



FIMA

The Leader in Intelligent Engineering Solutions

Full service

We offer integrated electronic engineering solutions. We are probably the only company in the Baltic States offering such a wide variety of solutions: from telecommunications, security, automation systems and installation of data centres adapted for individual needs to specialized solutions for modern cities infrastructure, transport, energy and other sectors.

Pioneers in innovation

Modern technology constitutes the basis of our activity. We are constantly the first to implement innovative solutions in the Baltic States and even Eastern Europe.

Global partners

Since we cooperate with a number of globally recognized business partners, we can therefore offer rational solutions by combining the most suitable equipment produced by different manufacturers.

Professionals in the implementation of solutions

Several thousand finished projects, a number of various systems being implemented, regular courses to improve competence, and high employee loyalty are just some of the facts proving the capabilities of our team of more than 400 highly qualified employees.

Uninterrupted operation of systems

FIMA Service Center, a division of our company, provides professional system maintenance services round-the-clock, seven days a week. 50 highly qualified engineers are ready to arrive at your site and solve any technical problems in a timely manner.

Major companies as our clients

Over a half of the top one hundred largest Lithuanian companies are FIMA's clients. We have implemented a number of projects worth millions of Euros at sites with national significance: at the border, in the railway and air transport sectors, and in the major cities of the country.

In Lithuania, Latvia, Poland and Belarus

In 2012, we provide our services in Lithuania, Latvia, Poland and Belarus. Our offices are located in Vilnius, Kaunas, Klaipėda, Šiauliai, Riga, Warsaw and Minsk.

Key Facts

History

FIMA was established in 1992 by a team of enthusiastic physicists and mathematicians. The first syllables of the Lithuanian words „fizika“ (physics) and „matematika“ (mathematics) were used to create the name of the company. Since starting its activity by offering security solutions, the company has rapidly expanded the variety of services provided, established contacts with foreign companies, looked for new solutions and implemented them actively in Lithuania, and undertaken expansion in major Lithuanian cities, Latvia, Poland and Belarus.

In 2008, the MVC Capital, Inc, a business development company listed on the New York Stock Exchange, became the majority shareholder of the successful company.

The company continues to expand. Today, it can offer virtually any technological solution in the fields of security, automation, telecommunications, transport, energy, healthcare, etc. The company's technical maintenance division, FIMA Service Center, provides professional maintenance services for systems that have been installed.

Clients and experience

Since its establishment, FIMA has completed over 10 000 projects of various degrees of complexity and scopes. Over one-half of Lithuania's largest companies are FIMA's clients. The company has implemented complex solutions at major infrastructural sites such as Lithuanian and Latvian railways, border control posts, airports, energy sites, companies Baltic Data Center, Barclays, Western Union. FIMA has acquired long-term experience in the implementation of large-scale projects and has carried out work as the general contractor a number of times.

Employees

Specialists in fields such as physics, mathematics, informatics and engineering are employed at the company. The company is continuously investing in development of employees' qualification by applying the tools of qualification improvement courses, international trade shows, trainings at the sites of technology partners. FIMA is proud of its professional and loyal team.

Key Facts

Operational standards

FIMA's name has always been a guarantee of high-quality work. The company implemented a successively operating quality management system complying with ISO 9001 requirements, an environmental management system complying with ISO 14001 requirements and occupational health and safety management system complying with OHSAS 18001 requirements.

Innovation awards

In 2008, the company received the medal "For merits to business" for the unique security system of Būtingė oil terminal in category "Introduction of innovative product to the market" of awards by the Ministry of Economy of the Republic of Lithuania.

In the annual national competition "Innovation prize 2008" organized by the Lithuanian Innovation Center and Lithuanian Confederation of Industrialists, the company was awarded with the title "The innovative company" and was one of the seven companies in Lithuania with received this title. This title means the recognition that FIMA applies the innovative management methods in its activities always seeks and suggests for clients in Lithuania the new and modern solutions.

In the 2009 Lithuanian Product of the Year awards organized by the Lithuanian Confederation of Industrialists, FIMA won a gold medal in the IT category for the modern data centre it implemented for Lithuanian Railways. In the 2011 awards, the company won gold for fitting out a Level 3 biosafety lab for the National Public Health Surveillance Laboratory.

Our Activities

FIMA offers integrated electronic engineering solutions and professional management of large-scale projects and supplies equipment produced by manufacturers widely recognized by professionals.

Electronic engineering solutions

- Security solutions
- Communications solutions
- Data center infrastructure
- Electrical energy solutions
- Intelligent transportation systems
- Railways solutions
- Control & Display solutions
- Automation & Monitoring solutions
- Industry-specific solutions

Contract project management

FIMA has acquired vast experience in the field of project management, and can assume full responsibility for work, including the analysis of a client's needs and situation, system design, and post-warranty maintenance. The company has completed a number of projects as the general contractor coordinating all stages of the project.

FIMA has an individualized attitude towards each task. After conducting an analysis of the client's needs, the company seeks the most suitable solutions. Upon completing a system and construction design tasks and obtaining the required permits, the company commences construction and installation of equipment. Thereafter, the site is transferred for evaluation and use by the client and certain institutions. During the warranty and post-warranty periods, the company carries out site maintenance work comprising servicing of the implemented systems and periodic maintenance.

Technical maintenance by FIMA Service Center

Each system that is implemented must be maintained properly in order to ensure its long-term use for its owners. That is why FIMA established a specialized technical maintenance division called FIMA Service Center. The highly qualified engineers working there are ready to carry out professional and timely warranty and post-warranty system and equipment maintenance work around the clock, seven days a week.

FIMA Service Center employs over 50 highly qualified engineers who receive approximately 1 000 requests every month. The division receives client calls at its unified telephone number around the clock, seven days a week.

Scope of activity

EUR 110.000.000

Total value of simultaneously implemented projects

EUR 47.000.000

FIMA turnover in 2011

EUR 39.000.000

Value of the largest project being implemented by FIMA

>10 000

The number of projects implemented by FIMA

>500

Sites serviced by FIMA Service Center

>100

Number of simultaneously implemented projects

>400

Qualified staff employed by FIMA

>200

Employees holding a higher educational degree

>90

Employees holding a master's degree

4

Employees holding a PhD



Our clients



The public sector



The transport sector



The energy sector



The telecommunications sector



The financial sector



Business, shopping, and leisure centers



The manufacturing sector



The healthcare sector

The Public Sector

Security solutions

- Security alarm
- Access control
- Fire alarm
- Fire extinguishing
- Video surveillance
- Perimeter protection
- Integrated IP security solutions

Telecommunications solutions

- Computer networks
- Wireless networks
- Computer network security solutions
- Telephony solutions
- Solutions for contact and call centers
- Integrated data, video, and voice transmission solutions

Installation of data centers

Electrical energy solutions

- Consumer power supply solutions
- Lighting management solutions
- Installation of electrical wiring
- Installation of lightning protection and earthing equipment
- Uninterrupted power supply solutions

