



## Mobility & City Transport Exhibition

in conjunction with the 59<sup>th</sup> UITP World Congress  
10-13 April 2011 - Dubai, United Arab Emirates



### A CLOSER LOOK AT THE 2011 UITP MOBILITY & CITY TRANSPORT EXHIBITION



Source: Dubai

## Welcome to Dubai!

**The day has finally arrived... With a concrete and inspiring theme 'Boosting public transport: Action', UITP and RTA are pleased to welcome you to the 59th UITP World Congress and Mobility & City Transport Exhibition here in Dubai!**

The Dubai Congress & Exhibition will review, together with you, the priorities identified in UITP's ambitious strategy for the sector. It will be the first important milestone for UITP to assess what has already been accomplished and what still needs to be done in order to achieve its vision: doubling the public transport market share worldwide by 2025.

In today's challenging environment, this strategy can only work if we share our expertise. Therefore, we hope that you, as an important part in the entire supply chain of public transport, will enjoy the opportunity to exchange ideas,

get inspired by international players in your sector and consolidate new business contacts.

Take your time to visit the Exhibition, where you will discover the latest technological innovations, solutions and developed services.

We specifically draw your attention to the multidisciplinary and diversified Expo Forum programme. This is the

place where you will get the latest updates on the public transport market directly from the source.

We are truly looking forward to meeting you

during this important event and wish you an inspiring and fruitful Exhibition!

UITP Exhibition Team

D. Deladrière

H. Badran

During the *Mobility & City Transport* Exhibition, UITP will present its alliance with other exhibition organizers who share the common objective to improve public transport for the benefit of people and societies. Rather than focusing on commercial benefits, UITP and its partners share the challenging mission to promote public transport, to help the sector grow and thus to contribute to UITP's ambitious strategy "Doubling the public transport market share worldwide by 2025".

UITP partners are GIE Objectif transport public created by the Public Transport Authorities Association (GART) and the Public and Rail Transport Union (UTP) for the European Mobility Exhibition, Busworld, Karlsruhe Conferences and Exhibitions Center (KMK) for IT-TRANS, and Swisstraffic. More details will be announced at the press conference on Tuesday 12<sup>th</sup> of April.

### WHO IS IN THIS EXPONEWS

- Abu Dhabi Department of Transportation (DOT)
- Al Futtaim Motors
- Alcatel-Lucent
- ASK
- Bombardier
- CUTA
- DILAX Intel
- EL-TRA srl
- Emirates Driving Institute
- ERG
- FOGTEC Brandschutz GmbH & Co.KG
- FQ Ingenieria Electronica
- GIE Objectif transport public GART-UTP
- GORBA AG
- GROENEVELD TRANSPORT EFFICIENCY B.V.
- HJS Fahrzeugtechnik Gbh & Col
- Höft & Wessel AG - ALMEX
- INIT
- IRIS GmbH
- KONTRON
- Moviken-SLE
- NETZPLAN
- Prodata Mobility Systems/ Aprans
- PTx2= 2025
- Roads & Transport Authority (RTA)
- RuggedCom
- SAZCILAR OTOM.SAN ve TIC
- Schaltbau GmbH
- Scheidt & Bachmann
- Securitas
- Siemens
- SOLARIS BUS & COACH S.A.
- Swedish Public Transport Association
- Thales
- JSC TRANS-ALFA AVTO
- Transports Publics Genevois
- UITP Sustainable Development
- UNWIRE
- VDL
- Voith Turbo GmbH & Co. KG

# Dubai's RTA - driving the public transportation agenda in the Middle East



Source: Roads & Transport Authority (RTA)

**To most observers, Dubai is renowned as a popular tourist destination and a city synonymous with the construction of ambitious projects such as the Burj Khalifa, the world's tallest tower. Scratch beneath the surface however and you will find a thriving cosmopolitan city on pace to revolutionize the face of public transportation in the Middle East.**

Dubai is a city that has experienced phenomenal economic and demographic growth over the last ten years. Its population is expected to increase to three million people in 2020 making it the world's fastest growing city with traffic expected to double over the same period. As a result, providing a state-of-the-art transport network for the city's residents has become a high priority on the government's agenda. The Emirate quickly recognized the critical need for more sustainable mobility and, with nearly half the city's strategic USD 20 billion plan allocated to public transport, Dubai is now developing public transport as its backbone.

Since it was established in 2005, Dubai's RTA set itself ambitious goals; increase public transport share from 6% in 2006 to as much as 25% - 30% in 2020 and develop mass transit modes with the aim of making them the favourite means of resident mobility across the Emirate. Given the country's hot weather climate, the RTA was confronted with a significant challenge as cars have always been the preferred mode of transport in the city. In 2005, the RTA embarked on one of the city's most ambitious projects; the launch of the Dubai Metro, the world's longest driverless metro line. When the Metro officially opened on 9 September

2009, nearly 10% of Dubai's population used it in its first two days of operation. Passenger numbers soared from 1.8 million in October 2009 to 4.4 million in November 2010, an increase of 145% in just 13 months.

The Dubai Metro was undeniably the RTA's flagship project, however under its leadership and vision, public transport in the Emirate has now evolved into a progressive and dynamic system that facilitates the movement of residents and visitors. Bus fleets, bridges, tunnels and other infrastructure projects have posted double and triple digit growth and usage numbers. Amid all the growth and development, the RTA also managed to reduce traffic safety and congestion over the last five years by 42% and 35% respectively.

The number of people who used public transport including taxi mode in 2009 was over 288 million with a daily ridership of about one million travellers. Dubai has increased its ridership by 90% over five years increasing the amount of people who use public transportation from 163 million in 1995 to 309 million in 2010.

As a result of the RTA's achievements, many of its neighboring GCC countries are consulting the organization to benefit from its expertise on modernizing mass transit modes and best practice implementation.

In meeting its ambitious goals, Dubai is proud to host the 59th UITP World Congress and Exhibition and to contribute to the targets of doubling public transport shares worldwide by 2025 (PTx2).

Source: Roads & Transport Authority (RTA)

# Abu Dhabi Rail Projects Opportunities

**In 2009, the Abu Dhabi Department of Transportation (DOT) created the ambitious Surface Transport Master Plan (STMP).**

The STMP was commissioned to deliver a World Class Transport System for Abu Dhabi and address the regional transport needs of the Emirate as a whole with particular emphasis on the Abu Dhabi Metropolitan area with a strong emphasis on environmental and cultural protection. The plan incorporates the concept of sustainable development. The STMP sets out to increase the modal share of public transport to 33% during peak hour by the year 2030. The ambitious public transport plans for Abu Dhabi established through the STMP include: metro (130 km), LRT/

Tram (340km), High Speed Regional Rail (560km), Improved Bus System, Ferry and Water Taxi, Demand Measures Solutions together with major improvements in streetscape, pedestrian and cycling provision. In 2010 momentum has accelerated and the DOT started the feasibility studies for the Metro, LRT/Tram, Water Transport, Regional Rail Study and others. Feasibility studies are expected to be finalized around the second quarter of 2011.

It is expected that the DOT would start the design and construction stages of the initial operating segments of those projects soon after finalization and approval of the feasibility studies. DOT would like to alert contractors/consultants to the great and challenging opportunities that might be available soon. Leading international contractors/consultants with in depth specialized experience are invited to register with the DOT for possible participation in those projects.

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Source: Abu Dhabi Department of Transportation (DOT)



Source: GORBA AG

# Gorba strengthens its Position in the Middle East

## Foundation of its first branch in Abu Dhabi

**Until now private taxis and the recently arrived buses have formed the backbone of Abu Dhabi's public transportation system. However, the demand for a coordinated public transit system**

**led to one of most rapid developments in the Middle East.** As an international provider for passenger information in vehicles, at stations, and at control centers, Gorba has been active in Abu Dhabi since the start of the year with its product range including

the imotion, iqube, and icenter product families. Gorba chose Mohammed Bin Zayed City as the location for its new branch, which already began business operations in January 2011.

*For over 10 years, Gorba has been developing its business operations in the Middle East.*

For over 10 years, Gorba has been developing its business operations in the Middle East. The main buyers of Gorba's products are in e.g. Abu Dhabi, Bahrain, Dubai, Saudi Arabia, and Iran.

The most recent contact, which involved equipping 505 public transportation buses in Abu Dhabi with displays, infotain-

ment systems, and control units, steered Gorba's focus to new demands: service and customer support on location. Gorba's new branch in Abu Dhabi offers more than just competent contact persons for technical support and sales. Other important duties, such as the installation and monthly inspections and examinations of the systems, can be quickly and easily conducted. A local spare parts warehouse ensures short delivery times. And there's more good news for Gorba customers in the United Arab Emirates: even more service technicians will support the current team until April 2011.

Source: GORBA AG

# PTx2: Doubling the market share of public transport worldwide by 2025

## *The PTx2 Stand at the UITP World Congress and Exhibition.*

The UITP PTx2 stand will showcase selected projects and initiatives contributing to making UITP's PTx2 ambition a reality: doubling the market share of public transport worldwide by the year 2025. The PTx2 stand will be the place to be to get information on PTx2 and related activities developed by UITP and mobility stakeholders. Doubling public transport means different approaches in different regions of this world. You are invited with your guests to come and see good practice examples of ambitious pub-

lic transport projects in different countries. UITP experts are on-site to discuss and share ideas for participation in UITP's striving PTx2 strategy.

Source: PTx2: Doubling the market share of public transport worldwide by 2025.

**DO NOT FORGET TO VISIT US!  
Stand 2A120**

**Set your ambitions**  
Public transport empowers the economy, alleviates congestion, helps the planet breathe, brings everyone everywhere.

**Pick your solutions**  
Develop visionary integrated urban policies! Create a new business culture! Secure stable funding and investment schemes! Use carrot-and-stick tactics! Deliver lifestyle services to become the mode of choice for citizens!

**Doubling the market share of public transport worldwide by 2025**

## Visit us in Dubai and discover 13 good reasons to come to UITP Geneva 2013!



We all look forward to meeting in Dubai at the 59<sup>th</sup> UITP World Congress and Exhibition. But do you know already where the 60<sup>th</sup> edition will take place in 2013? That's right: Geneva, Switzerland!

The local host of this anniversary edition, the Transports Publics Genevois (TPG), is proud to present to you 13 good reasons to come to Switzerland in 2013. Are you an exhibitor or a sponsor, a keynote speaker, a remarkable congressman or just a UITP member willing to take part and enjoy Swiss

hospitality? Just direct your feet to our booth where you will find all the necessary information and meet the appropriate interlocutors! Switzerland has the highest rail network density in Europe and is recognized worldwide for its reliability and punctuality.

There are huge public investments in public transport services. In Geneva for instance, TPG supply has increased by 50% for the past ten years and is expected to grow by 35% more in the next four years. Discover all this and much more while enjoying a Swiss Milk Shake or Chocolate at our booth!

Source: Transports Publics Genevois



## Defensive Driving Course by Emirates Driving Institute

### *How safe are you and your employees?*

**The Emirates Advanced Driving\* new 'Defensive Driving Course' is a course designed to greatly increase the in-car & on-road safety of drivers whom already possess a Driving License.**

The course covers an interactive blend of theoretical safety lecture and discussion, routine vehicle maintenance and active on-road training delivered via a one-to-one coached methodology.

The new course, the subject of this application has been specifically written for use in Dubai/the UAE and addresses many local and regional 'causal factors' which contribute to unsafe driving and subsequent accidents. It applies psychological reasoning processes to help each delegate acknowledge and if necessary, modify the way they think about their own driving and the driving of other road users.

The course incorporates international 'Best Practice' and is aimed by EDI to assist the RTA in achieving the stated concept of 'Smooth and Safe Transport for All'.

The EAD Defensive Course conforms to international driver risk management and reduction practices, and will create

safer drivers; drivers who actively think about their behaviour and that of other road users. This process brings benefits to drivers, their families and employers alike. Every driver and every organisation employing drivers will benefit from enrolling drivers on this course.

Changing drivers' attitudes and the way in which they THINK about driving are the most effective means of reducing road accidents and casualties by reducing the 'causal factors'.

Active safety thinking will help prevent accidents, something which Legislation and enforcement thereof cannot accomplish alone.

