Case study book

Check out how you can develop your business with
Orange for Business solutions

Dear Readers,

Orange Polska Group creates innovative, comprehensive solutions to support the businesses of our customers. Every day we advise companies and institutions how to develop even better thanks to modern communication tools, digitalization and advanced technologies.

We encourage you to read our case study book. The book presents examples of completed projects for customers from various industries who decided to use our solutions and gained tangible benefits for their companies. We hope that it will inspire you to look for innovative tools to improve your business as well.

Table of contents

#1 Communication

#1.1 Castle Ryn Hotel

Client

Castle Ryn Hotel is a historic facility, and now a modern hotel and recreation complex, which belongs to the Anders Group.

Challenge

- improving the operations of the facility
- ensuring even higher guest satisfaction thanks to reliable data network and modern communication

1 Communication

Industry
hospitality

Company size
hotel and recreation complex
with conference rooms and a SPA area

Scale of operations
350 beds, conference rooms including the
largest one for up to 1000 people

#1.1 Castle Ryn Hotel

Solution: BVPN, Business IP Telephony, devices

- we delivered 200 standard telephones as room equipment and 20 system IP telephones to the office, reception and restaurant
- we launched the Business VPN service using a separate fiber-optic connection – thanks to this, the hotel can now use VoIP technology
- we implemented Business IP Telephony

Business benefits

- fast data, voice, and video transmission thanks to Business VPN
- reliable voice communication throughout the facility provided by Business IP Telephony that allows for:
  - centralized communication management
  - call reporting for all contacts
  - traffic prioritization
- free calls within the company network

Back to table of contents

Customer's opinion

"The comfort of our guests, visiting both privately and for business purposes, is particularly important to us. Thanks to Orange, we have gained a fiber-optic connection that provides fast and reliable data transmission for our guests and staff. We streamlined the hotel's
communications thanks to modern IP telephony, which optimized the costs and allowed for efficient management of voice communications."

Ireneusz Raczyński
Technical Department Manager, Ryn Castle Hotel

#1.2 Hydrosolar

Client

Hydrosolar Group belongs to one of the biggest wholesale networks in the heating, installation, sanitary, air conditioning, ventilation, and water treatment industries in the Polish and European markets.

Challenge

Streamlining and unifying internal communications, so that it is both easy to maintain and does not require large investments at the implementation stage.

1 Communication

Industry
retail chains

Company size
530 employees

Scale of operations
79 retail outlets,
including 68 self-service installation
wholesalers and 11 company offices

#1.2 Hydrosolar

UCaaS solution

- we integrated the corporate network
- we unified the company's telephony
- we configured solutions taking into account all employees, allowing for selection of specific features to meet the needs of particular employee groups

Business benefits

- integration of the Group's communications
- improved network security and communication stability
- full cost predictability – also in the event of further extension of the network
- MPLS links allowed greater scalability and mobility, high quality of connections and no additional costs of internal communication in the company
- security of data stored on Polish servers with guaranteed backup

Customer's opinion

"UCaaS is a flexible and secure solution that adapts to the communication needs of our employees. The solution is very easy to expand to new users without incurring the costs of infrastructure extension. We were also able to eliminate an outdated telephone exchange, whose operation caused increasing costs while limiting the improvements in company management. From our point of view it would also be extremely important to create a unified system for fixed and mobile calls together with the billing system. In the near future, we are also considering the implementation of a contact center – a special hotline to support our customers and installers."

Marek Bajon
Managing Director

#1.3 Automotive client

Client

A leader in automotive safety. The company develops, manufactures and markets airbags, seat belts and steering wheels. These products are sold to all leading automobile manufacturers around the world.

Challenge

- efficient, unified communication
- reliable connectivity, both traditional and mobile

1 Communication

Industry
automotive

Company size
2,500 employees in Poland

Scale of operations
27 countries, 2 branches in Poland in the Dolnośląskie province

#1.3 Automotive client

Solution: Mobile, IT infrastructure

- provision of mobile services and hire purchase of mobile phones
- transferring the Wholesale SMS service to the Orange network
- provision of mobile accessories
- IT infrastructure services – supply of disk arrays
  and network switches

Business benefits

The cooperation between the companies began in Poland –
from the first deliveries of telecommunications services to advanced
computer equipment.

It was then expanded to other countries and is now implemented
through the company's headquarters thanks to:
- timeliness of order performance
- prices tailored to customer expectations

Back to table of contents

#1.4 RK Niedziałek

Client

RK Niedziałek is the South-Eastern Polish market leader
in the comprehensive supply of car repair shops
with car parts, oils, consumable fluids and tools,
as well as equipment and materials needed to perform car repairs.

Challenge

- efficient communication within the company
- simplified and reliable customer contact system
- centralized communication management

1 Communication

Industry
retail chains

Company size
14 branches

Scale of operations
fleet of over 80 cars,
retail and wholesale customer service

#1.4 RK Niedziałek

Solution: Business IP Telephony

- lease of PABX
- collocation of the headquarters in the Data Center in Łódź
- Business IP Telephony
- VPN and wireless (backup) links – to 16 branches
- 96 IP phones

Business benefits

- reliable, integrated voice communication between the head office and the branches
- increased number of voice channels and an integrated phone book for all branches
- all calls made over the Internet – possible use of computer applications – Softphone and PhoneCTI
- Multimedia-class Business VPN for high-speed transmission of data, voice and video over a single IP line
- free of charge calls between branches and attractive rates for domestic, mobile, and international calls

Customer's opinion

"A modern growing enterprise requires a strong technology base. Efficient and seamless communication is key to building a competitive advantage in the market. Connecting data to the telephone database is a fundamental element that organizes the contacts between the customers
and the company. It allows for better use of employees' potential, and the analysis of telephone calls leads
to a significant improvement in individual customer service. Undoubtedly, such assistance contributes to faster growth of the organization. We hope that Orange S.A. will introduce newer and newer solutions and technologies in the future to help us even further improve our work and build a competitive advantage of our company."

Krzysztof Niedziałek
President of RK Niedziałek

#1.5 URBIS

Client

URBIS Sp. z o.o. is, among others, the City Cleansing Plant and the Waste Management Plant, which operates on the basis of won tenders and engages in advanced waste management.