Intelligent transportation systems

- Traffic management solutions
- Number plate recognition systems
- Parking solutions
- Vehicle detection systems
- Fleet management systems
- Information displays
- Passenger information systems
- Speed meters

Professional video and audio solutions

- Professional TV (broadcasting, studios)
- Internet protocol television (IPTV)
- Audio and public address systems
- Conference systems
- Display walls

Automation and control solutions

Other solutions

- Information terminals
- Visitors counting systems
- People detection systems
- Meteorological monitoring systems
- Meteorological radars
- Air pollution measurement and monitoring systems
- Various substance detection systems
- GSM jamming systems
- Electric power saving systems

Major projects implemented

- Installation of perimeter and video surveillance systems at the border control points
- Surveillance systems of transit trains to Kaliningrad
- European external borders (Schengen) telecommunications network for the Ministry of the Interior of the Republic of Lithuania
- Video surveillance system for the cities of Vilnius and Klaipėda
- Population warning and notification system in Šiauliai



The Public Sector

Construction of a public health laboratory of Biosafety Level 3

Task

Setting up a Bio-safety Level Three laboratory to ensure better preparedness for and rapid detection and prevention of infectious diseases.

Project description

As the project's general contractor, FIMA was responsible for all construction and installation work in the Bio-safety Level Three laboratory. The work was carried out according to a design developed in line with recommendations by the Robert Koch Institute which oversees the setting up, construction and maintenance of Bio-safety Level Three and Four laboratories. The Vilnius laboratory is designed to ensure the safety of people working in it and to stop the escape of biological agents.

FIMA installed an integrated security and access control system, fire alarm and video surveillance systems, Category Six telecommunication networks, lighting and power supply networks as well as heating, ventilation and air conditioning system (HVAC) and automation systems.

In addition to implementing a shared HVAC system, FIMA designed and installed specialized HVAC systems for the two laboratories, a negative pressure cascade with flood gates and airtight doors and windows. The air in the laboratory is cleaned by special HEPA filters ensuring that it is changed 12 times an hour. All the ventilation systems are fully automatic.

A computer interface and control panels were installed to monitor the operation of all the systems and maintain an archive of events and data.

Solutions

- Security alarm system
- Access control system
- Fire alarm system
- Video surveillance system
- Telecommunication networks
- Light and power supply networks
- HVAC and automation systems

Uniqueness

This is the first laboratory in the Lithuanian health security system that can be used to safely examine rare Bio-safety Level Three infectious organisms causing human diseases.

Project implementation period

2010 – 2011





The Public Sector

An integrated security solution on the Lithuanian border with Russia and Belarus

Task

Ensuring the highest level of protection on the Lithuanian border in Tribonys, Bardinai, Viešvilė and Plašiai border districts.

Project description

As part of projects to reinforce the surveillance of EU external borders, Lithuania's border protection was strengthened and reformed to meet the standards set out in the Schengen agreement.

FIMA installed hardware and software specially tailored to the particular conditions in four border areas over a distance of 115km. The equipment picks up border breaches by people at distances of between 2 and 5km and by vehicles at 10km in all weather conditions.

FIMA's engineers built 20-35 metre high towers with video cameras and thermal visors, also installing radars, infrared perimeter barriers, microwave detectors and other cutting-edge devices in certain border areas. In addition, FIMA designed a bespoke security control system to provide real-time recording and analysis of border incidents and to control all the hardware. Data captured by the system is transmitted to border control and monitoring centres over fibre optic networks.

Solutions

Video surveillance solutions
Data communication solutions
Perimeter security system control software
Monitoring centre

Project implementation period

Project I: 2005 - 2006
Project II: 2009 - 2010
Project III: 2011



The Public Sector

An engineering systems solution for the new Lithuanian Parliament chamber

Task

Provision of communication infrastructure and security and building management solutions to enable Parliament employees to work effectively in the new chamber.

Project description

FIMA installed all of the cable infrastructure including Category Six computer and telephone networks, video surveillance, voting, discussion and simultaneous interpretation systems. Two video walls – each measuring 5.7m across and able to display agendas, voting results and other relevant information – were built.

As part of the installation of a security system in the Parliament, FIMA specialists set up almost 50 closed circuit cameras, video recording devices, security alarm and access control solutions.

A modern building management system can detect water in ventilation chambers or near cooling equipment. This system also reduces operational costs with a convenient central control of ventilation, air conditioning, lighting and elevators.

Solutions

- Data communication solutions
- Building management system
- Video surveillance system
- Access control system
- Video walls

Project implementation period

2006 – 2007



The Transport Sector

Specialized solutions for the transport sector

Railways

- Railway traffic management solutions
- Technological loudspeaker communication and staff warning system
- Electric heating of points
- Number plate recognition systems
- Information displays
- Passenger information systems
- Weather information systems

Road transport

- Traffic management solutions
- Number plate recognition systems
- Parking systems
- Vehicle detection systems
- Fleet management systems
- Information displays
- Passenger information systems
- Speed enforcement systems
- Weather information systems
- Infrastructural road tolling solutions
- Variable message signs
- Weight in motion

Air transport

- Airfield lighting systems
- Information displays
- Passenger information systems
- Electronic luggage management systems
- Weather information systems

Security solutions

- Security alarm
- Access control
- Fire alarm
- Fire extinguishing
- Video surveillance
- Perimeter protection
- Integrated IP security solutions

Telecommunications solutions

- Computer networks
- Wireless networks
- Computer network security solutions
- Telephony solutions
- Integrated data, video, and voice transmission solutions

Installation of data centers

Electrical energy solutions

- Construction and reconstruction of transformer substations and distribution substations
- Substations control system solutions (SCADA)
- Automation and relay protection solutions
- User power supply solutions
- Lighting control solutions
- Installation of electric wiring
- Installation of lightning protection and earthing equipment
- Uninterrupted power supply solutions

Professional video and audio solutions

- TV broadcasting systems
- Audio and public address systems
- Display walls

Automation and control solutions

Other solutions

- Simulation models for building design
- Electronic ticket systems
- Clock systems
- Information terminals
- People detection systems
- Electric power saving systems
- Substance detection systems
- Warehouse cargo management systems

Major projects implemented

- Centralized traffic management system for the city of Vilnius
- Engineering solutions for Kaunas railway tunnel
- Reconstruction of traffic control system of railway section Kaišiadorys - Radviliškis
- Reconstruction of the airfield lighting system at Kaunas Airport
- Flight information, video surveillance, and perimeter security system for Vilnius International Airport
- Weather information system for the air base of the Air Force of the Lithuanian Armed Forces
- Upgrading of the seaport TV video surveillance system of Klaipėda State Seaport Authority
- Set-up and maintenance of a speed enforcement network in Lithuania



The Transport Sector

Engineering systems in the new terminal at Vilnius International Airport

Task

To install systems that assist with passenger service, provide travelers with relevant information and improve security at the terminal.

Project description

To ensure the smooth and safe operation of the airport, FIMA installed a number of electronic engineering systems in a newly built airport terminal and set up Lithuania's first passenger flow management system to separate passengers from Schengen and non-Schengen area countries.