Accidents will be reduced in number and intensities, as will injuries and deaths diminish accordingly. Vehicle maintenance costs will diminish, and vehicles will be driven in a more environmentally-friendly matter, therefore also providing a 'green' benefit.

\*Emirates Advanced Driving is a business unit within Emirates Driving Institute and delivers driver training courses throughout the UAE and GCC member countries.

Source: Emirates Driving Institute

## How green are you really?

*Many exhibitors are showcasing their products and services in Dubai that have improved environmental credentials – are you one of them?*



Becoming a signatory to the UITP Sustainable Development Charter is an active commitment to sustainability and one that more than 150 of your colleagues have already taken! This programme within UITP provides a forum for the latest developments and best practices to be showcased as well as practitioners able to debate how they are addressing challenges such as green pro-

urement, trialling new technologies and giving input into UITP's international work on global issues such as Climate Change and the Green Economy. Joining this network is not just a hollow promise and UITP now provides cost effective tools and training. This includes the most recent internet based tool that will be launched at the Congress in Dubai that allows signatories to

see how well you are performing against the 'best in class'.

### **Want to know more?**

It's not too late to apply or if you would like to set up a meeting to learn more – then contact Heather Allen (heather.allen@uitp.org) for more information

Source: UITP Sustainable Development

## *Major Bus manufacturers sign up to the charter in Dubai!*

We expect more than 7 major players to jointly commit to the UITP Charter in Dubai – Watch this space!

# A long and fruitful partnership between Taxi operators in the UAE and Al Futtaim Motors

**Al Futtaim Motors has enjoyed a long and fruitful partnership with Dubai Taxi Corporation and many other Taxi operators in the UAE with the Toyota Camry being the mainstay of most Taxi fleets throughout the UAE.**

The Camry is the vehicle of choice for Taxi Operators as it offers an exceptionally low total cost of ownership; a combination of its legendary reliability and remarkable resale values - even in arduous taxi service for upwards of 500,000km and in the UAE's challenging climate.

Over the past two and a half years, Dubai Taxi Corporation has been testing ten Camry Hybrid models with very positive results. With no compromises for passengers and with the same legendary reliability, the Camry Hybrid has also delivered significant fuel savings.



Source: Al Futtaim Motors

These savings lead the way to the more cost effective taxi fleets of the future with benefits for both operators and passengers. They also clearly demonstrate that more sustainable transport solutions don't have to come at an increased financial cost.

The Hybrid Camry has delivered real and measureable sustainability bene-

fits in the tough operating conditions of a 24/7 taxi service. These include marked reductions in airborne pollutants that in turn mean cleaner air in Dubai for residents and visitors alike and the global benefits of reductions in CO2 emissions.

Source: Al Futtaim Motors

## Commenting on the Camry Hybrid test



*Collectively, the Camry Hybrid vehicles are approaching four million kilometres and we are satisfied with their general performance but the study is not complete. As far as sizeable fuel and emissions reductions, the outcome is not finalised but we are optimistic on the results. This brings us closer to realising our government's initiative for cleaner air in the UAE and also offers a contribution to the important UITP strategy: 2025 = PT X 2.*

Eng. Yousif Al Ali, Director of Operations Department at Dubai Taxi Corporation



# Passengers expect the personal touch

**Rail operators must prepare for a future that includes 'augmented reality' and Station 2.0 concepts to meet passengers new lifestyle and to give public transport a competitive advantage.**



Source: Alcatel-Lucent

**Public information systems and automated ticket vending machines are now considered standard elements of the modern station. But rail operators can hardly afford to be complacent: passengers expect the personal touch.**

Operators must be prepared to enable 'Station 2.0' technology to deliver personalised information to any device. In addition to more immediately obvious journey planning and delay information, operators should be able to tailor 'augmented reality' services. These could include live interactive maps to direct

the passenger to the right platform via a newspaper kiosk on the way. Social networking applications could be included to show friends waiting at a station meet point. Real-time departure information would also be offered, whilst last-minute journey amendments could be facilitated via mobile access to the train operator's booking service.

Tickets would then be delivered to the user's phone directly. The mobile phone creates a huge opportunity for rail operators to enhance services. On the move, passengers can expect to be able to be kept right up-to-date

with their journey as the train operator streams data to flat screens in the train, giving live running information and details of connections. Taking the concept one stage further, live weather updates on the destination city or tourist information could be broadcast on long-distance journeys.

Video on demand and other on-board entertainment options could also be offered, making broadband networks an essential requirement for inter-city train operators. The digital revolution shows no sign of slowing down, and the world's railways must strive to keep up. Visit Alcatel-Lucent stand 8B150 at the UITP Mobility & City Transport Exhibition to see their Dynamic Communication solutions for improving passenger experience.

Source: Alcatel-Lucent

# 3<sup>rd</sup> generation MobiGuider platform supports the growth of Prodata Mobility Systems clients



Source: Prodata Mobility Systems

**As the world constantly evolves, the environment of public transport and transport technology is bound to strive for continuous progress and improvements. In order to tackle the changes and challenges arising from this evolution, Prodata Mobility Systems is proud to present its 3rd generation MobiGuider platform.**

- Developing and deploying new services and functionality to attract travellers and seek new revenue streams
- Integrating a wide array of hard and software platforms seamlessly into one efficient infrastructure
- Reducing the cost-of-ownership of the system through lower hardware investment, ease of maintenance of the system and ease of adding or reducing business functionality.

When introduced several years ago, the goal of the first MobiGuider platform was to meet the needs of public transport operators in the domains of automatic fare collection (AFC), intelligent transportation systems (ITS) and real-time passenger information (RTPI).

Above all, the key strength of the MobiGuider platform is the ability to offer our customers the benefit of having all these domains integrated into one solution, effectively creating one single technology infrastructure, integrating all FARE-related functionality (AFC), all FLEET-related functionality (ITS), and all passenger JOURNEY-related functionality and interaction (RTPI).

The 3rd generation platform takes it even one step further. Its reworked technical architecture resulted in a true service oriented architecture making it future-proof through its openness, its flexibility and its aptitude to evolve. Prodata Mobility Systems strongly believes that by taking this step, it can better support the public transport operators in delivering the best services to their customers and to their own organisation by:

Needless to say that a technological (r) evolution without the backup of a strong service strategy is senseless. That is why Prodata Mobility Systems designs and delivers innovative systems but also provides the operation and maintenance services that are crucial to run these systems. They can supply and manage the integrated MobiGuider solution, as a whole or parts of it, depending on your specific needs. Prodata Mobility Systems is your trusted partner in assessing your requirements and recommending a business approach that makes sense. Prodata Mobility Systems is proud to be part of the UITP PTx2 strategy of creating awareness and drive towards increasing by two fold the market share by 2025.

*Above all, the key strength of the MobiGuider platform is the ability to offer our customers the benefit of having all these domains integrated into one solution*

Source: Prodata Mobility Systems

# In Dubai move fast and travel light in all public transport modes with ASK made Nol card!

## And travel for free as a congress attendee at the UITP exhibition!

### Limited edition for UITP congress attendees

During the UITP Dubai show in April, congress attendees will be granted free access to all public transport in Dubai thanks to a limited edition of contactless smart cards, manufactured by ASK.

### NOL cards, the country success

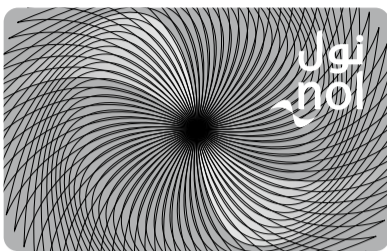
ASK has successfully achieved the delivery of the first batch of 1 million cards in Dubai. The project was implemented by System Integrator Abba Electronics - a division of well-known Alabbas Group - for Dubai transport operator, RTA (Roads and Transport Authority).

Nol card is a multimodal contactless card with 3 different layouts and various features to be used in Dubai metro, buses, water buses and parking meters. Silver card is an anonymous card

with an e-purse. Gold card holds the same features and grants the holder the privileged access to Metro's Gold Class seats for premium charges. As for Blue card, it is a personalized card with the holder's photo. NOL cards are microprocessor based contactless smart cards embedding highly secure Mifare DES-Fire chips.

Abdullah Al Madani, the CEO of RTA Corporate Technical Support Services Sector said that Nol Card was the best fare payment means ever introduced in Dubai.

Dubai developed an advanced transport network introducing the metro in 2009 and contactless ticketing was the next step to benefit from low cost fares, multimodality and swift and secure travelling around the city.



Source: ASK

ASK, with over 190 million contactless products in circulation in more than 50 countries, is a pioneer in contactless mass transit ticketing with breakthrough innovations such as contactless paper tickets. Our products are based on silver ink printed antenna on paper substrate, a highly reliable, durable and eco-friendly technology for the transit and identity sectors.

Source: ASK

# One for all

## Integrating several systems into one device is the future of parking and it also offers financial and environmental benefits

**In the parking sector there is a growing trend towards the integration of technologies. There is a rising desire to adopt compatible systems that are able to process different ticket types.**

There is a clear need to reduce traffic congestion in city centres and improve transportation so that drivers are persuaded that public transport (such as buses, trams and trains) is a viable alternative to driving.

In an ideal world, the majority of cars would remain at the city limits - in secure and well served car parks. To achieve this goal, the priority is to update existing systems to be able to manage parking tickets as well as public transport tickets, which usually adopt different technology, primarily barcode and magnetic based solutions. The final goal is that in the near future, all drivers (aware of their contribution to reducing city pollution) will have the ability to use a combined ticket that not only allows them to park their car but also to travel within the city limits.

Italian brand Eltra Sistemi represents the synthesis of experience accumulated in 40 years of activity from Eltra. Since 2006, several integrated solutions for various applications have been available from the brand. Applications encompass parking, motorways, public transport and more.

All-In-One is the latest motorised solution launched by the company and is ideal for automatic pay stations based on barcode technology. The unit can

also integrate RFID and magnetic technology to work not only as a validator but also as a dispenser (a double feeding mechanism is available) and reader for RFID (read/write) cards and magnetic credit/debit cards with any configuration: ISO1, 2, 3, central and double.

Within the same mechanism it is possible not only to validate entry ticket but also to process any discount coupon (capture function available), process payment (via the parking slot under the printer) when a ticket or credit card is inserted in the front slot and to dispense a new ticket or receipt (in case of lost ticket). All of these functions are now available at the same level of performance offered so far only from magnetic technology, but at a much lower operative cost due to the lower maintenance and costs for barcode devices.

### Current and future needs

The modularity of the All-In-One allows customers to tailor the unit to meet their current needs, but still be able to easily integrate new technologies in the future.

Another trend is the desire to have more functions performed by the same equipment, to reduce management costs and increase the ability to generate revenues from car parks. In spite of the financial crisis, Eltra is continuously receiving requests to supply more sophisticated devices. High on the current wishlist is hybrid magnetic/barcode motorised equipment (dispenser for entry station, validator for auto-pay station and reader for exit station) with thermal printer, able to fulfill the two main duties.

The first duty is to increase system reliability so that less personnel is needed in the parking facility and more processes can be managed from a central control office.

By using two technologies, the chances that both fail at the same time are reduced dramatically - as is the risk of the driver getting stuck in the car park. This method allows efficient management of parking facilities with less staff and reduced costs.

The second capability relates to the thermal printer itself. This offers the potential to see the ticket as a new instrument for communication. It is possible to pre-print advertising campaigns on tickets, and also to print short advertising messages on each new ticket, offering discounts on parking fees, thus becoming a generator of new revenue. Shopping mall car parks can continue relying on their main sponsors to personalise and pay off their tickets, but can also contribute to transform the paper ticket into an interesting vehicle to promote the many activities around the parking area.

All of the above, together with the increasing pollution in our cities and the reduction of spaces for our cars, certainly provide a good reason to believe that smart parking will have a very strong chance to prosper and develop in the near future. Innovative parking solutions offer a positive contribution to the organisation of our cities and an effective improvement with regards to the environment.

