SOLUTIONS | ERA

NEWSLETTER
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Fima

For those who follow the trends in intelligent engineering solutions

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News stream

- **RAIN-2, a large-scale broadband internet development project** which features contribution from Fima, continues in Lithuania. Company specialists have by now installed broadband connection network equipment in over 1,000 sites across Lithuania. US partner Extreme Networks' highest-reliability network equipment is used in the project.

- In Latvia, Fima has signed an agreement for the supply of equipment for the external perimeter security systems of **Riga International Airport**. Modern security solutions will ensure 24/7 surveillance of the airport territory and timely identification of unauthorised persons or objects.

- Fima has concluded an agreement with Kauno Tiltai AB on the construction of the **Vilnius Railway Bypass.** Along a 25-km section, company specialists will reconstruct traffic control systems and other engineering systems on the first track and install corresponding systems on the newly built second track; other engineering solutions will also be installed and the station's signalling equipment will be upgraded. This will ensure an even higher permeability on railway transport lines and cargo train communication at speeds of up to 80 km/h.

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RESULTS

Fima Sets **Record Revenue** for 2011

Intelligent engineering solutions company Fima announced record-high revenue for 2011: in Lithuania the company achieved revenue of EUR 47 million, an increase of 59%, year-over-year. Respectively, Fima's revenue in other markets rose almost fivefold to EUR 4 million. The company also expanded its market coverage by entering into the Polish market. The posted financial results are the highest since the company started its activity two decades ago.

> *"In 2012, Fima is set to continue expansion across the Baltic region.*

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News stream

- In Latvia, Fima continues the successful implementation of the **second track engineering systems installation at the Skrīveri–Krustpils railway section**. Currently, the company is implementing works of underground cabling for engineering system along 20-km section. This year, the network of newly-built cables is expected to reach a total of 200-km.
- This year, Fima's subsidiary in Belarus, ООО Фима БР, received recognition from the global high-resolution video system leader **Mobotix. The Project of the Year award** was granted for the modernisation of IP-based video surveillance systems at filling stations and oil bases of British Petroleum-controlled TNK BP operating in the territory of Belarus.
- In Latvia, Fima is embarking on co-operation with the **Riga Technical University student organisation BEST-RIGA**. Together with the university, the organisation helps students enrolled in technical studies to expand their vocational and social competencies as well as strengthen their skills. This year, Fima is the sponsor of the student summer camp Step by Step: How to Be the Best of the Best.

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Last year, the company's focus was essentially placed on solutions for the transport sector in the Lithuanian market and as part of the effort to consolidate its experience in the implementation of contract construction projects, the company established the Department of Construction Management. In 2011, the team of Fima welcomed 50 new specialists who will contribute to the company's efforts to meet market demands in the implementation of large-scale complex projects.

The company's has also reported successful operations on other markets. In **Latvia**, the company embarked on major projects including the modernisation of the national railway and the installation of the data centre for the Latvian Radio and Television Centre. Due to these factors the revenue in the Latvian market surged almost fivefold and the team of specialists employed in the country went up to 50.

In **Belarus**, economic decline and currency devaluation notwithstanding, the company reported revenue growth of 1.5 times. This year, economy is already showing signs of recovery, signalling a fresh start in new projects.

> *"The posted financial results are the highest since Fima started its activity two decades ago."*

In accordance with its long-term expansion plans, Fima stepped into the neighbouring **Polish market** with the establishment of a subsidiary, **Fima Polska**. Activity in this large and promising market is expected to yield revenue this year, as the majority of companies present in the sector tend to operate in a rather discrete area as compared to the market newcomer, which stands out with a full range of various engineering solutions offered.

In 2012, Fima intends to carry on boosting its sales across all markets. In Lithuania, the company will maintain an active presence in transport and energy infrastructure modernisation projects. In Latvia, the company plans to successfully continue the installation of engineering systems on the Latvian railway section from Skrīveri to Krustpils, a project valued at EUR 17 million. Finally, in Belarus and Poland, the company will proceed strengthening its positions by winning and implementing security, data centre infrastructure installation and other engineering projects.

