

Proposal

RFACo

<https://rfaco-ic.com>

KONČAR

<https://www.koncar.hr/en>



TRADITION

History of KONČAR begins on January 24 in 1921 when the company Elektra was founded, which the same year became the property of Siemens group and operates under this name until the end of the Second World War. From 1946 to 1990 the company operated under the name of "Rade Končar", as of January 1 1991 is organized as a joint stock company and operates under the name KONČAR – Electrical Industry.

The development from the workshop to the concern of the electrical industry is marked by the delivery of the first electric engine with lacquer wire (1930) and the first generator made by the company (1948), which is initiated the unstoppable development.

Today, the name of KONČAR is recognized around the world as well as being a synonym for high level of quality and reliability. Equipment and installations in more than 100 countries on all continents are proof of those properties and are lasting monuments to the achievements of KONČAR Group.

The main business areas of the KONČAR Group are the production of equipment and plants for the generation, transmission and distribution of electrical energy, as well as equipment for use in the field of transport and industry.

KONČAR Group today is made of KONČAR – Electrical Industry (parent company) and 14 subsidiaries and two associated companies.

Annual sales are about 400 million euros, half of which is exported. Over the years KONČAR products are exported in more than 100 countries on all continents.

Our strategy is to advance development and increase production in line with market demands, with special emphasis on our own development and know-how, as well as corporate social responsibility.

RESEARCH AND DEVELOPMENT

An integral part of long-term business policy of the Group' is reliance on products as a result of its own development. Management of KONČAR – Electrical Industry Inc. manages development on the basis of the adopted concept of strategic development areas in KONČAR Group. All of the decisions are in line with long-term development objectives, needs to develop new products, development of technology and available resources.

The strategic areas of development:

- Electricity production
- Substations and transmission of electricity
- Rail vehicles
- Renewable sources
- Advanced network and computer systems
- Information technology

Development activities are related to KONČAR – Electrical Engineering Institute and KONČAR companies' technical offices, as well as the ongoing cooperation with educational and scientific institutions.

The most important development projects in the previous period:

- low-floor electric and diesel-electric train
- SF6 insulated switchgear
- wind turbine
- low-floor tram

The main features of research and development are:

- proper research and development
- scientific and research projects in cooperation with universities and other institutions
- 90% of the products is the result of our own development
- plant and equipment adapted to customer requirements
- proper solutions for production technology

The business policy of the KONČAR Group is focused on meeting the needs and expectations of customers and all interested parties (stakeholders) through enterprise management, resource and processes management, and their continuous improvement.

The quality of products and services is achieved by fulfilling the needs and demands of our customers during the creation of products and services, from contracting, development, production and delivery, to provide services to customers in the use of products and services.

In accordance with the guidelines of [Sustainable Development](#) we apply the Quality Management System ISO 9001, Environmental Management System ISO 14001 Occupational Health and Safety Management System OHSAS 18001/ISO 45001:2018, Information Security Management System ISO/IEC 27001 and Energy Management System ISO/IEC 50001.

For some products a number of other standards is respected in accordance with the requirements of customers and users.

KONČAR – Digital is the newest member of KONČAR Group. We focus on green transition and digital transformation projects. Our mission is to leverage KONČAR's century of excellence and new talents to create sustainable digital power engineering solutions, infrastructure and build sustainable society.

We develop digital solutions and software platforms for smart power engineering control, critical and urban infrastructure and smart city management.

Our systems and processes are certified for Information Security Management (ISO/IEC 27001), Quality Management (ISO 9001), Environmental Management (ISO 14001) and Occupational Health and Safety Management (ISO 45001)





INTRODUCTION

Digital solutions and platforms

Our experts develop digital industrial solutions and software platforms for advanced management of power grids, critical and urban infrastructure and smart cities.

Open and modular architecture of modern software platforms based on SCADA and IoT systems ensures independence of technology and equipment manufacturers, by providing:

- Adaptability and integration into existing processes and systems,
- Access to various systems from a single operations center,
- Contemporary solutions with possibility to upgrade.

Data validation and cyber security systems guarantee integrity and security of data.

Applications: power generation, transmission and distribution systems, renewable energy sources, hybrid microgrids and electric vehicle charging, public lighting, gas and thermal energy systems, water supply and drainage systems, flood protection solutions, consumption metering, loss detection and energy efficiency in buildings, environmental monitoring, noise and air quality monitoring, and other.

PROZA HAT

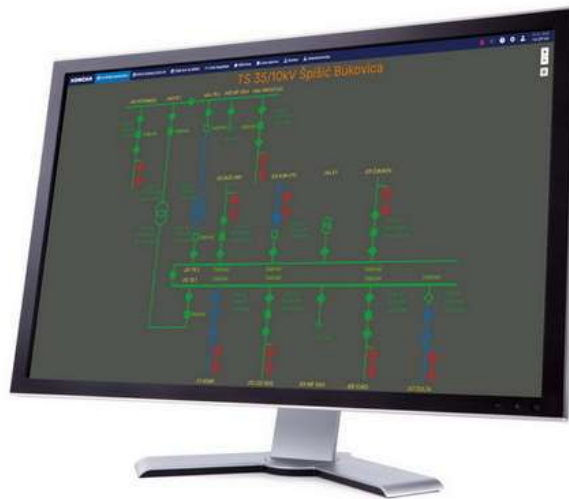
PROZA HAT is a cutting-edge SCADA platform for automating energy system and critical infrastructure management.