Source: EL-TRA srl

# Technology and Collaboration Drive Sustainable Mobility

**Population growth and rapid urbanisation are forcing many countries to embark on extensive infrastructure development programs to address the mobility of their population and countries with more established populations, while still facing issues of urbanisation, are looking at ways to improve mobility to improve access to services.**

The key considerations for these programs are to:

1. Ensure inclusion of people from all socio-economic levels of society through accessible and adequate public transport options;
2. Minimise the environmental impact of the continued population growth by driving people to lower impact modes of transit such as public transport, shared transport or bicycles/walking;
3. Ensure continued economic competitiveness through maintaining a mobile workforce as well as ensuring that congestion is minimised through effective and sustainable transport infrastructure.

vision of integrated solutions for payments and ITS. We are developing solutions to address the needs of the rapidly urbanising cities of the world, currently working with customers in Egypt, India, Thailand, South Africa and France and others to help them achieve their social inclusion and mobility goals.

These solutions will be showcased on our stand at UITP Dubai, where we will also present our vision for these enabling technologies in delivering on the true value of public transport in achieving social, economic and environmental policy goals during the UITP expo forum.

Vix Technology encourages you to attend the presentation at the expo forum and invites you to our stand during the UITP Congress & Exhibition to discuss the innovative solutions and technology they have on display with our team.

Source: ERG

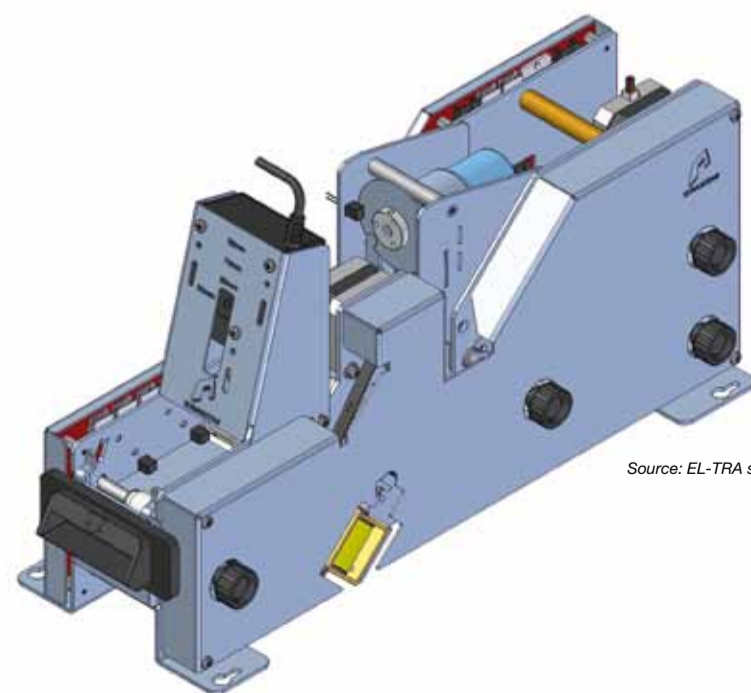
Technology plays a key role in ensuring these mobility goals are reached, providing:

1. Efficient and integrated payment solutions;
2. Systems exploiting varied delivery channels to place travel information at the fingertips of the travelling public allowing them to make efficient choices in their use of transport;
3. Systems for operators to allow them to monitor the utilisation and efficiency of the transportation systems allowing them to drive to greater efficiency;
4. Systems harnessing the wealth of information from multiple sources allowing for operators, the travelling public and policy makers to better plan and optimize their travel or transport services.

Vix Technology with its businesses Vix ERG and Vix ACIS is leading in the pro-

“  
*The UITP Dubai 2011 exhibition provides a unique opportunity for all those passionate about delivering on the true value of public transport to come together. The contacts made and the ideas shared, drive the innovative solutions that shape the future of sustainable mobility for all.*  
 ”

Steve Gallagher, Managing Director, ERG



Source: EL-TRA srl

# A new generation of stationary ticket vending machines

**Hoeft & Wessel is unveiling a new generation of stationary ticket vending machines with particularly compact dimensions and a special solar-powered version.**

In this way, the company is ushering in a new era of ticket vending machines which are powered by solar energy. As these machines do not have to be connected to the electricity grid, the cost-intensive infrastructure preparations can be dispensed with.

At the same time, the environment is preserved and CO<sub>2</sub> emissions reduced. This makes the new solar-powered TVM a good example of Green IT. The IT and engineering Group with main locations in Germany and the United Kingdom has developed the first stationary solar ticket vending machine offering the same easy to operate handling as large vending machines. The Hoeft & Wessel Group's Almex business division will be presenting the new product at the UITP exhibition in Dubai.

Energy consumption is the "be all and end all" for solar power. By using highly efficient components, it has been possible to reduce energy consumption by

up to 50 percent. The utilisation of LEDs instead of neon lights also saves energy. Known as almex.midi, the new vending machine extends the successful almex.station series, of which more than 10,000 units are in operation across Europe on railway platforms and public transport stations.

Whereas the almex.station has a width of 90 centimetres, the new model measures only around 68 centimetres. Although smaller, it offers the same functions as the larger model thanks to the optimised arrangement of the modules by Hoeft & Wessel.

Source: Höft & Wessel AG - ALMEX



Source: Höft & Wessel AG - ALMEX

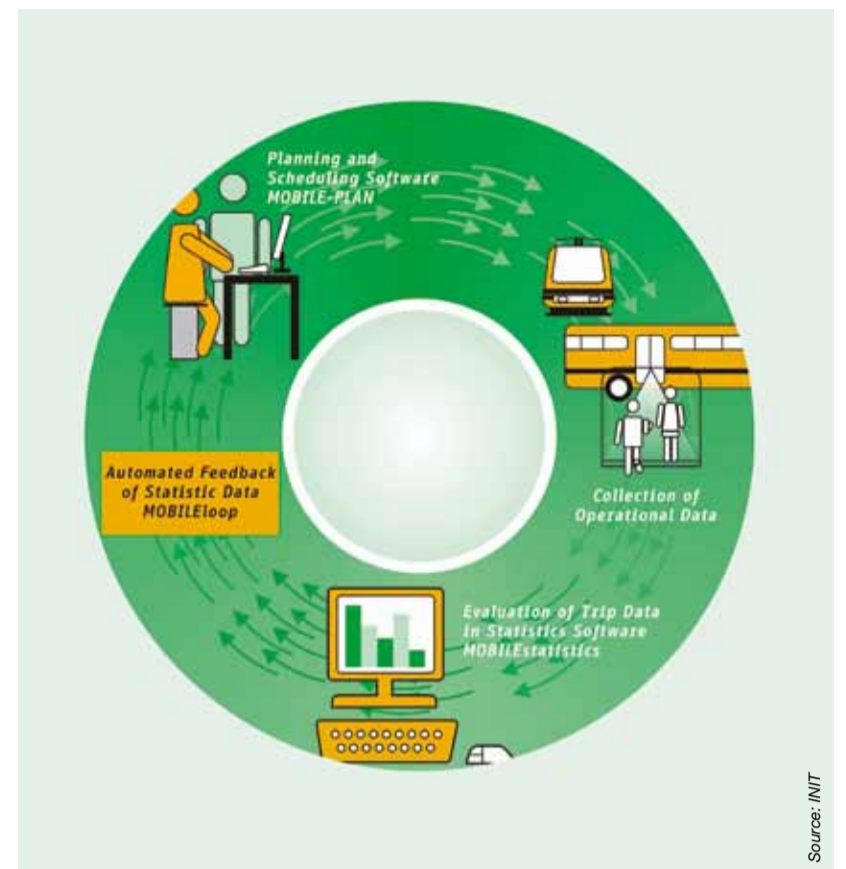
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*“Our résumé regarding the 2009 exhibition was positive. We had a substantial number of intensive contacts and managed to deliver an excellent presentation thanks to the open, generous design of our booth. Our newly developed on-board unit for buses and trams met with an outstanding reception.”*



Thomas Wolf, COO  
Hoeft & Wessel Group,  
Almex Business Division

”



Source: INIT

## MOBILEloop – More accurate schedules with the feedback of statistics into the planning process.

To increase the quality and efficiency of public transport, one must increase the punctuality of trips and prevent overcrowding on buses or trains. That's why it is essential to use actual operational data in the planning process. Until now, this data had to be considered by the planners themselves.

But, not anymore! INIT's new optimising solution, MOBILEloop, will give transport providers the ability to import relevant data from the statistics tool MOBILEstatistics directly into the planning system MOBILE-PLAN.

The big plus of the new solution, MOBILEloop, is that information like actual driving times and number of passengers is displayed directly within the timetable planning and vehicle scheduling system. Closing the gap between statistics and planning, transport companies can be more proactive in their planning and optimise the efficiency of their fleet as well as the reliability of their schedules. This in turn, increases the quality of public transport for passengers.

### Optimized Schedules:

In the beginning of the planning process, driving times were roughly estimated and used for the basic timetable planning, vehicle and duty scheduling. Within the ITCS, the actual driving times as well as all early and late recordings are collected and evaluated in the statistics module.

With MOBILEloop, this data is now transmitted back to the planning system automatically which enhances the efficiency and quality of service in several ways:

a) The vehicle blocks can be modified by shifting trips to ensure that better schedule adherence is achieved in the short term. This means that subsequent trips do not depart delayed due to the delay of the previous trip.

b) The most reliable driving times can be used for the next timetable change. This ensures a more robust schedule and significantly reduces the risks of delayed departures

*INIT's new optimising solution, MOBILEloop, will give transport providers the ability to import relevant data*

### Optimized Passenger load:

The size of the deployed vehicle, as well as the frequency of trips depend essentially on the number of passengers onboard. However, for economic reasons it is important not to deploy too many vehicles or, to deploy vehicles that are insufficient for passenger loads. With MOBILEloop, actual passenger load data from the automatic passenger counting system is being transmitted into the planning system. Therefore, MOBILEloop assists with dispatching the right size vehicle and provides a more economical and efficient tool for planning.

Source: INIT

# First EMV contactless e-ticketing solution for South Africa

**The Almex division of the Hoeft & Wessel Group will deliver 600 integrated on-board computers and ticket printers to Durban Transport in South Africa based on the eThekweni Municipality tender for new electronic ticketing equipment.**

The almex.optima devices will replace current equipment from Almex which has reliably served Durban Transport for almost 15 years. Key to the recent success however is the innovative system solution that allows starting the integration of e-ticketing with the South African EMV contactless bank issued fare media initiative for debit card transactions.

This initiative is driven by the National Department of Transport (NDoT) in conjunction with the member banks of the Payments Association of South Africa (PASA), in the case of Durban The Standard Bank (SBSA). The electronic fare collection data structure (EFC) utilises specific tags on the EMV chip for recording and retrieving public transport related data.

The EMV contactless solution for Durban Transport will be the first imple-

mentation in South Africa that will be based on standards conforming to the Card Association specifications (for example MasterCard PayPassTM, Visa payWaveTM). Durban will be using the MasterCard PayPassTM standards. The primary mode of fare payment and access to public transport services will be through contactless EMV dual interface smart cards hosting the NDoT AFC Data structure.

In addition, commuters will be enabled to pay for single fares in cash on board the bus. The Almex business division of the Hoeft & Wessel Group is one of the leading providers of ticketing systems for public transport in Europe and throughout the world.

Source: Höft & Wessel AG - ALMEX



Source: Höft & Wessel AG - ALMEX

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*“...the UITP Exhibition in Dubai, in April 2011, will illustrate the important position of the MENA region in the public transport business in the 21st century...”*

François Dumont, Editor Director,  
La Vie du Rail/Ville, Rail & Transports Magazine, December 2010

”



Source: DILAX Intel

## Passenger counting comes of age

### What outputs do I want from a Passenger Counting System (PCS)?

In answering this question the customer needs to consider not just today's requirements which may be limited to "producing reports", but also the future potential uses of the system.

Typically, the main focus of the planning ahead of a PCS installation is on the hardware. After all, the system is expected to have a lifecycle of anything up to 20 years so it is certainly worthwhile to think about the potential benefits of the system beyond today's requirements. Having thought about what hardware configuration will suit our requirements for today and into the future, we need to consider how the data will be presented. Questions arise such as What reports are required? Who needs these reports? What IT systems will the data management server require? What about integration with other software applications such as ticketing and yield management? In the future it can be expected that the transport operators will see the detailed picture of their passenger loads across all of their services

as a vital tool in efficiently running their businesses.

In this scenario, a wide variety of people in different departments from finance to planning and marketing will require the passenger load data, perhaps on a daily basis.