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NEW PROJECT

Fima to install **modular data centre** for the Institute of Cardiology in Warsaw

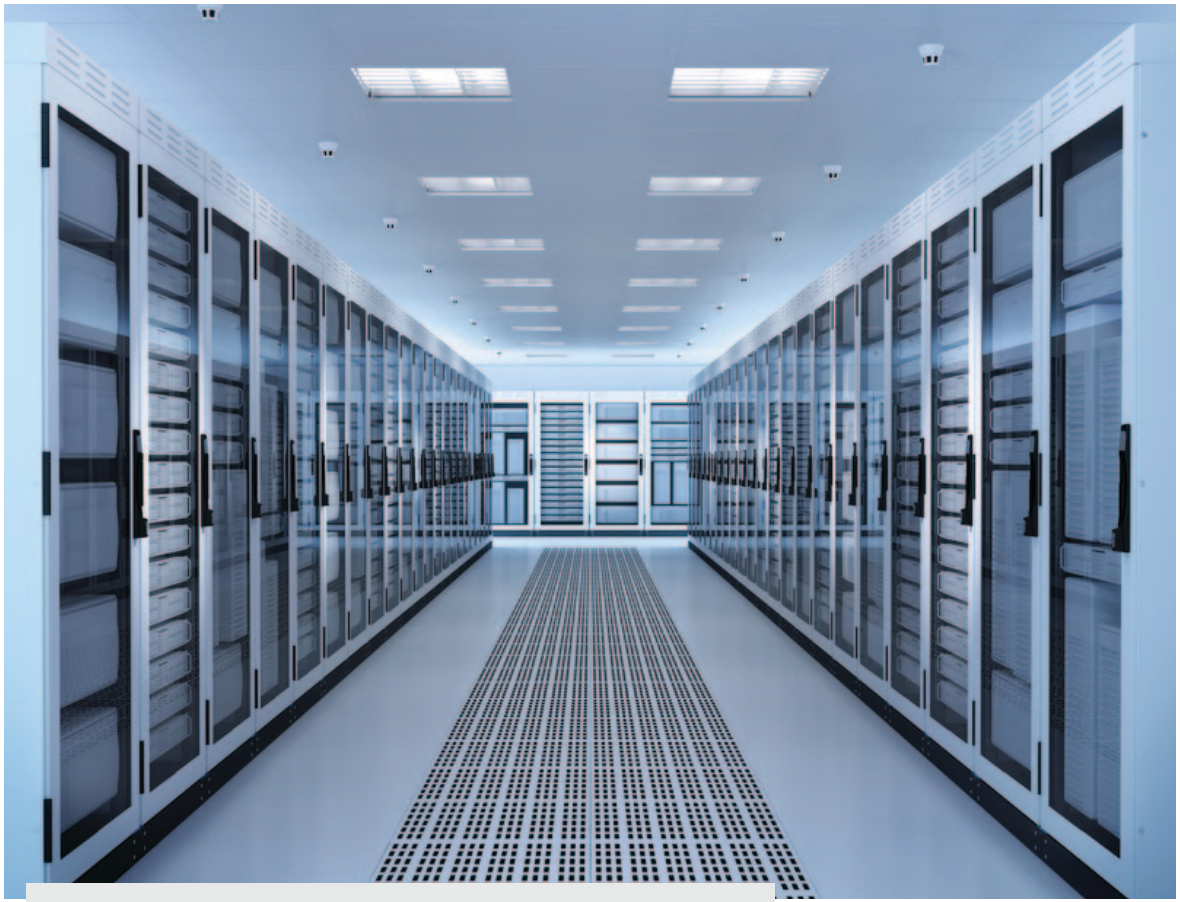
Having just recently founded its subsidiary company in Poland, engineering solutions company Fima is embarking on the implementation of a new project in the country: the company's experts will install a **data centre for the Warsaw Institute of Cardiology**. According to **Fima Polska** Director Robert Zdunek, after the project is completed in autumn 2012, the institute will have access to a data centre, the installation of which is based on next generation equipment and the most efficient engineering solutions.

According to the head of Fima Polska, Robert Zdunek, the installation of a modular data centre at the Institute of Cardiology in Warsaw will allow for a simple and fast expansion of the data center in the future.

Reliability is the key factor

The Warsaw Institute of Cardiology provides 24/7 emergency help to the residents of the city and the neighbouring region. The hospital offers a wide variety of procedures, from interventional treatment of cardiac arrhythmias to heart transplantation surgeries. For this reason it is vital that the institute has a reliable data centre.