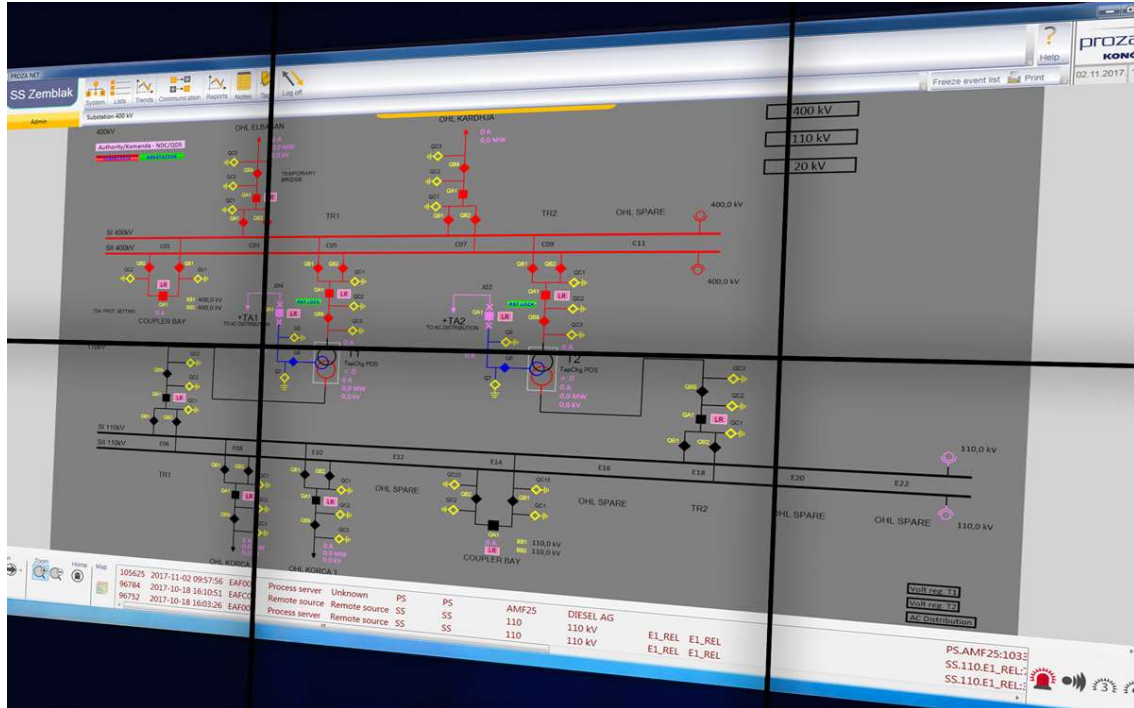
It is developed for applications in automated management of energy distribution systems and transformer stations. It supports complete functionality of SCADA systems for real-time monitoring and control of primary and secondary equipment in distribution substations.

The software is developed by KONČAR as a result of 40 years of experience in the development of digital solutions for power system and power plant management.

Key features:

- Automatic data reading
- Operating on a Linux OS, in a virtual environment or on a physical computer
- Security through user authorization, centralized logging of all system events and secure control mechanisms
- Unique solution for digital redundancy in a cloud system
- Simple upgrade to new versions and compatibility with previous versions\
- Adaptability and integrability with different operating systems
- Open-source core
- Web-based graphical UI
- Quick and easy configuration for complete engineering





PROZA NET integration platform

SCADA & RTGo

One of the basic problems of accelerated development and integration of the advanced power distribution grid is the lack of a single environment that would enable simple introduction of new subsystems while ensuring independence of a particular technology, applied control methodology and equipment manufacturers. We successfully solve these problems by implementing the PROZA NET platform which provides appropriate technology solutions based on open technologies that enable the application and communication connectivity of distributed control and monitoring devices and applications. The PROZA NET intermediary platform is a layer of software support that allows for the interaction between different applications and/or devices with the purpose of simpler and faster application development, and provides a set of multifunctional software capabilities from the operating system itself. Advanced industrial automation systems are largely based on computer systems, and therefore intermediary platforms have a significant role in the development of distributed control and monitoring systems.

The main features of the PROZA NET platform are:

The universality of the application – independent of the automation system domains

- Scalability – the possibility of application from mobile devices to data centers
- Adaptability – based on expandable software environments and libraries
- Modularity – adapted to connecting to external systems of other manufacturers
- Openness – based on international industry standards and globally accepted technologies

PROZA NET is the platform within which we implement the SCADA system with functions for monitoring and controlling facilities and plants in the field of power distribution (including

renewable energy sources with reference to wind farms), gas and oil, industry, transport and water management, which are continually being upgraded with respect to advances in technology.