At DILAX we have over 25 years experience in advising our customers on the best configuration for a passenger counting system and how to consider all factors, both hardware and software, to arrive at the most cost effective tool for their business requirements. Over the next few years we look forward to making sure that the outputs are considered first when a PCS is being specified and that the subsequent PCS delivers reliable and useful results for the next 20 years.

The effective use of PCS enables every public transport organisation to increase the use of public transport which fits perfectly into the UITP aim known as PTx2.

Source: DILAX Intel

## Nordics: the frontier of mobile tickets

**In Denmark and Sweden 55,000 travelers each day use their mobile phone to pay for tickets on busses, trains and the metro.**

Since 2008 Copenhagen and Stockholm have seen a dramatic increase in travellers choosing mobile tickets as the quick and easy successor to old fashion paper tickets.

In just a few years Unwire has made its mark as one of the most innovative suppliers of mobile ticketing technologies. Partnering with public transportation giant's Arriva, DSB and Storstockholms Lokaltrafik Unwire handle payment and validation of mobile



Source: UNWIRE

### About Unwire

Unwire is a leading provider of mobile ticket solutions. They leverage mobile technologies to create business opportunities for our customers.

More information: [www.unwire.com](http://www.unwire.com), [info@unwire.com](mailto:info@unwire.com) or +45 33 93 14 34.

Source: UNWIRE

tickets worth over €70 million a year.

In Denmark a joint venture of train, bus and metro companies recently introduced next generation mobile tickets developed by Unwire. The ticket system uses mobile web technologies to create an easily recognizable, user-friendly interface on mobile phones and computers. Taking mobile tickets from SMS to a true web based experience.

### 1st class mobile tickets

Niklas Marschall, Sales Director at DSB, is convinced the new ticket system takes mobile payment to a new level. "Our mobile ticket site uses a route

search and payment system much similar to traditional websites. This means we deliver an extremely user-friendly service, with a high recognition factor. Another innovation is our simple and fast payment system by credit card.

This makes mobile tickets accessible to almost any traveler," he says.

Unwire's Mobile Ticket platform offers end-to-end ticketing administration via a web interface as well as an advanced module for managing payment flow and ticket validation. Whether SMS or more advanced mobile payment systems, Unwires platform is secure, scalable and easy to manage.

Source: UNWIRE

## Automatic passenger counters: Evolution of Sensor Technology Leads to "IRMA MATRIX"

### Speed of Light for Revolutionary Detection Principle

**IRIS-GmbH, long-term supplier of innovative Automatic Passenger Counter (APC) systems, has put insignificant development effort to offer state-of-the-art generation of APC sensors to the transit industry: this results in "IRMA Matrix".**

Revolutionizing the counting technology, the new sensor is based on the "Time of Flight (ToF)" technology. A matrix of 500 elements is integrated to capture 500 distance values in the door area. Thus, the sensor provides a three-dimensional image of the detected persons & objects. This results in the highest and invariable count accuracy achievable by automated sensing. The "IRMA Matrix" sensor system is excellent in any current technology standard:

- The speed of light is an absolute constant and in no way affected by environmental impacts, such as reflecting floor, extreme temperature, high humidity, sun/shade contrast, stationary persons in the doorway etc.
- Queuing underneath the sensor does not affect the accuracy.
- Boarding/de-boarding in tightly packed crowd or simultaneous boarding and de-boarding is easily detected.
- No minimum passenger sample required. Exact counts are provided at each stop.



Source: IRIS GmbH

• Door contact connection is no longer necessary, as the sensor observes the door open/door close activity. Due to the unequalled high accuracy of the raw count data, the "IRMA Matrix" APC system opens up new fields of applications.

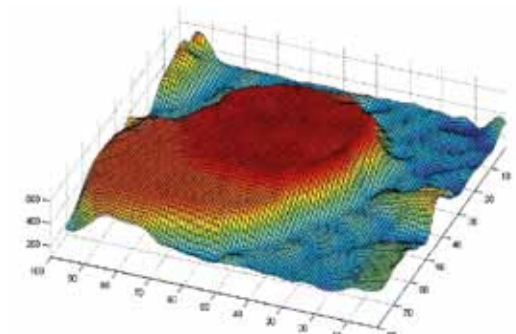
The "IRMA Matrix" APC system provides modern architecture, flat structural design, with CAN or Ethernet, direct power supply through the vehicle network, and simple mechanical integration.

"IRMA Matrix" is scheduled for introduction in early 2011. After real field tests, IRIS is now proving that the Time-of-Flight technology is superior to competitive technologies due to a number of significant features.

The new APC system will demonstrate a leading position of IRIS as a creator and manufacturer of high-end Automatic Passenger Counting systems.

More information under [sales.service@irisgmbh.de](mailto:sales.service@irisgmbh.de)

Source: IRIS GmbH



Profile of a person underneath the IRMA Matrix sensor. The different colors indicate distances to the sensor ■ short ■ long

“ For many years DILAX has attended the International UITP congress either as an exhibitor or as an active participant of the congress. For DILAX the UITP congress is a strategic event to meet relevant decision makers from transit operators or transport municipalities. It is also an invaluable source to gain new information about innovations and the latest technological tendencies. ”

## Flexibly configurable data server, internet-on-train platform and EN50155 certified train driver display



Source: Kontron

**At the UITP 2011 World Congress & Exhibition in Dubai, Kontron, the global leader of Embedded Computing Technology (ECT), will showcase its CompactPCI® -based train computing platforms OBSERVO Rugged RAID Data Server and INTERPARLO Internet-on-Train Server as well as its 10.4" Display Computer HMITR.**

The OBSERVO Rugged RAID Data Server is aimed at railroad applications, such as platform edge observation and recording in local trains for vandalism. Its high performing RAID controller supports data integrity RAID 0, 1, 5, 10. The 3U 19" CPCI rack is flexibly configurable with Kontron's rail-compliant embedded modules, ranging from CPU, storage

and Ethernet switching, through system management modules, to an EN50155-compliant plug-in power supply. The INTERPARLO Internet-on-Train Server is well suited for Passenger Infotainment, supporting wireless communication by UMTS, GPS 3G and WIFI. For streaming applications such as real-time transmission of media data for passenger information, two separate controllers provide the respective performance and mass storage. An Ethernet switch offers connections to intelligent HMIs and the train network. The EN50155-compliant train computing platforms give railroad equipment and service providers a basis ready to work on for creating modular, rugged, long-life sys-

tem designs to the latest state of the art. Developers will be able to reap the benefits of a homogeneous platform on which they can implement custom-designed train computing solutions in a much shorter time and at a lower cost, meaning faster time-to-market and less hardware design effort and expenditure. Furthermore, Kontron showcases its EN50155-compliant 10.4" Kontron Display Computer HMITR. The application-ready display computer is characterised by an extended temperature range (EN50155 T3), reduced energy consumption and powerful graphics and display technology. Designed for UIC 612-01 railway applications such as Driver Display Systems (DDS), the fanless and maintenance-free Kontron HMITR with capacitive touch display or hard keys has IP64 protection on the front side to safeguard it against dust and water. Thanks to its robust design the Kontron HMITR is well prepared for many demanding applications in the traffic and transportation industries.

Source: Kontron

# Improving the quality of the passenger experience

**The long experience of Moviken-SLE in the field of Service Management and information Systems, allied to the know-how of Moviken in the area of cartography, has enabled the development of an autonomous on-vehicle passenger information and navigation system: Navibus**



Source: Moviken-SLE

Navibus offers one or more super-wide high resolution TFT screens to the passengers on the bus or tram. It also provides audio channels for voice announcements which supplement the visual displays, with separate channels for interior and exterior announcements. In addition to the information normally transmitted to the traveller, the Navibus screens present:

- A line diagram which is inter-active and multi-scale, with a display sequencing which is related to the position of the vehicle
- A cartographic response to the principal queries of the passenger : representation of position on the line diagram, the next stops / stations, a map of the area and connections for the next stop / station, estimated time to arrive at the next stop, information about connecting services and points of interest (commercial, cultural or municipal establishments)

- An information service available to the network operator: service disruptions, events, local information, advertising, ...).

The equipment is available in a variety of configurations, so it can be installed in locations best adapted to the needs of the operator, this navigation application represents a leap forward in modernity which makes public transport the equal of the private car in the use of navigation technologies and answers a pressing need for the traveller.

The first installations of the Navibus system are taking place in the early spring of 2011, on vehicles of the BBM network in the Ile de France, with a number of other customers awaiting delivery shortly afterwards.

Source: Moviken-SLE

# Scheidt & Bachmann joins hands with Energy International, Dubai



Source: Scheidt & Bachmann

**Scheidt & Bachmann's Fare Collection Systems division has joined hands with Energy International – A Dubai based Organization. The objective of this partnership is to promote Automated Fare Collection Systems for public transport in the Middle East. The two companies met during the last UITP World Congress Exhibition in Vienna in 2009 and since then, a strategic partnership has been developed.**

The partnership has seen the two companies working together in their recent participation in a prestigious tender for Automated Fare Collection Systems in the Middle East.

Aspi Kapadia, Vice President of Energy International explains why they preferred Scheidt & Bachmann as their partner: "Scheidt & Bachmann is an almost 140 years old, 100% privately owned company that designs, develops and manufactures Automated Fare Collection Systems for public transport including AFC device housings, sub-component PCB hardware etc.

Scheidt & Bachmann also engineers and develops devices and backend

software, all together in-house. This assures immense flexibility of their products and services. Additionally, for the fact that Scheidt & Bachmann is a privately owned company, provides us additional comfort and assurance that, they will work professionally to the complete satisfaction of our esteemed Governmental Customers". Energy International is an ISO9001:2008 certified organisation having substantial presence in the Middle East for the past 27 years. They have successfully implemented several infrastructure development related projects including but not limited to, State of the Art Parking Control Systems, Automated Fare Collection Systems for public transport & integration with City-wide Interoperable Automated Fare Collection projects in the Middle East. Energy International provides their proven after-sales service, maintenance and operational support on projects implemented in the region thereby gaining confidence of their discerning customers.

Scheidt & Bachmann is a German company managed by the fifth generation of the founding family. This underlines the continuity and personal commitment of the family and the company's employees. Scheidt & Bachmann has 1,950 employees on all 5 continents, a global network that enables the company to remain in close contact with their many customers at all times.

With a commitment to development of cutting edge technology and a reputation for reliability, high quality products and proven commitments to their customers, Scheidt & Bachmann is a market leader in their 4 business segments, covering Parking and Leisure Centre Systems, Signalling Systems, Fare Collection Systems and Petrol Station Systems.

Scheidt & Bachmann is an ISO9001 certified organization which underpins its high level of quality standards. The company takes great pride in its large-scale and flexible in-house manufacturing capability which is equipped with state-of-the-art machines. With its very high production capacity Scheidt & Bachmann is able to ensure through its manufacturing autonomy that the solutions delivered maintain the company quality standards at all times.

The Fare Collection Systems (FCS) division was established in 1978. Since being formed, the FCS Division has grown to successfully provide local and regional transit solutions all over the world. Among its numerous successfully concluded projects are the system-wide modernisation and smart card implementation of the USA's oldest transit system for MBTA in Boston, Massachusetts as well as the equipping of the megacity Shanghai where FCS installed elegant Slim Line Gates, with full smart card functionality and office equipment for the Ministry of Railways.

The keys to Scheidt & Bachmann's success are their capability to provide comprehensive and customised solutions including device hardware, software and services all from one source. One of FCS's core competencies is the implementation of multi-modal and multi operator smart card schemes. Both Scheidt & Bachmann and Energy International are positive that their exclusive strategic partnership will translate into several business opportunities for Automated Fare Collection Systems for public transport in the Middle East.

Source: Scheidt & Bachmann

# Improve your service image and customer satisfaction

**Netzplan is a new graphics service provider assisting Transport Operator Clients who are seeking to improve their service image and customer satisfaction.**

Updating the static passenger information systems of a network is one of the simplest and cheapest ways to achieve a step-change in quality perception, network and service legibility and patronage growth. The quality of Network Maps, Timetables and Graphics are all fundamental to achieving these outcomes.

With "2025 = PTx2" as the Goal – Transport Operators over the World need to be doing whatever they can afford to attract more customers to their services. Information is power and an informed passenger is a happy one. We all know the uncomfortable feeling of having no idea how to use an unfamiliar public transport system or what to do when services are disrupted; keeping passengers informed and up-to-date with service changes is key to ensuring their satisfaction and sense of service reliability – even when its predictability slips.

