



# NextGen SCADA Europe 2018

## Integrating High Functionality Cyber Secure SCADA Systems into the Digital Grid

3-Day Conference, Exhibition & Networking Forum

**30th January to 1st February 2018**

Hotel Casa, Amsterdam, **The Netherlands**



### Hear In-depth Insights on:

- ✓ **Next Generation Architectures** – create cost-effective, flexible, future-proofed system architectures to meet the needs of the rapidly changing digital grid
- ✓ **SCADA System Integration** – achieve seamless integration of SCADA systems with GIS, AGC, and other IT and OT systems to maximise network visibility
- ✓ **Advanced Functionalities** – incorporate new functionalities to drive the self-healing network
- ✓ **Data Processing** – leveraging cloud solutions to manage high volumes of grid data and better inform decision making
- ✓ **Standardisation** – utilising CIM to deliver seamless integration of multiple systems and ensure the effective flow of information to and from SCADA systems
- ✓ **Cyber Security** – determining the optimal prevention, detection and response approaches to securing SCADA infrastructure

### 20+ Utility Case Studies From:

- Aurelio Blanquet**, Director, Division of Automation and Telecommunications & Chair EE-ISAC – **EDP**
- Jan Vorrink**, Manager National Control Centre, System Operations – **Tennet**
- Markus Lenzin**, Head of Substation Automation – **Swissgrid**
- Paul Plessiez**, Project Manager and member of EDI WG group **ENTSO-E – RTE**
- Jorge Hidalgo López**, Centre for Electrical Control and Integration of Renewable Energy – **Red Eléctrica de España**
- Gediminas Černiauskas**, Head of Control Systems Group – **LitGrid**
- Arūnas Medekša**, EMS/SCADA Architect – **LitGrid**
- Boaz Landsberger**, Information Security – **Israel Electric Company**
- Abdo Saad**, Department Manager – **Con Edison**
- Arjen Jongepier**, Innovation & Sustainability – **Enduris**
- Nuno Pinho da Silva**, Researcher – **R&D Nester**

- Jose Manuel Corera Sanchez**, Head of Control Systems – **Iberdrola**
- Raido Rosenberg**, Head of Network Systems Development – **Elektrilevi**
- Tony Hearne**, Future Networks Manager – **ESB Networks**
- Laurent van Groningen**, Lead Architect – **Alliander**
- Peter de Koning**, Lead Architect – **Alliander**
- Walter Schaffer**, Head of Load Distributor Center – **Salzburg Netz**
- Stefan Straubinger**, Electrical Engineer – **Salzburg Netz**
- Lhoussain Lhassani**, Data Communication and Cyber Security Expertise – **Stedin**
- Anne Van der Molen**, Expert Asset Management, Grid Strategy – **Stedin**
- Alexander Harsch**, Head of Cyber Security Resilience – **Innogy**

### Technology Innovations From:

- Johan Malmstrom**, Cyber Security Manager PG Grid Integration – **ABB**
- Frederic Wauquiez**, Distribution & Smart Grid Senior Product Manager – **GE Grid Software Solutions**
- Alexander Krauss**, Project Manager – **Siemens**
- Biren Gandhi**, Global Work & Asset Optimisation and Renewable Energy Solutions Leader – **IBM**
- Jose Manuel Corera Sanchez**, Head of Control Systems, **Iberdrola**

### Expert Advice From:

- Mark Ossel**, Vice President – **Networked Energy Services Corporation** & Board member **OSGP Alliance**
- Paraskevi Kasse**, Network & Information Security Officer – **ENISA**
- Glenn Janssen**, Senior Manager – **Accenture**
- Gert Rietveld**, Senior Scientist – **VSL**

### Cyber Security Seminar! Thursday 1st February 2017

Don't miss the opportunity to hear about the impact of advanced prevention, detection and response strategies to secure next generation SCADA systems.