PROZA NET has been fully developed at KONČAR-KET and is the result of own know-how and experience with hundreds of installations in power distribution, the gas sector, industry, water management, transport.

The RTGo system is used as a digital system which facilitates maintenance procedures of all types of plants. The system does not depend on the type of plant and, in addition to the maintenance process and failures analysis, it also offers the ability to read instructions from the operator and display digital SCADA information at any location in real-time (actual current data) using augmented reality.

The RTGo platform is a system intended for use in maintenance of all types of plants. It has been designed to be applied in various domains, making it useful in any type of plant, including large power plants. With the RTGo platform, you will be able to digitalize all maintenance processes. RTGo offers the ability to define detailed description of maintenance procedures, as well as descriptions of steps required of the operator to perform these procedures. The operator uses the mobile RTGo application to read instructions before and during execution of the maintenance process. The application gives the operator the ability to capture images and text of the executed procedure steps and suddenly detected malfunctions. Via a web application, the staff can monitor the entire maintenance and analyze and optimize all processes, thus enabling early failure prediction.

RTGo also offers the possibility of integration with the SCADA system in the environment and can, via the mobile applications and augmented reality, anywhere and in real-time, visualize the current state of equipment, which is sometimes necessary for quick execution of maintenance procedures. This is achieved by setting up special Končar augmented reality markers and observing markers through the mobile device camera. When the RTGo application detects a marker, it draws the current state of the relevant equipment over it.

Cyber Security

The first global certificate for compliance with the internationally-recognized industrial standard IEC 62443-2-4



The PROZA NET platform for the digitalization of automated power distribution systems is certified for compliance with the internationally-recognized industrial standard IEC 62443-2-4.

A power grid that is marked by cyber security is a prerequisite for automation and progress of future smart cities, and the fact that KONČAR's product PROZA NET was the first in the world to receive cyber security certification will enable the creation of new digital solutions that will enable accelerated development of the next power distribution grid known as the Smart Grid.

Network-accessible digital systems enable attacks that hide or falsify the sources of attack, and in the systems that are isolated, the greatest threat comes from the manner of operating the systems.

We have been following trends related to the management and security of digital systems and products. A few years ago, we received the certificate for information security management, and the IEC 62443-2-4 certificate is a natural continuation of the initiated process of gradually increasing the cyber security of the system we deliver to our customers.

Data centers – Key IT Infrastructure

Overall infrastructure and implementation of the PROZA NET integration platform

We have been implementing projects for the construction and renewal of energy infrastructure for data centers, with the implementation of PROZA NET as the platform for monitoring all infrastructure components:

- Power distribution: SS, MV, LV, DEA, UPS
- Mechanical engineering: air conditioning, ventilation
- Other systems: fire protection, fire alarm, video surveillance, access control, CNUS and LAN.

We also perform the construction and architectural design of the space required for the operation of data centers.

Significant functions of the PROZA NET platform that we implement for data centers to ensure security and availability standards are the following:

- Screen Displays,
- Data Collection,
- Time Synchronization,
- Data Processing,
- Alarm and Events lists,
- Lists Filtering,
- Data Model for Archiving,
- Historical Data Display and Reports,
- Management and the Transfer of Authorization,
- Sequential Management, ...

By implementing the PROZA NET system, we provide data center services to customers without interruptions.

Generation, Power Transmission and Distribution, Gas Transmission and Distribution system, Transport

Reliable system control

Our advantage lies in many years of experience in the implementation of information systems for real-time monitoring and control, as well as applications for analysis, forecasting, market functions as support to business processes of Transmission System Operators (power and gas), Distribution System Operators (power and gas), Power Generation Centers and the Railway Transport System.

All of the systems that we implement are modular, high-performance, insensitive to failures with built-in redundancy at all levels.

During the replacement of the system in the dispatch centers, we ensure the parallel operation of the existing and new systems by installing our own software and machine solutions with continuous and uninterrupted work of dispatchers and operating personnel.

We integrate information systems by providing the automation of business processes and activities, the integration of engineering and market/financial data, data consistency and the basis for analyses and business decision making.

We take into account the ability to change information systems and applications after the introduction of a new technology, while maintaining customer requirements.

We design, implement, test and commission:

- Dispatch centers for power transmission and distribution

- SCADA real-time monitoring and control system
- Applications for advanced EMS and DMS analyses (Energy Management System, Distribution Management System)
- Automatic Generation Control / Load Frequency Control (in transmission centers)
- Market applications
- A unique approach to the application user interface via the website for market and reporting functions
- Lightning Location System
- Wind Power Management System
- Meter Reading System
- Data Warehouse
- Common Data Model

- Electricity generation centers – the control and management of generating facilities in the river basin:

- SCADA real-time monitoring and control system
- Generation planning applications
- River basin simulation
- Reporting applications
- Timetable application
- Meter reading system
- Scheduling application
- Automatic Generation Control,
- Web portal and data warehouse.