Passenger information systems are the vital link between passengers and the

services they consume on a transport system: "Like not having a menu at a restaurant - you won't know what you're choosing if you don't know what's on offer."

Passenger information systems take two forms – static and real-time. Whilst the industry focus in recent years has been on achieving state-of-the-art real-time information systems – linking in-vehicle GPS to smart phones helping passengers to get around or keeping them up-to-date with service reliability – the more traditional means of communicating the more static components of service information may have remained somewhat neglected, but this need not be the case.

Network maps, interchange maps, precinct maps, timetable legibility and way-finding signage have all experienced improvements with the improved technological tools available to assist in their production, presentation and integration. The worldwide - examples can be found of innovation in each of these traditional areas of static passenger information presentation.

Taking stock of these improvements, and developing new styles and improved production techniques, Netzplan

has developed a new service available for Transport System Operators. With over 15 years of international industry experience – Netzplan can assist Operators with the presentation of their static service information by updating and developing custom presentation styles that suit both the individual Operator's and the Passengers' needs.

Internationally recognised Network Schematic Maps (in a variety of custom styles), intuitive and simple to use timetable layouts designed to meet the passengers' needs, clear interchange configuration maps showing passengers how to find connecting services, and integrated information and service marketing "packs" – all assist both local and visiting customers to making informed choices about the public transport services on offer. Assisting network navigation is one of the most important elements in improving passenger satisfaction and improving network efficiency.

Whilst at the UITP Mobility & City Transport Exhibition, visit them at Stand 2A415 and ask how they could assist your operation, or more information on: [netzplan.com.au](http://netzplan.com.au)

Source: Netzplan



Source: Netzplan

Extract from the new Melbourne Suburban Rail Network Schematic Map Currently under development.

## FQ supplies OEM Secure RFID controller boards for e-ticketing and ready for e-payments

**With a large experience supplying OEM hardware to system integrators and equipment manufacturers since 1984, FQ Ingenieria Electronica, SA is launching at UITP 2011 Exhibition in Dubai the new generation of Secure RFID Controller, named SID1.** Currently, the new SID1 has been approved by the ATM (Authority Transport Metropolitan) of Madrid in Spain and first units are running from December 2010 in buses.

Our customer, not Spain based, has trusted us on our technology and experience to comply with one of the hardest tests related to speed of transaction time. Indeed, the ATM speed transaction time has to grant a speed less than 0,2 seconds when reading and writing data into a mifare DESfire card with a total amount of about 600 bytes of encrypting and decrypting data between contactless reader and contactless card using SAM modules.

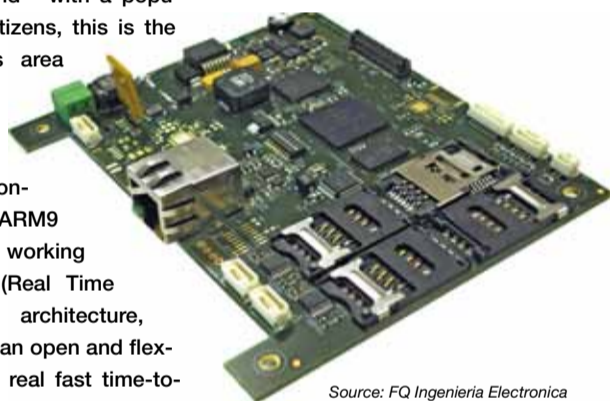
This speed will allow the ATM the implementation of a very complex fare policy by the integration with other transport modes (light train, city buses, rail, and metro) and operators of all the metropolitan area of Madrid - with a population of 6 million citizens, this is the third-most populous area in the European Union after Paris and London.

Our Secure RFID Controller is based on ARM9 microprocessor and working under open RTOS (Real Time Operating System) architecture, Linux based offering an open and flexible system giving a real fast time-to-market customer applications.

The board and its associated contactless reader are fully ISO14443A/B compliant, ISO18092 for NFC applications and will be EMV contactless ready for e-ticketing and e-payments worldwide standards. The SID1 Secure RFID Controller has a small footprint of 100x120 mm including several communication interfaces, such as: 3 X RS232, 1 x RS422/RS485, 1 x Ethernet, 4 x USB 2.0, 1 x display (LCD or TFT), 3 x LED, 1 x beeper, 1 x keypad, 1 x audio IN/OUT and 1 x micro-SD socket.

Additionally, we are offering our SID1 SDK (Software Development Kit) including all related documentation, IDE development tool, webserver containing IPK repository, application example with source code, TFTP server for future firmware updates, C/C++ development support and 3 FQ libraries for RFID (reader and contactless card), SAM's and external input/output board support.

Source: FQ Ingenieria Electronica



Source: FQ Ingenieria Electronica

## Thales's SelTrac CBTC solution boosts metro attractiveness



Source: Thales

**Governments and operators are consistent in their quest to alleviate traffic congestion by building urban rail lines and applying best-in-class technology to ensure reliability, operating efficiency and consistent first-class passenger service.**

Thales continues to advance its SelTrac® Communications-Based Train Control (CBTC) technology and integrated communications products to provide world-leading solutions to meet these objectives. Recent project successes in the Middle

East include Dubai's Red and Green Lines, Mecca's Mashair Metro and Istanbul's Kadikoy-Kartal Line. w CBTC, now in revenue on over 1,000 km of track with 30 operators around the world, was selected for the Vancouver SkyTrain in 1986 – the first fully automated operation CBTC system in the world – and it continues to provide reliable service.

During the Winter Olympics last year, "SkyTrain performed very efficiently with no significant delays to report, considering they operated at higher than peak

service levels for more than 18 hours per day," said Mike Richard, Vice-President Operations and Vehicle Maintenance, B.C. Rapid Transit Corporation. CBTC has now been in highly reliable revenue operations on Dubai's Red Line for over 16 months, and is currently being installed on Dubai's Green Line.

Istanbul's Kadikoy-Kartal Line is in its installation stage with initial revenue service planned for 2012. Mecca's new metro received much press during its inauguration for the Hajj in November. Thales applied a two-stage implementation strategy to ensure that the trains would operate in automated train protection mode to provide much needed mobility for pilgrims, with implementation of full automatic CBTC operation capability to be commissioned in the next several months.

Similar staged implementations have also been applied to five lines in Shanghai and two in Beijing. CBTC is today's preferred technology for new metro lines and the modernization of existing aged infrastructures, as operators face growing urbanization and mobility demands.

Source: Thales

## RTA Dubai Leverages Wipro's Innovative Service Delivery Model

**Ensures High Availability, Reliability and Maintainability of services for Road Transport Authority through partnership with Wipro**



Source: Wipro

**RTA IT Department's mission is to provide leading integrated IT solutions and services through the use of relevant technology, robust IT infrastructure, competent human resources, balanced outsourcing and international standards and process-**

**es enabling RTA to provide world class, customer-centric, safe and smooth transport for all.**

To fulfill the requirements, a technology partner like Wipro was required. The selection of Wipro was based on

Wipro's superior technical expertise, process orientation and knowledge of best practices in the IT domain. Given the geographic spread of RTA's operations including the need to operate in remote locations and having to run 24/7 operations, onsite support alone was not feasible and cost effective for RTA. Automation was essential to delivering high availability at all times. Taking this into account, Wipro proposed a hybrid model of service delivery - a combination of onsite support, near shore support (both out of Dubai) and 24/7 remote support (out of India). Wipro IT Business, a division of Wipro Limited (NYSE:WIT), is amongst the largest global IT services companies and is proud to be associated with RTA since June 2006.

### Key Benefits

- Consistently over achieving more than committed SLAs for all Services including Availability, Reliability and Maintainability

- Reduced risk of application and infrastructure downtime due to round-the-clock proactive monitoring from GSMC
- Timely reporting resulting in better visibility to client on overall IT operations and performance
- Automation of services without increase in manpower – reduced costs
- ITIL based service delivery resulting in efficient processes and procedures. This has helped in RTA IT Department in achieving the ISO 20000 certification.
- Customized solutions which were based on the needs of the client resulting in faster turnaround time and better C-SAT.
- ROI and lesser TCO for the client with the increased efficiency and productivity of the team.

Source: Wipro

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*Urban, eco-friendly mobility can only be achieved through intelligent, continuing development of public transport. This year's UITP World Congress gives drivers of innovation an opportunity to come together to develop solutions to this challenge – solutions ranging from attractive transport planning to vehicle emissions-reduction technologies.*

**Michael Himmen,**  
member of the board of management at HJS HJS Fahrzeugtechnik Gbh & Col

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Source: Bombardier

## PrimoveCity Easy Urban Mobility

**Imagine a city where all the vehicles are electric and give out no emissions - with no noise, no pollution but with complete flexibility.**

With PrimoveCity Bombardier is making it a reality. This groundbreaking inductive technology will shape the future of cities across the world. Convenient, efficient and flexible, it powers and charges vehicles in motion or at rest.

Available now, at a stroke, it solves the key challenges of e-mobility: range, rapid charging, convenience and flexibility. Moreover, all types of road ve-

hicles can use the same technology. PrimoveCity powers by magnetic induction through cables in the road. With easy installation it can be applied to all road types. The range of power will propel any kind of vehicle - cars, buses, trucks, taxis and trams. Because it is wireless, it is intrinsically safe as well as weatherproof and maintenance-free. PrimoveCity opens up new dimensions in public transportation.

*Range, convenience, rapid charging and flexibility: PrimoveCity solves the key challenges of e-mobility*

In 2008, Bombardier equipped a Light Rail Vehicle with inductive power transmission. Now a showcase operation has been built in Augsburg, Germany, and the first demonstration will be in Spring

of 2011. As a second application Bombardier has equipped a bus now running tests on a PrimoveCity road built in Lommel, Belgium. Testing with a car starts in summer 2011.

The application of PrimoveCity to road transportation is a natural upgrade for Bombardier, with its long experience in electric mass transit vehicles. Bombardier Transportation, a global leader in rail technology, offers the broadest portfolio in the rail industry and delivers innovative products and services that set new standards in sustainable mobility. Bombardier Transportation is headquartered in Berlin, Germany and has a presence in over 60 countries. It has an installed base of more than 100,000 vehicles worldwide.

Source: Bombardier

## Project of Century “Marmaray” composite parts of train vehicles are produced by Sazcilar

**On stand 8B050 at UITP 2011 Dubai Exhibition, SAZCILAR, leading composite parts manufacturer and first IRIS certificated company of Turkey, will be showcasing a few parts of MARMARAY.**

produce first samples in a short time (for example they produced 45 kinds of size MDF models and 70 GRP tools for one of Hyundai Rotem Project 45 days after being awarded that project.

SAZCILAR is based in Turkey. Main business sectors are Automotive, Mass transportation (Railway), Earth Moving Machine, tractor and yacht. SAZCILAR has IRIS (International Railway Industry Standard), ISO/TS 16949:2002, ISO 9001:2000, ISO 14001:2004 and Ford Q1certificates.

SAZCILAR has a very successful model and tool shop and has a capability to

Currently 80% of the production of the railway parts are exported to European countries and South Korea. Main customers for Railway and Bus industry: CAF, HYUNDAI ROTEM, HYUNDAI EUROTEM, BOMBARDIER, HEULIEZBUS (IVECO), MAN, OTOKAR, ISUZU, FAST GROUP.

Source: SAZCILAR OTOM.SAN ve TIC



Source: SAZCILAR OTOM.SAN ve TIC

## Inspiro - The new platform for metro systems

**At the UITP Mobility & City Transport Exhibition, Siemens Mobility will be presenting a mockup of the new Inspiro for the first time. This new-generation metro unit is a particularly lightweight and cost-efficient vehicle**

*Siemens Mobility will be presenting a mockup of the new Inspiro for the first time*

**in which great importance has been attached to environmentally friendly design.**

The consistent use of lightweight construction materials, modern drive technology and option of advanced

driver assistance systems or driverless operation has achieved a significant reduction in energy consumption.

The modular self-contained train concept can be implemented with variable levels of motorization in any configuration from a three-car to an eight-car train. The use of the widest possible doors and load capacity detection systems has significantly reduced dwell times, while the redesigned interior offers more space for passengers. Thanks to the design, it has been possible to eliminate technical equipment completely from the interior and offer end-to-end access through the train, offering maximum convenience. The futuristic look of the Inspiro has been achieved with the assistance of one of the most reputable design agencies.