Challenge

Call modernization and freedom of number portability
– implementing a comprehensive, flexible communication system.

1 Communication

Industry
public utility services

Company size
nearly 300 employees

Scale of operation
processing of 56 thousand tons of waste per year

#1.5 URBIS

Solution: Business IP Telephony

- we implemented Orange Business Communication together with Internet connection in a new location
- we transferred 73 analogue numbers from the old exchange to the new service
- the service operates at all company-owned sites
- we installed new telephones

Business benefits

- a high-speed Internet connection was established
- the quality of service has improved
- flexible configuration changes are possible
- freedom of number portability between locations has been achieved

Customer's opinion

"By implementing the Orange Business Communication service, we have significantly improved the quality of communication within our company. The new solution gives us much greater flexibility in migrating numbers between our sites. In the long term, we consider expanding our cooperation in the area of improving communication and security in our company. The offer of thermal imaging cameras for field workers is also interesting."

Mirosław Białecki
Head of the Employee and Administration Department
URBIS Sp. z o.o.

#1.6 VAN group

Client

VAN group is a company that provides a wide range of logistics services,
ranging from domestic and international transport,
to warehouse services, to brokerage and customs services.

Challenge

Deploying a unified, secure corporate network across all branch offices in
the country – regardless of data connectivity available at the given location.

1 Communication

Industry
Transport and logistics

Company size
36 locations in Europe, including 31 in Poland

Scale of operations
a fleet of over 3000 vehicles,
nearly 100 000 sq. m of warehouse space in
several locations in Poland

#1.6 VAN group

Solution:
UCaaS, WAN MPLS upgrade, LAN upgrade

Orange and Integrated Solutions have implemented a comprehensive ICT solution (from audit, to design and implementation, to maintenance) consisting of:
- modernization of WAN network based on MPLS technology
- IP telephony, audit and upgrade of LANs
- Unified-Communications-as-a-Service

Business benefits

- improved network security and communication reliability
- one entity responsible for all communication services
- putting the infrastructure in order
- easier network management
- full cost predictability, also in the event of further extension of the network
- greater scalability and mobility

Back to table of contents

Customer's opinion

"We have been thinking about upgrading our WAN and introducing an IP VPN solution since 2005. Orange Polska and Integrated Solutions proposed a solution that was scalable enough
to meet our needs not only today, but also in the future. This is because
it can be expanded very quickly, and IP telephony (including numbering) and data transmission services can be moved to another location.
If the office has to be relocated, a phone with the old number will be waiting for its employees at the new location. In the longer term, we are considering further areas of cooperation with Orange and IS, including the use of
the data center in Łódź, which, in addition to excellent technical facilities, has qualified staff and impressive security systems."

Adam Kasperowicz
CIO at VAN group

#2 Cloud solutions

#2.1 Ziemia Kaliska Cooperative Bank

Client

Ziemia Kaliska Cooperative Bank is a member of two cooperative bank associations: Spółdzielcza Grupa Bankowa oraz Spółdzielczy System Ochrony. The bank offers its products to consumers, farmers and businesses.

Challenge

- ensuring high availability of services
- fast and professional service in both traditional banking and online and mobile banking
- optimal infrastructure cost
- ensuring a high level of security

#2 Cloud solutions

Industry
banking

Company size
7 branches

Scale of operations
products for consumers, agriculture and business; traditional banking and online and mobile banking

#2.1 Ziemia Kaliska Cooperative Bank

Solution: Integrated Computing

- **implementation of the Integrated Computing service from Integrated Solutions based on Orange Data Center**
- **the bank uses a pool of Virtual Data Center resources and a self-service Customer Panel built on VMware's vCloud Director**
- **The Virtual Data Center is connected to the bank's locations using Orange's WAN MPLS and Business VPN services**

Business benefits

- **no costs of investment in server infrastructure associated to the purchase of equipment and its maintenance**
- **no costs connected with equipping the whole server room with supporting infrastructure – air conditioning, security, fire extinguishing, alarm systems, etc.**
- **no need to hire specialists to administer and maintain hardware platforms**

Back to table of contents

Customer's opinion

"By moving a significant portion of our systems to the Integrated Computing cloud, we took the security of our services to another level. We also ensured compliance with the regulator's ever-increasing requirements in this area. The solution allows for flexible management of our server resources and faster implementation of changes in hardware requirements. In an ever-changing technology landscape, this gives us tangible benefits of change management and allows us to rationally scale the hardware environment."

Piotr Muszyński
Director of Infrastructure, Ziemia Kaliska Cooperation Bank

#2.2 FMCG industry

Client

One of the world's leading retailers with operations in over
30 countries. It is an omnichannel trading group that has been operating in Poland
for over 20 years.

Challenge

Implementation of a modern solution providing a secure IT employee environment to work remotely without the need to invest in hardware and without service and maintenance issues.

#2 Cloud solutions

Industry
FMCG

Company size
900 stores in Poland

Scale of operations
various forms of activity: hypermarkets, supermarkets, wholesale and discount stores, housing estate stores, specialty stores and online store

#2.2 FMCG industry

Solution: VDI or virtual desktop

- **VDIaaS (Virtual Desktop Infrastructure As a Service) – the entire solution was implemented in the Orange Flexible Engine cloud using the Workspace service**
- **In the end, the company has opted for 250 virtual machines that are deactivated and restarted for the next employee when a specific person terminates their work**

