

# Annual Report 2003



## Figures



## Information



## Facts

IVU Traffic Technologies AG



## Five-year review (Consolidated IAS figures)

	1999	2000	2001	2002	2003
	million€	million€	million€	million€	million€
Revenues	14.7	17.5	25.5	35.6	29.9
Gross profit	12.5	19.1	28.0	32.0	24.9
Personnel costs	7.6	10.6	23.3	18.9	19.5
EBIT	0.8	1.9	(18.8)	0.8	(6.6)
Consolidated net profit	0.5	1.4	(37.1)	(3.4)	(7.4)

The year-end financial statement and management report for IVU Traffic Technologies AG for fiscal year 2003 were audited by Ernst & Young auditors in Berlin and provided with an unqualified audit report. The audit and the unabridged notes on the consolidated financial statements are available on request or can be downloaded from the Internet at [www.ivu.de](http://www.ivu.de).

### Supervisory Board

Dr. Hans-Ulrich Abshagen (Chairman)

Hans G. Kloß (Vice Chairman)

Dr. Manfred Garben

Ralph Günther

Klaus-Gerd Kleversaat

Dr. Gunnar Streidt

### Management Board

Prof. Dr. Ernst Denert, Berlin (Chairman)

Dr. Olaf Schemczyk, Berlin

Dr. Gero Scholz, Berlin (since 1 February 2004)

## Letter to our shareholders

Dear shareholders, dear friends of IVU,

We expected 2003 to turn out better. In our initial calculations at the beginning of the year, we believed that we would be able to generate €39 million in revenues. Indeed, this figure turned out to be only €30 million, an unsatisfactory result. One of the reasons why our expectations missed the mark is that we allowed ourselves to be deceived by the previous year's figures. 2002 was too good a year, if such a thing is possible. Revenues included over five million euros for delayed projects that could finally be billed in 2002. As a result, we earned roughly the same revenues in 2001, 2002 and 2003.

When it became apparent after the first quarter that we would not be able to meet our expectations, we immediately reacted with cost-cutting measures, which led to the layoff of roughly fifty employees in April. It was a painful move, but one we felt it necessary to take in order to secure IVU's future. We strongly believe that this measure will help improve the company's health, making it profitable and successful.

We are also able to report a number of positive developments over the past year, having defined and eliminated the weaknesses of the old IVU. In terms of costs, we have entered the new year over €2 million lighter and with greater efficiency. We have strengthened our sales organisation, particularly in the international arena. Our new member of the Management Board, Dr. Gero Scholz – whom we enticed away from Dresdner Bank – is an outstanding IT expert who will boost efficiency in software development and further improve our systems.

The most important achievement is that we further strengthened our market position in 2003, particularly in our main business segment Public Transport. IVU is the only system developer to offer customers an IT platform consisting of hardware and software solutions for all public transport requirements, from planning and operations to management. A good reason for optimism.

Sincerely,  
The Management Board  
Prof. Dr. Ernst Denert  
Dr. Olaf Schemczyk



Dr. Olaf Schemczyk  
Prof. Dr. Ernst Denert

## Public Transport

IVU offers its customers an IT platform consisting of hardware and software solutions for all public transport requirements, from planning and operations to management. These are systems that support public transport companies before their buses and trains leave the depot, while they are in service and after they return to the depot. None of our competitors can demonstrate a product platform of this type. In 2003, our systems continued to gain ground both in Germany and abroad. Last year, we attracted important new orders that will bring substantial strategic advantages, especially in the international market.

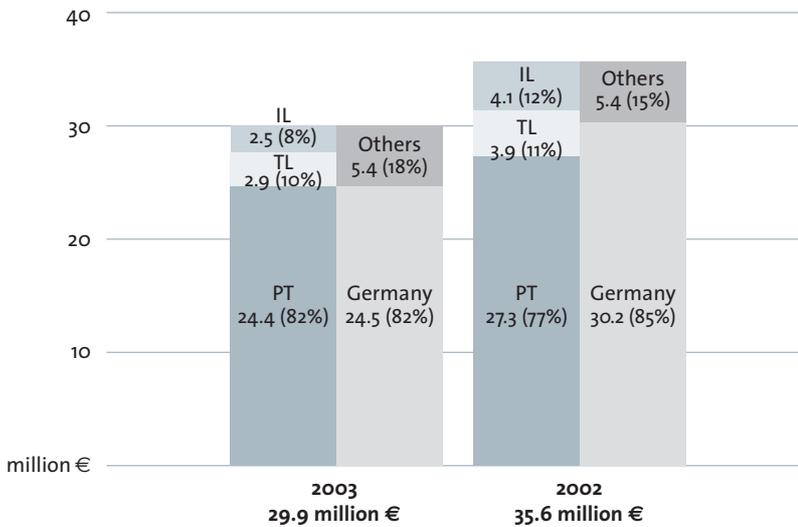
### Business segments

The market situation in 2003 varied greatly among our different business segments. While Transport and Information Logistics suffered the effects of cautious spending on the part of its customers, our largest segment, Public Transport – which develops systems for public transport companies – is well on its way to success, accounting for over three quarters of our revenues.

### Strategic international success

For the first time, our MICROBUS planning and scheduling system was able to overcome opposition from its strongest international competitor. As the general contractor of the new subway line in Bangkok, Siemens AG commissioned IVU to install MICROBUS for this project. Measuring 20 kilometres long, the line connects 18 stations in downtown Bangkok, a city that is home to eight million people. The IVU system is used to plan, optimise and schedule the deployment of vehicles and drivers. The main features that convinced Siemens AG to choose MICROBUS were the system's flexibility and adaptability to other systems. This was already the third co-operation project between Siemens and IVU in Asia. The "Skytrain" elevated railway in Bangkok and the airport feeder line in Kuala Lumpur, Malaysia, both run on the basis of MICROBUS.