The trains comply with the latest European fire protection and crash safety requirements according to CEN/TS45545 and prEN15227 and have a recycling quota in excess of 95 percent. These new Inspiro cars feature the consistent use of technology with high levels of safety and reliability. Low-maintenance systems have been provided in order to reduce service times and to increase the availability of the metro fleet for the operator.

Siemens won its first contract for the new Inspiro generation in Poland, in February 2011, Warsaw Metro ordered a total of 35 six-car trains for use on the 23-kilometer metro network in the Polish capital. The order includes the delivery, commissioning, testing and certification of the units. Delivery is scheduled to start in autumn 2012.

Source: Siemens

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*We have been a member of UITP for a long time. So it is quite natural for us to take part in the biennial World Congress of the association and also appear as an exhibitor. Just as it did two years ago in Vienna, our participation signals Siemens intensive commitment to urban and regional transportation worldwide. In addition, we will be presenting our solutions for road traffic, for example, our systems for parking and traffic management. But our exhibition themes will also include automatic train control systems, electrification, tram operation without overhead contact lines, and electromobility.”*

Hans-Joerg Grundmann, CEO Siemens Mobility

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# Clean city commuting: innovative emissions technologies for low-emission mobility provided by HJS



Source: HJS Fahrzeugtechnik Gbh & Co

**Short- and long-distance public transport are regarded as environment-friendly alternatives to using one's own car and they keep the growing population mobile.**

However, these means of transport also contribute to pollution of the air we breathe: buses are in constant service all around the world providing people with convenient and reliable mobility, but in the majority of cases they are powered by a diesel engine that emits particulate matter (soot particles) and nitrogen dioxide. This has negative consequences for the quality of life in our cities. This serious problem can now be solved by an innovation from the German automotive supplier HJS Emission Technology, that specialises in the development of environmental technologies: with Selective Catalytic Reduction Technology (SCRT®) onboard, pollutant emissions are measurably lower. The system tackles the emissions problem at its source by removing almost all particulate matter, nitrogen dioxide and other hazardous components from the exhaust gases.

## Suitable for OE and retrofitting

SCRT® systems are not only suitable as original equipment in new vehicles, but can also be retrofitted. Vehicles that are already fitted with a filter system can be retrofitted with an SCR unit to create

an SCRT® system. SCRT® enables both retrofitted and new buses to comply with the current, highly demanding European emissions standards for buses and trucks – Euro V and even EEV (Enhanced Environmentally Friendly Vehicle). The technology can be employed very flexibly and is suitable for buses, trucks, light commercial vehicles as well as for engines for the non-road sector, i.e. for construction machines, agricultural and forestry machinery, ships and rail vehicles.

## Reference projects across all Europe

Numerous transport companies in Germany, the Netherlands, the UK, Spain, Belgium and other European countries are already using SCRT® in order to live up to their own self-image as providers of eco-friendly mobility and to play their part towards improving air quality. It's far quicker and much less expensive to retrofit a fleet with SCRT® than it is to completely renew it. The cost of retrofitting amounts to just 5% to 6% of the price of a new vehicle. With a service life of eight to twelve years, this investment pays for itself quickly.

Visitors to this year's UITP Mobility & City Transportation Exhibition in Dubai can discover more about SCRT® and other systems from the extensive technology portfolio of HJS Emission Technology by making their way to the company's stand (Stand 3C310).

Source: HJS Fahrzeugtechnik Gbh & Co

# New contactor design successfully introduced in the global railway market

**Schaltbau GmbH launched its new CT1000 series contactor at the InnoTrans 2008. Since then the range has been expanded from 400 A to 800 A and from 1,500 V to 3,000 V. CT1000 series contactors have been successfully implemented worldwide in a variety of applications, proving the universal applicability of the new concept.**

The CT1000 series combines the advantages of the electromagnetic and permanent magnetic blow-out technology, and can be used for bidirectional DC and AC applications practically without restriction. These maintenance-free contactors switch off loads faster and more efficiently than comparable contactors, thereby offering safety and product longevity together. The features of CT1000 series contactors make them the ideal choice for a variety of applications:

- In modern inverter applications, contactors usually only switch small loads, which can be a problem for other devices. Unlike other devices the CT1000 can efficiently switch both these small loads as well as the large loads caused during a fault situation.
- The CT1000 is also ideally suited for load switching applications due to the minimum wear of the contacts.
- Customer requirements often cover more than just a standard application. Schaltbau has therefore developed a number of variants to meet this challenge. Design-in is one of the trademarks of Schaltbau.
- Due to the success of the new series, Schaltbau has begun local production in the largest railway markets such as China and Russia. This will reduce logistics and allow for the local content required in these markets.



Source: Schaltbau GmbH

Contactors in the CT1000 series can be used almost without limitation in AC and DC railway applications. For more information please contact: bierbrauer@schaltbau.de

Source: Schaltbau GmbH



Source: GROENEVELD TRANSPORT EFFICIENCY B.V.

**Groeneveld experiences a growing demand for its innovative high quality automatic greasing systems. For buses with independent front suspension with up to 10 greasing points, Groeneveld has developed the CompAlube automatic greasing system.**

The grease reservoir, pump, electronic control unit and injectors have been integrated into one compact unit. This makes the greasing system easy to install while it guarantees highest reliability. The specially designed grease cartridges can be changed simply and in a clean manner. For more complex

# Groeneveld group anticipates on clear trend in drivelines

applications, such as articulated buses with more greasing points, Groeneveld offers class-leading automatic greasing systems, such as TriPlus and the unique TWIN dual line greasing system. Practical examples show the value of automatic maintenance. Many public transport companies around the world are using Groeneveld's Oilmaster and automatic greasing systems: De Lijn in Belgium, STM in Montreal, EMT in Madrid and KMB in Hong Kong are only a few examples out of many. These customers achieve cost and time savings and experience an increase in their operational capability.

For the Roads and Transport Authority (RTA) in Dubai Groeneveld has equipped more than 500 VDL Citea buses ex-factory with the Groeneveld Oilmaster. The VDL buses are used for the Metro project, a prestigious, strategic plan to increase the use of public transport in Dubai by thirty percent. The Citeas offer transport between the various subway stations, the city itself and the suburbs.

Source: GROENEVELD TRANSPORT EFFICIENCY B.V.

# Maintenance efficiency for buses is gaining popularity

**City buses face a heavy task: on call 24 hours a day, 7 days a week, changing drivers, tight timetables and fulfilling high expectations in reliability.**

Daily maintenance – in particular checking and topping up engine oil – plays a key role in keeping the engine in condition. When done manually, it takes time and buses cue up waiting for their daily check. Groeneveld offers the solution with the Oilmaster.

Because of increased maintenance intervals and the introduction of expensive exhaust after-treatment systems of modern Euro 5 engines, the Oilmaster of Groeneveld rapidly gained popularity. This advanced oil management system ensures the engine oil is always exactly at the right level: not too low, which may lead to expensive damage of the engine,

but certainly not too high either, which may result in excessive oil consumption and damage of the exhaust after-treatment system. The Oilmaster measures the oil level in the engine according to a fixed protocol and automatically adds the correct amount of oil. This is done through an electronically controlled pump, while the amount of oil added is automatically stored in the Oilmaster's memory.

The Oilmaster reduces oil consumption and operational costs, which automatically has its environmental benefits. In addition, the service staff is offered extra comfort, as manual oil checks are no longer required. It is for good reason that well-established bus manufacturers, such as Evobus, Solaris, VDL and Volvo specify the Groeneveld Oilmaster ex-factory.

Groeneveld has an innovative product development approach to provide sustainable and customized solutions that are well fit for the future. Groeneveld is currently in the process of co-developing oil management systems for Euro 6 engines with major European bus and coach manufacturers.

Source: GROENEVELD TRANSPORT EFFICIENCY B.V.



Source: GROENEVELD TRANSPORT EFFICIENCY B.V.

# RuggedCom introduces the RX1500 modular hardened networking platform



Source: RuggedCom

**RuggedCom Inc., the leading substation networking equipment supplier to electric power companies, presents its new RX1500 family of industrial networking products. The RX1500 is an integrated, modular, secure and expandable layer-3 network switching and routing platform.**

The RX1500 features an interchangeable line-replaceable modular design, which can be configured in a variety of ways to achieve the lowest cost and footprint. Using interchangeable line modules minimizes required spares and isolates failures and replacement to LLRU level while maintaining multiple levels of redundancy.

RuggedCom RX1500 platform includes hot-swappable, redundant, universal power supplies and interface modules with no need for power conversion and conditioning, making it suitable for

universal implementation and maintenance. It functions normally at ambient temperatures of -40 C to + 85 C with no moving parts, external or internal forced ventilation.

The RX1500 exceeds electromagnetic compatibility and other environment requirements of power and rail industry standards, which makes it suitable for universal use on rolling stock and mobile fleet, on trackside, and in equipment rooms of any urban transit system. The platform is an industry leader in interoperability, reliability and performance. It provides the highest industry levels of functionality, supports the widest range of communication security and standards and is compliant with telecommunications standards, protocols, management and diagnostic features.

RuggedCom's RX1500 platform is available in a variety of sizes and form factors from rack mount to compact DIN or panel mount designs, all with interchangeable parts. All RuggedCom equipment features a standard five-year warranty, extensive worldwide support and long-term product life cycle management.

Source: RuggedCom

# Trans Alfa: developing a complete city trolleybus family

**During the last 16 years the enterprise Joint Stock Company "Trans-Alfa" has been specializing on manufacturing of vehicles – trolleybuses and buses, being nowadays one of the leaders of the commercial public transport industry in Russia and in the world.**

Our plant is producing a complete city trolleybus family: single and articulated, normal and low floor, which are in operation in many cities in Russia and abroad. During the last 2 years, there were developed large-, extra large- and medium-sized city and suburban buses.

Our enterprise gives the most important priority to the on-going improvement of the vehicle construction, implementation of innovative technologies including solutions not introduced in the world practice yet.

Our enterprise is not coincidentally known as a pioneer in the trolleybus industry. One of the main advantages of the JSC Trans-Alfa is the production of modern low-floor trolleybuses with steering on the base of IGBT-transistors and off-line operation.

Cost efficiency, reliability and security, comfort and environmental friendliness – these are our principal requirements for our products. Manufacturing capacities, technological opportunities of the enterprise, highly qualified staff – all



Source: JSC TRANS-ALFA AVTO

that allow us to manufacture up to 2000 vehicles a year.

As mission of our enterprise, we understand a highest possible meeting of requirements of customers: buyers, passengers, drivers and technical staff of operating companies.

Our buses «OLIMP» comply with the Euro-3 and Euro-4 standards, and are designed to make trips of handicapped passengers more comfortable.

Making decision to purchase a vehicle for public transportations, companies first of all pay attention to such criteria as price, warranty obligations, operating economy and technical characteristics. We evaluate ergonomics and comfort for passengers and also for trolleybus

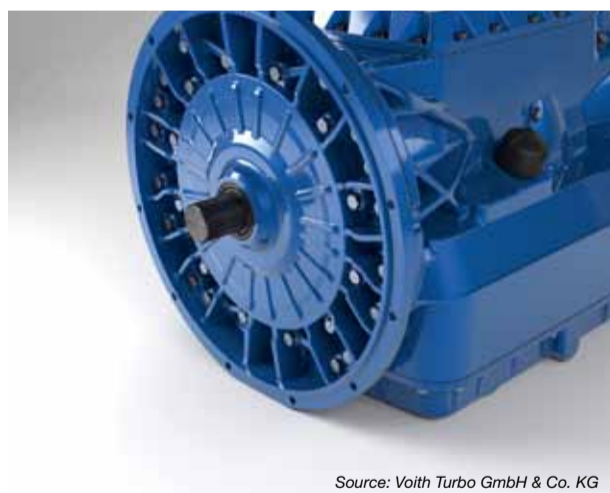
drivers. It is very important because the driver is responsible for the security of passengers and the vehicle, and also of other participants to the traffic.

The opinion of technical specialists, responsible for maintenance and repair works, plays a very important role. They estimate quality of assembly, safety of details and components, availability of components for service. The central customer is a passenger. Taking care of passengers in terms of their comfort and security is the final aim of our work.