- Dispatch centers in the gas sector

The local and remote monitoring and management systems include all components of:

- process instruments,
- metering systems,
- telemetry units,
- communications systems
- local and remote control centers
- gas quality control system
- for the purpose of collecting, transmitting and processing process data at all levels of the system.

We implement application solutions for complex process data processing in real-time and extended real-time, such as various process calculations, forecasts, simulations, etc.

- Dispatch centers in transport:

- SCADA real-time monitoring and control system
- Electric traction power supply control and monitoring
- Sectioning control and monitoring
- Control and monitoring of railway stations contact line disconnectors
- Control and monitoring of switch heating power supply disconnectors
- Telecommunication network monitoring

In all dispatch centers, a SCADA system based on the PROZA NET integration platform has been installed: <http://koncarkethr.lin61.host25.com/upravljacki-centri/it-rjesenja/>

MARS IoT platform

MARS is an innovative software platform for the industrial Internet of Things (IIoT) used for advanced management of the smart city, critical and urban infrastructure and power engineering.

This platform enables real-time remote metering, monitoring, control, analysis and reporting. It is used in power engineering, water supply and drainage, public lighting, electric vehicle parking and charging stations, for consumption metering, loss detection and energy efficiency, noise and air quality monitoring, waste management and in other fields.

Key features:

- Digital platform with open and modular architecture
- Integration with various business and process systems and upgradeability independent of equipment and software manufacturer
- Automated data reading from IIoT devices, smart meters and sensors, technology agnostic
- Simultaneous reading of data from a large number of devices
- Analysis, verification and calculation of data
- Data integrity and operability with cyber security systems
- Advanced reporting and warning systems
- Advanced real-time data visualizations



Quality

Continuous care about improving the efficiency of the quality system, environmental protection, health and safety protection



ATTESTATION OF CONFORMITY

No. 30102088-Consulting 10-1524

Issued to:
 Končar - Power Plant and Electric
 Traction Engineering Inc.
 Fallerovo setaliste 22
 10000 Zagreb
 Croatia

for the product:
 KKUIEC Communication Converter
 Version 2.0
 Type: Master station
 Version date: July 12, 2010

With the implemented communication protocol:

IEC 60870-5-101 ed.2 (IS 2003)

Companion Standard for basic telecontrol tasks and the Končar Protocol
 Implementation Conformance Statement (Version May 20, 2010)

The product has not been shown to be non-conforming to the specified protocol standard, including the interface requirements.

End-to-End data element tests for the information and control points as described in manufacturer Protocol Implementation Conformance Statement (PICS) have been performed on the product's protocol implementation. Functional tests in controlled mode are performed for the following levels:

<ul style="list-style-type: none"> • Station initialization in Unbalanced mode • Data Acquisition by Polling • Cyclic data transmission • Acquisition of events 	<ul style="list-style-type: none"> • General Interrogation • Clock synchronisation • Command Transmission • Transmission of integrated totals
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The test campaign did not reveal any errors in the product's protocol implementation.

This Attestation is granted on account of tests made at location of Končar in Zagreb, Croatia and performed with UniECim 60870-5-101 version 2.17.03 (April 2008) running CS101 Test Suite version CS101Slave 3.10. The results, including remarks and limitations, are laid down in our report no. 30102088-Consulting 10-1523.

The tests have been carried out on one single specimen of the product, submitted by Končar. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by KEMA is not the responsibility of KEMA.

Arnhem, July 16, 2010

M. Adriaensen
 Manager Intelligent Networks and Communication

P.H.S. Ermens
 Test Consultant

IMPORTANT: Remarks apply to this implementation. See the resulting report for full details
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 Telephone + 31 26 356 91 11, Telefax + 31 26 443 38 43

Experience you can trust.



ATTESTATION OF CONFORMITY

No. 30102088-Consulting 10-1522

Issued to:
 Končar - Power Plant and Electric
 Traction Engineering Inc.
 Fallerovo setaliste 22
 10000 Zagreb
 Croatia

for the product:
 KKUIEC Communication Converter
 Version 2.0
 Type: Controlled station
 Version date: July 12, 2010

With the implemented communication protocol:

IEC 60870-5-104 ed.2 (IS 2006)

Network Access for IEC 60870-5-101 using standard transport profiles in Standard direction and the Končar Protocol Implementation Conformance Statement (Version May 20, 2010)

The product has not been shown to be non-conforming to the specified protocol standard, including the interface requirements.

End-to-End data element tests for the information and control points as described in manufacturer Protocol Implementation Conformance Statement (PICS) have been performed on the product's protocol implementation. Functional tests in controlled mode are performed for the following levels:

<ul style="list-style-type: none"> • Station initialization • Cyclic Data Transmission • Acquisition of events 	<ul style="list-style-type: none"> • General Interrogation • Command transmission • Transmission of integrated totals
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The test campaign did not reveal any errors in the product's protocol implementation.