### Sales



We also have MICROBUS to thank for a second outstanding order. The municipal government of Dubai in the United Arab Emirates ordered IVU's most successful product in a deal that opens up good opportunities for us in the rapidly growing Persian Gulf. In light of the population boom in their region, the Gulf states have identified the need to control traffic volume and implement traffic technology in their countries as a top priority over the next few years. The Dubai administration will initially use MICROBUS to plan and schedule 230 buses, with this number increasing to over 500 in a later phase. The system will also handle operations in three depots with over a thousand drivers. Thanks to this reference project, IVU has substantially intensified its sales activities in the Near East. IVU presented its products in December at the "Gulf Traffic" trade show in Dubai.



### European market leader

MICROBUS is on its way to become the standard application for planning and scheduling systems. With over 175 installations, the system is the European market leader. More and more companies who use other products are switching to MICROBUS, including Stadtverkehr Lübeck, Chemnitzer Verkehrs AG, RKH in Kassel – which operates over 600 buses – Sonneberg in Thuringia and Eberswalde, all of which switched in 2003. The new MICROBUS version, which we will place on the market in 2004, is expected to attract other new customers – along with re-orders from existing ones. The new version will be the first to combine all functionalities of the system developed in recent years for urban bus and light rail operators as well as regional public transport and railway companies.

### Clearing the way for MICROBUS

When the minute hand moved to eight past midnight in the early morning hours between 13 and 14 December 2003, the first train operated by S-Bahn Rhein-Neckar left the new Ludwigshafen-Mitte station. MICROBUS is used to plan and schedule the timetable as well as the deployment of trains and drivers in the 240-kilometer network. S-Bahn München also switched its operation planning and scheduling functions to MICROBUS the last time it changed the timetable. Last year, IVU made substantial improvements to the system specifically for railway operation. The orders from Mannheim and Munich are a milestone for IVU because they allow us to show how well suited MICROBUS is to rail service. This development opens up an enormous new market for IVU.



### Advantages of the IT platform

It has become increasingly clear that the success of our public transport systems is based on the fact that we have a uniquely broad and harmonised range of hardware and software products that meet all the requirements of our customers. This strategy turned out to be an advantage in the case of the order placed by Jenaer Nahverkehrsgesellschaft, which will install both our BON vehicle monitoring system and our on-board computers in all public buses in the Thuringian college town. Thus, the regional transport company will continue to use IVU's complete range of products. Once again, we won the contract over a number of well-known competitors. According to the managing director of Jenaer Nahverkehrsgesellschaft, which became our first MICROBUS customer in the former East Germany as early as 1992, the most important factor in the decision was that IVU had offered the best technology at the most reasonable price.

The Cottbus order also underscores the fact that our platform approach is the right move to take. The public transport company of this city on the Spree River in the German state of Brandenburg has commissioned IVU to enhance its existing BON vehicle monitoring system. During a second phase, the IVU software will connect real-time passenger information systems to the vehicle monitoring system. Cottbusverkehr GmbH now uses nearly all of IVU's product range, from planning and operations to reliability management.

### Multi-modal passenger information

IVU developed an innovative technology for the Berlin-Brandenburg integrated transport system. "VBB fahrinfo intermodal" is the first integrated door-to-door information system for all means of transportation throughout Berlin and Brandenburg. In addition to presenting the best public transport connection, the system also provides a graphical display of the access routes. If an adequate means of public transport is unavailable, for example at night or in low-population areas, the system automatically displays access routes for cars and taxis. The user receives a detailed route description table and a corresponding map of the entire route.

### Innovations in ticketing

Our Ticketing unit did brisk business last year, benefiting from the trend toward placing railway service contracts into private hands. Two of these new railway operators went right ahead and invested in IVU ticketing products. Rhenus Keolis, a subsidiary of the Rhenus Logistics Group and Keolis S.A., the largest private railway operator in France, ordered additional mobile ticket vending machines and the new i.box pda ticket vending system based on commercial PDA computers. Train conductors use this system to issue tickets and receipts for additional services whilst the passengers travel.

The Connex Group, a leading private railway operator in Germany, also selected IVU's i.box pda system for use in its long-distance InterConnex trains. Over the course of a two-week trial, Connex tested the mobile ticket vending system in the InterConnex trains running between Gera and Rostock. The company also compared them directly with the mobile ticket printers used by Deutsche Bahn conductors. Connex was happy with the IVU solution in every respect. Although the PDAs are being used on the Gera-Rostock line, Connex also plans to equip additional lines with the IVU solution and integrate other software functions, including the management of "black lists" – containing invalid or blocked credit cards – for cashless ticket sales along with the management and automatic apportioning of revenue.



### **New generation of on-board computers**

In July, Südwestdeutsche Verkehrs-AG (SWEG) ordered seventy i.box printers – our newly developed on-board computer with vehicle monitoring and integrated ticket vending functionality. This is the first major order for the i.box printer since the end of its successful field trial. Addition orders are expected in 2004. Ten customers now use equipment from our i.box family. This year, we will place a new generation of on-board computers on the market, allowing us to offer powerful, yet reasonably priced equipment.

### **Consulting services in demand**

Our consulting business is small but growing as the demand for consulting services increases among public transport companies and the towns, districts and states they serve. One reason is the growing competitive pressure to manage operations more efficiently. In addition, the European Court of Justice has issued clear rules of interpretation on the conditions under which subsidies to public transport companies are not considered unlawful assistance. This means that future public subsidies will be allowed only if payments are related to performance and prices are competitive. It must also be possible to compare prices transparently. Yet how high should competitive costs be to meet non-profit obligations? Because IVU has many years of experience in calculating the costs of transport services, we have developed special methods that allow us to precisely calculate the individual costs of specific transport tasks in every region, taking local parameters into account. We expect to see increasing interest in this area.

Our traffic consultants received an interesting order from Berliner BVG in the third quarter. They are developing scenarios for optimising all public transport services in the German capital. The new S-Bahn Rhein-Neckar, which has been using IVU consulting services

for many years, employs our Qbase quality management system in its operations and is therefore a Deutsche Bahn pilot customer for this innovative software.