Supported by:

Produced By:



Dear Colleague,

We are delighted to bring you the 5th annual **NextGen SCADA Europe 2018** conference, exhibition and networking forum. Due to popular demand, we are once again running this event as a standalone dedicated forum, providing the content depth and networking focus you need to help make important new decisions around upgrading your SCADA infrastructure to better meet the needs of the digital grid.

Over three intensive days you will hear from 20+ utility case-studies, on the crucial subjects of system architecture, integration, functionality and cyber-security. You will gain insights into the decision-making process, implementation experiences, and future roadmaps of the leading European TSOs and DSOs. And you will get to grips with the successes and set backs of key projects and how they are being evolved to better support the future grid.

**Just some of the benefits of this year's programme include:**

- ✓ **Case Study Programme** - hear from 20+ utility SCADA system experts and implementation leaders on the lessons learnt from actual deployments of next generation systems to meet the needs of the digital grid
- ✓ **Utility Heavy Speaker Line-Up** - selected on the strength of the projects they are involved in, their pivotal roles in implementation decision making, and their insights into lessons learnt and future roadmap
- ✓ **Roundtable Discussions** - the opportunity to brainstorm and problem solve with peers from across the SCADA ecosystem in small groups, bring real-life challenges to the table, and take-away fresh new solutions to support your implementation objectives
- ✓ **Cyber-Security Seminar** - taking place the day after the main conference, this seminar provides deep insights into the prevention, detection and response approaches to maximise the security of next generation SCADA systems
- ✓ **Solution Zone** - running alongside the conference, the solution zone provides a focused display of SCADA products and services with experts on hand to discuss your specific challenges and provide tailored advice to help drive your SCADA infrastructure to the next level
- ✓ **Evening Networking Reception** - taking place the evening of conference day one, this complementary networking event is open to all participants, and provides the opportunity to relax and unwind, meet with colleagues from across the European SCADA community, allow new ideas to cement and new partnership opportunities to emerge

We look forward to welcoming you to the event in January 2018.

Kind Regards,

Joanna Strumilowska  
Producer | **Phoenix Forums**

*PS: Very Early Bird Discount – Save €400 on Delegate places and €1,000 on Exhibitor spaces by booking before Friday 27th October 2017!*

*PPS: Group Booking Discounts – Save a further 10% on 3+ delegates booked from the same organisation at the same time - Call us on +44 (0)20 8349 6360 to arrange!*

## Sponsorship & Exhibition Opportunities

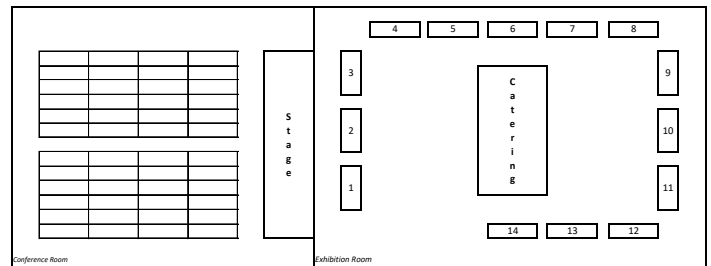
Would you like the opportunity to raise your brand profile, demonstrate your products and services, and share your expertise with a highly concentrated and influential group of SCADA system implementation leaders?

Our adjoining exhibition area provides the perfect platform for you to do this and more! Capped at 14 stands we ensure a focused and relevant display of the latest SCADA solutions and services for our audience and maximum visibility for each exhibitor.

To find out more about the various sponsorship and exhibition opportunities:

Call: +44 (0)20 8349 6360

Email: [registration@phoenix-forums.com](mailto:registration@phoenix-forums.com)



## Testimonials From Our Past SCADA Events

*"Great mix of participants with insights about challenges that utilities are facing now and in the future."*

**Oleg Gulich,**

Smart Grid and ICT Expert, Project Manager - **Caruna**  
@SCADA Track at SGTech Europe 2017

*"An enjoyable conference providing a very good overview of the state of the art SCADA technology and solutions as well as addressing questions that really matter, like SCADA security. Therefore, the visit was a very good investment."*

