

October 2011

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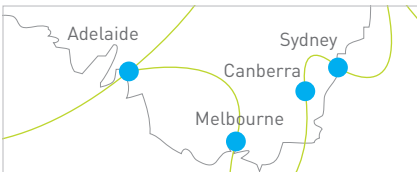


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# AWARDED

Mio receives the UITP "Knowledge and Research" Award 2011



Santiago de Cali

Under its motto "2025 = PTx2", the International Association of Public Transport (UITP) is this year rewarding the best public transport stakeholders for their contributions to improving public transport services and increasing the sector's market share. According to the estimates of UITP, half the world population will be living in cities in about 14 years time, and traffic levels will have more than doubled. The economic and environmental crises of recent years are a clear sign of the need to further expand public transport according to the association. It argues that a fully functional public transport system is a key factor for ensuring the future viability of towns and cities; it promotes economic development, minimises environmental impact, allows mobility for everybody, and helps to reduce the burden on traffic networks. For its pioneering role in developing public transport in the Colombian metropolis Santiago de Cali, the "Mio para todos" project received UITP's "Research and Knowledge"

Award 2011. The official award ceremony was held during the 59<sup>th</sup> UITP World Congress in Dubai, and the award was accepted by Arturo Villarreal, managing director of the Unión Temporal Recaudo y Tecnología (UTR&T), the consortium which is responsible for the "Mio para todos" project.

The award is given to projects which aim to improve and disseminate knowledge about public transport and sustainable mobility. The jury regarded "Mio para todos" as a model for the sustainable development of a public transport network in a region characterised by high levels of private traffic, out-dated means of public transport, a grid-locked road network, and rising accident rates.

The major order for the "Mio para todos" project was placed by the METRO CALI S.A. authorities in 2009 with the UTR&T consortium, which



Frank Kochanski, Member of the Executive Board

**Dear Readers,  
Dear Customers of IVU,**

More and more people are moving to the cities. Urbanisation is a trend that will continue to accompany us in the future, and according to UITP estimates, traffic levels in towns and cities will have more than doubled by 2025. An efficient public transport system is becoming an increasingly important factor for the viability of large cities. Without mobility there can be no progress. Public transport remains a growth market, and IVU is establishing itself worldwide with its high-performance products. Whether in Portugal, Chile, Australia or Switzerland – in this issue of IVU News there are a lot of interesting projects to read about.

The success of IVU is based above all on intelligent product management and high technical standards. We are working continually to develop our products further, and every release offers impressive new features. At the moment we are scoring points with our solutions in the field of passenger convenience. E-ticketing is only one of the areas in which new developments are ensuring high levels of passenger satisfaction and thus increasing the acceptability of public transport.

Not only do our products fit closer and closer together, our teams are also cooperating closely. In order to promote the transfer of knowledge between departments and locations, an in-house exhibition was organised this summer which delighted all our co-workers. If you want to find out more about us, why not visit our showroom in Bundesallee 88 in Berlin? To let us know when you would like to come, contact us at [post@ivu.de](mailto:post@ivu.de).

**I hope you enjoy reading this issue. ■**

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provides the platform for the operation of public transport in Cali as well as leading and financing the project. UTR&T ensures the necessary ticket sales points, control and communications systems, the passenger information, and the systems for efficient fleet management. UTR&T has committed itself to the goal of sustainable public transport on the basis of intelligent IT systems and state-of-the-art technology. In 2009, UTR&T 2009 placed an order with IVU Traffic Technologies AG for the delivery of systems for the planning, scheduling and operational control of the fleet of some 1,000 buses, as well as fitting these with on-board computers and providing the system for the passenger information at the stops and in the buses.

Since then, much has happened in Cali. Colombia's third-largest city has separate bus lanes, and modern, energy-efficient city buses. The old, poorly-maintained, fuel-guzzling small buses have almost completely disappeared from the city streets. 'Mio' has now become one of the most attractive means of mobility for the 2.5 million inhabitants. The number of traffic deaths has been reduced by 70 percent, and also the number of traffic jams. The improved traffic routing has also considerably reduced journey times and improved mobility. For the customers, 'Mio' means

a high quality service offering safety, easy access and value for money, combined with environmentally friendly technology and low energy consumption. For this extraordinary progress within a very short time, "Mio para todos" was chosen in this class from 150 applicants from various cities and continents as the most successful project implementing the "2025 = PTx2" strategy.