### **High-level public transport conference**

In early October, we welcomed over fifty CEOs, managing directors and executives of public transport companies to Berlin for our first IVU conference on the subject of “IT in Public Transport”. The speakers at this high-level conference were Albert Schmidt, transportation spokesperson for the Alliance 90/Greens parliamentary coalition; Wolfgang Meyer, CEO of EVAG in Essen; Uwe Stindt, Managing Director of VBB in Berlin and chairman of the Federal Consortium of Local Authorities; Prof. em. Jakob Maurer of the Swiss Technical College in Zurich; Prof. Martin Grötschel of the Konrad Zuse Centre for Information Technology in Berlin; Rudolf Althoff, CIO of Personenverkehr DB Regio in Frankfurt; Dr. Heinrich Ganseforth, CEO of üstra in Hannover; Volker Sparmann, managing director of RMV in Frankfurt; and Andreas Graf von Arnim, CEO of Berliner BVG. In the evening, IVU invited its guests to the roof of the Reichstag Parliament Building.

The enormous interest demonstrated in this highly successful event underscored IVU’s solid reputation as a supplier of IT solutions to the public transport sector. This could also be seen in the response to our annual public transport user’s conference, held in late September in Berlin. Once again, we welcomed 200 guests this year, many of them already long-time users of individual IVU products. They have now also expressed interest in our complete platform of hardware and software products for planning, operations and management in the public transport sector.



## Transport Logistics

Last year, our Transport Logistics segment, which develops systems for scheduling, controlling and monitoring large lorry fleets, acutely felt the effects of an economy in which freight forwarders took a cautious approach to capital spending. Arguments over the Lkw-Maut kilometre levy also unsettled the carriers. As a result, most of our personnel layoffs in the spring affected this business segment. Nevertheless, Transport Logistics did its homework, eliminated weaknesses and placed itself in a good technological and financial position for the economic upturn.

## Attractive new customers for Waste Management Logistics

Combitour, an outstanding logistics system for sanitation companies from our Waste Management Logistics unit, is the European market leader for this specialised application and helps companies efficiently deal with the current consolidation trend in this market. In 2003, IVU was able to attract new customers for Combitour, including Alba subsidiary Havelländische Abfallwirtschaftsgesellschaft mbH, AVR Rotterdam – the largest sanitation company in the Netherlands – and Linz AG, our first Combitour customer in Austria. Last year, Hamburger Stadtreinigung began using Combitour in regular service for its municipal solid waste (residential waste and Gelbe Tonne recyclables) and Container divisions. The IVU system organises and monitors over 400,000 weekly collections in Hamburg.

In late September, we presented our system at Entsorga 2003 in Cologne, the world's largest trade show for environmental technology. Due to the enormous interest expressed by visitors for Combitour, we received several test orders right at the show. The most pressing issue facing waste management companies today is load optimisation, which involves finding more effective ways to deploy vehicles and personnel. This trend is largely being fuelled by changes in waste management laws, which in the future will require the pre-treatment of roughly 15 million tons of residential waste per year that used to be stored untreated in landfills. As a result, waste management companies are facing enormous challenges where load organisation is concerned. We view this trend as an enormous opportunity for our system. As many as 25 managers of public sector waste management companies attended IVU's first seminar series on this subject. We expect to receive a number of new Combitour orders in 2004.



### Opportunities for transportation logistics

Although the uncertain introduction of the highway levy is still holding up investments in the transport sector, we nevertheless see the levy as an opportunity for our products. The levy infrastructure, that is, the on-board computer, GPS system and interconnection with the central office, will trigger substantial new investments in lorries, since the equipment – once installed – can be used for a wide range of additional services. IVU's Contour Web is an ideal product for this purpose, as it is currently the only system on the market that supports real-time order scheduling and optimisation of the entire fleet via an Internet access. Contour Web therefore gives motor carriers the opportunity to plan and control their fleets more efficiently, manage orders online, avoid empty runs and save money overall. The large Bavarian construction company Max Bögl has been using Contour Web for the past year and is extremely happy with the system.

Early in the year, we placed an attractive innovation on the market for small companies who want to plan and control their vehicle fleets and field service personnel without having to invest in their own server systems, hardware or IT personnel. A lease version of the complex Contour Web transport logistics system is now available as an online subscription service. A co-operative distribution agreement with Blaupunkt, the leading European supplier of car radios and navigation equipment, also appears to be quite promising. Blaupunkt's new series of on-board computers for use in lorries and other commercial vehicles has a simple interface to the ContourWeb system.

### A unique system-independent positioning platform

Since last fall, IVU has been offering a unique, system-independent platform that provides access to all common positioning technologies – especially GSM and GPS. The positioning portal is tailored specifically to the requirements of security and logistics customers, including companies that offer personal protection, property protection and corporate security services as well as public security agencies. The first few customers are already using mLoc. The system can also be used in logistics processes for monitoring material flow and vehicles. The use of commercially available mobile telephones instead of special on-board computers or other hardware makes the IVU solution an economical choice where purchase and operating costs are concerned. Another advantage is that – unlike GPS – the mobile radio-based positioning technology works even in enclosed spaces. In addition, communication and positioning functions are combined into a single device.



### Information Logistics

Our Information Logistics segment is making a name for itself as a specialist in e-government systems, and it has received pioneering new orders in 2003.

### The leader in election systems

Following the success of our election system for the German parliamentary elections in 2002, the Federal Election Commissioner has asked IVU to repeat its efforts for the 2004 European elections. Based on Internet technology instead of conventional main-frame computers, the system will be refined for the European elections and new functions added. As part of the order, IVU will also redesign the Internet portal of the Federal Election Commissioner along with an election preparation system. In 2003, the city of Saarbrücken also placed an order for an election system to handle the regional and local elections in the German state of Saarland. This makes IVU the leading supplier of election systems in Germany; talks are in progress with other potential buyers in Germany and abroad.