**Walter Schaffer,**

Head of Electrical Grids & Smart Grids Program Manager - **Salzburg Netz**  
@SCADA Track at SGTech Europe 2015

*"Excellent for creating awareness and supporting the further application and development of the Common Information Model."*

**Milos Bunda,**

Senior Consultant, **TenneT**  
@NextGen SCADA Europe 2014

*"NextGen SCADA was a great place to get to know what goes around in the energy sector, from TSO and DSOs to vendors with future system solutions."*



**Stefan Tholen,**

Analyst Netcalc, **Elia System Operator**  
@NextGen SCADA Europe 2013

*"Great networking, addressing the need to exchange ideas, approaches, points of views."*

**Laura Pimpinella,**

Control Systems and Automation Engineer, **ENEL Distribuzione**  
@NextGen SCADA Europe 2013

08:00	<b>Registration and refreshments</b>	14:00	<b>SCADA &amp; GIS - optimising the integration of SCADA &amp; GIS systems to achieve accurate and real-time monitoring of the grid</b> <ul style="list-style-type: none"> <li>Determining the range of information that can be extracted from GIS systems and used to produce in depth analysis and results</li> <li>Pace-layering SCADA, GIS and ERP in the correct security zones</li> <li>Ensuring that GIS data and visuals are represented accurately when transferred to SCADA</li> <li>Enabling secure remote accessibility of GIS through mobile channels such as tablets and cell phones and real-time monitoring on the move</li> <li>Establishing which application to use in which situation to maximise performance</li> <li>Dealing with changing requirements in the market and measuring the business benefits in terms of optimised network and crew management</li> </ul> <b>Laurent van Groningen, Lead Architect - Alliander</b> <b>Peter de Koning, Lead Architect - Alliander</b>
08:50	<b>Opening address from the chair</b> <b>Mark Ossel, Vice President - Networked Energy Services Corporation and Board member OSGP Alliance</b>	14:30	<b>SCADA &amp; AGC - achieving effective integration of AGC, SCADA and DER systems to ensure efficient load balancing and cost-effective power supply</b> <ul style="list-style-type: none"> <li>Understanding how increasing numbers of DER systems in the grid is driving the need for better integration of AGC, SCADA and DER systems</li> <li>Examining the architecture and interface considerations for SCADA, AGC and DER integration to support the seamless and real-time transfer of information in a dynamic digital grid environment</li> <li>Migrating towards a highly automated system architecture to minimise manual intervention and speed up operator decision making</li> <li>Determining the cyber-security vulnerabilities introduced by SCADA, AGC, DER integration and identifying how these can be overcome</li> <li>Quantifying the improvements that will be achieved in terms of reduced grid disruption and higher quality power supply (Speaker to be confirmed)</li> </ul>
09:00	<b>Drivers for Change - understanding the impact of the evolving digital grid on SCADA system requirements and determining a cost-effective system development plan to support this</b> <ul style="list-style-type: none"> <li>Understanding the implications of key drivers for change:                             <ul style="list-style-type: none"> <li>Increasing complexity presented by DER, DA, AMI, Storage, V2G, VPP</li> <li>New services and new business models</li> <li>Physical and cyber security driven by IT/OT, IoT and new applications</li> <li>Innovation through building new applications, trials and pilots</li> </ul> </li> <li>Evaluating how production, transmission and distribution network expansion is driving the need for greater data storage capability and analysis to support the day to day operation of the grid</li> <li>Implementing the most cost-effective system developments, functionalities and features to support stable and secure digital grid operations</li> <li>Assessing the emerging cyber-security risks posed by the evolving threat landscape and how it affects the need for SCADA system evolution into a Digital Grid Platform</li> <li>Integrating legacy SCADA systems with new platforms to extend system lifecycle</li> </ul> <b>Aurelio Blanquet, Director, Division of Automation and Telecommunications &amp; Chair EE-ISAC - EDP</b>	15:00	<b>Wide Area Monitoring - leveraging phasor measurements for accurate situational awareness and real-time grid control in the DSO environment</b> <ul style="list-style-type: none"> <li>Examining a methodological approach to DSO grid control and application development to ensure situational awareness in support of growing numbers of renewable generation</li> <li>Extending the development and implementation of DSO specific synchronized phasor measurement applications for grid control</li> <li>Selection, evaluation and prioritization of useful DSO applications of phasor measurement systems</li> <li>Developments on increasing sensor accuracy, data collection and storage, and data analytics for distribution power system status monitoring and stability enhancement purposes</li> </ul> <b>Arjen Jongepier, Innovation &amp; Sustainability - Enduris</b> <b>Gert Rietveld, Senior Scientist - VSL</b>