FIMA's engineers integrated video surveillance with access control and display systems consisting of indicator arrows and LED information panels to manage the flow of passengers. They also set up 60 monitors, more than 100 automatically-controlled doors and 200 video surveillance cameras. The existing passenger information system was expanded and upgraded with the latest software.

The terminal's new video surveillance system serves both the airport's aviation service and the state border guard service and video captured by the system is displayed on a state-of-the-art Barco video wall.

FIMA also implemented security systems, fire alarm, public address systems, a building management system and smoke exhaust and automatic fire extinguishing systems.

Solutions

Passenger flow management and information system

Video surveillance system

Access control system

Security and fire alarm system

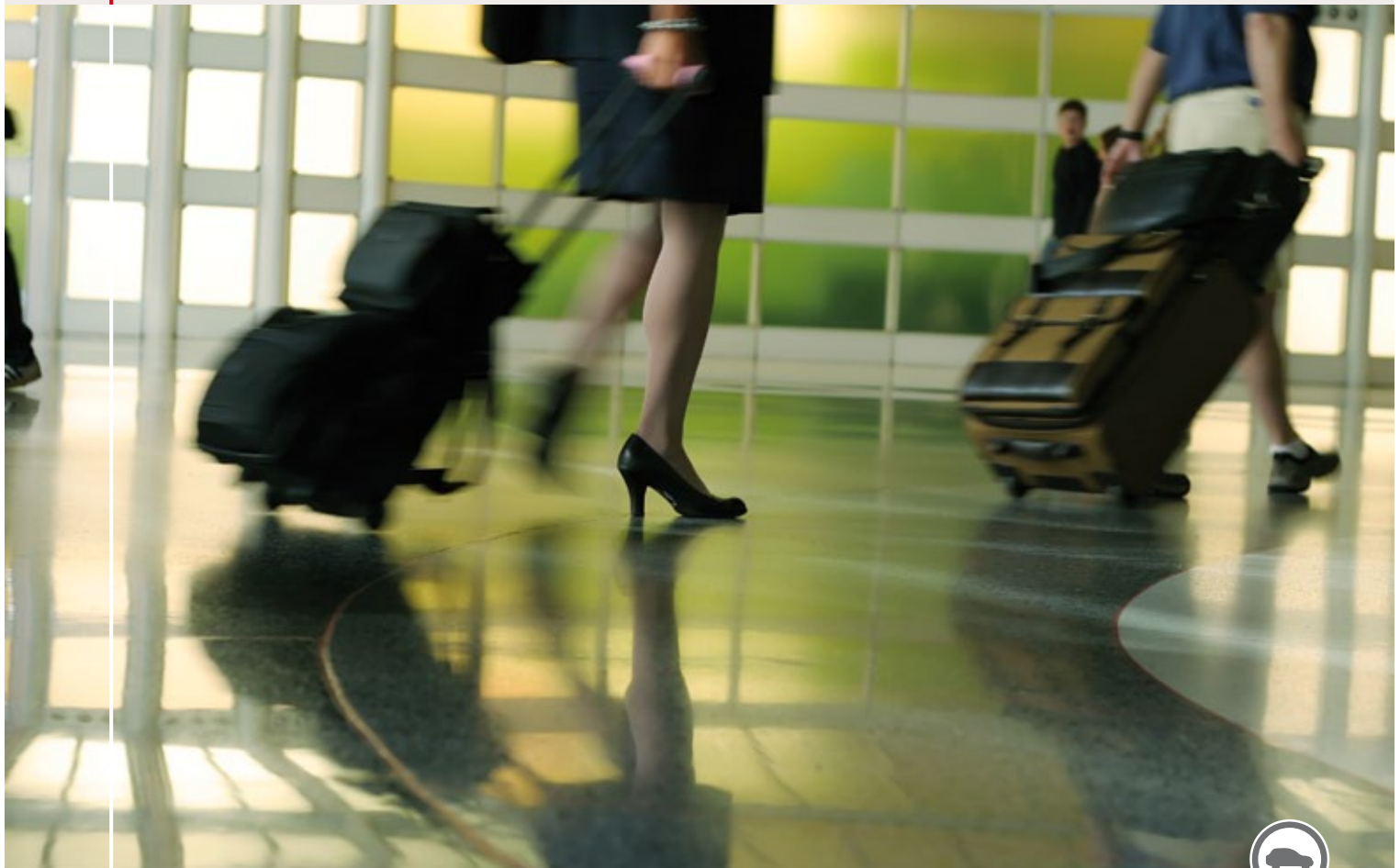
Public address system

Building management system

Smoke exhaust and automatic fire extinguishing systems

Project implementation period

2006 – 2007





The Transport Sector

Installation of traffic information system in Lithuania

Task

Installation of a traffic information system to increase traffic safety and the effectiveness of traffic control and monitoring as well as to ensure a rapid response to emergencies.

Project description

Over the course of a year and working with its partners, FIMA built a road traffic information system including infrastructure for monitoring traffic conditions on major national roads, a traffic information centre and an information system to bring the two solutions together.

FIMA built 43 automatic road weather stations containing equipment to monitor weather conditions, video cameras and 15 traffic counters on major roads. All of the new equipment and 48 existing weather stations were linked to the traffic information system to collect road and traffic condition data which is streamed to a video wall made up of eight video cubes.

State-of-the-art weather stations accurately measure the amounts of rain, snow or ice on the road network as well as monitoring air temperature, visibility, wind speed and other climactic conditions. Traffic counters analyze traffic flow and measure vehicle speeds.

Traffic information is provided to road maintenance services to help them plan and work more efficiently and to drivers to help them prepare for adverse weather conditions or delays caused by accidents and road works, plan their journeys and to drive at safe speeds.

The system has been set up so that it can be integrated with other solutions in the future.

Solutions

- Traffic analysis system
- Meteorology monitoring system
- Data communication solutions
- Information system (software)
- Display system (video walls)

Uniqueness

This is the first traffic information system in the Baltic States to integrate so many devices and sources for monitoring traffic conditions.

Project implementation period

2010 – 2011



The Transport Sector

Modernization of signaling, telecommunications and power supply systems on corridor IX D of Lithuanian Railways

Task

Modernization of railway corridor IX D to improve the reliability and security of this important railway section.

Project description

Modern computerized train traffic control system will be installed in the entire railway section connecting Kaunas, Kybartai and state border with Kaliningrad of the Russian Federation. This system will allow controlling the signalling equipment of 8 railways stations and 33 level crossings, power supply equipment in the section of 110 km in length and managing of train traffic from Vilnius Traffic Control Center. To implement this large scope project, FIMA designs and upgrades signalling, telecommunications and power supply systems of Kaunas railway station, Palemonas-Rokai-Jiesia detour and Kaunas-Kybartai line.