### Bringing public authorities to the people

IVU is close to completing its mobile citizen's services in Berlin, creating the first government agency that goes directly to the people. The Mobile Citizen Services project MoBüD, which is the only one of its kind anywhere in the world, is aimed at combining all administrative tasks of many different Berlin agencies into a standard platform and making them available not only online in the public offices, but also through mobile communications. To accomplish this, agents are equipped with mobile terminals that they can use to administer public services locally wherever the people need them. The MoBüD services will give the public access to housing subsidies, family and youth matters, alien legal affairs, registration procedures, identification matters or lost property. In developing the software, IVU is able to build upon earlier work that it has performed for public agencies in Berlin over the past two years. The system was presented to the general public just a few weeks ago. In 2003, our MoBüD project earned us the German E-Government Prize, which we won over almost a hundred competitors – further proof of IVU's outstanding expertise in the forward-looking field of e-government.



### **E-government for the entire state of Brandenburg**

Another e-government project involves modernising the administrative procedures of the German state of Brandenburg. In February 2003, Minister of the Interior Jörg Schönbohm commissioned IVU to implement an e-government strategy for the state. A selection procedure among numerous Brandenburg public authorities and municipalities resulted in the selection of 21 projects, which will now be implemented by the participating companies – IVU as well as Deutsche Telekom and Microsoft. One of the proposals selected is to set up an online agency for Brandenburg with the goal of making state and municipal government services just a mouse-click away by providing standard electronic access. The first two projects to be implemented by IVU will be a system for Internet-supported urban development and an online land registry. The co-operation agreement between Brandenburg and its three corporate partners has a total volume of €15 million, €7.5 million of which will be assumed by the state. IVU's share will be worth €2 million.

### **Deutsche Post – a strong customer**

The second division of our Information Logistics segment, which specialises in geographic information systems and geo-marketing, also had significant successes to report last quarter. In 2003, we developed a new and highly flexible system for Deutsche Post, which used an IVU system to plan the locations of 13,000 post office locations. Germany's largest retail store organisation uses the system as a platform for optimising analysis and planning processes. Like its predecessor, this system features a very user-friendly interface and easy operating procedures as well as functions tailored specifically to postal needs for boosting the efficiency of special business processes. The Postal Administration is very happy with its IT partner IVU.

### International business growth

Since last year, we have been substantially expanding our international sales organisation to open up new market potentials. In fact, our foreign subsidiaries cover a territory that is twice the size of Germany, Austria and Switzerland combined. However, they have contributed less than ten percent of our revenues to date. We can and must do a great deal more in this area. However, this does not necessarily mean founding new branch establishments. After all, the successful examples of Dubai and Bangkok demonstrate how successful international business with partners can be. In both cases we were able to build upon reliable sales partners who know local customers and smooth the way for our products. We therefore plan to further expand our partner network and penetrate farther into Asia as well as Spain, Portugal and the new EU member states.

#### New business surge in the United Kingdom

Our subsidiary in the United Kingdom is right on course following the change of management in 2003. It is led by an IT specialist who spent five years at National Express, one of the U.K.'s largest public transport companies. As a result, he is thoroughly familiar with the local public transport market. The public transport market in the U.K., which anticipates heavy investment activity over the next few years, offers IVU excellent opportunities, since our existing customers there will provide us with outstanding references, and we already have a solid footing in this country.

In the second half of the year, Nottingham City Transport placed additional modules of the MICROBUS system in service for 400 buses and over a thousand drivers, while Dublin Bus is scheduling its first two depots using the IVU system. The Birmingham-based Travel West Midlands, one of the largest public transport enterprises in the U.K., also recently began using

MICROBUS to plan and schedule its 2,000 buses and 3,500 drivers. The company has also selected MICROBUS-map for visualising its traffic network, becoming the first customer in the U.K. for this module. In addition to public transport technology, the British regional company will soon launch a marketing campaign for Combitour, our waste management logistics system, in the U.K. – a market that is expected to show great promise.

#### Effectivity becomes IVU Benelux

IVU Traffic Technologies AG has acquired a 100% stake in its Dutch subsidiary Effectivity Waste Management Solutions B.V. in Veenendaal, with retroactive effect to 1 January 2003. Previously, the Berlin software company held only a 52.5 percent share of the company. We are happy to see Effectivity become a wholly-owned subsidiary of IVU under the name IVU Benelux, especially since the market for waste management software solutions in the three Benelux countries is showing a very promising trend. In 2003, IVU managed to attract AVR Rotterdam, the Netherlands' largest waste management company, as a new customer for its Combitour logistics system. AVR has over fifty subsidiaries in sixty locations in the Netherlands, Belgium and Ireland.

#### Combitour on a track to success

In 2003, the Combitour logistics system was also chosen by Cyclus, the waste management company in the Gouda region, which handles waste disposal in seventeen cities throughout the region and plans to use the IVU system to improve its service. Our first customer in Belgium is the sanitation company ILVA, which operates in twelve cities and uses Combitour to optimise rubbish container transport. In the future, IVU Benelux will market not only waste management solutions, but also IVU's entire product range in the Benelux countries.

#### Breakthrough in France

Our French subsidiary landed the first major order and thus the key reference for what is still an untapped market for us. VFD Autocars, a public transport company based in Grenoble, chose MICROBUS in the fall. It was a milestone for us in the French market, which we believe has enormous additional potential. Winning this contract in Grenoble means that IVU will be taken seriously in the French market, which is sure to help us gain ground among the large French groups of Connex, Keolis and Transdev, all of which are controlled from Paris.



VFD Autocars will introduce the trip, block and duty scheduling modules in an initial phase. Over the past few years, IVU has substantially enhanced the system to meet the special needs of regional transport service. The Grenoble company will use MICROBUS to plan and schedule the deployment of 400 vehicles and 600 drivers. Starting with the next school year, MICROBUS will also be used to plan school bus service for 15,000 children throughout the region. VFD operates routes to a number of France's most popular ski areas as well as to nearby cities, especially the major metropolitan centre of Lyon. One route follows the famous Napoléon Route through the French Alps to Nice.

