, CEO Heinrich-J. Kraus will depart the company on March 31, 2004. Norbert Wienck, who has been Executive Board member for years and was previously responsible for Finance, Controlling and Production, will head the company as its sole board member from April 1, 2004.

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

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

	Shares at 31/12/2003
Shareholder	in %
Augusta Technologie AG	57.9

As disclosed on May 22, 2003, Mr Detlef Küster's share in Pandatel Aktiengesellschaft has fallen below 5% at May 21, 2003.

## Declaration regarding the Corporate Governance Code

In December 2003, the Executive Board and Supervisory Board submitted the declaration of fulfillment as defined in section 161 German Stock Corporation Act, which can be viewed by shareholders on the Pandatel Aktiengesellschaft homepage under www.pandatel.com (available in German only).

## Group membership

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

The consolidated financial statements of Augusta Technologie AG are disclosed at the Frankfurt/Main District Court under file no. HRB 41371.

## (E)\_Additional information

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

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

## Contents and preparation

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

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

#### Deferred taxes on income

According to HGB, deferred taxes must be calculated in line with the so-called "timing concept", but only the remaining liability balances may be entered in the consolidated financial statements. Moreover, according to a definition of the German Standardization Council (Deutscher Standardisierungsrat) in DRS 10, deferred taxes carried as assets resulting from tax losses brought forward may at least be entered in the consolidated balance sheet. According to US GAAP, deferred taxes shall be calculated for temporal valuation differences arising from the method used for assets and liabilities in the tax balance sheet and the consolidated financial statements on the basis of the legal tax rate to be expected at the point in time when the differences are reversed. According to US GAAP, deferred taxes would also have to be calculated for tax losses brought forward if the company possessed such losses brought forward. Should the deferred taxes carried as assets have no value, then the value of these must be corrected. The decisive point in this regard is to assess the likelihood that these items are actually realizable in the future.

## Costs of capital procurement

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

#### **Securities**

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

#### Accruals

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

#### **Currency gains**

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

#### Stock option plan

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

Hamburg, February 20, 2004

Heinrich-J. Kraus

Norbert Wienck

CEO

Member of the 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, 2003. 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, 2003 – 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, 2003, 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 20, 2004

Ernst & Young AG
Wirtschaftsprüfungsgesellschaft

Steinke Boelsems
Auditor Auditor

Access	7, 10	Optical Systems (business area)	8, 62
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# **Business Areas**

CONNECTIVITY	Task: to transmit and convert data
PRODUCTS	Products for linking two business locations or converting data
	PRODUCT GROUPS:
	Fiber optic and copper modems
	Fiber optic and copper converters
	Rack system and management
ACCESS	Task: to interface with networks
MULTIPLEXERS	Products to bundle data for accessing networks
	PRODUCT GROUPS:
	SDH over IP multiplexers
	IP over SDH multiplexers
	Fiber optic multiplexers
OPTICAL	Task: to bundle data
SYSTEMS	Complex systems for multiplexing data and storage applications
	PRODUCT GROUPS:
	DWDM systems
	CWDM systems
	TDM cards
	Optical amplifiers

Product Groups

Glossary



# Glossary

Backbone Powerful supra-regional main data line that links up many sub-networks

Bandwidth Transmission capacity of communication systems, measured in data per second

Broadband technology Transmission method in which the bandwidth of the transmission medium is broken down into several frequency bands

that specific tasks (sending/receiving) or types of communication are allocated to

Carrier Network operator that provides transport services to other companies for a fee

 Connectivity
 Ability of systems to communicate with each other via a network

 Converter
 System that converts data set in a particular format into another format

CWDM Coarse WDM – Method that uses broader channels and is therefore more cost-efficient than > WDM or > DWDM

DSL Digitial Subscriber Line – Transmission technology for broadband Internet access via the telephone network