09:30	<b>Next Generation SCADA - implementing a high functionality, cyber-secure, flexible and costs-effective architecture and understanding the impact of the evolving digital grid on TSO SCADA systems</b> <ul style="list-style-type: none"> <li>Understanding the implications of key drivers for change for next generation SCADA system architectures and functionalities</li> <li>Analysing the advanced processes that the European Network Code imposes on DSOs and TSOs and how these can support the migration toward the digital grid</li> <li>Evaluating how DSOs and TSOs can implement new information exchange processes with other grid users resulting in new demands on SCADA EMS systems</li> <li>Evaluating how production, transmission and distribution network expansion is driving the need for greater data exchange and data storage capability to support the day to day operation of the grid</li> <li>Translating the growing demands for new SCADA developments into a secure architecture that supports the integration of new functions</li> <li>Creating greater interoperability of SCADA system with IT and OT systems to support flexible and resilient grid operations</li> <li>Implementing secure and flexible system functionalities that supports efficient operations and DER integration</li> <li>Establishing a robust architecture that meets redundancy, cyber security, and data management and processing requirements</li> <li>Will the implementation of a system with one back-up still be the standard or is a new architecture required?</li> </ul> <b>Jan Vorrink, Manager National Control Centre, System Operations - Tennet</b>	15:30	<b>Morning refreshments, networking and exhibition</b>
10:00	<b>Legacy SCADA System Integration - achieving interoperability of SCADA with other IT and OT systems to extend network visibility for the end-to-end digital grid</b> <ul style="list-style-type: none"> <li>Identifying when to invest versus upgrade your legacy SCADA infrastructure to support next generation requirements</li> <li>Comparing alternative approaches to building real-time capability in legacy SCADA systems</li> <li>Overcoming the interface challenges when integrating legacy SCADA with new functionalities for more efficient data transfer</li> <li>Enabling more effective integration of legacy SCADA systems with DER to support close monitoring of the end to end power supply</li> <li>Analysing the ways in which operators can extend the lifecycle of existing SCADA systems to enable longer and more cost-effective operations</li> </ul> <b>Raido Rosenberg, Head of Network Systems Development - Elektrilevi</b>	16:00	<b>Self-Healing Grid - utilising real-time data to detect and isolate faults, improve system reliability, reduce outage times and optimise operational costs</b> <ul style="list-style-type: none"> <li>Defining a generic logic approach where no maintenance is required due to topology changes</li> <li>Identifying the centralised solution in the control system to restore faults in a fast and secure way</li> <li>Maximising the effectiveness of real-time data to detect and isolate faults and rapidly reconfigure the network to minimise power outage</li> <li>Implementing additional functionality to identify undesired islands, using real-time measurement and topology analysis</li> <li>Analysing information from the field and working around wrong information, failed commands, different substation tele-control engineering approaches</li> <li>Closing the loop: control system autonomous restoration as a path to implement automatic operations from the control system, such as DER close loop control by the DSO</li> </ul> <b>Jose Manuel Corera Sanchez, Head of Control Systems - Iberdrola</b>