#### Outstanding references in Italy

Our Italian customer Mantua uses the entire range of IVU platform products for public transport service. Our systems plan and optimise the timetables and deployment of 220 vehicles and 450 drivers in urban and regional service. They monitor operating procedures, collect data during operations and allow the company to take quick, selective action when problems arise. All operating data is passed on to the real-time passenger information system, so that passengers always know exactly when their bus arrives – down to the last minute. The information is then subjected to statistical analysis and flows on to the next planning process. The system's outstanding feature is that operating data is input into the on-board computers via a wireless network, and the vehicles transmit it back to the dispatch centre. Our Mantua customer is so happy with the product that representatives of our new customer in Dubai travelled to Italy last fall to see how the systems work under real conditions. IVU Italia received a very attractive new order just before the end of the year, when Carrara, a city famous for its marble, ordered the BON vehicle monitoring system. Once again, we have the excellent reference from Mantua to thank for this order.

## Personnel development

Right at the beginning of the past fiscal year, we could see that IVU's personnel capacity was too high. For operating reasons, we unfortunately had to lay off around fifty people, thereby reducing the workforce to 264 full-time employees. A redundancy scheme was agreed on jointly in intensive and highly constructive discussions with the works council. Nearly all of the laid-off employees signed the liquidation contracts they were offered; only four complaints of unfair dismissal were filed. This demonstrates that we treated our employees fairly despite the difficult economic situation. In October, we also closed the Hannover office which had been taken over from TTI Systems AG. We found that all business handled through that office could be transacted just as efficiently from the nearby company headquarters in Berlin – it is only an hour-and-a-half train ride from one city to the other.

Personnel development	2003	2002	Change
Number of employees as of 31 December	305	381	(19.9%)
Personnel capacity as of 31 December	264	337	(21.7%)

In 2003, we set up a comprehensive programme for further education for our employees. A total of some hundred employees, or roughly one third of the entire workforce, received training in software development, project management, English and presentation techniques. The further education programmes will be continued in 2004.

	1999 million €	2000 million €	2001 million €	2002 million €	2003 million €
Revenues	14.7	17.5	25.5	35.6	29.9
Gross profit	12.5	19.1	28.0	32.0	24.9
Personnel costs	7.6	10.6	23.3	18.9	19.5
EBIT	0.8	1.9	(18.8)	0.8	(6.6)
Consolidated net profit	0.5	1.4	(37.1)	(3.4)	(7.4)

## Financial position

### Revenues and earnings as expected weaker

IVU's revenues dropped to only €29.9 million in 2003, compared to the previous year. However, the comparison with the previous year is distorted by the fact that we were able to submit invoices worth €5 million in 2002 for projects that had been delayed and could finally be billed in 2002. As a result, we earned roughly the same revenues in 2001, 2002 and 2003. The decline of EBIT by some €7 million is due in part to the weak business in 2003, but also to a number of special effects, in particular such which had led to a one-off improvement in 2002 (see table).

### Comments on EBIT

Profit and loss position	2002 € million	2003 € million	EBIT-Effect € million
Activated performances on own account	2.3	0.5	(1.8)
Depreciation of original non-tangible assets	2.5	2.6	(0.1)
Depreciation of tangible fixed assets and non-tangible assets	2.3	1.7	0.6
Other operating earnings	5.4	2.5	(2.9)
Personnel costs	18.9	19.5	(1.6)
<b>Total</b>			<b>(5.8)</b>

In 2002 and in the preceding years we activated in full group performances, namely the work involved in the development of our software products. Such activated performances consist of the results of work in the company – especially for our software. They are not charged directly to customers, but only generate earnings at a later date, for example when payments are received for licences. The activation increases gross earnings, but in the subsequent years involves writing off the equivalent, which impacts on the result. We do not expect to activate essential performances on own account in the future. The result is

that the level of activated company performances (€6 million as of 31 December 2003) is to be written off over four years and that this item will no longer play a role then. In the EBIT-comparison of 2003 and 2002 this accounts for a difference of €(1.9) million (lower activation and higher depreciation of activated company performances).

The difference in the other business revenues which also affects the results in full are attributable to the sales of shareholdings in 2002 amounting to €0.7 million, and further to concluding agreements on residual matters relating to the acquisition of TTI Systems AG amounting to €1.5 million.

There is also a special effect in the personnel costs: In 2002, reserves amounting to €1.6 million were released which had been set aside in previous years as a precautionary measure with respect to the re-structuring of TTI. This creates the false impression that the personnel costs were higher in 2003, whereas in fact the real costs were about €1 million lower.

### Reduction of high levels of depreciation until 2007

The EBIT in 2003 is negatively affected by high levels of depreciation, namely those on:

- Immaterial fixed assets (i.e. software for product development and office operations, e.g. from Microsoft, Oracle, etc.) as well as fixed assets (office furniture, computers, etc.). In addition to its own investments, IVU also had to take on high levels of inventory with the acquisition of TTI Systems AG, which now have to be written off by depreciation.
- Goodwill (essentially for TTI and IVU GmbH). This depreciation remains constant at almost €1 million, unless the IAS-rules are changed, as currently under discussion, so that company goodwill will no longer have to be written off, as a general rule.



These extraordinary depreciations will have a negative effect on the results until 2007. It will then revert to a normal level, which is appropriate for the levels of new investments.

#### **Personnel costs decline**

In 2003, we made early cuts in our personnel capacity, once again lowering personnel costs over five percent from €20.5 million to €19.5 million – despite paying over €0.5 million in severance payments. The €18.9 million shown in the annual report as the previous years' figure is due to the fact that we were able to write back €1.6 million in earlier reserves in 2002, which appeared to improve personnel costs for that year by this same amount. Our costs will drop substantially in 2004, when we expect to see improvements of over €2 million due to the layoffs alone.

#### **Liquidity**

As of 31 December 2003, the company drew on lines of credit amounting to €4.4 million and held roughly €1.9 million in cash which had been furnished as a deposit for guarantees. €3 million were also maintained in current accounts. On 31 December, therefore, IVU had a positive cash flow amounting to half a million € and available lines of credit worth three million €. Based on our plans we will pay off, as agreed, the first portion of the existing debts of TTI Systems AG, which we acquired in 2001. Two additional installments will follow in 2005 and 2006.