Trans-Alfa values the opinions of our products clients. Their comments make us look for new solutions, constantly improving the trolleybus construction.

Source: JSC TRANS-ALFA AVTO

# Lower Consumption and Emissions with DIWA.6



Source: Voith Turbo GmbH & Co. KG

**With DIWA.6 Voith Turbo is continuing the success story of its automatic transmissions for citybuses. The need-based control of the auxiliary units and an intelligent start-up management enable up to 5% less consumption. Alongside these technical innovations, the newly designed housing already meets the requirements of future noise regulations.**

With the Euro 6 Norm, which will become effective in 2014, exhaust emissions, too, are going to be subject to much stricter regulations. The DIWA.6 transmission has been designed to meet the ensuring requirements on drivelines already today. An important characteristic of DIWA.6 is the need-

based control of the auxiliary units. Whatever the operating condition, the oil pump will, for example, always provide just the output that is actually needed. The overall transmission efficiency is thus significantly increased.

For the first time, DIWA.6 combines the automatic shift into neutral (ANS) with an intelligent start-up management: To ensure that the transmission stays in ANS for as long as possible, new sensors are installed, which detect any roll-back movements during starting. The transmission remains in ANS mode until the vehicle starts – without the danger of the engine having to work against the still active brake and thus wasting fuel. For engines with higher torques there is

an additional converter design for lower engine speeds. A newly configured torsional vibration damper also ensures that the resonances from the driveline are shifted to the lower speed range. This again leads to lower gear-shifting points. As a result, the engine speeds are also lower, and so are consumption and CO2 emissions.

Targeted ribbing of the transmission housing adds extra stiffness, which reduces vibrations and thus noise emissions. In combination with a quieter oil pump, passenger comfort is improved and future, stricter noise regulations are being taken into account.

Source: Voith Turbo GmbH & Co. KG

# Traveling quickly through Dubai on the Red Line

**The approximately 85-meter-long metro trains of the "Red Line" move through Dubai driverlessly and reliably on both overground and underground routes, at speeds of 90 kilometers per hour.** Covering a length of 52.1 kilometers, the "Red Line" is the first of a total of four planned lines of Metro Dubai. Sections of it have been in service since 2009. As of October 2010, 26 of 29 stations are now fully operational.

During the rush hour, the trains travel at 90-second intervals with up to 600 passengers on board. In August 2011, parts of the "Green Line" will also be opened. By then, the average number of passengers - currently 110 000 - is expected to rise considerably.

The vehicles of Dubai Metro made by Kinki Shario are all connected by Scharfenberg type 10 One4 couplers from Voith Turbo. By 2010, Voith had fitted 87 vehicles for Metro Dubai with this coupler technology. Apart from their shock absorbing elements, the couplers also provide impact protection for the vehicles. The One4 couplers have proven themselves excellently in day-to-day operation in Dubai. And this operation

means: extreme heat, sand storms and high salt contents in the air. With its subsidiary in Dubai, Voith also offers after sales service. End customers and OEMs receive fast and competent advice and on-site assistance at any time.

Voith Turbo, the specialist for hydrodynamic drive, coupling and braking systems for road, rail and industrial applications, as well as for ship propulsion systems, is a Group Division of Voith GmbH.

Voith sets standards in the markets energy, oil & gas, paper, raw materials and transportation & automotive. Founded in 1867, Voith employs almost 40,000 people, generates € 5.2 billion in sales, operates in about 50 countries around the world and is today one of the biggest family-owned companies in Europe.

Source: Voith Turbo GmbH & Co. KG



Source: VDL

## Solaris remains fully committed to developing hybrid technologies and new hybrids

**Solaris will show the innovative Solaris Urbino city bus at the 59th UITP World Congress and Exhibition.**

The Solaris Urbino offer ranges from midibuses – extremely manoeuvrable at just 8.6 metres length – to articulated buses ideally suited to carrying large numbers of passengers. Flexible customisation means that each Solaris Urbino is built to its customer's individual specification.

With a choice of clean and green power trains, the Solaris Urbino is the eco-friendly bus for urban transport. Its choice of diesel-electric hybrid solutions is unparalleled, with both parallel and serial hybrids on offer. Energy is

stored in batteries or supercaps, reducing fuel consumption by up to 30% and emissions by as much as 78%. Solaris remains fully committed to developing hybrid technologies and new hybrids offering even greater efficiency are set to enter service in 2011.

Quiet engines running on compressed natural gas are another innovative cornerstone of the Solaris Urbino range. When fuelled with second-generation biogas, these are a carbon-neutral alternative to conventional technology. Based on the Solaris Urbino, the Solaris Trollino trolleybus is at the heart of sustainable electric mobility. Silent and emission-free at the point of operation,

it enhances urban quality of life without missing any of the reliability and economic advantages customers have come to expect of the Solaris Urbino.

The values of Solaris Urbino buses are appreciated by operators throughout Europe and beyond. One of the largest fleets of Solaris Urbino city buses is found in Dubai, host to the 59th UITP World Congress and Exhibition, where 225 are in service. They are fitted with powerful air-conditioning and state-of-the-art amenities, offering highest comfort and safety to passengers every day.

Source: SOLARIS BUS & COACH S.A.



Source: SOLARIS BUS & COACH S.A.

## Success for VDL Bus & Coach in Dubai

**In 2008, the Dubai based company RTA (Roads and Transport Authority) has placed an order for 518 Citea Low Floor city buses with VDL Bus & Coach.**

The highly modern, low-energy and lightweight Citea Low Floor city bus, which has a length of 12 metres, is extremely suitable for the busy public transport system of Dubai. Thanks to the low floor, the bus is also easily accessible for disabled passengers. The ultramodern buses have three passenger doors (1+2+2 door arrangement) which can be operated by the passengers. Because of the climate in Dubai, the buses are equipped with special tropical air-conditioning. At the end of 2010 VDL Bus & Coach delivered 400 Citeas. The rest of the order will be delivered in 2011.

**Roads and Transport Authority (RTA)** The Citeas were bought by RTA (Roads and Transport Authority). RTA is responsible for the planning and realisation of public transport in the Emirate of Dubai. RTA aims to provide an effective and

sustainable public transport system that matches the ambitions of Dubai as a metropolis. RTA is responsible for the infrastructure in Dubai and surrounding area and uses buses, metro and marine transport to provide an efficient world-class transport system.

**Swaidan Trading/Al Naboodah**

For the delivery and maintenance activities of the Citeas, VDL Bus & Coach is assisted by partner Swaidan Trading. Besides buses, Swaidan Trading also imports cars, pick-up trucks, forklift trucks, cranes, tyres and products for the agricultural industry. This company is part of the Dubai based Al Naboodah Group. Al Naboodah was founded in 1958 and has since then expanded through takeovers and various partnerships. Today, Al Naboodah employs over 45,000 people. The company is active in construction, manufacturing, trading and investments. With its activities, it wishes to make a significant contribution to the future of Dubai.

Source: VDL

*At the end of 2010 VDL Bus & Coach delivered 400 Citeas*

## VDL Citea is 'Bus of the Year 2011'

**With the Citea Low Floor public transport bus, VDL Bus & Coach has won the prestigious international 'Bus of the Year 2011' award. During the 'Bus Euro Test 2010' in the Romanian capital Bucharest, the city bus from the Netherlands scored better than its strong international rivals.**

**The members of the jury paid particular attention to the practical usability, the finishing, the concept and the efficiency of the participating vehicles.**

**Bus of the Year 2011**

The jury of 'Bus of the Year 2011' con-

sists of trade journalists from 19 European countries. They see the Citea above all as a well balanced, harmonious bus for city transport that performs admirably on all aspects. The bus provides the passengers with every comfort, and the driving characteristics are of high quality.

The VDL Citea is an innovative low-floor city bus. The lightweight construction offers excellent carrying capacity, saves on fuel and reduces emissions.

The repair and maintenance-friendly construction of this low-floor bus reduc-

es workshop times. The impressive international sales figures confirm the advanced concept of the VDL Citea city bus.

Rémi Henkemans, managing director of VDL Bus & Coach, is proud of the product and his team: "Being awarded the 'Bus of the Year 2011' title shows that we and our products are among the European elite. This award demonstrates to international passenger transport firms our know-how and expertise in the field of city buses."

Source: VDL



Source: VDL

## SECURITAS makes the difference!



Source: SECURITAS

### Public Transport Competence Center to facilitate network, co-operations and exchange

**TAS uses segmentation to pool the know-how and make best use of global expertise. Segmentation allows specialization and focusing on customer's needs to offer special solutions and to walk the extra mile for our customer's benefit.**

The company's segmentation policy allows freedom of choice. The SECURITAS Public Transport Segment has installed a Competence Centre at European level to exchange our experiences, to coordinate and develop new solutions. This global network of know-how is an interface for all European public

transport customers and managers who are in charge of those contracts allows to face similar and very special challenges but can also rely in the same way on the SECURITAS organization.

The Competence Centre has set up the Public Transport Forum, where SECURITAS managers from all interested countries meet twice a year to exchange experience, develop new ideas and solutions. Also our customers get linked into this international network and SECURITAS solve individual problems together with them.

The SECURITAS Competence Centre Public Transport aims to stimulate a continuous dialogue with our customers and other interested operators. Sharing our global expertise may help Public Transport operators to think about new approaches. Better understanding the needs of the Public Transport sector enables us to develop more efficient solutions.

Source: SECURITAS

## How to improve fire protection: FOGTEC's innovative solutions



Source: FOGTEC Brandschutz GmbH &amp; Co.KG

**In present times where safety is getting more and more important, FOGTEC Rail Systems - a business unit of FOGTEC Fire Protection - as the world market leader for active fire protection solutions in rolling stock is developing its products according to recent needs. This means to improve fire safety products in a cost effective and environment friendly way as well as to deliver complete fire protection solutions (incl. fire safety concepts).**

As FOGTEC is specialized in water mist systems which use plain water, an environmental friendly and also extremely effective fire fighting solution is guaranteed. But not only fire fighting is important. Also detecting fires and forwarding appropriate information to affected persons is essential, especially in railway vehicles.

FOGTEC therefore developed new products and also new concepts regarding fire protection in railway vehicles. For example fire fighting systems installed in Essen's new light railway vehicles (which are tailor-made plug and play modules) save costs in refurbishing complete underground stations throughout the city.

By implementing FOGTEC's systems directly into the vehicles the fire risk could be immensely lowered. Such fire safety concepts are very important by considering fire safety in complete. Especially by looking at compensation aspects.

Compensation is getting very important in these days, even by looking at the recent European Standards.

Not only looking at the concepts, but also looking at the products there are new inventions, especially in detection technology for railway vehicles. For example gas monitoring detectors. These detectors can be used to measure different gases which will be produced in case of a starting fire or smouldering combustion. Typical gases will be produced even by very low temperatures. So such detectors can catch a starting fire or smouldering combustion before usual smoke or heat detectors can detect fires. FOGTEC's gas detectors consist of IP 64 class and therefore can be used in the most unlikely positions. Even completely polluted on the outside combustion gases can be detected. This detection method shows new opportunities for fire detection, especially before a fire is started.

Source: FOGTEC Brandschutz GmbH &amp; Co.KG

## Firetrace® Fire Protection chosen for 1500 Polish buses



Source: Firetrace International

**Firetrace International has secured a number of major orders for the protection of bus engine compartments in Poland that have resulted in 1500 of its Firetrace® automatic fire detection and suppression system being supplied.**

The Firetrace systems are being installed by Warsaw-based Auto Consulting, the global dealer for Jelcz buses, into a range of buses manufactured by Jelcz Motors SA, Solaris Bus & Coach SA and MAN. The majority of the systems are being installed in the 12-metre Solaris Urbino 12 and the 18-metre articulated Solaris Urbino 18 buses. The business was won in the face of stiff international competition and, according to Auto Consulting's Rafal Misztalski, the decision was influenced by the fact that Firetrace is already being used to

protect over 10,000 vehicles.

Firetrace provides reliable, around-the-clock, unsupervised protection that requires neither electricity nor external power and comprises an extinguishing agent cylinder attached to specially developed leak-resistant polymer tubing. This proprietary Firetrace Detection Tubing is a linear pneumatic heat and flame detector that was specially developed to deliver the desired temperature-sensitive reaction in even the harshest of environments. Immediately a fire is detected the tubing ruptures, automatically triggering the release of the ABC powder suppression agent, extinguishing the fire precisely where it starts and before it has had time to escalate or spread.