Business benefits

- **simplify company-wide desktop management and improved data security due to centralized management**
- **eliminating the steps necessary with traditional desktop infrastructure, such as installing latest patches, updates and relevant versions**
- **thanks to the Workspace service from the Flexible Engine cloud, employees can use private computers on company resources**
- **reducing costs through subscription-based financing**
- **possibility to flexibly increase the current number of virtual desktops owned if necessary thanks to pay-as-you-go billing**
- **security – no data or applications are processed on endpoints**
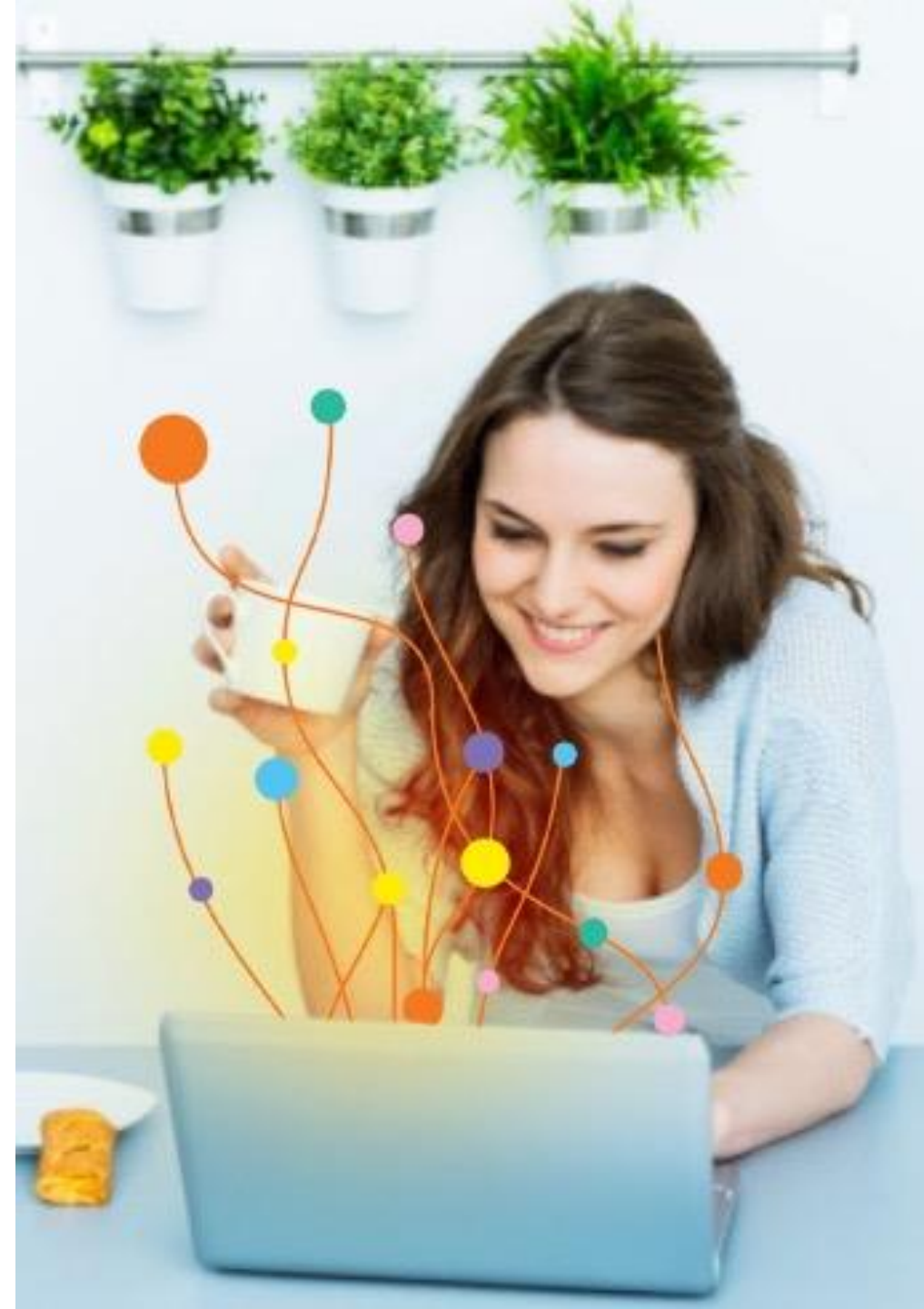
#2.3 Bunasta

Client

Bunasta is one of the largest, specialized customs brokers, providing services also at the borders of the European Union.
The company has been constantly developing since 2012 and supports transport companies in crossing state borders in the fastest and easiest way possible.

Challenge

- the need to migrate resources to one of the most popular ERP systems
- limitations in company's own infrastructure - insufficient to carry out the migration
- looking for a solution that ensures availability of resources from any location, without delays and the risk of data loss

#2 Cloud solutions

Industry
Transport and logistics

Company size
guarantee fund - 40 M EUR
30 service offices for drivers

Scale of operations
operates in such countries as: Lithuania, Poland, Belarus, Russia, Latvia, Ukraine, Estonia and at the borders of Great Britain

#2.3 Bunasta

Solution: Integrated Computing

It is a cloud service based on the VMware Cloud Director 10 platform, offered by Integrated Solutions in Orange Data Center in Łódź, which allows the user:
- **to use a virtual data center (servers, mass storage, network connections, etc.)**
- **to manage it using the self-service Customer Panel**
- **to receive a complete service providing access to the physical infrastructure in the form of hardware, software, technical support services**

Business benefits

- **cost optimization due to the effective use of IT resources, without the cost of purchasing the equipment and equipping your own server room**
- **predictable subscription fees**
- **security of data stored in one of the most modern Orange Data Centers in the country**
- **flexible availability of data from any location from anywhere in the world thanks to cloud resources**
- **technical support - consultancy of experts and engineers both at the stage of implementation and service maintenance**

Back to table of contents

Customer's opinion

„We constantly monitor new solutions, legal acts and technologies, thanks to which we can save our clients' time. We constantly invest in improving the quality of service and customer care. Thanks to the migration to Orange cloud, we have gained full security of our data, and above all, free access to it from any location. The method of billing based on subscription fees is also important - it does not require investment in own IT facilities.

The company is constantly developing and gaining new market areas - thanks to successful cooperation, we will take into account the offer of Orange and Integrated Solutions in the next steps of our development."

Andrius Povilaitis
head of the IT Bunasta department

#2.4 CUK Ubezpieczenia

How to gain an advantage in the competitive financial market?

Client

CUK Ubezpieczenia has been operating in the insurance consulting industry
in Poland since 2001, cooperating with all key
insurance companies in the Polish market.

Challenge

Orchestrating the network, moving business applications
and service platforms to a stable and secure cloud.