During the installation of railway traffic control system, the specialists of the company will do the following specific works: centralized control of traffic in all stations and line sections from Vilnius Traffic Management Center will be implemented, computerized interlocking systems with local management options in all railway stations will be installed, all signalling devices and respective cables will be changed, new signalling systems will be installed at the level crossings, reliable train detection system will be installed, public address systems will be installed in all stations to warn the personnel about oncoming trains automatically or directly, reliable power supply will be ensured for the new signalling and control system, etc.

The works completed during the project on the modernized line will allow increasing the speed of trains up to 160 km/h in the future.

Solutions

- Microprocessor traffic control system
- Microprocessor level crossing signalling system
- Diesel generators and uninterrupted power supply solutions
- 10kV and 0.4kV electrical networks
- Electrical switch heating system
- Relay protection and SCADA system
- Lighting of level crossings and platforms
- Technological loudspeaker communication system
- Warning system for people working on tracks
- Security and fire alarm and gas extinguishing system
- Video surveillance systems on level crossings
- Data transmission system

Uniqueness

In Lithuania, this project is unique because of its scope and complexity of engineering solutions. This project includes large number of components and installed systems and modernization works are carried out on the section of 94 km.

Project implementation period

2009 – 2012



The Energy Sector

Electrical energy solutions

- Construction and reconstruction of transformer substations and distribution substations
- Sub-station management system solutions (SCADA)
- Automation and relay protection solutions
- Consumer electric power supply solutions
- Lighting management solutions
- Installation of electric wiring
- Installation of lightning protection and earthing equipment
- Uninterrupted power supply solutions

Security solutions

- Security alarm
- Access control
- Fire alarm
- Fire extinguishing
- Video surveillance
- Perimeter protection
- Integrated IP security solutions

Installation of data centers

Telecommunications solutions

- Computer networks
- Wireless networks
- Computer network security solutions
- Telephony solutions
- Integrated data, video, and voice transmission solutions

Professional video and audio solutions

- Audio and public address systems
- Conference systems

Automation and control solutions

Other solutions

- Solutions for monitoring the condition of buildings

Major projects implemented

- IP-based video surveillance system for AB Lietuvos Energija substations and distribution facilities
- Installation of a dispatch center for AB Rytų Skirstomieji Tinklai (RST) and SCADA systems for the northern and southern divisions of the city of Vilnius
- Installation of the constructions state monitoring equipment at Kruonis Pumped Storage Plant
- AB Lietuvos Energija data centers in Vilnius and Kaunas
- Security solutions for Ignalina Nuclear Power Plant



The Energy Sector

Reconstruction of substations and power distribution station for Lietuvos energija

Task

Reconstruction of 330kV and 110kV power distribution stations and substations and ensuring their management from central control rooms.

Project description

While implementing the project, FIMA reconstructed one of the main power distribution stations at the Lithuanian Power Plant: a 330 kV Elektrėnai distribution station. It changed all the existing equipment, including set-up and commissioning of microprocessor relays, relay protection and automation systems; programming, set-up and commissioning of a centralized control system SCADA; and installation of a fibre optic communication network for data collection and transmission. After project completion, all of the distribution station equipment can be operated from the Vilnius-based central control room.

FIMA replaced all the old equipment in the Kupiškis and Vilkaviškis substations, installed a microprocessor-based relay protection and tele-information collection and transmission devices which collect information from substations and transmit it by fiber optic communication to central control rooms. Dispatch operators use SCADA to control substation equipment, monitor its status and change its parameters.

In addition, FIMA built security and fire alarm systems, video surveillance and perimeter security solutions in the power distribution station and substations.

Solutions

Substation automation and relay protection solutions

SCADA

Perimeter security system

Video surveillance system

Security and fire alarm system

Project implementation period

Elektrėnai 330kV power distribution station: 2003 – 2005

Kupiškis 110/35/10 kV substation: 2005

Vilkaviškis 110/35/10kV substation: 2006





The Energy Sector

Security solutions for the sea buoy of Būtingė oil terminal

Task

Installation of security system in a buoy of Būtingė Oil Terminal, where mooring tankers load oil products, to ensure security of an object of a strategic importance.

Project description

At the commission of Mažeikių Nafta FIMA developed, designed and installed a world-wide unique, natural energy consuming solution for protection of the object of a special importance and floating in an open sea. A buoy located more than 7.3 km away from the coast of the Baltic Sea is the only buoy providing Lithuania with oil.

Fima specialists installed the surveillance camera with remote control and 2 night vision devices (thermovisors) on the buoy.

The oil buoy is far away from the coast, therefore, a solution of electric power production, which is still rather rarely used in Lithuania – a combined electric power supply by using the sun, wind and accumulator batteries – was created for the surveillance system installed.

Radio communication was used for the transfer of the image recorded by surveillance devices mounted on the buoy to surveillance points on the shore. As the object, from which the image is transferred, is moving and rotating around its axis and the object sending and receiving data is not in one line of visibility, a special antenna, which ensures that the sent signals reach the shore without losing its quality, was applied.

Solutions

- Video surveillance system
- Wireless data transmission solution
- Power supply solution

Uniqueness

The uniqueness of protected object required innovative and new solution for the buoy. For this solution FIMA was awarded by the Ministry of Economy of the Republic of Lithuania and received a medal "For Merits to Business" in the category of "Introduction of Innovative Product to the Market".

Project implementation period

2007 – 2008



The Energy Sector

Reconstruction of substation control systems in the Kėdainiai and Rokiškis regions

Task

To increase the efficiency of maintenance of power substations by reconstructing regional substation control systems in Kėdainiai and Rokiškis.

Project description

FIMA modernised power substation control systems in the regions of Kėdainiai and Rokiškis. It installed SCADA to allow staff to detect the causes of disruption to the power distribution network and to ensure faster restoration of supply to residents. After the deployment of a new control system in power substations, maintenance has become more effective, thus ensuring a more reliable service to customers.

The control systems installed in Kėdainiai and Rokiškis regions collect data from 13 and 10 regional substations, respectively.