This Attestation is granted on account of tests made at location of Končar in Zagreb, Croatia and performed with UniECim 60870-5-104 version 1.20.02 (Oct 2009) running CS104 Test Suite version CS104 V1.34. The results, including remarks and limitations, are laid down in our report no. 30102088-Consulting 10-1521.

The tests have been carried out on one single specimen of the product, submitted by Končar. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by KEMA is not the responsibility of KEMA.

Amhem, July 16, 2010




M. Adriaansen
 Manager Intelligent Networks and Communication




P.H.S. Ermens
 Test Consultant




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Experience you can trust.

		Ref. Certif. No. DE 7-0493
IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE)		
Certificate of Conformity – Industrial Cyber Security Capability		
Type	Solution Capability Assessment	
Name and Address of the Applicant	KONČAR-Power Plant and Electric Traction Engineering Inc. Fallerovo 22, 10000 Zagreb, Croatia	
Certificate Coverage (including Version)	SCADA System / Integration Platform: PROZA NET V3.4	
Standard	IEC 62443-2-4: 2015 IEC 62443-2-4: 2015 AMD1:2017	
Requirements Assessed / Total Requirements	Solution Staffing (8/11); Assurance (4/7); Solution Hardening (7/9); Network Security (5/9); Data Protection (5/6); Wireless (0/6); SIS (0/12); Configuration Management (4/4); Remote Access (5/5); Event Management (3/8); Account Management (9/17); Malware Protection (7/8); Patch Management (7/12); Backup/Restore (6/9)	
Additional Information (if necessary may also be reported on page 2)	<input type="checkbox"/> Additional Information on page 2	
As shown in the Test Report Ref. No. which forms part of this Certificate	35236729	
This Certificate of Conformity, issued by the National Certification Body, certifies that the above have been found to be in conformity with the requirements of the Industrial Cyber Security Capability Scheme (IECEE OD-2061) as it relates to the claims declared by the Applicant.		
Date: 2018-12-20		 Signature:  Matthias Springer

		Ref. Certif. No. DE 7-0493
IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE)		
Certificate of Conformity – Industrial Cyber Security Capability		
Type	Solution Capability Assessment	
Name and Address of the Applicant	KONČAR-Power Plant and Electric Traction Engineering Inc. Fallerovo 22, 10000 Zagreb, Croatia	
Certificate Coverage (including Version)	SCADA System / Integration Platform: PROZA NET V3.4	
Standard	IEC 62443-2-4: 2015 IEC 62443-2-4: 2015 AMD1:2017	
Requirements Assessed / Total Requirements	Solution Staffing (8/11); Assurance (4/7); Solution Hardening (7/9); Network Security (5/9); Data Protection (5/6); Wireless (0/6); SIS (0/12); Configuration Management (4/4); Remote Access (5/5); Event Management (3/8); Account Management (9/17); Malware Protection (7/8); Patch Management (7/12); Backup/Restore (6/9)	
Additional Information (if necessary may also be reported on page 2)	<input type="checkbox"/> Additional Information on page 2	
As shown in the Test Report Ref. No. which forms part of this Certificate	35236729	
This Certificate of Conformity, issued by the National Certification Body, certifies that the above have been found to be in conformity with the requirements of the Industrial Cyber Security Capability Scheme (IECEE OD-2061) as it relates to the claims declared by the Applicant.		
Date: 2018-12-20		 Signature:  Matthias Springer

		Ref. Certif. No. DE 7-0498
IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE)		
Certificate of Conformity – Industrial Cyber Security Capability		
Type	Product Capability Assessment	
Name and Address of the Applicant	KONČAR-Power Plant and Electric Traction Engineering Inc. Fallerovo 22, 10000 Zagreb, Croatia	
Certificate Coverage (including Version)	Automation protocol conversion appliance system: PROZA LKKU V2.8	
Standard	IEC 62443-2-4: 2015 IEC 62443-2-4: 2015 AMD1:2017	
Requirements Assessed / Total Requirements	Solution Staffing (8/11); Assurance (2/7); Solution Hardening (6/9); Network Security (5/9); Data Protection (4/6); Wireless (0/6); SIS (0/12); Configuration Management (4/4); Remote Access (5/5); Event Management (1/8); Account Management (5/17); Malware Protection (7/8); Patch Management (4/12); Backup/Restore (5/9)	
Additional Information (if necessary may also be reported on page 2)	<input type="checkbox"/> Additional Information on page 2	
As shown in the Test Report Ref. No. which forms part of this Certificate	35241414	
This Certificate of Conformity, issued by the National Certification Body, certifies that the above have been found to be in conformity with the requirements of the Industrial Cyber Security Capability Scheme (IECEE OD-2061) as it relates to the claims declared by the Applicant.		
Date: 2019-03-07		 Signature:  Matthias Springer