With its 'Mio' project, UTR&T in Cali has shown how rapidly major improvements can be made to the mobility and infrastructure in a major city. And in terms of technical standards, Mio has also pioneered new developments internationally. For example, the consortium committed itself at an early stage to e-ticketing and contact-free payment with chip cards in the buses and at the stops and stations, which are connected to the control centre by means of an advanced communications network involving fibre optics. The planning of networks and timetables, and vehicle scheduling are optimised by the use of highly complex mathematical algorithms. The operational efficiency is a key factor when it comes to ensuring attractive ticket prices. Passengers also benefit from the comprehensive information provided at the stops, in the vehicles and via Internet and smart phone. ■



Representing 'Mio', Arturo Villarreal receives the UITP Award



# SWISS PRECISION USING GERMAN TECHNOLOGY



Source: SBB

In hardly any other country in the world do people travel by train as frequently as in Switzerland. And more than 5,000 kilometres of tracks make the Swiss rail network one of the densest in the world. A large part of the countrywide network (3,011 km), with some 800 stations, is served by Swiss Federal Railways (SBB), which has more than 950,000 passengers every day. SBB employs thousands of train drivers and additional on-board personnel to ensure that the services run smoothly. Planning the duty rosters for so many personnel is not practicable using pen and paper – intelligent software solutions are essential here

for the efficient deployment of resources. Since 2003, SBB has been relying on the quality of German engineering, using the systems of IVU Traffic Technologies AG. In the course of the joint PIPER project ('Planification Informatique du Personnel Roulant'), the planning system IVU.rail was introduced and adapted to meet special client needs and comply with specific local restrictions. Since then, IVU.rail has been ensuring efficiency both for rail passenger transport and also for rail freight transport with its special operational requirements. The optimised services providing freight and passenger transport operate together

like clockwork, reducing waiting times and journey times for train personnel to a minimum.

Since the end of 2010, a control module has supported the operative deployment, replacing even more paper. With various filters and selection options, the control centre staff have an overview of the status of the network at all times, and thanks to the real-time display of information are able to make timely interventions when conflicts arise. The data are continually updated automatically, and manual reloading is no longer necessary. New functions such as drag & drop moves and swaps, the graphical journey proposal window, sign-on monitoring, and the possibility to directly establish a telephone connection to personnel are extremely helpful extensions. The new system with its wide range of functions is particularly helpful for malfunction management.

The facts speak for themselves: With 347 million passengers and 50 million net tonnes of goods annually, more than 91 percent of all trains have delays of less than 3 minutes, and more than 97 percent of connections at the rail junctions are successful.

German standard products are establishing themselves worldwide. In addition to Switzerland, state railways in Germany, Hungary, Finland, Italy, and most recently also in Portugal are using the IVU.rail planning system from IVU. ■

## IVU.PANORAMA

# IVU BUS ON THE ROAD IN AACHEN

Since the start of September, the IVU bus has been operating on Aachen's road. A so-called Traffic Board on the modern low-floor bus run by ASEAG ('Aachener Strassenbahn und Energieversorgungs-AG') now shows all passengers on the city's transport network that this bus is equipped with IVU software. For a year it will be used on the various routes in the western German city. The advertising display measuring 3.5m x 2.5m draws attention to IVU not only as a supplier of intelligent software solutions but also as an interesting medium-sized employer. The message in German reads: "In this bus and worldwide: Intelligent software, developed in Aachen. IVU – more than a job." Aachen is the key

location of IVU in Germany alongside the Berlin headquarters, and work is carried out there on many national and international projects. There is considerable demand for well-educated specialists, and the travelling advertising board will in future make potential co-workers more aware of IVU and its exciting projects in Berlin, Aachen and worldwide.

Thanks to the systems of the IVU.suite, ASEAG always knows where the IVU Bus is at any time. And so IVU personnel who wanted to travel with "their" bus on the first day of its operations could find out quickly and easily which stop to wait at and when they would be able to get on board. ■



The IVU bus about to start out on its first journey.