#2 Cloud solutions

Industry
insurance

Company size
330 locations

Scale of operations
offer of 30 insurance
companies

#2.4 CUK Ubezpieczenia

Solution: Collocation, BVPN, Managed UTM

- connecting CUK Ubezpieczenia's corporate network with the cloud using the Business VPN service
- arranging access to the Internet by creating a secured link in the Managed UTM service
- full, independent network addressing and improved communication with CUK branches and partners

Business benefits

High SLA (Service Level Agreement) level that guarantees the security and reliability of IT infrastructure functioning.

Use of the cloud computing model that allows to freely and easily scale the IT infrastructure depending on business needs:
- meeting the growing needs in both end customer service and cooperation across branches and partners
- increasing network security through protected access to the Internet using efficient edge routers and Fortigate devices installed in the Data Center in Łódź

Customer's opinion

"Like any company in our industry, we have our own server system, but the increased scope of operations means that our computing power is insufficient in the context of rapidly expanding facilities and introduction of new services. Expanding our own server room is not cost-effective, so we decided to migrate to the cloud. For our company, speed, continuity and efficiency of operation is extremely important to build a competitive advantage."

Przemysław Grabowski
Member of the Management Board of CUK Ubezpieczenia

#2.5 Femion Technology
Cloud brings new opportunities for business growth

Client

Since 2014, the company has been operating as a national payment institution developing money transfer and lending services offered through a network of partners and agents.

Challenge

- new areas of activity required innovative solutions
- an additional need was full IT outsourcing at the projected cost level
- it was necessary to guarantee an efficient environment compliant with Polish Financial Supervision Authority's requirements (e.g. at rest encryption)

Industry
financial

Scale of operations
services in:
- open banking
- deferred payments
- money transfers
- lending and management of loans

#2.5 Femion Technology

Solution: Integrated Computing

Our proposal included cloud solutions based on VMware technology.
- **The basis of the implemented solution is a virtual data center based on VMware virtualization technology, with a vCloud Director client panel for self-management of allocated resources.**
- **It was crucial to meet all the requirements of the Polish Financial Supervision Authority, including data encryption.**
- **In addition, we have provided documentation that confirmed the compliance with formal safety requirements.**

Business benefits

The implemented solution guarantees:
- **improved performance of infrastructure resilient to single points of failure**
- **meeting all the requirements included in the recommendations of the FSA**
- **confidentiality, uninterrupted access and maintenance of data integrity thanks to encryption and professional services of Orange specialists**
- **maintaining costs at the current level, while increasing productivity and guaranteeing business continuity**

Back to table of contents

Customer's opinion

"Larger customer volumes require absolute system reliability. Thanks to the cooperation with Orange and Integrated Solutions, we have gained not only an excellent cloud platform that fully meets our expectations, but also a guarantee that all formal requirements will be met and that we will be ready for possible inspections by superior bodies."

Tomasz Baliński

Director of Business Development, Femion Technology

#2.6 Van der Vlist

Client

Van der Vlist specializes in areas such as oversize and heavy haulage. Using his experience with different transport methods and guaranteeing control over all stages of the order, the company ensures proper organization of abnormal transport.

Challenge

Speeding up the flow of transport documentation allowing for unobstructed transportation within the EU.

#2 Cloud solutions

Industry
Transport and logistics

Company size
330 locations

Scale of operations
25,000$^{sq. \, m \, of}$ storage space
Various types of vehicles: tractors, trailers, pilot cars. Services: oversize goods transport, customs documentation, permanent cargo permits, pilot services, GPS vehicle tracking and more

#2.6 Van der Vlist

Solution: Corporate cloud drive

- **Orange and Integrated Solutions have deployed the Corporate Drive cloud solution based on the Micro Focus FILR file-sharing system, deployed on Integrated Computing virtual cloud servers.**
- **Access to corporate resources is provided via a web browser on workstations, while for mobile employees (drivers) – via a tablet application.**
- **Management and control of mobile devices is made possible thanks to the provided Mobile Device Management class system – Famoc Cloud.**

Business benefits

- **radically reducing the time of documentation flow, which significantly improves efficiency and effectiveness of the company's operations**
- **improved communication between employees translates directly into reduced costs and improved cash flow**
- **reduced time to invoice improves cash flow and significantly increases customer satisfaction**
- **in case of unforeseen problems on the road, the driver quickly obtains the necessary transport documents and can store and show them on their tablet**
- **data is stored on Orange's secure servers**

Customer's opinion

"The solution from Orange and Integrated Solutions came at the right time, when delays in delivering shipping documentation reached a critical point and noticeably started to affect the company's health. Providing drivers with access to documents in the cloud, most of all the oversize transport permits, provides security in the event of an inspection, while the driver's ability to take a photo of the load or damage gives immediate access to documentation to all office personnel. Crucially, taking photos of waybills allows us to issue invoices and send
them to customers on the day of unloading. With this implementation, we eliminated delays, resulting in a positive impact
on our financial result. Positive effects of the implementation encourage us
to extend the solution to other companies from the Van der Vlist Sp. z o.o. group."

Karol Zieliński
General Manager at Van der Vlist Polen Sp. z o.o.

#3 Internet of Things

#3.1 Alfamedica

Client

Alfamedica provides services in the medical industry and operates the "Słoneczne Wzgórze" retirement home. The company currently has one location in Łódź.

Challenge

- ensuring safety through automatic patient monitoring to improve the work of the staff
- implementing an easy-to-use and reliable communication system for resident emergencies

#3 Internet of Things

Industry
medical

Company size
retirement home – single facility

Scale of operations
care and nursing services, medical care, rehabilitation

#3.1 **Alfamedica**

Solution: Medical wristbands

Monitoring of residents with a full management and data transmission system. The implementation included:
- **delivery of devices/wristbands**
- **device licenses**
- **administration panel for system management available in a web browser and as a smartphone app**

Business benefits

- **constant monitoring – patient location**
- **emergency calls – easily made by seniors in the event of an emergency**
- **scheduling alerts according to the calendar of appointments, activities such as taking medication, etc.**
- **remote patient calling, e.g. for an examination**
- **easy wireless charging of the devices**
- **easy and clear management via the system administrator level**
- **convenient access to the panel via Internet and mobile app**

#3.2 Hydrosfera Józefów

Client

Hydrosfera Józefów ensures continuous water supply of appropriate quality, as well as reliable sewage disposal in the city.