CERTIFICATE



Management system as per EN ISO 50001:2018

In accordance with TÜV AUSTRIA CERT procedures, it is hereby certified that

KONČAR-KET, d.d.
Fallerovo šetalište 22
10000 Zagreb
Croatia

applies a management system in line with the above standard for the following scope

design, supply, construction, commissioning, overhaul and servicing of power generation, transmission and distribution facilities, industry and marine, electric traction and control and protection systems

Certificate Registration No. TA2/0203009182

Valid until 2023-08-08
Initial certification: 2017-08-07

Certification Body
at TÜV AUSTRIA CERT GMBH

Vienna, 2020-07-27

This certification was conducted in accordance with TÜV AUSTRIA CERT auditing and certification procedures and is subject to regular surveillance audits.
TÜV AUSTRIA CERT GMBH Deutschstraße 10 A-1230 Wien www.tuv.at



ZERTIFIKAT | CERTIFICATE | CERTIFICAT | CERTIFICADO | СЕРТИФИКАТ | شهادة | 證書 | 인증서

028249-10-1

www.tuv.at/onlinecheck

Projects Description:



The FLEX Coop develops a novel software platform for active demand response. The aim is to democratize the energy market through introduction of innovative demand response tools and novel business models and take the role of aggregators, and pays special attention to end-user comfort.

The FLEX Coop develops a novel software platform for active demand response. The aim is to democratize the energy market through introduction of innovative demand response tools and novel business models and take the role of aggregators, and pays special attention to end-user comfort.



HOLISDER – Integrating Real-Intelligence in Energy Management Systems enabling Holistic Demand Response Optimization in Buildings and Districts

The HOLISDER project builds an open, interoperable and mature framework addressing the needs of the whole demand response chain. HOLISDER enables the end users to participate in the market through implicit and hybrid active demand response schemes.



CROSSBOW – CROSS Border management of variable renewable energies and storage units enabling a transnational Wholesale market

The CROSSBOW project is a transmission system operators driven project, promoting shared use of resources to foster transmission networks cross-border management of variable renewable energies and storage units.



TRINITY – Transmission system enhancement of regional borders by means of Intelligent market technology

The TRINITY project extends the topics of the previous project in the direction of the electricity market. The aim of this project is to accelerate and harmonize the development of the regional market, based on experience from other regions and knowledge of the situation in the region.



BALIHT – Development of full lignin based organic redox flow battery suitable to work in warm environments and heavy multicycle uses

The EU-funded BALIHT project is designing new redox organic flow batteries that can work at temperatures of up to 80 °C. The new battery will be based on low-cost, abundant organic molecules that are easily dissolved in water, electrolytes comprising lignin, thin non-fluorinated membranes and carbon electrodes.



SYNERGY – Big Energy Data Value Creation within Synergetic energy-as-a-service Applications through trusted

SYNERGY introduces a novel framework and references big data architecture that leverages data, primary or secondarily related to the electricity domain, coming from diverse sources in repose to the need for “end-to-end” coordination between the electricity sector stakeholders, not only in business terms but also in exchanging information between them.

ATTEST

ATTEST – Advanced Tools Towards cost-efficient decarbonization of future reliable Energy Systems

The objective of the ATTEST project is to develop and operationalize a modular open source toolbox comprising a suite of innovative tools to support TSOs / DSOs operating, maintaining and planning the energy systems of 2030 and beyond in an optimized and coordinated manner, considering technical, economic and environmental aspects.



fresco – New business models for innovative energy service bundles for residential consumers

fresco aims to engage with ESCOs and aggregators and enable the deployment of innovative business models on the basis of novel integrated energy service bundles that properly combine and remunerate local flexibility for optimizing local energy performance both in the form of energy efficiency and demand side management.



PRAETORIAN – Protection of Critical Infrastructures from advanced combined cyber and physical threats

PRAETORIAN strategic goal is to increase the security and resilience of European CIs, facilitating the coordinated protection of interrelated CI against combined physical and cyber threats.

Reference list in the world

2017

CLIENT	NAME	DATE
Kahramaa/QATAR	TMS_TS_DOHA_METRO_WEST	10.01.2017.
Kahramaa/QATAR	TS Velika Popina	11.01.2017.
Kahramaa/QATAR	UPOV Čakovec	11.01.2017.
Kahramaa/QATAR	OPĆI PODSUSTAVI MC RIJEKA	27.01.2017.
Kahramaa/QATAR	TS Čitluk 2	08.02.2017.
Kahramaa/QATAR	TS Primošten	13.02.2017.
Kahramaa/QATAR	TS 110/35kV Pračno	14.02.2017.
Kahramaa/QATAR	RHE VELEBIT	17.02.2017.
Kahramaa/QATAR	HE ZAKUČAC	23.02.2017.
Kahramaa/QATAR	TS Zaprešić	24.02.2017.
Kahramaa/QATAR	TS_ALBIDA	02.03.2017.