# NEW IVU OFFICE IN CHILE



Our team in Chile: Dieter Albertz, Andrés Javier Renner Peters, Loreto Troncoso, Daniel Schwarz

The demand for IVU products in South America has been demonstrated in recent years by a range of orders from Colombia, Argentina, and Chile. The systems of the IVU.suite are used to plan, schedule and control bus fleets, to take care of the communications between driver and control centre, and to provide information for the passengers of the South American clients. Now that the software solutions from Germany have been seen to operate successfully, more and more public transport operators on the fourth-largest continent are placing their confidence in this IT expertise from Germany. In order to further expand our position on the South American market and to ensure that all potential and existing clients are able to contact us directly, in addition to the branch office in Bogotá IVU has now also established a new office in Santiago de Chile.

The key advantage of this presence is the local knowledge of the IVU personnel there. Not only

do they speak the language, but they are also familiar with the customs and cultures of South America. These are key requirements for establishing good relations with clients and project partners. Personal contacts and joint efforts to find solutions are essential when it comes to de-

## Personal contacts and joint efforts to find solutions are essential when it comes to developing business connections in South America.

veloping business connections in South America. In contrast to public transport in Germany, the transport networks in South America are mostly in private hands, and in some cases, as many as 100 different operators have concessions. Coordinated timetables, uniform tariffs and effective personnel and fleet management therefore present special challenges. In order to be able to meet the requirements of all the transport companies involved, it is important to maintain continuous contacts between the IVU engineers and their clients.

The head of the new office in Chile is Daniel Schwarz. Born in Berlin, he grew up in Chile and began his career there in 1997 after obtaining a master's degree in transport engineering. Until April 2006 he worked as an engineer and specialist for transport planning in various transport companies, and as coordinator in the urban transport department of the Ministry of Urban Development in Santiago de Chile. In May 2008 he began work as a software engineer for IVU in Germany. Since July 2010, Daniel Schwarz has been working in Chile again, where he ensures the smooth implementation of all IVU projects. As a dedicated supporter of Hertha Berlin, he now follows the fortunes of his football club by live stream from the other end of the world. Small wonder, then, that 'Hertha' is the first thing he mentions when asked what he misses most from Germany. ■



# IVU SYSTEMS REACH THE WORLD'S SOUTHERNMOST CITY

Movigas in Punta Arenas plans and dispatches with IVU.suite



Every day, some 60 modern Euro V natural gas buses are in operation for movigas, Source: Movigas

In Punta Arenas, the largest city in southern Patagonia with some 117,000 inhabitants, the transport company Movigas has chosen efficiency and modern technology from Germany. Movigas is the only company in Chile to run an entire city bus fleet on natural gas. Every day, some 60 modern Euro V natural gas buses are in operation for the company, and in future their operations and the duty rosters of more than 100 drivers will be planned and dispatched with systems from the IVU.suite.

In a region like Punta Arenas, the efficient planning of a vehicle fleet operating solely on natural gas is particularly challenging. Although Punta Arenas is one of the largest cities in South Patagonia, the area around the regional capital is only sparsely populated. For longer journeys to outlying villages, the stops at the special natural gas filling stations have to be planned very carefully. And because Movigas promises its passengers the lowest fares in Chile, and aims

to keep this promise in the long term, highly efficient daily operations are a top priority. All

**IVU.plan and IVU.crew will in future provide integrated scheduling for buses and personnel, while taking into account all the special features of the natural gas bus operations in Punta Arenas.**

these requirements now have to be integrated in intelligent planning systems for timetables, and personnel and vehicle scheduling. Movigas is therefore placing its trust in the software systems of the IVU.suite, which have already proved their dependability internationally for a range of vehicle types.

IVU.plan and IVU.crew will in future provide integrated scheduling for buses and personnel, while taking into account all the special features of the natural gas bus operations in Punta Arenas. The IVU solutions integrate into the daily timetable all operational rules, quality specifications, special

factors such as road-works and public events, as well as the necessary maintenance work and refuelling stops. In particular Movigas has been impressed by the duty optimisation tools integrated in IVU.plan. These can be used to model all possible organisational service options and to develop a wide range of scenarios. Intelligent algorithms extract the most efficient duty plans from the highly complex scenarios.