Solutions

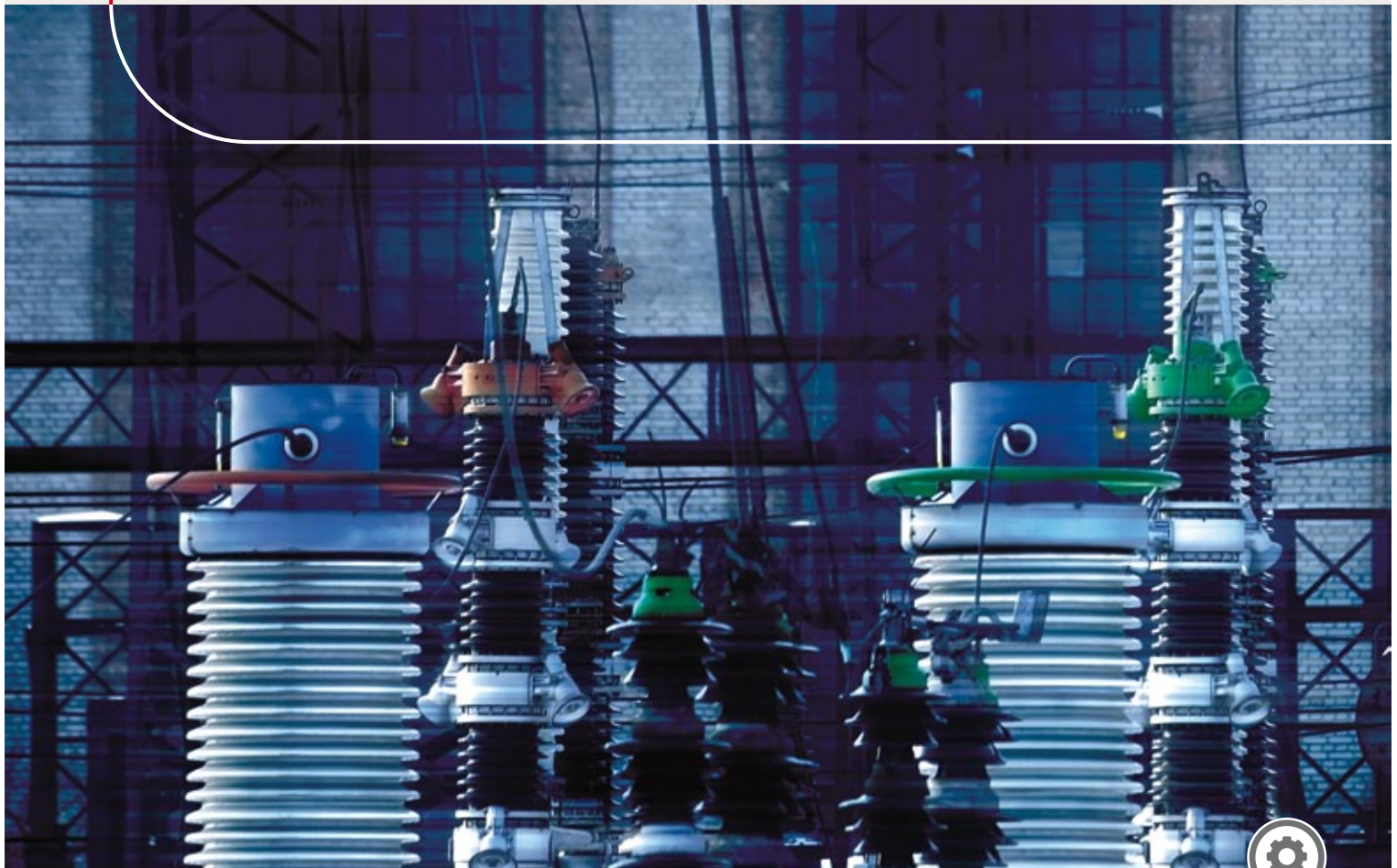
SCADA

Radio communication

Project implementation period

Kėdainiai region project: 2009 – 2010

Rokiškis region project: 2010 – 2011



The Telecommunications Sector

Security solutions

- Security alarm
- Access control
- Fire alarm
- Fire extinguishing
- Video surveillance
- Integrated IP security solutions

Installation of data centers

Telecommunications solutions

- Computer networks
- Wireless networks
- Computer network security solutions
- Telephony solutions
- Solutions for contact and call centers
- Integrated data, video, and voice transmission solutions

Electrical energy solutions

Professional video and audio solutions

- Internet protocol television (IPTV)
- Audio and public address systems
- Conference systems
- Display walls

Automation and control solutions

Major projects implemented

- Contact center of Western Union division in Lithuania
- Implementation of the Baltic Data Center data centers
- Data Centre infrastructure for the Latvian State Radio and Television Centre
- Upgrading of the computer network points of the LITNET regional centers
- Upgrading of the core data network of the Lithuanian Radio and Television Center



The Telecommunications Sector

Installation of a high energy efficiency data centre for the Baltic Data Center

Task

Establishment of reliable data centre infrastructure to satisfy the requirements of high energy efficiency.

Project description

FIMA designed and installed a new 700 kW data centre covering an area of 260m² for Baltic Data Center, a leading data center and outsourced IT services provider in the Baltic. A new server cooling solution KyotoCooling was installed in the data centre, reducing power costs for cooling (by as much as a factor of eight) and becoming the first KyotoCooling installation in Eastern and Central Europe. KyotoCooling uses ambient air temperatures to cool servers during most of the year so is more efficient and eco-friendly than traditional cooling systems.

Special server cabinets have been set up in the data centre to separate cold and hot air flows thereby increasing the data centre's efficiency.

Along with the KyotoCooling solution, FIMA installed a precise control system – KyotoEco – which autonomously monitors the situation in the data centre (IT equipment power density, balance between air flows, indoor and outdoor temperature) and automatically cycles air of the correct temperature to keep the data centre cool.

In addition, FIMA designed and installed all supporting infrastructure in the centre including power distribution networks, uninterruptible power supply solutions (diesel generators), security systems (fire detection, fire extinguishing, video surveillance, access control and security alarm), environmental monitoring, building management and metering systems.

In a first in Lithuania, the heat generated by the data centre is recycled to heat employee offices and technical premises.

The data centre's power usage effectiveness (PUE) is 1.1. During 2011, KyotoCooling helped Baltic Data Center reduce power consumption by almost 600,000 kilowatt hours.

Solutions implemented

Cooling solution KyotoCooling®	Automatic gas fire extinguishing system
Power supply and metering systems	Access control system
Diesel power stations	Video surveillance system
Data communication solutions	Fire and security alarm system
Early warning fire detection system	System parameter monitoring and control system

Uniqueness

The first data centre in the Baltic region to have achieved such a high level of energy efficiency.

Project implementation period

Installation of the data centre: 2009 -2010
Expansion of the data centre: 2011





The Telecommunications Sector

Installation, upgrade and technical maintenance of a contact centre for Lintel

Task

Enable Lintel to provide effective customer service with the deployment of a reliable and flexible technology platform for the contact centre.

Project description

FIMA has been partners with contact centre operator Lintel since 2005 when it first deployed Avaya's leading-edge IP-based contact centre solution. A virtual contact centre integrated six company contact centers operating in five Lithuanian towns into a single system.

In 2011, FIMA worked on a major upgrade of IT equipment in the contact centre by installing Avaya Aura-V6 communication platform. The project was implemented without interrupting the contact centre's normal operation.

The upgrade enabled Lintel to provide better service quality, increased the customer service response, enabled the contact centre customers to choose their preferred communication channels and boosted operational efficiency.

As part of this project, the servers used by Lintel were consolidated, resulting in a reduction of technical maintenance and license procurement costs.

As a certified Avaya Joint Service Delivery partner, FIMA offers rapid and high-quality technical maintenance services for the contact centre and, if necessary, can call upon the manufacturer's technical support. Following the Lintel contact center upgrade, FIMA committed to providing regular updates and technical maintenance for three years.