## **Outlook for 2004**

Because we began the past year with too much optimism, we have taken a very conservative and reticent approach to our calculations for 2004. Thus we expect to see revenues of about €30 million. Because of depreciations the consolidated result will still be negative. This is only an accounting effect that does not influence liquidity. We attribute the reason for a positive development in 2004 to the difficult year we experienced in 2003: Personnel costs are more than €2 million lower, and we will make further cuts in miscellaneous costs. In addition, we have substantially expanded our sales organisation, especially in the international arena, and our software development will be more efficient under new management. We are also seeing the initial effects of the economic recovery.

### Risks

#### Business risks

A general risk is presented by the tight financial situation in the public sector. However, we have observed that a smoothly operating public transport system is regarded as an important public service. Moreover, our products significantly boost the efficiency of public transport companies. As a result, we expect that, along with growing competitive pressure, increasing networking and cooperation between transportation companies will be a source of new opportunities for IVU. The goodwill reported on the consolidated balance sheet was valued on the basis of projections.

#### Litigation risks

An adequate reserve was formed for legal disputes arising in connection with employee layoffs despite our legal opinion to the contrary.

#### Liquidity risks

In business year 2003 the management board already initiated measures which are expected to lead to an increase in profitability and an improvement of the financial situation in 2004. We planned our liquidity in 2004 assuming that earnings will be €30 million and allocated over the course of the year as in preceding years. In this case our liquidity using the existing credit lines is ensured. This would not be the case if our assumptions were significantly incorrect.

### IVU stock

#### A turbulent year

The past year has been a turbulent time for IVU's stock. In early September, the price rose 100 percent in just a few days to over €2.50 without any news being reported by the company. The rise in price went hand in hand with a very high trading volume. This movement is certainly attributable in part to investors' renewed interest in smaller technology companies that have survived the New Market and the economic slump over the past few years – combined with certain speculations on to who will benefit from the introduction of the Maut kilometre levy in Germany. However, this meteoric rise also had to do with certain recommendations, a trend that could be easily followed in Internet forums. We cannot approve of such speculation, which was not always supported by solid information, since it unnecessarily angered our shareholders. We therefore avoided all actions on our part that would reinforce the buying spree, and we are not unhappy to see the adjustment that was made soon afterwards.

#### Solid basis for further growth

Apart from this small speculation bubble, we are very happy with the price of IVU stock, especially considering the fact that our 2003 result was not overwhelmingly positive. The price rose more than 90 percent over a twelve-month period and showed a better trend than the Tec-DAX, for instance. Following the September speculation, our stock managed to hold steady at a price above €1.40, which means that – even in the most optimistic view – it has left the realm of “penny stocks”. The current price level appears to be a good, solid starting point for sustained price growth, based on our actual results.



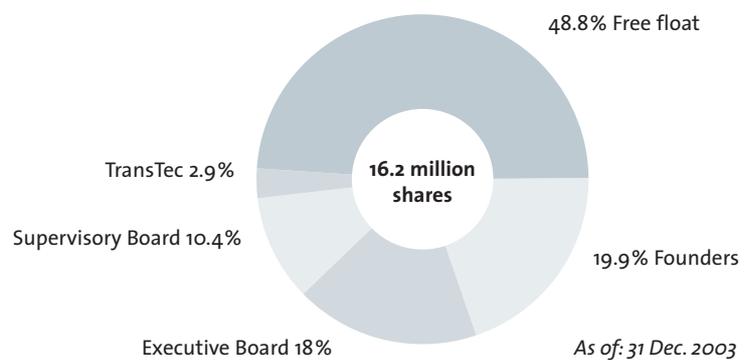
IVU-Share Price compared to Indices



**Shares held by the Company's Board Members as of Dec. 31<sup>st</sup> 2003**

	No. of shares
<b>Executive Board</b>	
Prof. Dr. Ernst Denert	1,808,132
Dr. Olaf Schemczyk	1,097,895
<b>Total Executive Board</b>	<b>2,906,027</b>
<b>Supervisory Board</b>	
Dr. Ulrich Abshagen	1,904
Dr. Manfred Garben	1,124,825
Ralph Günther	0
Klaus-Gerd Kleversaat	93,162
Hans G. Kloß	468,217
Dr. Gunnar Streidt	0
<b>Total Supervisory Board</b>	<b>1,688,108</b>
<b>No. of IVU shares owned by The Group</b>	<b>0</b>

**Shareholder Structure**



## Year-end financial statement

### Consolidated Profit and Loss Account in Accordance with IAS for Financial Year 2003

	2003 T€	2002 T€
<b>1. Earnings</b>	<b>29,908</b>	<b>35,587</b>
2. Reduction in volume of finished and unfinished goods	(2,618)	(3,366)
3. Other activated services on own account	536	2,288
4. Other operating earnings	2,467	5,362
5. Costs of material	(5,434)	(7,904)
<b>Gross profit</b>	<b>24,859</b>	<b>31,967</b>
6. Personnel expenses	(19,452)	(18,888)
7. Depreciations on long term assets	(5,213)	(5,625)
8. Other operating expenses	(6,818)	(6,676)
<b>9. Operating result (EBIT)</b>	<b>(6,624)</b>	<b>778</b>
10. Financial result	(768)	(790)
<b>11. Results of operating activities</b>	<b>(7,392)</b>	<b>(12)</b>
12. Taxes on income and earnings	0	(3,530)
<b>13. Group net annual loss before minority interests</b>	<b>(7,392)</b>	<b>(3,542)</b>
14. Portion of other partners on the net profit	0	109
<b>15. Group net annual loss after minority interests</b>	<b>(7,392)</b>	<b>(3,433)</b>
	€	€
<b>Earnings per share undeluted</b>	<b>(0.46)</b>	<b>(0.24)</b>
<b>Earnings per share deluted</b>	<b>(0.46)</b>	<b>(0.24)</b>

### Notes on the 2003 consolidated financial statement

The complete notes on the consolidated financial statement, which was audited by Ernst & Young auditors, are available on request or by downloading them from the internet at [www.ivu.de](http://www.ivu.de).