Challenge

- **elimination of water losses**
- **shortening the time of detecting and removing failures in the water supply system**
- **improving the financial liquidity through continuous collection of water consumption data, elimination of cases of illegal water abstraction**

#3 Internet of Things

Industry
public utility services

Company size
1. Water treatment plant
2. Sewage treatment plant

Scale of operation
Production capacity of the water treatment plant
is about 5000$^{m3/day}$.

#3.2 Hydrosfera Józefów

Solution: Smart Water

- we delivered 1700 water meter caps together with a wireless data transmission service to monitor water consumption
- in total, the project at Hydrosfera Józefów will include approx. 10 000 measuring points
- in the case of coverage problems, the so-called femtocells were installed, allowing for signal amplification

Business benefits

- improving the collection of charges for water used, more accurate information on water consumption per month, sealing the system to minimize uncontrolled water leaks
- quick response to water supply system failures or irregularities in its operation
- reducing user abuse
- reducing the need for individual reading of water meters
- utilizing the experience of collectors for other tasks, e.g. servicing water meters, installing caps

Customer's opinion

"Thanks to the Orange Smart Water system, we can now check how much water we have delivered to a given area and whether this is consistent
with the amount of water we have injected into the water network.
In turn, customers don't have to worry about the reading, wait for the collector or provide the meter reading by phone. They can also receive invoices more often, even by email, if they wish."

Stanisław Zdanowicz
President of the Board of Directors of Hydrosfera Józefów

#3.3 Bolesławiec

Client

Bolesławiec is a city in Lower Silesia that is famous for its pottery – local stoneware is known on all continents.

Challenge

Increasing the efficiency of city services and companies and allowing for a more sustainable city.

Industry
city

Company size
nearly 39 thousand residents

Scale of operations
16.5 thousand properties, nearly 5 thousand business entities

#3.3 **Bolesławiec**

Solution: Smart City

The scope of the implementation was the E2E delivery of:
- **Smart Bike – 4th generation urban bicycle system**
- **Smart Water – remote reading of water meters**
- **Smart Lights – smart lighting management system**
- **Smart Sensor – air pollution sensors**

Business benefits

An ecosystem for managing the digital city was created that:

- **improved residents' safety and quality of life**
- **resulted in measurable savings in lighting operation and failure recovery**
- **reduced carbon dioxide emissions**
- **resulted in more efficient management of the water supply system**

Customer's opinion

"Our cooperation with Orange is almost exemplary
– we have full support for each project, and all
our requests are processed immediately. The implementations gave us
better control over our municipal utilities, reduced our costs, and most
importantly improved the quality of life for our residents.
Due to the plans for modernization and replacement of existing lighting
fixtures, we look forward to further cooperation."

Robert Rzepnicki
Deputy Head of Public Procurement
and Municipal Investments

#3.4 Włocławek

Client

It is one of the largest cities in the province.
What made Włocławek most famous are the factories of faience, whose images were put on the city's bikes to commemorate them.

Challenge

Popularizing a healthy and environmentally friendly mode of transportation, which is important to both the city and its residents.

Industry
city

Company size
more than 109 thousand residents

Scale of operations
number of businesses:
over 11 thousand.

#3.4 Włocławek

Solution: Smart City

Together with Roovee – a Polish manufacturer of city bikes – we have implemented
an innovative system of city bike rentals, named after
the city: "WŁOWER":
- 19 virtual stations
- 20 physical stations
- 220 bikes, including 20 bikes with child seats
- intuitive mobile app and dedicated website

Business benefits

- simple operation via mobile app (including technical support, also available in a foreign language for tourists)
- parking anywhere thanks to virtual stations
- promoting a healthy lifestyle
- affordability
- promoting environmentally friendly solutions

Customer's opinion

"The WŁOWER city bike-sharing system, which we have the pleasure to co-create, is a three-year project. It covers the entire city of Włocławek, with nearly 40 bicycle stations and 220 bikes, including 20 bikes with child seats. The technology provided by Orange and Roovee greatly simplifies the rental and return of bikes and gives our residents unlimited mobility – in reality, you can leave your the bike anywhere you want! A good indicator for further cooperation and development of the system is the fact that in the first month of its operation, i.e. in June 2020, we drove more than 100 thousand km together!"

Dr Marek Wojtkowski
Mayor of Włocławek

#3.5 Miejski Zakład Komunalny in Stalowa Wola

Client

Miejski Zakład Komunalny in Stalowa Wola is a leader in the field of innovative applications serving the protection of the natural environment. The company carries out investments to protect water resources, manage solid waste, and recover recyclable materials and energy from waste.

Challenge

- **promoting active recreation among residents**
- **reducing public transport and, as a result, improving air quality**
- **promoting the region and bicycle paths among tourists**

#3 Internet of Things

Industry
public utility services

Company size
9 independent utility service units

Scale of operation
257.58 km – length of the water supply system
48 thousand Mg – waste collected annually
2244 million – number of passengers carried annually

#3.5 Miejski Zakład Komunalny in Stalowa Wola

Solution: Smart Bike

The so-called 4th generation bike rental system
- **12 bike stations**
- **120 bicycles equipped with GSM and GPS modules**
- **mobile app and website**
- **IT platform for bicycle communication**

Business benefits

- **a single contractor responsible for an end-to-end solution**
- **immediate maintenance and service by Orange and Roovee**
- **the latest technology in the market**
- **high security**
- **effective engagement of residents**

Customer's opinion

"Bicycles are one of the many Smart City elements that are present in many Polish cities. In Stalowa Wola, bikes are embedded in the history of the founding of the steel city, as part of the pre-war idea of the Central Industrial District. In the pre-war years and then until the 1980s, bicycles were a key mode of transportation in the city and region. That's why our residents sue them so willingly and frequently: they see its advantages for both short trips within the city and longer sightseeing excursions. Personal transportation takes on special importance in the age of pandemics. With bicycles, it is possible to keep a safe distance and minimize the risk of infection, especially during the period of restrictions on the number of passengers on public transport buses. The city's bike-sharing system is, therefore, an ideal complement to our public transportation and this trend will certainly continue."