Solutions

Contact centre

Project implementation period

2005: deployment of contact centre

2011: upgrade of contact centre



The Telecommunications Sector

Development of the Rural Areas Broadband Internet Network (RAIN)

Task

Deployment of fiber optic network equipment to improve broadband access for regional operators.

Project description

The project, which is part of the Development of Rural Areas Broadband Network (RAIN-2) and funded by the European Union and the Lithuanian government, was launched in December 2009 and is due to be complete in March 2013.

The objective is to provide residents, state and municipal authorities and businesses with fiber-optic broadband access in rural areas.

During the two-year project, FIMA will install highly reliable network equipment by its American partner Extreme Networks as well as uninterruptible power supply from Eaton on network intersections and end points.

After the implementation of the project, 98% of the rural population will have access to broadband, ensuring a competitive environment for provision of internet services as well as connecting the main schools, libraries and public internet centers in rural areas.

Solutions

Fiber optic equipment

Uninterruptible power supply solutions

Data communication equipment (switchboards)

Uniqueness

A project of very large scope across more than 1,000 sites.

Project implementation period

2010 – 2012



Business, Shopping, and Leisure Centers

Specialized solutions for business, shopping, and leisure centers

- Visitors counting systems
- Parking systems

Security solutions

- Security alarm
- Access control
- Fire alarm
- Fire extinguishing
- Video surveillance
- Perimeter protection
- Integrated IP security solutions

Telecommunications solutions

- Computer networks
- Wireless networks
- Computer network security solutions
- Telephony solutions
- Integrated data, video, and voice transmission solutions

Installation of data centers

Electrical energy solutions

- Construction and reconstruction of transformer substations and distributions substations
- User power supply solutions
- Lighting management solutions
- Installation of electrical wiring
- Installation of lightning protection and earthing equipment
- Uninterrupted power supply sources

Professional video and audio solutions

- Professional TV (broadcasting, studios)
- Internet protocol television (IPTV)
- Audio and public address systems
- Conference systems
- Display walls

Automation and control solutions

Solutions for the transport

- Number plate recognition systems
- Information displays

Other solutions

- Simulation models for building design
- Electronic ticket systems
- Internal logistic (pneumatic transportation) systems
- Clock systems
- Information terminals
- Electric power-saving systems

Major projects implemented

- An integrated engineering systems solution for the Šiauliai Arena
- Implementation of the security, telecommunications, and computer network systems of Rimi shopping centers
- A complex of engineering systems at Druskininkai Aqua Park
- Information and sports competition result system at Siemens Arena in Vilnius
- Security and building management system for Europa, a shopping and business center in Vilnius



Business, Shopping, and Leisure Centers

Security solutions for a snow arena in Druskininkai

Task

Installation of engineering systems to ensure the safety of arena visitors.

Project description

FIMA installed a video surveillance system, security and fire alarm systems and a single computer network in a Druskininkai snow arena – the first venue of its kind in the Baltic States.

The winter entertainment complex has a video surveillance system of 100 video cameras. It guarantees security for visitors and offers them an opportunity to observe other areas of the complex. Video from cameras mounted near the skiing slopes and children's play areas is streamed to monitors and projectors in the complex's restaurants. The system can also transmit video captured on any of the system's cameras to the arena's website.

The computer network installed by FIMA ensures that different system components (video surveillance, TV and automation systems) are compatible and can share data. The reliable operation of the system is guaranteed by Extreme Networks products.

FIMA also installed a GE addressable fire detection system, an automation system that controls heating, ventilation and air conditioning (HVAC), fire valves, smoke removal valves and a power distribution system for an effective fire prevention in the complex.

Druskininkai Snow Arena is unique in terms of its size, equipment and the services it offers. In terms of the technologies used, it is one of the top most advanced indoor ski arenas in the world.

Solutions

Video surveillance system
Security alarm system
Fire alarm system
Computer networks

Project implementation period

2010 – 2011





Business, Shopping, and Leisure Centers

Integrated engineering systems for the CIDO universal sports arena

Task

The installation of modern engineering systems that assist in the organization of high-level sport competitions and events in the CIDO arena.

Project description

FIMA specialists implemented local TV system including TV cable network and triax cable network, access control system integrated with a security alarm system, a video surveillance system comprising 70 CCTV cameras and a sports competition information system complying with FIBA requirements in the CIDO arena. FIMA engineers put in place a high-resolution video cube weighing eight tones, which can be raised up during events by programmable hoists.

FIMA also installed cycling timing system – the first photo finish system in Lithuania. The system can accurately identify the race winner while the software captures all the action from a competition and transmits it to the video cube.

Solutions

- Local TV studio
- Sports event information management and display software
- Cycling timing system
- Video cube
- LED displays
- Security alarm system
- Access control system
- Video surveillance system
- Power supply
- Clock systems

Project implementation period

2008



Business, Shopping, and Leisure Centers

Parking guidance system in the Panorama shopping centre

Task

Building a state-of-the-art parking guidance system to ensure fast and convenient access to parking lots for customers.

Project description

FIMA installed a state-of-the-art parking guidance system in the Panorama shopping and entertainment centre. The system spans an underground car park stretching over 60,000 sq metres on two floors with more than 1,500 parking spaces.

Sensors detect whether a car is parked in a space and then change a signal above it between green and red, quickly indicating to other motorists how many spaces in a lane are occupied. FIMA specialists also put in place LED displays showing the total number of free spaces in a car park and software that analyses transport flows twice a second.

The accuracy and reliability of the system led to a 19.2 per cent increase in the number of spaces available and the average time taken to park a car fell by 20 per cent.

The system meets IP54 requirements for moisture and dust resistance, which are mandatory for all equipment installed in underground car parks across Europe.

Solutions

Parking guidance system

Project implementation period

2008



The Manufacturing Sector

Security solutions

- Security alarm
- Access control
- Fire alarm
- Fire extinguishing
- Video surveillance
- Perimeter protection
- Integrated IP security solutions

Telecommunications solutions

- Computer networks
- Wireless networks
- Computer network security solutions
- Telephony solutions
- Integrated data, video, and voice transmission solutions

Installation of data centers

Electrical energy solutions

- Construction and reconstruction of transformer substations and distribution substations
- User power supply solutions
- Lighting control solutions
- Installation of electrical wiring
- Installation of lightning protection and earthing equipment
- Uninterrupted power supply solutions

Professional video and audio solutions

- Internet protocol television (IPTV)
- Audio and public address systems
- Conference systems

Automation and control solutions

Solutions for the transport

- Number plate recognition systems

Other solutions

- Simulation models for building design
- Internal logistic (pneumatic transportation) systems
- Visitors counting systems
- Air pollution measurement and monitoring systems

Major projects implemented

- An automated container terminal management system at the Klaipėda Terminal
- Implementation of engineering systems at the Neo Group PET granule production site in Klaipėda District
- Expansion of Phillip Morris Lietuva plant engineering systems
- A complex of engineering systems for the Mars Lietuva production site
- A security system solution for Vakarų Laivų Gamykla



The Manufacturing Sector

Electronic perimeter security system at an oil terminal

Task

Ensuring the protection of the Klaipėda Nafta oil terminal, one of Lithuania's strategic facilities of the Republic of Lithuania, with perimeter security solutions and video surveillance and access control systems.