The consolidated financial statement was drawn up according to the stipulations of the International Accounting Standards Committee (IAS) and also taking into account the interpretations of the Standing Interpretations Committee (SIC). In drawing up the present financial statement, we followed the same accounting and valuation methods as well as the same calculation methods as we did in the last year-end financial statement.

## Consolidated Cash Flow Statement in Accordance with IAS for Financial Year 2003

	2003 T€	2002 T€
<b>1. Business activity</b>		
Consolidated annual profit before income tax of the periods (according to minority interests)	(7,392)	97
Depreciation of tangible assets	5,213	5,625
Depreciation of financial assets	0	136
Net change of provisions	(398)	(5,001)
Differences from currency translation	32	45
Earnings from special items	(83)	(83)
Earnings from interest	768	680
Profit from sale of fixed assets	3	271
	<b>(1,857)</b>	<b>(1,770)</b>
<b>Change of items of the current assets and the short-term Capital</b>		
Stocks	3,604	5,661
Receiveables and other assets	5,520	(3,200)
Securities	0	11,160
Short-term liabilities except provisions	(3,843)	(13,761)
<b>Cash flow in/out from normal business activities before income tax</b>	<b>3,424</b>	<b>1,630</b>
Interests paid	(819)	(1,100)
Income taxes received/paid	0	4
<b>Cash flow from business activities</b>	<b>2,605</b>	<b>534</b>
<b>2. Investment activities</b>		
Payments for acquisitions of holdings reduced by the holding's liquid funds	(484)	(53)
Earnings from disposal of holdings reduced by the holding's liquid funds	0	447
Investment in assets	(996)	(5,283)
Receipts of payments from disposal of tangible assets	28	54
Interests earned	50	420
<b>Cash flow in/out from investment activities</b>	<b>(1,402)</b>	<b>(4,415)</b>
<b>3. Financing</b>		
Deposits from capital increase	540	1,960
Deposits from short term loans	894	81
Payments for middle and long-term liabilities	(359)	(354)
<b>Cash flow in/out from financial activities</b>	<b>1,075</b>	<b>1,687</b>
<b>Change in liquid funds</b>	<b>2,278</b>	<b>(2,194)</b>
<b>Liquid funds at beginning of period</b>	<b>789</b>	<b>2,983</b>
<b>Liquid funds at end of period</b>	<b>3,067</b>	<b>789</b>

## Year-end financial statement

### Consolidated Balance Sheet in Accordance with IAS for Financial Year 2003

Assets	Dec. 31, 2003 T€	Dec. 31, 2002 T€
<b>A. Short-term Assets</b>		
1. Liquid funds	3,067	789
2. Trade receivables	9,793	11,432
3. Stocks	1,005	4,609
4. Prepayments and accrued income and other short-term assets	3,153	7,034
<b>Short-term assets</b>	<b>17,018</b>	<b>23,864</b>
<b>B. Long-term assets</b>		
1. Tangible assets	2,149	2,781
2. Intangible assets	21,073	24,481
3. Financial assets	26	26
4. Latent taxes	1,783	3,063
<b>Long-term assets</b>	<b>25,031</b>	<b>30,351</b>
<b>Assets, total</b>	<b>42,049</b>	<b>54,215</b>

Liabilities	Dec. 31, 2003 T€	Dec. 31, 2002 T€
<b>A. Short-term Liabilities</b>		
1. Short-term loans and short-term portion on long-term loans	5,911	3,367
2. Trade payables	1,356	2,214
3. Down payments retained	104	1,908
4. Provisions	1,378	1,830
5. Sales items of accrual and deferral	168	66
6. Short-term payables	5,125	6,069
<b>Short-term liabilities</b>	<b>14,042</b>	<b>15,454</b>
<b>B. Long-term liabilities</b>		
1. Long-term loans	4,500	6,150
2. Latent taxes	1,783	3,063
3. Pension reserves	1,623	1,569
4. Off-line item investment grants and investment subsidies	263	346
5. Other	27	725
<b>Long-term liabilities</b>	<b>8,196</b>	<b>11,853</b>
<b>C. Minority interests</b>	<b>0</b>	<b>277</b>
<b>D. Equity</b>		
1. Subscribed capital	16,169	15,629
2. Capital reserves	46,456	46,456
3. Consolidated Balance sheet profit /loss	(42,891)	(35,499)
4. Currency translation	77	45
<b>Equity</b>	<b>19,811</b>	<b>26,631</b>
<b>Liabilities</b>	<b>42,049</b>	<b>54,215</b>

## Year-end financial statement

### Consolidated Group Assets in Accordance with IAS for Financial Year 2003

	Historical Purchase / Production Costs				Dec. 31, 2003 T€
	Jan. 1, 2003 T€	Additions T€	Transfers T€	Disposals T€	
<b>1. Intangible assets</b>					
1 Software licenses and commercial copyrights	4,547	71	0	7	4,611
2 Goodwill	36,978	204	0	0	37,182
3 Original intangible assets	14,969	536	0	0	15,505
	<b>56,494</b>	<b>811</b>	<b>0</b>	<b>7</b>	<b>57,298</b>
<b>2. Tangible assets</b>					
1 Machinery and technical equipment	2,498	322	4	462	2,362
2 Other equipment, factory and office equipment	4,197	67	0	121	4,143
3 Construction in progress and advance payments on tangible assets	349	0	(4)	0	345
	<b>7,044</b>	<b>389</b>	<b>0</b>	<b>583</b>	<b>6,850</b>
<b>3. Financial assets</b>					
1 Guild shares	26	0	0	0	26
	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>
<b>Total</b>	<b>63,564</b>	<b>1,200</b>	<b>0</b>	<b>590</b>	<b>64,174</b>

## Consolidated companies

	Percentage of holding %	Equity per Dec. 31, 2003 T€	Annual result 2003 T€
IVU-Gesellschaft für Informatik, Verkehrs- und Umweltplanung GmbH, Berlin	100	480	0
IVU Traffic Technologies Italia s.r.l., Rome, Italy	100	55	(46)
IVU Traffic Technologies France SAS, Paris, France	100	(99)	14
IVU Traffic Technologies UK Ltd., Birmingham, United Kingdom	100	(521)	(171)
IVU Benelux B.V., Veenendaal, Netherlands	100	558	(154)