Paulina Jurkiewicz
Head of Project Implementation,
Miejski Zakład Komunalny Sp. z o.o.

#3.6 PGKiM Hrubieszów

Client

The company's activities include water, sewage, and waste management, as well as real estate administration.

Challenge

- shortening the time of collecting water consumption data
- streamlining customer billing
- reducing water losses

Industry
water and sewage, utilities

Company size
4 plants: water supply plant, sewage treatment plant, municipal services, housing and renovation

Scale of operation
Length of the active water supply system: 123.78 km

#3.6 PGKiM Hrubieszów

Solution: Smart Water

We delivered 1,500 water meters and caps together with
a wireless data transmission service to monitor water usage.

Business benefits

- accurate and immediate data on water consumption
- streamlining customer billing
- reducing user abuse
- reducing the need for individual reading of water meters

Customer's opinion

"Thanks to the implementation of the water consumption measurement system, we gained
the ability to collect all the information at the same time, which is necessary for efficient and accurate customer billing. The solution also eliminates unintentional reading errors made by collectors. Moreover, the time and workload associated with water meter readings has been significantly reduced."

Małgorzata Bocheńska
President of the Management Board of Przedsiębiorstwo Gospodarki Komunalnej
i Mieszkaniowej in Hrubieszów

#3.7 Zakład Komunalny Utylizacji Odpadów Komunalnych Izery

Client

The main activities of the municipal waste disposal plant include municipal services, such as collection, processing and disposal of waste, as well as water supply, sewage disposal and treatment.

Challenge

- caring for the environment and reducing air pollution
- limiting energy price increases

#3 Internet of Things

Industry
public utility services

Company size
water collection and transmission, sewage treatment, waste disposal

Scale of operations
services provided to 4 municipalities:
Gryfów Śląski, Stara Kamienica and Wleń

#3.7 Zakład Komunalny Utylizacji Odpadów Komunalnych Izery

Solution: Smart Energy

- we have implemented photovoltaic installations at three different locations of ZUOK
  Izery which showed the highest demand for electricity
- the total power of the installations is 100 kW, with more than
  300 photovoltaic panels
- the solution includes the complete service, i.e.: design, installation, implementation, commissioning, management and maintenance

Business benefits

- day-to-day control of energy production and consumption
- efficient energy management
- cost stabilization
- promoting renewable energy
- one contractor responsible for implementing and delivering the service

Customer's opinion

"Orange representatives listen to our needs and always try to respond to them. The most gratifying thing is that our partner introduces
new technologies to its offer, which is very useful
and measurably improves our work. Orange suggests interesting ideas and solutions, thanks to which our plant and residents gain real benefits. In the case of this implementation, the image aspect is also of great importance
– thanks to the panels, we developed the unused land created when the landfill ceased to operate."

Wiesław Gierus

President of the Board of Zakład Utylizacji Odpadów Komunalnych Izery
in Lubomierz

#4 Network and data transmission

#4.1 Bania Hotel

Client

Bania Thermal & Ski Hotel in Białka Tatrzańska welcomed its first guests in the 1920s. Today it is one of the most popular hotel complexes in the vicinity of the Tatra Mountains with a wellness & spa area.

Challenge

- reliable network connection in every place part of the complex
- easy management of the entire telecommunications and Internet infrastructure

#4 Network and transmission

Watch the video

Industry
hospitality

Company size
Bania Hotel complex equipped with a wellness & SPA zone, mini-park for children, conference area, connected with the Termy Bania aquapark

Scale of operations
1000 conference seats, 14 conference rooms, 275 rooms and suites

#4.1 Bania Hotel

Solution: BVPN, VoIP, Meraki, Contact Center

- we implemented the Business VPN service (2 x 6 Mbps)
- we installed fiber optic link with speed up to 800 Mbps
- we transferred analogue telephony to the VoIP platform
- we implemented the CISCO Meraki system
- we upgraded the hotel's contact center by moving it to the Orange Data Center platform

Business benefits

- we unified the communication of the Bania Hotel
- we increased the comfort of using the network by guests
- the solution has improved the quality of the Internet connection from any place within the complex
- uniform communication has increased employee efficiency

Back to table of contents

Customer's opinion

"Bania is a hotel that particularly cares about the level of guest service.
Hence the decision to choose the best solutions in the market and ensure our guests' comfort. The new investments represent a big change in Internet accessibility and link stability.
For us, this is a key concern, as there are currently 1.5 devices connected to the network per guest. It was a big challenge, which we managed to meet thanks to the cooperation with Orange.

At the same time, the efficiency and comfort of our employees' work has been improving – our goal is to ensure that the person logged into our system has a full overview of all communication channels.
By design, the call center to be implemented will serve as a CRM system,
which will allow us to manage contacts with our guests. All communication between guests and staff will take place in a "single place" and will be settled with a single provider. This is a significant advantage, especially as we also use mobile telephony from Orange, which proved to be extremely reliable in recent years."

Karol Pilch, Sales Director at Bania Hotel

#4.2 Gemini Polska

Smart data transmission network at Gemini Polska

Client

The Gemini brand has been present in the Polish market since 1990. For more than ten years, it has also been providing convenient online sales for patients, available at
24 hours a day. Today, approximately 200 branches located throughout the country operate under the Gemini brand.

Challenge

Connecting the facilities to a single logical structure with reliable
Internet access, ensuring business continuity and security.

#4 Network and transmission

Watch the video

Industry
pharmaceutical

Company size
approx. 200 brick and mortar outlets

Scale of operations
brick and mortar sales and 24/7 Internet sales

#4.2 Gemini Polska

Solution: Hybrid SD-WAN, ONS, BVPN, Cisco Meraki

- Business VPN to link all the locations together
- Orange Network Security – a service providing a high level of protection when using the Internet and a centralized security policy
for all locations
- Hybrid SD-WAN – an advanced solution for building a corporate network that guarantees business continuity thanks to reliable transmission regardless of the access technology, as well as traffic prioritization
and access to an administration panel that allows for monitoring of all applications in all locations
- Cisco Meraki – a service responsible for the maintenance of WiFi networks

Business benefits

- reliability of data transmission network, which translates into better business continuity
- minimizing the risk of downtime resulting from failures, which means reducing the risk of financial losses caused by
interruptions in Internet access
- increased bandwidth – a 4-fold increase in speed (from 10 Mbps to 40-50 Mbps) was achieved in nearly 80 locations where the solution was implemented,
- automatic backup

Customer's opinion

"Gemini is a modern company. We are open to innovation and willing to invest in advanced solutions and technologies. We focus on innovation, and we are happy to reach for solutions that help us increase the level of customer service. With Hybrid SD-WAN provided by Orange, we don't have to worry about Internet service interruptions that could result in our patients' needs not being met."