"With Movigas, our IT solutions are now also in operation at the southernmost end of the world," comments a satisfied Dr Helmut Bergstein, member of the Executive Board of IVU Traffic Technologies AG. "Following on from Colombia and Argentina, this new order proves that there is demand in South America for the advanced engineering standards from Germany. We are proud that we are able to establish an increasing international presence and that our products find acceptance in all corners of the globe." ■

# IVU.PLAN – SUCCESS FOR MORE THAN 25 YEARS

Andreas Langenhan has been involved from the start



1990



1993



1995

**F**or the past two decades, transport engineer Andreas Langenhan has been travelling on behalf of IVU in Germany and beyond. As Head of Business Development in the Public Transport segment of IVU Traffic Technologies AG, he is mainly responsible for gaining new customers all over the world. Whether in Europe, Asia, or South America – no distance is too far for Andreas Langenhan in order to meet the wishes of IVU's customers. In consultation, he formulates requirements and ideas which subsequently flow into the solution development. Together with his team, he then works on the appropriate concepts for modules and new functionalities and matches these to the customer's requirements. Today, more than 500 transport companies are planning and organising services with more than 100,000 buses and trains in 350 cities worldwide using the systems of the IVU.suite. In the course of his training and his career with IVU in support, product management and marketing, Andreas Langenhan has been able to follow the development of the planning and dispatching systems right from the start:

**1970s/1980s:** Major companies already have the first computer applications for operational planning. However, these company-specific systems have been developed internally and only run on main-frame computers, which are much too expensive for smaller enterprises.

By the late 1970s, the first affordable microcomputers are on the market in combination with the DOS operating system. Some inventive transport experts in Berlin and Braunschweig soon have the idea of developing an operational planning system on this basis.

**1984:** Wolfsburger Verkehrs GmbH introduces a first version of IVU's planning and dispatching system, initially known as MICROBUS.

IVU, together with Bertram + Partner, shows the way for efficient, IT-controlled operational planning for public transport companies. MICROBUS is the first system that can be installed on a personal computer, and this opens up the possibility of applications by small and medium-sized transport companies.

**1989:** The fall of the Berlin Wall offers new prospects. Soon MICROBUS is being introduced by the first public transport services in towns and cities in eastern Germany, for example Potsdam, Jena, Gera, Schwerin, and Zwickau.

**1990:** IVU receives an order from Leverkusen for the development of a personnel scheduling solution, which comes into operation in 1993 for the first time with wage data interfaces. The development of personnel scheduling is followed by vehicle scheduling.

**1994:** Development work starts on a Windows version of the planning and dispatching system with database support. On completion in 1996, all functionalities – from journey and fleet planning, through the planning of duty rosters and personnel scheduling to comprehensive vehicle dispatching – are integrated in a comprehensive system. The Windows version is augmented by programs to generate timetable information and provide information for operators in the control centre.

**1997:** The so-called MICROBUS 2 system is tested in pilot projects by Kieler Verkehrs AG and Havelbus Verkehrsgesellschaft and proves to be a complete success. MICROBUS 2 operates with graphics interfaces under Windows and uses Oracle, which at this time is not a general standard. The high integration potential of the system also allows direct data feeds, for example to ITCS and ticket printing systems. By now, cartographic presentation and processing of line networks is also possible. In subsequent years, MICROBUS becomes market leader among the planning and dispatching systems.

**2001/2002:** With the first large railway orders from the Swiss Federal Railways (SBB) and S-Bahn Munich, new functionalities are integrated in MICROBUS. For the first time, the system is equipped to meet the special requirements of a railway operator. MICROBUS is gaining a growing reputation in other countries, and at this stage is already available in German, French and Italian.





1998



2004



2010

**2003:** Interest is shown in Dubai for the solution from IVU, and MICROBUS learns Arabic. In addition all graphical interfaces and timelines are customized and now run from the right to the left side.