HEP PROIZVODNJA ORLOVAC	HE ORLOVAC	16.03.2017.
Comision Ejecutiva Hidroelectrica del Rio Lempa/SALVADOR	TS_EL_CHAPARRAL	31.03.2017.
HEP ODS Elektra Zadar	TS 35/10 kV Nin	03.04.2017.
HOPS PrP OSIJEK	TS ĐAKOVO 220/110	05.04.2017.
HEP PROIZVODNJA ĐALE	HE ĐALE	18.04.2017.
HEP ODS DP Križ	TS KUTINA 110	24.04.2017.
HOPS PrP Split	TS NOVALJA	02.05.2017.
HEP ODS Elektra Karlovac	TS HE Ozalj	09.05.2017.
HOPS Rijeka	TS Krasica	15.05.2017.
Privatni investitor	TS Agroproteinka	16.05.2017.
HEP-ODS Elektroslavonija Osijek	TS Osijek 3	18.05.2017.
Končar IET	PC-TESTTRACK1	22.05.2017.
HEP ODS Zadar	DC Zadar	19.04.2017.
Indonesia PLN	TS_DURIKOSAMBI	08.05.2017.
Indonesia PLN	TS_MUARATAWAR	08.05.2017.

HEP ODS Elektrodalmacija	TS Hrvace	30.05.2017.
HOPS Zagreb	TS Kutina	06.06.2017.
UTE Urugvaj	TS_PDT_GSU 2	22.06.2017.
Petrokemija	Petrokemija	25.05.2017.
HEP ODS Dubrovnik	DC Dubrovnik	12.06.2017.
HOPS Rijeka	HE Senj	06.06.2016.
HEP ODS Zagreb	TS Botinec	04.05.2017.
HOPS PrP Rijeka	TS Krk	27.01.2017.
HOPS PrP Rijeka	TS Krk	22.03.2017.
HOPS PrP Osijek	TS 110/35kV Osijek 1	15.03.2017.
HOPS NDC	Razvod besprekidnog napajanja zgrade NDC	15.03.2017.
HEP ODS Virovitica	TS VIROVITICA1	27.06.2017.
HEP ODS Zadar	TS Silba	29.06.2017.
INA	INA RNR	29.06.2017.
OST/ALBANIA	SS Orikum	30.06.2017.

HEP ODS Varaždin	TS Nedeljanec	4.7.2017.
KETRACO (Kenya Electricity Transmission Co. Ltd.)	TMS_TS_SUSWA	5.7.2017.
Petrokemija Kutina	Petrokemija Kutina	10.7.2017.
HOPS Zagreb	TS Kutina	10.07.2017.
HOPS PrP Split	TS Sinj 110	07.07.2017.
HOPS PrP Split	TS Trogir 110	07.07.2017.
HEP ODS Elektrodalmacija	TS GOMILICA	01.08.2017.
HEP ODS Elektra Šibenik	TS 110/35kV Knin	19.07.2017.
HOPS PrP Split	TS Opuzen	23.08.2017.
ViO Split	CS Klara	31.07.2017.
Plinacro d.o.o.	FEP	31.08.2017.
Plinacro d.o.o.	FEP - testni sustav u KET-u	31.08.2017.
HEP ODS d.o.o. Elektra Varaždin	RS Trakošćan	31.08.2017.
UTE urugvay	TS_PDT_AUTO	01.09.2017.
Pomak Control d.o.o.	Centar Proizvodnje Zapad - MHP postaje	05.09.2017.

OST Albania	SS Himare	08.09.2017.
Ceylon Electricity Board	Colombo A substation	11.09.2017.
Ceylon Electricity Board	Colombo I substation	11.09.2017.
HEP Proizvodnja d.d.	Centar Proizvodnje Zapad	11.09.2017.
ELEKTRO PRIMORSKA	DC Elektro Primorska	13.09.2017.
HEP Proizvodnja d.d.	HE Ozalj1	05.09.2017.
Ceylon Electricity Board	Colombo N substation	18.09.2017.
ScottishPower Renewables	TS_EASTANGLIA	18.09.2017.
SDS	TS_LEMESANY	19.09.2017.
HEP ODS Elektra Zadar	TS 35/20/10 Obrovac HAC	20.09.2017.
Petrokemija	Petrokemija Kutina	20.09.2017.
Odvodnja Sisak	Odvodnja Sisak - Centar	26.09.2017.
HOPS PrP Osijek	PrP Osijek licenca br. 1-29092017	03.10.2017.
HOPS PrP Osijek	PrP Osijek licenca br. 2-29092017	03.10.2017.
HOPS PrP Rijeka	PrP Rijeka licenca br. 1-29092017	03.10.2017.