Marcin Szczepanowski

IT Systems Maintenance Manager
Gemini Polska

#4.3 Miele

5G campus network in the factory of the future

Client

Miele is the world leader in the production of premium household appliances. The company focuses on the production of home appliances as well as business products and medical devices ("Miele Professional").

Challenge

Manufacturing companies, including an industry leader like Miele, face numerous challenges such as:

- looking for new development opportunities
- increasing competitiveness and employee productivity
- optimizing production and operation processes
- dealing with frequently changing customer expectations
- quick reaction to changing market conditions

#4 Network and transmission

Industry
household appliances

Company size
More than 20 thousand employees (global)

Scale of operations
Representative offices in 47 countries worldwide

#4.3 Miele

Solution: 5G campus network

A high-speed, state-of-the-art 3.6 GHz 5G campus network with data transfer at speeds of more than 750 Mbps.
This end-to-end implementation includes design, delivery, installation and configuration of the network, as well as maintaining its high performance and reliability.

Business benefits

The 5G campus network from Orange will enable, among others:
- production automation and optimization of operational processes
- digitalization and automation of the quality control of created products
- launching large-scale employee training using virtual reality (VR)
- using autonomous vehicles on site
- support for a large number of IoT sensors
- remote expert support using augmented reality (AR)

Customer's opinion

"In the future, we want to use the 5G network Orange is building to support autonomous vehicles, a large number of IoT sensors and remote expert support using augmented reality (AR).
This is all aimed at driving the digital transformation of our factory and increasing its operational efficiency. We have also invited startups with whom we want to implement and test new 5G solutions. We hope to successfully apply them to our facilities in other countries as well."

Dr. Sven Schumacher
Managing Director at Miele Ksawerów

#4.4 PERN

Smart data network improves fuel depot logistics

Client

PERN is a strategic treasury company guaranteeing Poland's energy security in the area of oil and fuels. The company manages a network of oil and product pipelines, as well as crude oil and fuel depots.

Challenge

- building a high-capacity, reliable data transmission network, whose quality will not depend on field conditions
- real-time control of quality parameters

Watch the video

Industry
fuel

Company size
more than 1600 employees

Scale of operations
40 million tons of crude oil and liquid fuels per year at the marine transshipment terminal

#4.4 PERN

Solution: Hybrid SD-WAN

Implementation of a basic and backup WAN connecting two central locations – the headquarters in Płock and the office in Warsaw – the PERN data center and 19 production locations (fuel and transshipment depots)

Business benefits

- **significant improvement of the management system for the technological proces of crude oil supply and wholesale distribution to refineries and fuel depots**
- **flexible and optimal use of bandwidth**
- **high performance of business applications**
- **integration with private and public cloud solutions**
- **managing the whole network from a single location**
- **making immediate changes in delivery and application performance**

Customer's opinion

"Due to the strategic nature of its activity for the country, PERN cares about reliability and safety of the implemented solutions. We are eager to use innovative technologies that allow us to better serve our customers and – in the long run – improve the efficiency of our operations. Hybrid SD-WAN is an integrated, redundant system for all databases, which serves as a transport layer for other services. This allows us to easily integrate other solutions."

Mateusz Wodejko
Vice-President of PERN responsible for IT and other areas

#5 Digital Business

#5.2 FMCG industry

Client

Polish company that is the largest producer and exporter of cosmetic products in the country.

Challenge

The company's goal was to improve the purchasing process and increase conversion in the online channel by:
- improving the product search process
- increasing involvement of users on the store's website thanks to personalization of product offer

5 Digital Business

Industry
FMCG

Company size
Products of this brand are available in 70 countries around the world

Scale of operations
wide distribution in stationary stores and the online store

#5.2 Branża FMCG

Solution

Orange, together with QuarticOn, proposed a solution that allows personalizing the entire space of the online store thanks to intelligent algorithms that:

- record behavioral data of each client
- create his individual purchasing profile
- display products tailored to his needs, interests and expectations

Business benefits

- Increasing conversion by improving the process of searching and matching products
- quick implementation of the solution
- convenient and intuitive customer panel with extensive reports and the ability to monitor the most important KPI parameters
- free monthly consultation of QuarticOn specialist in the field of optimization of used strategies
- reliable and experienced technology provider
- convenient payment