**Early 2004:** Bahnbus GmbH of Deutsche Bahn AG is the first public transport company to begin operations with the newly developed integrated roster and vehicle scheduling with MICROBUS, in order to plan the deployment of its 12,000 buses. Important considerations include the fact that MICROBUS is the only system on the market which is able to generate and optimise personnel and vehicle scheduling plans in one process. This is particularly important for regional transport services, which often operate over much larger areas than municipal services and frequently cover a number of areas with differing tariff regulations.

**2005/2006:** The MICROBUS system is adapted further to meet the needs of regional transport companies and railway operators, so becoming the first IT system for providers of public transport by bus, tram and railway which can be applied for urban and regional operations, as well as for long-distance services. In addition, the IVU solution is now also used for ferry services, which presents a particular challenge in view of the need to dispatch crews with the right combination of specialists.

**From 2007:** The IVU solution is increasingly modernised and systematised. Work starts on the development of the third generation of the product, which can now also be used by very large transport companies with thousands of vehicles, stops and daily trips.

**2008:** The IVU systems for public transport have grown together into a complete suite able to support the entire operations of a public transport company. All the modules fit together systematically, and the system character is reflected in the new product names. As IVU.plan, IVU.vehicle and IVU.crew, MICROBUS now forms the heart of the new system family.

**2009 – 2011:** The systems of the IVU.suite make a big impression internationally, for example in Australia, New Zealand, Argentina, and Colombia. With the help of IVU, large cities such as Santiago de Cali are completely reorganising their public transport networks in record time. IVU is able to convince customers with tailor-made solutions which are based on standardised software systems which can be integrated in every system landscape. The modules of the IVU.suite continue to merge together. With an order from Movigas in Punta Arenas, the systems of the IVU.suite reach the world's southernmost city in summer 2011. There the modern systems integrate the special requirements of a vehicle fleet operating solely on natural gas.

Andreas Langenhan has made a significant contribution to this international success. In close contact with the customers he is developing the modules of the IVU.suite further and helping to ensure that they are able to meet the future demands of public transport companies all over the world. ■



**Andreas Langenhan**

Head of Business Development  
Public Transport

# CASHLESS PAYMENT IN MÜNSTER WITH E-TICKETING SOLUTION FROM IVU

Stadtwerke Münster orders 400 validators and associated software



Source: Stadtwerke Münster

As one of the first public transport operators in Germany, Stadtwerke Münster will be introducing electronic ticketing at the beginning of 2012. It is expected that the cashless payment solution will make public transport services more convenient, more economical, and more environmentally friendly. The public utility has placed an order with IVU Traffic Technologies AG for 400 electronic validators together with the associated software for ticket sales and background settlement – IVU.ticket and IVU.fare. By the end of 2012, all the utility's bus passengers will be using the new chip cards and e-ticketing service.

No more waiting to pay the driver, no fumbling for change, and always paying the most economical fare – all this will soon be reality in Münster. With the introduction of the e-ticketing system from IVU, passengers will find it considerably more convenient to travel on the 160 buses operating in Münster. In September 2010 the public utility announced its innovative payment project at a conference of the nationwide eTicket promotion

initiative. In January 2011, the decision was taken in favour of the IVU systems. The e-ticketing solution from IVU will not only make payments on Münster's buses considerably quicker and easier, but will also offer potential savings. IVU.fare always determines the best tariff option for each passenger. For example, if somebody uses the transport services of Stadtwerke Münster several

times on the same day, then instead of paying for a number of single tickets, the customer will be charged for a more economical day ticket. The calculation is made completely automatically to the benefit of the customer, so that passengers do not have to be familiar with all the details of the fare system.

Another advantage of e-ticketing is that it increases the punctuality of the bus services. Thanks to the IVU.validator, passengers can check in quickly, and

the time-consuming cash payment of fares to the driver is no longer necessary. This minimises the delays caused by ticket purchases, so that services will be able to run on time.

"The investment in the latest e-ticketing technologies will soon pay for itself," predicts Dr Henning Müller-Tengelmann, CFO of Stadtwerke Münster.