HOPS PrP Split	TS Orlovac	11.10.2017.
HEP ODS, Elektra Karlovac	TS 110/35kV Pokupje	12.10.2017.
HOPS RIJEKA	TS PLOMIN	12.10.2017.
HEP ODS d.o.o. Elektra Šibenik	TS 30/10 kV Crljenik	13.10.2017.
HEP ODS d.o.o. Elektra Zabok	TS 110/20 kV Krapina	19.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
General Engineering d.o.o.	Ma'aden GTW-GIS1 /KSA	20.10.2017.
Ceylon Electricity Board	Colombo L substation	25.10.2017.

Ceylon Electricity Board	Colombo M substation	25.10.2017.
7com Limited	Demo System for Exhibitions	20.10.2017.
TS 35/10kv Trogir	HEP ODS Elektrodalmacija Split	23.10.2017.
HOPS Rijeka	TMS_TS_PHELIN	25.10.2017.
HOPS Zagreb	TS Ksaver	25.10.2017.
CS Buško blato	TS Buško blato	26.10.2017.
SELAN d.o.o.	VE VRATARUŠA	30.10.2017.
HEP ODS Pula	TS Poreč	06.11.2017.
HEP ODS d.o.o. Elektra Zagreb	4TS 102 Samobor	10.11.2017.
HEP ODS d.o.o. Elektra Zagreb	TS 110/10 kV Dubec	10.11.2017.
ELEKTROPRIJENOS BIH OPERATIVNO PODRUČJE MOSTAR	TS 110/20/10 kV KUPRES	24.11.2017.

2018

Kahramaa/Qatar	TS_DOHA_SUPER	05.04.2018.
Kahramaa/Qatar	TMS Al Sowaidi Super	11.04.2018.
Dubai Electricity and Water Authority	TS Jebeli Ali	08.05.2018.
OST, Albania	SS Orikum	18.05.2018.
Kahramaa/Qatar	Al Shahhanyah Super	21.05.2018.
Kahramaa/Qatar	Umm Garn	21.05.2018.
Kahramaa/Qatar	Al Waab Super	29.05.2018.
KOST/KOSOVO	SS Prishtina	18.06.2018.
ELEKTROPRIJENOS BIH A.D./Bosnia and Herzegovina	TS 110/35/10(20) kV LJUBUŠKI	03.07.2018.
ELEKTROPRIJENOS BIH A.D./Bosnia and Herzegovina	TS 110/35/10(20) kV LJUBUŠKI	17.07.2018.
MEPSO/ Macedonia	TS SKOPJE 1/5	30.10.2018.
Veitur Utilites PLC/ ISLAND	Island Jon-A	12.11.2018.
KENGEN - Kenya Electricity Generating Company Ltd.	HPP Masinga	21.11.2018.
Saudi Consolidated Electric Company	TS_SHOAIBA	13.04.2018.

2019

Taiwan Power Research Institute/TAIWAN	CC SCADA TPRI IEC 61850-90-2 SS to CC project	U-23-19-00004	20.06.2019.
Taiwan Power Research Institute/TAIWAN	GW1 TPRI IEC 61850-90-2 SS to CC project	U-23-19-00004	20.06.2019.
DUQM RAFINERY/OMAN	DUQM RAFINERY - TMS 1	8360-25-15-0048	02.10.2019.
Transelectrica/Romania	TS_ISACCEA2/Romania	8360-25-15-0048	28.10.2019.
MEPSO AD Macedonia	TS Skopje 4	8350-23-18-0036	19.11.2019.
CGES a.d./ Montenegro	NDC CGES	25-19-00160	26.11.2019.
Olkaira/Keniya	Olkaira	8360-25-15-0048	11.12.2019.
DUQM RAFINERY	DUQM RAFINERY - TMS 2	8360-25-15-0048	02.10.2019.

2020

Svenska Kraftnet/Sweden	Malfors Substation	02.03.2020.
EP HZHB	DDC Mostar	10.03.2020.
EMS/Serbia	Beograd Substation	23.04.2020.
TANESCO Ltd./Tansania	S/S KIGAMBONI	21.07.2020.
Taleveras Group Nig Ltd/Nigeria	NIGERIJA CA4 + spare license	11.11.2020.
KOSTT/ Kosovo	KOSTT Substation1	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation2	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation3	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation4	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation5	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation6	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation7	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation8	17.12.2020.

KOSTT/ Kosovo	KOSTT Substation9	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation10	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation11	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation12	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation13	17.12.2020.
KOSTT/ Kosovo	KOSTT Substation14	17.12.2020.

2021

Institut/ UAEmirates	TS Fujairah S	26.02.2021.
Institut/ UAEmirates	TS Fujairah H	26.02.2021.
Institut/ UAEmirates	TS Misfa	26.02.2021.
KOSTT/Kosovo	SS VALLAC	03.03.2021.
KOSTT/Kosovo	SS BERIVOJCE	03.03.2021.
KOSTT/Kosovo	SS BESIANE	03.03.2021.
KOSTT/Kosovo	SS PRIZREN2	03.03.2021.
OST/Albania	Tirana 2	01.04.2021.