Back to table of contents
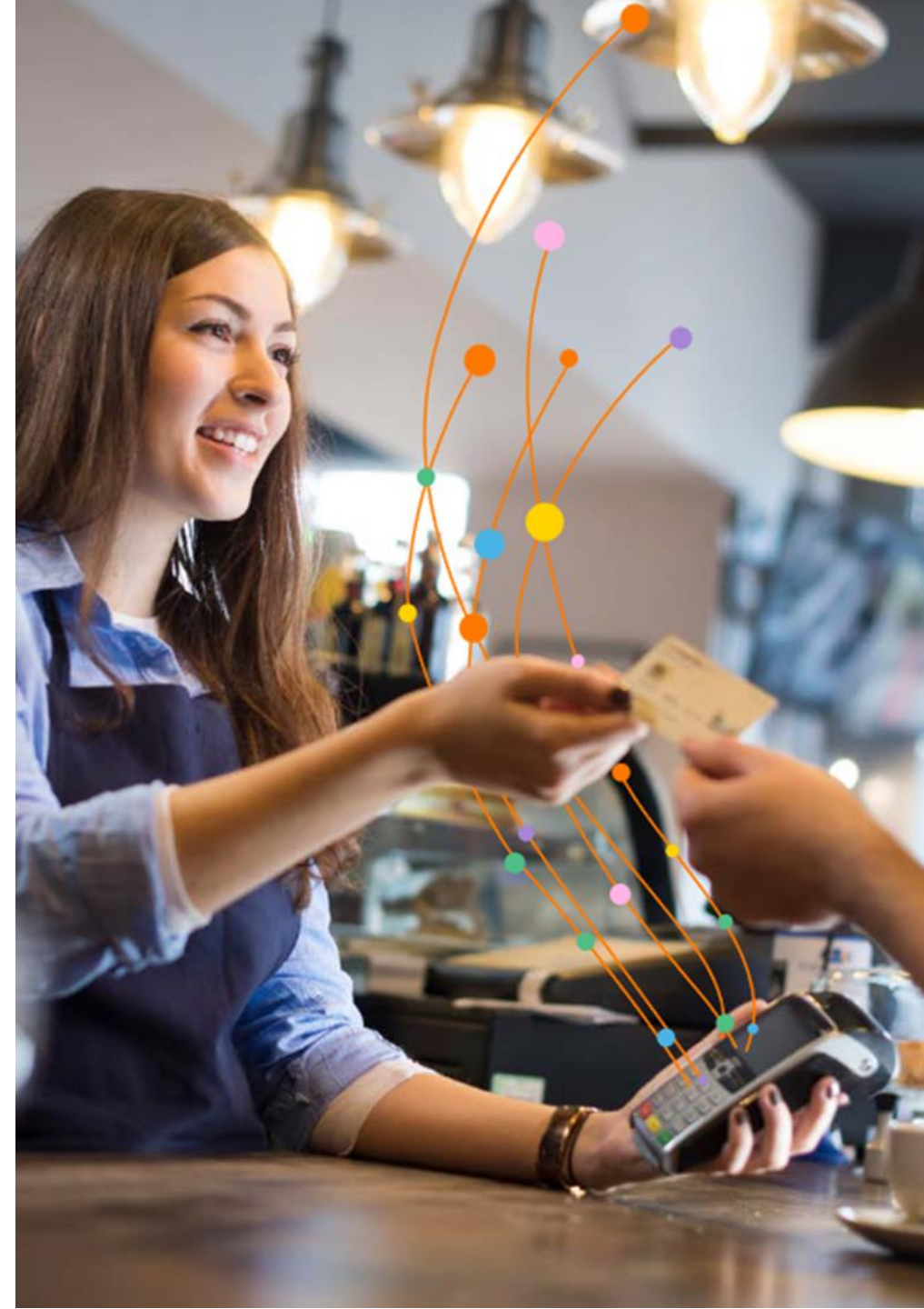
#5.1 Gołębiewski Hotels

Client

**Gołębiewski is a chain of modern hotels with complete infrastructure
for business guests – banquet, conference, and congress rooms
– for organizing training, conferences and formal banquets.
Thanks to numerous attractions and activities, as well as the Tropikana zone,
the hotels also attract
crowds of individual guests.**

Challenge

**Comprehensive upgrade of telecommunications
infrastructure – Internet, television, voice calls.**

#5 Digital Business

Hotel Gołębiewski

Industry
hospitality

Company size
chain of the biggest luxury hotels in Poland
located in Masuria,
in the mountains and in Podlasie

Scale of operations
4 hotels with conference infrastructure and
Tropikana zones – water parks

#5.1 Gołębiewski Hotels

Solution

Our implementation in the hotel in Wisła included:

- AmStream DVB-C headend
- cloud-managed news feeds
- DVB-T channels sent with an AmBroadcaster device via the Internet provided by Orange
- new PABX – the single scalable system includes integrated Internet, voice, and data communications

The implementation at the hotel in Mikołajki included channels managed by the hotel staff via the cloud.

Business benefits

- full information for guests about the facility is available at any time in the rooms
- savings on printing and distribution of brochures and current activity programs
- quick delivery of any content to all or selected recipients
- opportunity for business guests to present information about their companies, events, agendas
- service management from a single location
- a tool that allows to generate additional revenues from services offered via TV channels

Back to table of contents

Customer's opinion

"The solutions implemented by Orange fit into the strategy and mission of the development of our hotels, as our goal is to further increase the satisfaction of our guests. A stable system for TV reception and management is a reliable promotion channel for our hotel, and at the same time a simple and modern way to communicate with our guests."

Agata Michałek

Marketing Director
Gołębiewski Hotel Wisła

#6 Cybersecurity

6.1 PEC Gliwice | Cybersecurity audit, SIM cards – M2M

#6.1 PEC Gliwice

Client

PEC Gliwice is responsible for production, transmission and distribution of heat in Gliwice. Production takes place in the Gliwice Heat Plant and in two local boiler plants.

Challenge

Securing PEC Gliwice's infrastructure against future hacking attacks.

#6 Cybersecurity

Industry
heating

Company size
251 employees

Scale of operation
heat supply to institutions, industrial plants, commercial facilities and residents – 100 thousand inhabitants of Gliwice

#6.1 PEC Gliwice

Solution: security audit

- we conducted a security audit
- we presented the report with action recommendations
- we increased the safety of the heating network in Gliwice

Business benefits

- obtaining an objective opinion on the condition of audited facilities, prepared by external experts
- identifying any deficiencies and risks associated with the IT infrastructure
- recommendations in identified areas of potential improvement of security systems
- indication of opportunities to streamline processes, improve efficiency, rationalize activities and optimize costs
- security improvement expenditures with no impact on charges paid by system heat consumers
- the changes introduced had a positive impact on personal data handling and protection

Customer's opinion

"In my opinion, the audit was conducted very professionally, and the results were very rigorous, which is exactly what we wanted – both the security solutions and equipment were criticized. After reviewing the results, we made the recommended changes and re-audited after another 4 months. I believe that a re-analysis of security is necessary to properly assess the effects of the changes made and the current level of security. Moreover, we intend to conduct another security audit next year. This is particularly important as our company may be qualified by the Department of Security and Crisis Management at the Ministry of Energy to the group of key operators, which means increased security requirements. In such a situation, our cooperation with Orange will become even closer.

Krzysztof Szaliński
Deputy Director for Technical Issues at PEC Gliwice