"It will allow us to offer the passengers a better service which is both more economical and considerably more convenient. Satisfied passengers, and at the same time less traffic on the roads and therefore a

reduction in the impact on the environment – this will be possible with the introduction of modern e-ticketing systems."

Münster marks the start of what will soon become a nationwide development. More and more regions are re-equipping, so that in a few years time cashless payments with a personal chip card will be the standard for many public transport associations. ■

**The e-ticketing solution from IVU minimises the delays caused by ticket purchases, so that services will be able to run on time.**



# PORTUGUESE STATE RAILWAY WILL BE PLANNING WITH IVU.RAIL

**C**aminhos de Ferro Portugueses (CP) is the latest state railway to be convinced by the IVU.suite. After Hungary, Finland, Italy and Switzerland, Portugal will now also utilise IVU.rail for train and rail personnel scheduling. Over a rail network of 2,830 km, the operations of 375 trains and the duty rosters for 1,500 personnel will be planned and optimised with the software from IVU Traffic Technologies AG.

The Portuguese state railway transports some 135 million passengers throughout the country every year. The operations involve controlling the rolling stock, drivers and on-board personnel over the entire rail network. In order to ensure efficient deployment and punctual services, a modern planning system is needed which can also reflect the country's special requirements.

Following an international call for tenders, the Portuguese state railway has now chosen IVU.rail – the planning system from IVU which has been specially developed to meet the needs of rail transport services.

“With Portugal we have been able to win another customer on the Iberian Peninsula and thus strengthen our position on this interesting

Together with IVU's Portuguese project partner Metcube, which also specializes in the development and implementation of process management and information systems for rail transport, IVU will by the end of the year install its systems for timetable planning, vehicle and personnel scheduling, duty roster optimisation and rolling stock deployment for the state railway. A special challenge is the integration of IVU.rail

in the existing system landscape for infrastructure planning and personnel management. “By using standardised interfaces we are also able to solve such tasks,” explains Martin Müller-Elschner. “This mixture of standardisation and flexibility contributes to the worldwide success of our systems.” ■

## **With the Portuguese state railway the sixth state railway has chosen IVU.rail, the planning system specially developed for rail transport services.**

market,” comments a satisfied Martin Müller-Elschner, CEO of IVU Traffic Technologies AG. “The quality of our Berlin engineering is increasingly being appreciated worldwide, and this is reflected in our order book situation.”