Firetrace has more than 150,000 systems installed world-wide offering protection in military vehicles, fume hoods, wind turbines, CNC machines, and server room applications. Firetrace is the only UL Underwriters Laboratories] listed, FM [Factory Mutual] approved and CE [Conformité Européene or European Conformity] marked tube-operated system in the world that is tested as an automatic fire detection and suppression system. For more information on the many uses of the Firetrace micro-environment automatic fire protection systems visit us at booth 4A112 or our website at [www.firetrace.com](http://www.firetrace.com)

Source: Firetrace International

## An intelligent interchange combines more than tracks, stairs and platforms

### Yellow Design Foundation develops the UIC toolkit for the design of intelligent interchanges

**Horrible traffic jams occur 24/7 in many cities. Loss in time, manpower and money can be astronomical. Not counting damage to the environment and public health caused by the CO<sup>2</sup> emissions.**

It is generally understood today, that even if the car industry succeeds in offering cars with efficient, safe, adaptable and low CO<sub>2</sub> emission, we must push for alternative mobility solutions. However, relying exclusively on solutions the car industry offers means accepting an economic asphyxiation of our cities. So it is fundamental to change the paradigm of mobility.

Public transport offers one of the best alternatives to the congestion of cities. For optimal performance, public transport needs to be interlinked by efficient intermodal hubs or interchanges. Interchanges are a city within the city, combining different modes of public and private transport. With the design, programme and development meeting user expectations and the highest intermodal and international standards.

To double the use of public transport, an "intelligent interchange" needs to combine efficient infrastructural solutions with passenger-friendly spatial solutions

in terms of safety and security, passenger information, retail, entertainment, maintenance and waste management, while 'behind the scenes' governance, synergies and cooperation between the different operators define perception in the intermodal hub.

Yellow Design Foundation is aware that often seemingly opposing interests are at stake in an interchange. This includes passenger safety, luggage check & controls, security and safety of the premises, passenger comfort, shopping areas, waiting areas, smooth passenger flows, sustainable energy consumption, waste management are all essential concerns of operators and their authorities.

In 2010, Yellow Design Foundation began in cooperation with UIC developing a toolkit for the renovation and/or design of an interchange. They visited several major interchanges in Europe (Madrid Puerta de Atocha, Berlin Hauptbahnhof, Milano Centrale and Paris Montparnasse). They are currently extending research to Asia including New Delhi, Mumbai, Beijing, Shanghai and Seoul. It is their aim to provide a toolkit which will support the doubling of public transport.

Source: FONTANA IDENTITY AND DESIGN



# STRADA

The Road to Hire Success • La route vers le succès

## Hiring a bus operator? How do you choose the best from a crowd?

**The best mobility solutions require more than new vehicles or well planned routes; it's the people who deliver the service that make the difference. The best employees can pacify anger and turn a bad customer experience into a positive outcome. In 2006 the Canadian industry predicted a retirement of 10,000 operators by 2012 and ridership growth on the horizon.**

A reliable solution was needed to fill those jobs. A solution that not only revealed technical skills, but a personality fit that would highlight candidates who were suited to the unique demands of bus driving: traffic management, task repetition, unruly passengers, schedule stress and so on. A consortium of transit systems joined forces to create a recruitment toolkit:

STRADA – The road to hire success. Their research showed that transit systems across North America had fragmented approaches to recruitment. All of the systems were challenged by:

- Candidate measurement tools that did not address all the required competencies
- Generational change in candidates with baby boomers retiring and young people with a different set of values
- A growing economy that continues to create jobs causing the quantity and quality of applicants to drop
- The pool of applicants becoming more culturally diverse and being inadvertently “screened out” by traditional recruitment practices

Just one year after implementation, systems are reporting significant savings in

their recruitment and training budgets. Edmonton Transit has reported \$36,000 saved in the first 6 months as the drop-out/failure rate during new hire training has reduced from 9% to 5%. York Region Transit interviewed all candidates tested, even those that scored poorly on the test. Of 300 interviews, the recruitment team found that they agreed with the results of the psychometric testing and recommendations in 98% of cases.

Using STRADA is like gazing into a crystal ball for a glimpse of a candidate's real personality. If you'd like to have a look, contact Nancy Ortenburg at the Canadian Urban Transit Association, ortenburg@cutaact.ca

Source: CUTA



Source: GIE Objectif transport public GART-UTP

## The European Mobility Exhibition: improving tomorrow's transport through innovation

**From June 5-7 2012, Transports Publics 2012, the European Mobility Exhibition in Paris, organised by GIE Objectif transport public GART-UTP, will be bringing together professionals from across Europe and the world who work in urban, interurban, and regional transport: organising authorities, operators, industrial players, manufacturers, sub-contractors and others.**

This not-to-be-missed biennial exhibition gathers key players from rail, bus, coach and alternative transport, as well as from related industries. It offers the 250 exhibitors an opportunity to present and promote the latest technologies and innovations to some 10,000 international professional visitors and 250 journalists.

Transports Publics 2012 is pursuing the aim of promoting public transport and sustainable travel methods by encouraging delegates to share their experiences and best practices throughout Europe. During the three-day event, experts from across the continent will be sharing their strategic and political outlook on the mobility of the future, with a programme focusing on current issues.

The European Mobility Exhibition also brings together the latest innovations: the equipment, techniques, and management being implemented across Europe to cater for the public's expecta-

tions regarding transport – expectations which are ever-more demanding and personalised. The challenge is to respond to demand in a variety of ways: innovating in terms of multimodal solutions and promoting complementary offerings, geared to current lifestyles and the requirements of sustainable development. Innovations to serve passengers better.

A wide range of innovations will be featured at the Exhibition: ‘clean’ technologies (enabling the implementation of transport which is increasingly environmentally-friendly, quieter and less polluting); solutions for developing intermodality (mobility centres, real-time passenger information, all-mode travel cards, ticketing over the internet or by mobile phone, optimising changes during journeys, parking and park-and-rides, etc); and complimentary transport solutions (car-sharing, car-pooling, self-service bikes, boat-buses, and so on).

The Exhibition's Public Transport and Innovation Awards and the Innovation and Research Track highlight the very best advances in the sector featured at the event.

Source: GIE Objectif transport public GART-UTP

## The Swedish Doubling Project

*How to create a new service culture?*



Source: Swedish Public Transport Association

**The Swedish Doubling Project is a partner co-operation conducted by the Swedish Public Transport Association, The Swedish Bus and Coach Federation, The Swedish Taxi Association, The Association of Swedish Train Operating Companies, the Swedish Association of Local Authorities and Regions and the Swedish Transport Administration with a long-term goal of doubling the market share held by public transport.**

“Public Transport is a natural part of travel in a sustainable society.” This is our vision, says Charlotte Wäreborn Schultz, managing director of The Swedish Public Transport Association. In 2009 the sector presented a report entitled “Business Model for Doubled

Public Transport” as basic input for a discussion on how public transport should be developed in order to be able to double the market share. This report was followed in 2010 by “The Contract process – from plan to contract to doubled travel by public transport”.

The purpose of “The Contract process” is to provide proposals for the way in which the sector, with the help of developed contract forms, should work towards achieving the doubling goal. The report is a tool for purchasers, transport companies and local authorities. “There needs to be a shift in our sector from a production culture to a service culture”, says Charlotte Wäreborn Schultz.

A number of activities have been arranged within the sub-project “The Knowledge Lift”, for example a management course for people in leading positions. In 2009 and 2010 seven “Think Tanks” were organised for over 1300 key individuals within the sector with the aim of initiating a change movement all over the country. Learn more about their Doubling project and best practices from different towns and regions in Sweden on April 11 in session 3 and on Expo Forum 2. Please feel welcome to visit our stand at 2C410.

Source: Swedish Public Transport Association



*It is very important to think “outside the box” and look around for new alternatives and best practice. The UITP Congresses are a perfect opportunity for this. Furthermore; they fill an important role creating relationships across the borders and facilitating networking.*

**Charlotte Wäreborn Schultz,  
Managing Director,  
Swedish Public Transport  
Association**



# SuperBus

**Carefree and comfortable travel, customized according to your needs. You can get in the vehicle wherever and whenever you need. It will take you to your destination without any changeovers. During the journey, you can get on with your work, or sit back and enjoy the speed**

Updating the static passenger information systems of a network is one of the simplest and cheapest ways to achieve a step-change in quality perception, network and service legibility and patronage growth. The quality of Network Maps, Timetables and Graphics are all fundamental to achieving these outcomes.

This is not a dream, but a concept that formed the starting point for the development of Superbus as an innovative alternative for today's personal mobility.

Superbus is a new concept for sustainable mobility, which consists of a new vehicle, new type of dedicated infrastructure and new logistics. For this new concept, all of the intelligence and innovation is put into the vehicle, whereas the dedicated infrastructure, where the Superbus runs at 250 km/h, is made of relatively cheap concrete roads.

Superbus is 15 meters long and provides seating for 23 passengers. In order to improve comfort and to allow individuality, it has 8 doors per side.

Superbus does not have a fixed schedule and the logistics allow for flexibility in high volume transport on demand, via a central routing optimization system. Thus the vehicle transports passengers from target to destination without the need for changeovers.

The design of Superbus has been developed around some key themes. Superbus is safe due to obstacle detection systems (through radar equipment and a fast responding electronic guidance system), high maneuverability and formidable breaking power.

Superbus is designed to be flexible regarding different travel needs. The two different interior cabins are designed for people travelling alone or in groups. Superbus is also flexible due to the routing, since there is no fixed route for Superbus and the routes are customized based on the preferred starts and destinations of the passengers. Since it also runs on standard roads, it can fit seamlessly into the existing infrastructure.

Superbus is sustainable. It is an electrically powered vehicle which uses rechargeable batteries. Because it is lightweight and because of its highly streamlined construction, Superbus has low energy consumption.

Beside all this, Superbus is designed to provide a sensational travel experience. The level of comfort should be comparable to travelling with a luxurious sedan. This sensational experience will be realized through high speed, ergonomic interior design and personal multimedia equipment for each individual passenger.

Superbus is developed in the Netherlands, but it can be regarded as a global investment since the Netherlands will subsequently be able to market it worldwide.

Source: SuperBus



Source: SuperBus

TECHNICAL SPECIFICATIONS	
Power train	Electric motors powered by lithium polymer battery pack and regenerative braking
Power output	300 kW, peak at 600 kW for 1 minute
Driving range	210 km
Acceleration	0-100 km/h 0.1g in comfort mode
Braking	250-0 km/h in less than 200m
Cruising speed	250 km/h (155 mph)
Length	15,000 mm (49.21 ft)
Width	2,550 mm (8.20 ft)
Height	1,650 mm (5.41 ft)
Weight	9,500 kg fully loaded
Weight distribution	34/66
Torsional stiffness	30000 Nm/deg
Suspension	Air springs and frequency selective dampers system with lifting subframe in aluminum
Ride height range	330 mm (70mm to 400mm)
Chassis frame	Carbon fiber
Bodywork	IXIS Thermoplastic reinforced fiberglass
Glazing	Lexan Polycarbonate
Driving mode	Driver assisted controlled on existing roads, autopilot on Supertrack
Equipped with	Seat belts, airbags, TV, internet, air-conditioning, heating, etc
Provided with	Navigation system, obstacle detection, communication system, fail safe system and control system



**Empower your visibility in 2013!**

**Secure your stand for the 60<sup>th</sup> UITP World Congress & Exhibition 26-30 May 2013, Geneva, Switzerland**  
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Register now for the conference or reserve your booth in the exhibition!



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## IT Solutions for Public Transport

Karlsruhe Trade Fair Center  
 15 – 17 February 2012  
 Germany

**The Conference**

Solutions for global developments and strategic decisions

**The Exhibition**

Products and services for everyday challenges and operational requirements



"Compared to the 2008 event, the visitors are of an even higher caliber. This is the best meeting place in all of Europe for decision-makers in the IT sector of public transportation, which is why we are here. We welcome the move to the Karlsruhe Trade Fair Center, which will allow the exhibition to expand."

Terry Bills,  
 Transportation Industry Manager,  
 ESRI, Redlands, USA



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