"Lately, the data centre market has made significant advances. Cutting-edge engineering solutions ensure uninterrupted system operation, simple maintenance, system control and expansion as well as high energy efficiency. This is exactly the solution that we have offered the Warsaw Institute of Cardiology since, due to the peculiar nature of its activity, the reliability of the data centre is a key requirement," Mr Zdunek comments.



> *"In Poland, companies tend to operate in a rather discrete area of engineering solutions, while clients benefit far more from having a single project contractor offer all the required solutions and services.*

Modular and scalable solution for simple expansion

At the institute, Fima Polska specialists will install a scalable data centre solution. Mr Zdunek notes that such a construction offers companies the possibility of gradual investment and simple expansion of the data centre, taking into consideration growing IT demands as well as helping to save maintenance costs, as equipment is used with respect to the needs at a given time.

As part of the project, all the relevant data centre control, maintenance and security infrastructure, including server cooling, fire extinction, and video surveillance, will be installed. Data centre infrastructure management will be ensured by StructureWare, a system developed by the partner APC by Schneider Electric. The system will offer real-time monitoring of the

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data centre infrastructure's status, automatic control of supporting systems, assistance in planning and management of any modifications, and energy consumption monitoring and optimisation.

Polish market deficient in companies offering complex solutions

Although a number of engineering solutions companies are present in the Polish market, Fima Polska has the advantage of providing a wide range of engineering solutions and a variety of services. "In Poland, companies tend to operate in a rather discrete area of engineering solutions. We can offer the full range of engineering infrastructure solutions, and perform system design, installation and technical maintenance work. Clients benefit from having one contractor implementing and supervising the entire process from its commencement until completion," Mr Zdunek says.

In his words, the Polish data centre infrastructure installation market is especially promising and displays around 10% annual growth. "Today, the Polish capital city alone has more than 20,000 square metres of commercial area and the data centre market is still in its initial stages of development. Therefore, in the future we are resolved to get actively involved in data centre design and installation tenders," Mr Zdunek comments.

PARTNER NEWS

Fima offers **greater speed and precision** with baggage screening

Fima is now supplying the latest generation of automatic airport baggage screening technology from its partner, **Morpho**, the global leader in security systems. These cutting-edge solutions increase speed and efficiency when screening large amounts of baggage, guaranteeing better security for airports and passengers.t

> *EDS system can screen 1,080 items of luggage each hour.*

Morpho's EDS (Explosive Detection System) is already in use at many international airports. When it is integrated with the airport's unified baggage management system, EDS provides more precise detection of explosives, narcotics, weapons and other prohibited items.

EDS also speeds up the baggage screening process and can screen as many as 1,080 items of luggage each hour – a huge increase over older systems. When prohibited items are detected, EDS generates automatic reports allowing the system to run without a full-time operator.

XRD (X-Ray Diffraction) explosives detection system offers an even higher level of security. Used for additional screening of baggage that has been identified as suspicious by EDS, XRD can analyse liquids, identify substances according to molecular structure and distinguish explosives and narcotics from non-hazardous substances. When it is integrated with the airport's baggage screening system it works automatically without the need for full-time operator.

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SEB bank experts:
efficient information security relies on integrated approach and public education

Every day, residents and companies not only enjoy the benefits provided by the internet, computers and smart devices, but are also exposed to the risk of data theft. Although there are no official statistics, reportedly, cybercrimes were the cause of USD 400 billion of losses suffered by ordinary users and businesses in 2011 . **Audrius Šapola, the head of the Prevention Department at the SEB (Lithuania) bank**, says that information security is a constant headache to every organisation and individual. “Sometimes complex cyber-attacks are the cause of the problem, but more often people simply lose vigilance and neglect the basic security measures,” says the bank’s expert. We have taken a closer look at how the banking sector is dealing with the issue and the precautionary measures that experts propose employing.

> *“Physical security measures must be integrated with software solutions based on a unified security policy employed by the company.*

Audrius Šapola, the head of the Prevention Department of the SEB (Lithuania) bank: Lithuania is a small country, thus the scale and amount of cybercrimes is significantly lower than in Great Britain or the United States. Nonetheless, this should not be the reference point when a private company or a state institution makes a decision on investing in data security.

Banks control immense flows of extremely sensitive personal and corporate financial data. What are the peculiarities of information security in the banking sector nowadays?