Source: CP

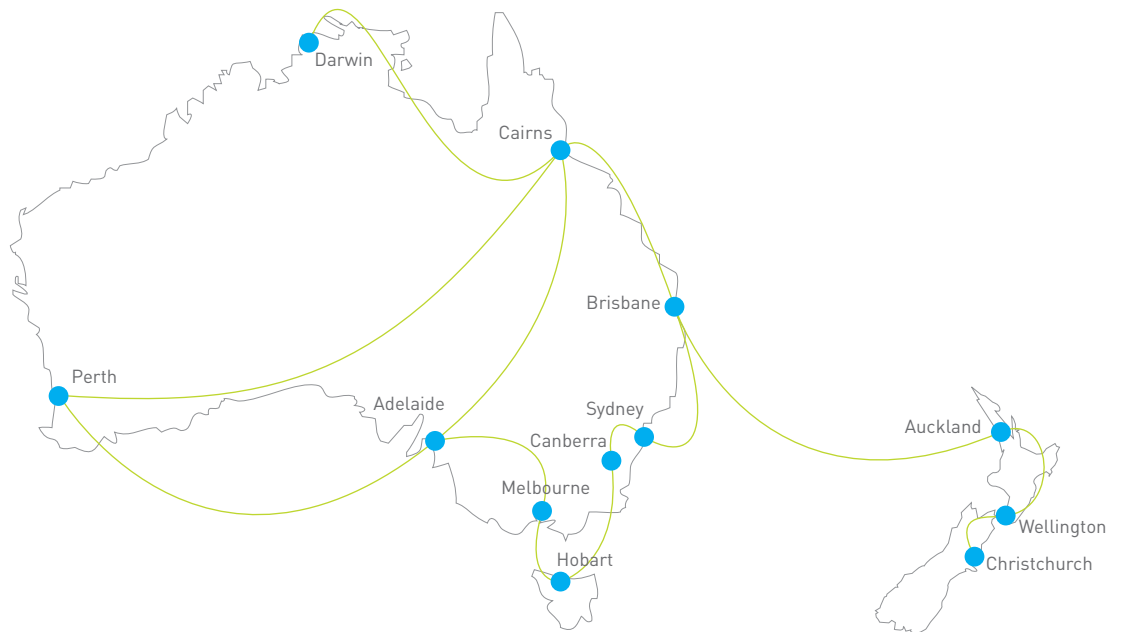
# ROADSHOW ACROSS AUSTRALIA

## Frank Nagel develops the Australian market



**Frank Nagel**

Sales manager for the Asia-Pacific region



Counting together the flying hours of Frank Nagel last year shows he spent a total of more than three weeks on planes. He covered many tens of thousands of kilometres on his travels to the other end of the world. Because Frank Nagel is responsible at IVU for the international marketing in the Asia-Pacific region. In the second half of 2010 he was traveling the Australian continent on this mission.

With its wealth of resources, Australia has experienced an enormous economic boom. Thanks to its rich reserves of coal, ore and oil, the country was much better placed to weather times of crisis than others. But at the same time, Australia also faces considerable challenges. Although it has a comparatively small population, it has one of the highest per capita levels of CO<sub>2</sub> emissions worldwide. Australia currently generates some 80 percent of its energy from coal. But facing increasingly severe natural catastrophes, it is becoming more and more important for the country to mitigate the impact of climate change and in connection with this to reduce the levels of CO<sub>2</sub> emissions. In addition to the increasing use of energy from renewable sources, the development of a modern, well-structured public transport network is also an important milestone on the way towards a sustainable climate policy. One aim must be to reduce the use of private vehicles and at the same time to significantly lower CO<sub>2</sub> emissions. According to the South Australian Department for Transport, Energy and Infrastructure (DTEI), for example, a fully occupied tram could replace about 140 cars on the roads.

When expanding its public transport network, Australia has to take a number of specific national factors into account. The large majority of the population lives in the major cities and their suburbs, whereas the rest of the country is only very sparsely populated. As a result of the decline of agriculture, the numbers of inhabitants in the conurbations is continuing to increase steadily. Also continually expanding are the public transport systems in the cities. Melbourne, for example, now has the world's largest tram system, with 245 km of track, 500 vehicles, 28 lines and 1,812 stops. In a single year it registers more than 179 million passengers. The necessary infrastructure is therefore in place, but there is a lack of modern systems for the effective planning and control of operations and for the provision of passenger information. The cities face the challenge of further expanding their public transport systems and integrating them in a transport network. It is only by providing unbroken connections, regular services, and transparent tariff systems that the public transport services will be more attractive to people than their own cars. In addition, there are so far hardly any links between the conurbations. The large distances between cities, difficult geographical conditions with deserts, outback and mountain ranges, as well as the sparse population along the routes are among the difficulties faced when trying to establish a nationwide public transport system. So far, travel between the major cities has only really been feasible by air, which also has a significant impact on CO<sub>2</sub> emissions. There is a need here for German expertise.

Public transport throughout Germany now has a very high technical standard which is making an impression worldwide. IVU has already established an international reputation, for example with projects in Auckland (New Zealand), Cali (Colombia) and also in Adelaide (Australia). And other Australian cities are interested in the individual solutions offered by the IVU.suite, which can easily be integrated in existing system landscapes, as well.

But because it is difficult to explain such complex systems on the telephone, Frank Nagel started off on his roadshow across the continent in Summer 2010. Brisbane, Sydney, Melbourne, Canberra, Darwin and Perth were just some of the places that he visited during his travels. He travelled more than 50,000 km in only four weeks. That is not so unusual for IVU, because the direct contacts with the customers are important in order to clarify the precise requirements. "The contact with people all over the world, their different cultures and characteristics, and the further development of public transport are the challenges that make my job so interesting," explains Frank Nagel. "And just as each contact has their own personality, so each public transport system requires its own individual solutions. The roadshow in Australia has demonstrated that the systems from IVU have a lot to offer here. There is a need for them, but in the past they were not sufficiently well known. That has changed now." ■