DWDM Dense Wavelength Division Multiplexing – Special form of > WDM where the individual wavelengths are positioned very

close to one another and thus ensure even more efficient use of the fiber optic cable

Ethernet Transmission protocol for local area networks (> LANs)

**G.SHDSL** > SHDSL; the "G" stands for a standardization series of the International Telecommunication Union

 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

Inverse multiplexer > Multiplexer that splits a high-speed channel into several independent channels with low transmission speed or combines

several independent data streams to form one broadband channel

LAN Local Area Network – Computer network that is installed at the user's end and is geographically limited

Last-mile access

The last mile is the connection range between the network exchange and the home exchange; frequently what is meant is

the copper line between telephone company and end customer

Mbit/s Megabit per second – Data transmission speed in million bits per second

Metro Ethernet Metro networks equipped with > Ethernet-based services; virtual > LANs, for example, can be established by means of

Ethernet connections, allowing several company locations to be integrated into a homogeneous network

Metro network Metropolitan Area Network – Telecommunication network that covers a city or region

Multiplexer System that enables the simultaneous transmission of several mutually-independent data streams down one and the

same physical channel (copper cable, fiber optic line)

Multi-services Merging of different solutions in convergent networks

**OEM**Original Equipment Manufacturer – Manufacturer that buys products from other manufacturers and integrates them into

its own products; sometimes the original manufacturer is termed  $\ensuremath{\mathsf{OEM}}$ 

**OEM product** Product from an external manufacturer that a company includes into its own product portfolio and sells under its own label

**Optical systems** Instruments and systems that enable the > optical transmission of data

**Optical transmission** Data transmission via fiber optic line or synthetic fiber with light as the signal carrier

Routing In telecommunications: a method of conveying news between networks; routers convey data packages in the best

possible way from one network to another

SAN Storage Area Network - Centrally-managed high-speed storage network which provides several servers with simultaneous

storage access and increases error tolerance thanks to its structure

SDH Synchronous Digital Hierarchy – Standard for the high-speed transmission of data via fiber optic networks

SDSL Symmetric Digital Subscriber Line - > DSL with symmetric transmission speed, i.e. upload and download speed are identical

Service provider Company that provides communication or storage services with network access, e.g. Internet service provider

SHDSL Single Pair High Bit Rate Digital Subscriber Line – Symmetric > DSL method for copper double cores

Storage Area Network > SAN

Switching Means by which a transmission path is switched between sender and receiver

TDM Time Division Multiplexing – Technology in which signals for different messages are transmitted in a time-interleaved

pattern down a single channel

**Transmission protocol** Definition of the way in which information is to be exchanged between two systems **Virtual concatenation** Technology that allows the efficient transport of large data bandwidths via > SDH

WDM Wavelength Division Multiplexing – Technology which uses laser light of different wavelengths (colors) to simultaneously

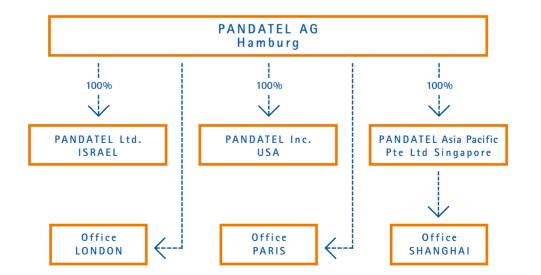
transmit several communication channels down a single fiber optic line

xWDM Collective term for the multiplexing technologies > WDM, > CWDM and > DWDM

Pandatel is a globally-operating special supplier of professional network technology. The company develops, produces and distributes optical systems and complex solutions for data transmission in heterogeneous networks. Some 180 colleagues offer products and services to customers in 90 countries.

Pandatel has been operating on the market for fiber optic data transmission technology for more than 15 years and offers reliable products and technology consulting in the growth markets Metropolitan Area Networks (MANs) and external storage networks (SAN – Storage Area Networks).

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



## Pandatel AG

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