You have named one of the peculiarities, namely the fact that large financial data flows circulate in the banks. This is really one of the most sensitive types of personal data. Another aspect of this sector is that clients themselves – companies and individuals – assume a significant role in data security. For instance, there was a time when online banking services were a novelty, but before they were offered to consumers, suppliers had to foresee their benefits and risks. Therefore, these services were introduced to the market only after technological solutions were capable of ensuring the security and reliability of financial transactions. Banks are constantly improving their security systems, since hackers pick up on new developments so quickly. Nowadays data thefts tend to be carried out by making use of users’ credulousness rather than breaking into bank systems. Fraudsters trick consumers into giving away their online banking access passwords and other personal data.

In consideration of these tendencies, what changes in information security solutions have been implemented by the banks?

Banks are now taking a different stance on data security than they did two decades ago. Now they take a complex approach, meaning that physical security measures are integrated with software solutions based on a unified security policy employed by the company. Banks remain zeroed in on electronic security measures by installing cutting-edge video surveillance, alarm systems, and building access control solutions. The progress in technologies now allows the alarm system to react to the slightest changes in pressure or temperature, and minor glass damage. Of course, the major part of investment is earmarked for IT solutions because the risks are different now. Today physical bank robberies make the news less fre-

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INTERVIEW

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quently, and this is a natural phenomenon as thefts have moved to the electronic space. Therefore, special IT security solutions tailored for the banking sector are being developed.

Could you please elaborate more on the special software solutions designed for data security in the banking sector?

The banks have special monitoring systems that keep track of payment card transactions and online money transactions, and, based on specially programmed scenarios, that are capable of identifying potential criminal behaviour. Let us say the bank system records a person buying a cup of coffee in one of the cafés in Vilnius around 9 a.m. and paying for it with their payment card, while just a few minutes or hours later a transaction is carried out over the Atlantic Ocean using the same payment card. The system identifies that the person cannot be in several places simultaneously or move so fast in terms of geography, thus a report is sent to responsible bank officials who rapidly react, contact the client, block the card or take other precautionary measures. However, as regards data security, another key factor pertains to raising public awareness on potential risks and new fraud schemes, and providing information on the basic personal security measures, i.e. protecting data from unauthorised access, making sure that the online shopping source is safe, etc.

In your opinion, are the private and the public sector in Lithuania paying sufficient attention to information security?

Lithuania is a small country, thus the scale and amount of cybercrimes is significantly lower than in Great Britain or the United States. Nonetheless, this should not be the reference point when a private company or a state institution makes a decision on investing in data security. Another problem, which is characteristic not only of Lithuania, is that, often, IT security solutions are considered post factum, although the consequences still rebound on the organisation's reputation and reliability, which are difficult to restore afterwards. Of course, for this reason there are no statistics that would reflect the real situation either in Lithuania or in the rest of the world. The damage caused by cybercrimes – the data lost and losses incurred – are swept under the carpet, and organisations try to solve the problems without bringing them to light. Meanwhile, hackers are extremely active in collaboration and information exchange, joining underground networks and making major progress.

What changes do you predict for information security perception in Lithuania in the next five years?

Undoubtedly society, business and the public sector will place increasing focus on data security. We are already witnessing attempts to break into state institutions, block their websites, and steal their data. Industrial spying and intellectual property thefts in cyberspace are on the rise. Therefore, we must think about it, follow the examples of other countries and learn from their mistakes or achievements before we encounter them ourselves. Lithuania will inevitably have to boost investment into security solutions and step up efforts to enhance public awareness of the subject. As I have already mentioned, breaking into banks is now really complicated, if not impossible (due to modern video surveillance, security alarm systems, advanced information system solutions, etc.), thus hackers are setting their eyes on the weak link, namely bank clients. The cooperation of companies and state institutions is another pivotal aspect. Drawing on the experiences of other institutions allows for more efficient planning of data security, cost distribution and prevention of criminal behaviour in the electronic space before it occurs. Achievement of these goals would be fast-tracked by the development of universally accepted data security rules or guidelines.

Thank you for the conversation.