### Write-offs

Jan. 1, 2003 T€	Additions T€	Disposals T€	Dec. 31, 2003 T€
2,142	664	7	2,799
20,965	926	0	21,891
8,906	2,629	0	11,535
<b>32,013</b>	<b>4,219</b>	<b>7</b>	<b>36,225</b>
1,642	550	457	1,735
2,276	444	99	2,621
345	0	0	345
<b>4,263</b>	<b>994</b>	<b>556</b>	<b>4,701</b>
0	0	0	0
<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>36,276</b>	<b>5,213</b>	<b>563</b>	<b>40,926</b>

### Residual value

Dec. 31, 2003 T€	Jan. 1, 2003 T€
1,812	2,405
15,291	16,013
3,970	6,063
<b>21,073</b>	<b>24,481</b>
627	856
1,522	1,921
0	4
<b>2,149</b>	<b>2,781</b>
26	26
<b>26</b>	<b>26</b>
<b>23,248</b>	<b>27,288</b>

## Year-end financial statement

### Group Equity Change Account in Accordance with IAS for Financial Year 2003 and 2002

	Subscribed capital T€	Capital reserves T€	Currency translations T€	Consolidated Balance sheet loss T€	Total T€
<b>As of Jan. 1, 2002</b>	13,669	46,456	0	(32,066)	28,059
Capital stock increase incorporated as of Sept. 20, 2002	1,960	0	0	0	1,960
Currency translation differences (Profits not considered in the consolidated profit and loss account)	0	0	45	0	45
Consolidated annual loss	0	0	0	(3,433)	(3,433)
<b>As of Dec. 31, 2002</b>	<b>15,629</b>	<b>46,456</b>	<b>45</b>	<b>(35,499)</b>	<b>26,631</b>
<b>As of Jan. 1, 2003</b>	15,629	46,456	45	(35,499)	26,631
Capital stock increase incorporated as of Feb. 7, 2003	540	0	0	0	540
Currency translation differences (Profits not considered in the consolidated profit and loss account)	0	0	32	0	32
Consolidated annual loss	0	0	0	(7,392)	(7,392)
<b>As of Dec. 31, 2003</b>	<b>16,169</b>	<b>46,456</b>	<b>77</b>	<b>(42,891)</b>	<b>19,811</b>

## Supervisory board report

In 2003, the Supervisory Board of IVU Traffic Technologies AG, Berlin, discharged its duties in accordance with the law and the company's statutes and supervised and advised the Management Board. It dealt continuously and intensively with the company's situation, the course of business, corporate planning and business policy.

The Supervisory Board met with the Management Board in four sessions. The Compensation Committee and Audit Committee of the Supervisory Board each met twice. Even outside meetings, the Supervisory Board continuously received direct and detailed reports from the Management Board on important business activities.

Topics of intensive consultation included:

- further streamlining of the company structure
- the layoffs that had become necessary
- the full acquisition of Effectivity B.V., Netherlands
- the appointment of Dr. Gero Scholz to the Management Board on 1 February 2004

IVU's year-end financial statement for the 2003 business year was audited by Ernst & Young auditors in Berlin and provided with an unqualified audit report. The company's individual financial statement was prepared according to the stipulations of the German Commercial Code. The consolidated financial statement and management report were prepared according to the rules of the International Accounting Standards Committee (IAS).

The Supervisor Board intensively discussed and reviewed both financial statements and the management report during its meeting on 3 March 2004 in the presence of the auditor. It raised no objections and accepted the year-end financial statement of IVU Traffic Technologies AG on 31 December 2003, thereby adopting them.

The Supervisory Board would like to thank all the employees for their tireless work on behalf of our shared company during the 2003 business year.

Berlin, 3 March 2004  
Dr. Hans Ulrich Abshagen  
Chairman of the Supervisory Board

## Members of the supervisory board and management board

### Supervisory board

Dr. Hans-Ulrich Abshagen (chairman)

Consultant, managing director of Abshagen & Partner KG, Berlin

Chairman of supervisory board RÖNTEC Holding AG, Berlin

Vice chairman of supervisory board Spütz AG, Düsseldorf

Hans G. Kloß (vice-chairman)

Chairman of supervisory board Hansen & Heinrich AG, Berlin

Klaus-Gerd Kleversaat

Chairman of managing board Consors Capital Bank AG

Vice chairman of supervisory board Ventegis, Capital AG, Berlin

Member of supervisory board EURO Change Wechselstuben AG, Berlin

Member of supervisory board Stream Films AG, Berlin

Member of supervisory board Orbit Software AG, Berlin

Dr. Gunnar Streidt

Managing director STREIDT CONSULTING GmbH, Berlin

Ralph Günther

Managing director bmp Venture Tech GmbH, Berlin

Member of managing board of bmp AG, Berlin

Member of supervisory board WorkXL AG, Berlin

Dr. Manfred Garben

Managing board Stiftung heureka

### Executive board

Prof. Dr. Ernst Denert, Berlin (Chairman)

Dr. Olaf Schemczyk, Berlin

Dr. Gero Scholz, Berlin (since 1 Feb 2004)

In the business year 2003 the members of the management board received payments amounting to €438,000 (previous year: €417,000).

Payments to the members of the supervisory board amounted to €65,000 (previous year: €72,000).

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**Editor**

IVU Traffic Technologies AG

Gerd Henghuber

Head of Corporate Communications

The 2003 Annual Report and the Unabridged Notes to the Financial Statement (German/English) can also be downloaded in PDF format from [www.ivu.de](http://www.ivu.de).

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#### 2004 Financial Calendar

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Friday, 14 May 2004	1 <sup>st</sup> Quarter Report
Friday, 14 May 2004	Analyst Meeting in Frankfurt/Main
Wednesday, 2 June 2004	Shareholders' Meeting
Friday, 20 August 2004	Semi-Annual Report
Wednesday, 17 November 2004	3 <sup>rd</sup> Quarter Report

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