Project description

Klaipėdos Nafta, the main Lithuanian company that transships oil products into tankers, is a strategic facility in one of Lithuania's major seaports. Such facilities are subject to very stringent requirements.

Under the project, FIMA built a new 4.5. perimeter security system around the area. FIMA built the system using three technologies: a sensor cable, microwave barriers and outdoor motion detectors. The technologies were chosen for the perimeter security solution in response to the location and type of fencing.

FIMA modernized the site's video surveillance system with new CCTV cameras, digital recording devices as well as changing and expanding the video signals commutation matrix.

To control access to the site, an access control system was installed at the gates. In addition, an office was built and fitted out for the printing and issue of access cards. The systems installed by FIMA control and manage four vehicle access points and three passenger access points. All data captured by the equipment is automatically transmitted to the server of State Sea Port Directorate.

FIMA also expanded perimeter security and video surveillance systems during the reconstruction of the tanker loading site. The access control system was integrated with tanker loading systems and the systems that issue loading bills.

Solutions

Perimeter security system
Video surveillance system
Access control system

Uniqueness

FIMA installed systems at a site of major strategic importance to Lithuania and for a seaport company with extremely high security requirements. Because of its shore side location, great care had to be taken when selecting equipment that can function reliably in difficult weather conditions.

Project implementation period

2008 – 2009





The Manufacturing Sector

Access control system for Minsk Automobile Plant

Task

Design and installation of an access control system at a car plant and its associated units according to the latest plant security requirements.

Project description

FIMA designed and implemented an access control system for the 25,000 employees working in the Minsk car plant and its associated units. The system was installed in the plant, its two branches and two subsidiary companies. These operations employ 25,000 people so the system is of an extremely large scope.

The system consists of five access control points, 28 automatic turnstiles and access card readers. It integrates fixed metal detectors that were already installed in the plant and its units. In addition, FIMA set up servers and installed the necessary software for an employee database and to maintain and administer working time records.

FIMA continues to perform technical maintenance on the system.

Solutions implemented

Access control system

Project implementation period

2010



The Manufacturing Sector

Implementation of technological solutions at Orion Global PET raw material factory

Task

Implementation at PET raw material factory buildings of security, information, and telecommunications systems ensuring maximum security and efficient operation of the factory.

Project description

FIMA designed and implemented technological solutions at the 11 buildings of PET raw material factory of Orion Global PET. A unique automatic water mist fire extinguishing system was set up in the factory. The system comprises approximately 1,000 water mist sprayers protecting an area of 5,600 square meters. The premises are also equipped with gas leak detection and alarm system and a fire alarm system. All solutions, including ventilation, smoke removal, and elevator management solutions comprise one system managed in a centralized manner.

The following security solutions were implemented in the factory territory and buildings: cables that are sensitive to physical impact and register any unauthorized attempt to gain entrance to company territory were installed on the fence and video surveillance cameras, access control by means of magnetic cards, and security alarm systems were set up.

Solutions

Automatic water mist fire extinguishing system
Security solutions: video surveillance and fire alarm systems
Gas leak detection and alarm system
Perimeter security system
Audio and public address system
Telecommunications solutions

Uniqueness

A unique automatic water mist fire extinguishing system was installed. Approximately 40 percent of the fire alarm system and the entire gas leak detection system were installed in premises characterized by a high explosion risk.

Project implementation period

2005 – 2006



The Finance Sector

Specialized solutions for the finance sector

- Desktop integration solutions for trading floors
- Internal logistics (pneumatic transfer) systems

Security solutions

- Security alarm
- Access control
- Fire alarm
- Fire extinguishing
- Video surveillance
- Perimeter protection
- Integrated IP security solutions

Telecommunications solutions

- Computer networks
- Wireless networks
- Computer network security solutions
- Telephony solutions
- Solutions for contact and call centers
- Integrated data, video, and voice transmission solutions

Installation of data centers

Electrical energy solutions

- User power supply solutions
- Lighting control solutions
- Installation of electrical wiring
- Installation of lightning protection and earthing devices
- Uninterrupted power supply solutions

Professional video and audio solutions

- Conference systems

Automation and control solutions

Other solutions

- Information terminals

Major projects implemented

- Security system for Barclays Bank IT center in Lithuania
- An integrated security system for SEB bank
- Communication infrastructure and contact center for Danske Bankas
- Upgrading of Bankas Snoras telecommunications system and implementation of computer networks, building management systems, and a contact center
- Implementation of security solutions, server expansion, and SWIFT premises arrangement for the Bank of Lithuania



The Finance Sector

DNB Bank offices security and information systems

Task

To implement security solutions at bank offices, ATMs and money vaults and to ensure impeccable and uninterrupted operation of bank information systems.

Project description

Since 1996, FIMA has installed and maintained data communication, power supply and crucial security solutions in more than 60 DNB bank offices.

To ensure security for bank staff, clients and property, FIMA experts set up autonomous video surveillance and recording systems in all of the bank's offices. These systems are centrally controlled from the head office. For video surveillance, FIMA used ultra-sensitive cameras with night vision to deliver crystal clear images. In addition, FIMA installed a state-of-the-art security alarm and access control system in the bank. Special attention was paid to high-value vaults and to workplaces where cash transactions were performed.