Information security tips
by Mr Šapola:

- **Do your homework.** Identify potential risks and possible data theft models, and refer to foreign sources on similar cases;
- **Take an integrated approach.** Taking into consideration the nature of the activity, apply integrated security solutions ranging from physical security measures to IT solutions, and prepare an integrated security policy;
- **Take interest.** In addition to the usual software solutions such as antivirus software, today we have access to a whole variety of other highly effective security measures: tools that restrict access to specific information inside the company, block the forwarding of specific data to external addresses, deny access to databases after working hours, etc.;
- **Update.** Assess new potential risks, constantly revise and update the company's security policy, and allocate investment for the application of new security solutions and the update of existing ones.

Bank buildings have installed cutting-edge access control, security alarm, and video surveillance systems, and databases are protected by specially designed IT solutions; thus hackers are targeting the weak link, namely bank clients.

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European business sector boosts **data security investment**

Information security experts are setting alarm bells ringing as cyber-attacks on the public and private sectors rose almost twofold in the past two years. Conducted by PricewaterhouseCoopers, the 2012 Information Security Breaches Survey revealed that in 2011, major companies in Great Britain were exposed to an average of 54 hacking attacks a year, or 1.5 times up from 2010. Such trends were highlighted in the opening speeches delivered at **Infosecurity 2012**, one of the largest and most popular information security events in Europe. Fima specialists, who also took part in the exhibition, note that European companies are increasingly procuring complex information security services from third parties, thus ensuring maximum corporate data security and efficient cost distribution.

> *Complex IT security solutions protect both confidential corporate data and the company's reputation*

Both data and reputation secured

Modern hackers are making progress at a rapid rate, but the IT sector is catching up by constantly updating existing security solutions and delivering innovations. "While at the exhibition, we have learned that European companies and the public sector are paying increasing attention to this field. Undoubtedly, this is also attributable to the growing

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number of electronic data thefts. However, no less important are the aspects of an organisation's reputation and trustworthiness," says Vaidotas Černiauskas, product manager for networking solutions, adding that a rather narrow and one-way approach to data security still prevails in Baltic region.

"Much time has passed since antivirus software alone could do the job. Conversations with other participants at the exhibition showed that foreign companies apply complex IT security solutions and increasingly tend to entrust IT security to professionals. This ensures integrated IT network management, constant solution updates and efficient compatibility for the best security results," Mr Černiauskas says.

> *"European companies are increasingly procuring complex information security services from third parties, thus ensuring maximum corporate data security and efficient cost distribution*

Modern computer infrastructure solutions presented

Computer network infrastructure solutions were among the issues on which the Infosecurity exhibition centred. One of the emerging trends is the growing popularity of network audit software. Mr Černiauskas notes that these days network audits can be performed not only once a year by inviting IT specialists to test network security, but rather maintain them on a constant basis with the help of network audit software that regularly checks the computer network and allows for timely identification of its weak points.

European companies and organisations are using wireless network or WLAN (Wireless Local Area Network) technologies more and more. This is due to the lower investment which wireless networks require and higher employee mobility. However, information transfer on wireless networks is implemented by signals spread via radio waves, which opens up more possibilities for hackers to take over and control data. Mr Černiauskas says security solutions for these networks were offered by multiple exhibition participants and event visitors displayed high interest in the products.

The majority of producers presented improved software for data leakage prevention and next generation firewalls. These instruments analyse the flow of information and are capable of recognising programmes and their individual functions, and they can correlate programmes with the users and thus identify viruses and certain secret data, for instance, financial information. This provides the possibility of constant monitoring, analysis and recognition of the nature of data as well as data theft prevention.

"The exhibition provided us with the chance to meet many specialists and speak to producers and their clients. Obviously, today the winning edge belongs to the organisations that take a complex approach to data security and, in addition to physical or basic instruments, such as antivirus software, apply far more complex IT solutions," the Fima expert points out.

Vaidotas Černiauskas, Fima product manager for networking solutions: „Integrated IT network management, constant solutions updates and efficient compatibility are the main prerequisites for the best security results."

USEFUL TO KNOW

Trends in computer network security solutions

- Growing popularity of network audit software that offers 24/7 data network monitoring and allows for timely identification of its weak points;
- Higher employee mobility spurring development of wireless network security solutions;
- Rapid development of data leakage prevention solutions;
- Installation of next generation multi-functional firewalls that provide detailed analysis of the type of data and correlate the information with specific users;
- Integrated management of all IT security solutions.

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Technology integration: new opportunities for the transport sector

This spring, ***Inter traffic 2012***, the international exhibition on road transport and traffic infrastructure operation and development, was attended by more than 800 specialist manufacturers and service providers from 100 countries. The trends that dominate the road transport sector and the solutions developed in Europe and around the world to address traffic problems were the main areas of interest for Fima specialists.