# 35 YEARS OF IVU: IN-HOUSE SHOW PROMOTES INTERNAL KNOWLEDGE TRANSFER

For the first time in the 35 year history of IVU, a team of young managers organised an in-house exhibition this summer which offered all colleagues an opportunity to find out what goes on outside their own department or location. IVU personnel were invited to present all their projects and products in Berlin. On 30 June and 1 July they had the opportunity to find out more about their colleagues and the work they do, to discuss new approaches with one another, and to accumulate knowledge to take back to their workplace. Every department produced their own little stand, and the teams competed with each other to prove their creativity. Presentations were given, showrooms set up, posters and T-shirts printed, videos produced for software demonstrations, and lots of technology was on show for visitors to gain hands-on experience. All the participants made the most of this opportunity to learn about the latest work of their colleagues in other teams. Every stand had a quiz question to be answered, and these highlighted many interesting details about projects and products.

Martin Müller-Elschner, CEO of IVU Traffic Technologies AG, was really impressed. He praised the dedication shown by the personnel, and anticipated seeing positive effects both for human relations and for engineering developments. "Our in-house show is a very successful example for the promotion of young talent and cooperation within the company," was how Human Resources Manager Michaela Kress summed up the event. "Everybody enjoyed presenting themselves and their daily work. This represents a great store of knowledge that we were able to make available to all." ■



The organisers checking the quiz answers.



Volker Braun affords his colleagues an insight into the fleet management system.

## IVU RUNNING TEAM ARE GERMAN COMPANY CHAMPIONS

At this year's B2RUN in Berlin on 14 September, the IVU runners left the other participants well behind. With a best time of 01:43:44 for the 6.2 kilometres every runner has to pass, the team not

only won first place in the Berlin competition, but also became the men's German company champions. More than 7,000 runners and 450 companies took part in the B2RUN. ■

# AVAILABLE FROM AMAZON

520 pages of knowledge about IT systems in public transport



ISBN-13: 978-3898647700



A view of the workings of a modern public transport company is offered by the book “IT-Systeme für Verkehrsunternehmen: Informationstechnik im öffentlichen Personenverkehr” from the IT specialist Dr. Gero Scholz. This standard work, which establishes a common ground for communications between transport companies and system providers, is published by dpunkt.verlag and can be ordered via Amazon and other book-sellers from 15 November. On 520 pages, the reader learns everything about the complex software landscapes of modern public transport companies and their key contribution to maintaining mobility. The book will be of interest to system developers, university teachers and students, and of course to the public transport sector itself. It offers numerous insights and detailed technical descriptions of day-to-day IT processes. From timetable and duty roster planning and the deployment of drivers and vehicles through the management of vehicle fleets to comprehensive passenger information – all the

areas of operation of public transport companies are considered and the relevant software systems are described.

In order to be accessible to the whole spectrum of readers from users to IT specialists, and to provide a full overview in text and illustrations of the many-layered system landscapes of public transport operations, Dr Scholz develops a comprehensive UML domain model. He establishes links for the first time between public transport know-how and software development expertise. The result is a standard model which aims to provide individual actors and producers of IT solutions with a basis for communications.

The book is explicitly not written with only software engineers in mind. Dr Scholz manages to present the complexities of public transport clearly and simply, while still retaining the necessary depth of detail. In short, this is a book which sets standards. ■

## SAVE THE DATE

### **bonding job fair**

from 26<sup>th</sup> – 27<sup>th</sup> October 2011  
Lichthof TU Berlin

### **Night of companies**

09<sup>th</sup> November 2011, Technology Centre  
Aachen (TZA), Europaplatz

### **bonding job fair**

from 28<sup>th</sup> – 30<sup>th</sup> November 2011  
Bendplatz Aachen

### **IT-Trans 2012**

from 15<sup>th</sup> – 17<sup>th</sup> February 2012  
Stand No. G4, Karlsruhe Trade Fair Center

### **User Conference 2012**

from 12<sup>th</sup> – 13<sup>th</sup> March 2012  
Estrel Convention Center Berlin

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