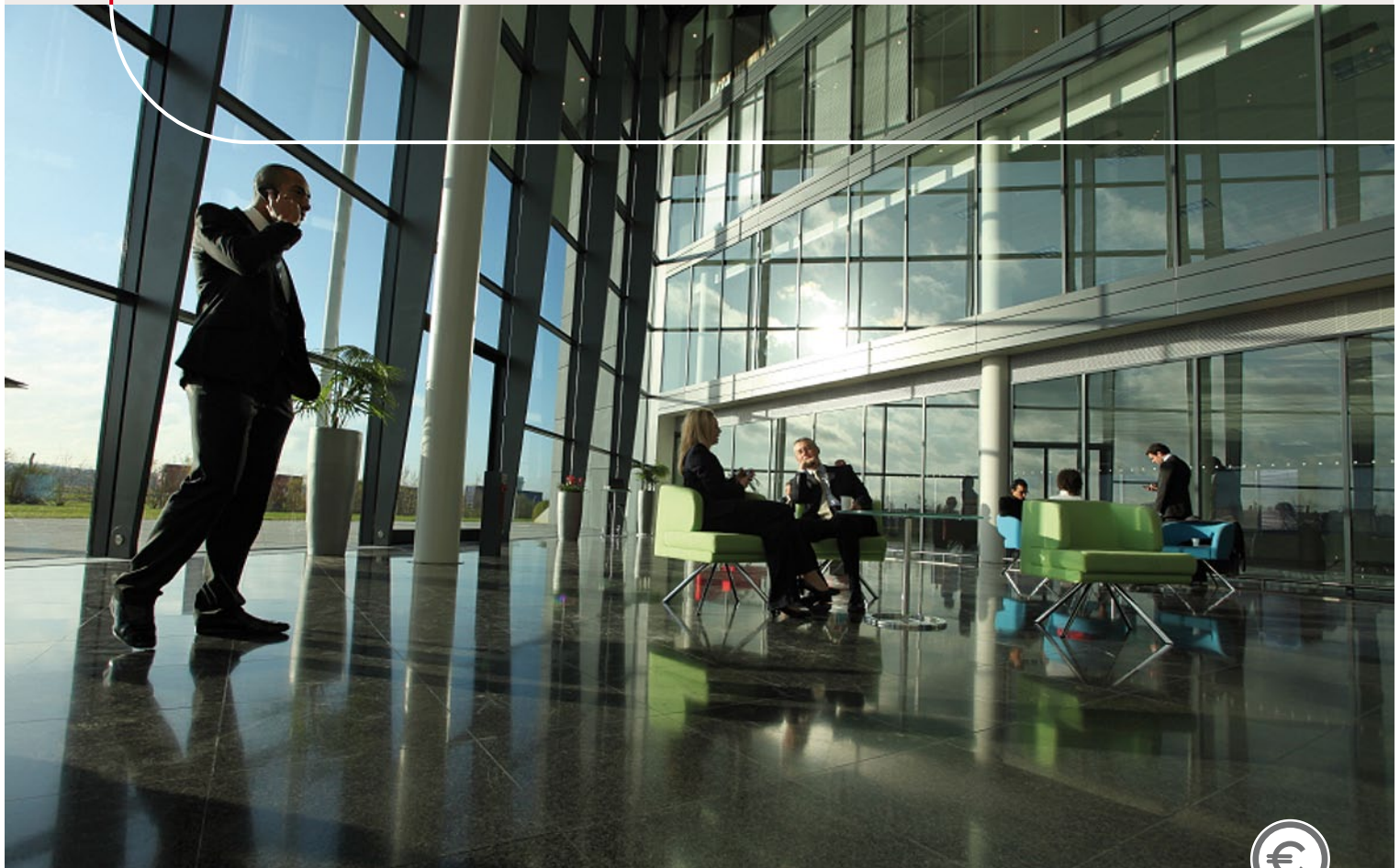
FIMA specialists continue to perform 24/7 technical maintenance of the systems it installed at DNB bank across the country.

Solutions

- Video surveillance systems
- Access control systems
- Security and fire alarm systems
- Data communication solutions
- Uninterruptible power supply solutions

Project implementation period

On-going co-operation since 1996



The Healthcare Sector

Specialized solutions for the healthcare sector

- Nurse call systems
- Internal logistic (pneumatic transportation) systems
- Protection from electromagnetic radiation

Security solutions

- Security alarm
- Access control
- Fire alarm
- Fire extinguishing
- Video surveillance
- Integrated IP security solutions

Telecommunications solutions

- Computer networks
- Wireless networks
- Computer network security solutions
- Telephony solutions
- Solutions for contact and call centers
- Integrated data, video, and voice transmission solutions

Installation of data centers

Electrical energy solutions

- User power supply solutions
- Lighting control solutions
- Installation of electrical wiring
- Installation of lightning protection and earthing equipment
- Uninterruptible power supply solutions

Professional video and audio solutions

- Internet protocol television (IPTV)
- Conference systems

Automation and control solutions

Other solutions

Major projects implemented

- Security system in Rokiškis psychiatric hospital
- An integrated engineering system solution for the Baltic American Clinic
- A telecommunications system for the Red Cross Hospital
- Data networks for Vilnius University Hospital Žalgiris Clinic
- Computer telephone network for polyclinics in Vilnius



The Healthcare Sector

Mobile nurse call system in Šiauliai county hospital

Task

Development and implementation of a nurse call system to enable the mobility of nurses and to ensure that signals sent are received in any part of the building.

Project description

FIMA created and implemented a mobile nurse call system which includes 57 ward beds for the first surgery department at Šiauliai county hospital.

The system alerts surgery department staff to the conditions of patients from monitors placed in duty posts as well as via pagers.

The system stores information about the history of calls and makes it possible to analyze the work of nurses. A signal received by a nurse indicates not only the ward, but also the specific bed in which the patient requiring assistance is located.

The system can be programmed so that monitoring devices send signals about critical changes in the condition of seriously ill patients.

Solutions

Nurse call system

Project implementation period

2009





Global manufacturer of data centre infrastructure, IT power supply energy and cooling systems



World leader in the field of intelligent communication systems and contact centers



An exclusive Czech supplier in the field of transportation, signalling telecommunications, automation and information technology



A global technology company that designs and develops visualization products



Institute designing train traffic control systems



Global company developing and implementing railway microprocessor traffic control systems



A global producer of video surveillance and audio systems



A leading supplier of copper and optical structural cabling systems



The world leading developer and manufacturer of high quality building automation systems



Innovative developer of intelligent video recording systems



Leading manufacturer of uninterrupted power supply devices



The US leader in the design, building, and installation of sophisticated Ethernet solutions that meet the toughest challenges in network connectivity and IP-based communications



The global leader in infrared cameras, night vision and thermal imaging systems



World's leading supplier of electrical generators and power supply technologies



An Australian developer and manufacturer of a fully integrated Security-Access Control Systems



Global manufacturer of a broad spectrum of diesel and gas generators



A global leader in automotive experience, building efficiency and power solutions



An innovating company that has designed and obtained patent protection for a power-efficient data center cooling solution



Global producer of IT systems



Developer and producer of monitoring and information systems



Manufacturer of call and video recording equipment



A world leader in the design, development and manufacture of video and security systems



A manufacturer of high-quality, reliable uninterrupted power supply solutions



A global producer of unattended ground sensors and intrusion detection systems



A leading supplier of passive cabling solutions for high-quality communication networks



World leader in identification and security control solutions



High quality CCTV and security technologies provider



The producer of the world's most complete line of electronic perimeter intrusion detection systems



An expert in the development and manufacture of remote controls (SCADA/DMS) systems



An expert in the field of development and installation of fire extinguishing and integrated security systems



World's leading technology company of security solutions



Global leader in environmental and industrial measurement

LITHUANIA

FIMA, UAB

Žirmūnų g. 139
LT-09120 Vilnius, Lithuania
Tel. +370 5 236 3535
E-mail: info@fima.lt
www.fima.lt

LATVIA

FIMA, SIA

Dzelzavas iela 120g
Rīga, LV-1021, Latvia
Tel. +371 677 222 77
E-mail: info@fima.lv
www.fima.lv

POLAND

FIMA Polska Sp. z o.o.

ul. Poleczki 12
02-822 Warszawa, Poland
Tel. +48 22 894 60 13
E-mail: biuro@fimapolska.pl
www.fimapolska.pl

BELARUS

FIMA BR, OOO

ul. Biriuzova 10a, № 7H
Minsk 220073, Belarus
Tel. +375 17 200 59 99
E-mail: info@fima.by
www.fima.by