Automotive industry trends including integrated systems and mobility

The modern automotive industry is increasingly characterised by convergence of electronics, information and communication technologies. Fima's Director of Solutions Department, Rokas Šlekys, said that these trends were clearly reflected at this year's show which focused on technological integration and the opportunities that it presents.

Technological integration and mobility have benefited from the increasing popularity of smart phones and other hand-held devices. This has created a new generation of services in the transport sector including eco-driving, real time traffic information and navigation services for finding the fastest routes. "The Traffic Information System is one of the first examples of technology integration in the Lithuanian transport sector. With more than 90 weather stations, traffic flow detectors, customised software solutions and integrated databases, it offers drivers and emergency services real-time reporting of traffic conditions. The system offers big opportunities for development, for instance the ability to integrate weather stations with variable traffic signs which could enable automatic variable speed limits that respond to changes in weather or road surface conditions," said Mr Šlekys.

Traffic analysis solutions presented

Intertraffic 2012 featured a number of solutions for analysing traffic flows. This area has consistently been a priority within expanding cities where an increasing number of vehicles makes traffic control vital.

Mr Šlekys added: "Manufacturers presented different solutions for analysing traffic flows, including detectors, radars, video cameras and inductive loop-based solutions. The opportunities in this field have been growing as manufacturers enhance their solutions with greater precision, durability and cost efficiency."

> *"The modern automotive industry is increasingly seeing the convergence of electronics, information and communication technologies*

Visitors had the chance to see the latest wireless solutions for transport detection and analysis. Their main benefits include durability, easy installation on the road surface and low service

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Rokas Šlekys, Fima Solutions Department Director, said: "Lithuania is starting to pick up speed with the upgrading of its infrastructure and we are on the right track with the deployment of state-of-the-art integrated solutions"

Fima's **intelligent transportation systems** help to:

- Control city traffic flows
- Control vehicle weight and speed
- Record road traffic offences including driving through a red light, driving in public transport lanes, unauthorised parking etc.
- Automatically record road accidents
- Inform drivers and the relevant services about traffic conditions
- Collect tolls
- Manage traffic flows in parking areas etc

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costs. Fima specialists have already deployed such a wireless detection system in Lithuania on one of the major road intersections in the city of Kaunas where state-of-the-art sensors analyse transport flows and adjust the traffic control algorithm accordingly.

> *"The Traffic Information System is one of the first examples of technology integration in the Lithuanian transport sector*

Solutions for smart cities

Intertraffic 2012 also featured the latest technological solutions to enhance urban infrastructure. For instance, as well as using LED technology, street illumination can be made more cost-efficient by integrating with a weather monitoring system so that lighting comes on depending on time of day, season and meteorological condivtions.

Mr Šlekys said that the exhibition also offered a number of new solutions for parking management. Rising consumer demand has meant that manufacturers are now offering a complete service package that includes processing and analysis of parking data on top of supplying equipment. This helps operators make better-informed decisions when planning the development of parking infrastructure. Another innovation is parking guidance solutions for open spaces where detectors are installed on the road surface rather than above vehicles. This equipment allows outdoor parking areas to be improved as a roof is no longer required for detectors.

> *"Manufacturers are now offering a complete service package that includes processing and analysis of data on top of supplying equipment*

Mr Šlekys concluded: "The exhibition was a perfect opportunity to talk to our technology counterparts from other countries and to meet new partners. As the broader context shows, Lithuania is starting to pick up speed with the upgrading of infrastructure and we are on the right track with the deployment of state-of-the-art integrated solutions."

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About „Fima” companies

Fima is the leader in intelligent engineering solutions in the Baltic countries, offering telecommunications, security, automation and data center solutions as well as individually tailored solutions for transport and energy sectors.

The company implements intelligent engineering solutions for businesses and governmental organisations in the Baltic states and Belarus and is continuously involved in projects of technological innovation. In two decades of operation, Fima has carried out several thousand projects of a various scale and degree of complexity.

Fima’s headquarters are based in Vilnius, Lithuania. The company has subsidiaries in Latvia, Poland, Belarus.

Do you have ideas, suggestions or comments? Email us at **solutions.era@fima.lt.**

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