10:30	<b>Morning refreshments, networking and exhibition</b>	16:30	<b>SCADA/EMS System Virtualization - supporting advanced and flexible grid operations through implementation of SCADA environment virtualization</b> <ul style="list-style-type: none"> <li>Exploring the advantages and disadvantages of virtualization for SCADA systems and outlining the drivers for implementation</li> <li>Comparing differences in physical versus virtual servers and storage to establish the baseline for decision making</li> <li>Evaluating different functionality and approach to maintenance in both virtualised and physical systems</li> <li>Outlining the differences in backup and recovery and comparing resource distribution and performance in virtual and physical systems</li> <li>Implementing a robust SCADA virtualization architecture and assessing the outcome in terms of:                             <ul style="list-style-type: none"> <li>Network</li> <li>Physical servers</li> <li>Storage</li> <li>Virtual servers</li> <li>Database</li> </ul> </li> <li>Introducing next steps in support of the existing infrastructure by implementing full flash storage technologies and VDI</li> </ul> <b>Arunas Medekša, EMS/SCADA Architect - LitGrid</b> <b>Gediminas Černiauskas, Head of Control Systems Group - LitGrid</b>
11:00	<b>Vendor Panel Discussion - prioritising the SCADA system functionalities that will maximise the performance of the digital grid and deliver a significant return on investment</b> <ul style="list-style-type: none"> <li>Prioritising investment in functionalities that meet current requirements and allow for adaptation, additions and scalability to effectively meet next generation grid demands                             <ul style="list-style-type: none"> <li>Forecasting</li> <li>Alarm management</li> <li>LV monitoring</li> <li>Frequency control</li> <li>Voltage control</li> </ul> </li> <li>Identifying alternative approaches to supporting data processing functionality within legacy and new SCADA systems</li> <li>Leveraging advanced functionalities to improve decision making through more accurate analysis of operational data to better support day to day operations, business and planning activities</li> <li>Understanding the interface requirements and security measures to protect the integrity of advanced functionalities in the system</li> <li>Determining how new functionalities can enable more accurate short-term forecasting</li> <li>Enabling employee training and development to fully unlock the potential of functionalities and facilitate an efficient and secure operation</li> </ul> <b>Alexander Krauss, Project Manager - Siemens</b> <b>Frederic Wauquiez, Distribution &amp; Smart Grid Senior Product Manager - GE Grid Software Solutions</b>	18:00	<b>Roundtable discussions - during this session the audience breaks out into several smaller working groups, each focused on a specific theme arising from the day's presentations. Each working group will comprise of representatives of the entire SCADA community to ensure a well-rounded and holistic discussion. A summary of the issues raised by each group will be presented back to the wider audience.</b> 
12:30	<b>Lunch, networking and exhibition</b>	19:30	<b>Networking Reception - time to relax and unwind after an intensive day of presentations and discussions. All participants are invited to join this complementary networking reception where you will enjoy the company of colleagues from across the European SCADA community.</b> 

- 08:00 **Registration and refreshments**
- 08:50 **Welcome back from the chair**
- 09:00 **HVDC Control – optimising power monitoring and control of HVDC to support decision making processes and achieve stability of the transmission grid**
- Identifying advanced supervisory control actions to guarantee high levels of uptime for the HVDC grid
  - Employing a hierarchical control system to manage different functions such as voltage or power flow control and limit fault disturbances
  - Applying appropriate responses to any disturbances within VSC based HVDC to effectively manage voltage and power flow for further renewables integration
  - Implementing interconnection of multiple HVDC converters to better control power flow and facilitate the future expansion into HVDC grids
  - Measuring the effectiveness of HVDC control innovations to facilitate renewable penetration, improving grid security and decreasing congestion in the system
- Jorge Hidalgo López**, *Centre for Electrical Control and Integration of Renewable Energy - Red Eléctrica de España*
- 09:30 **TSO-DSO Reactive Power Exchange – providing reactive power support for the transmission system in real-time, whilst ensuring consideration of distribution constraints**
- Discussing the TSO-DSO relationship by which market actors can interact with distribution network capacity limitations
  - Deploying Nodal Controller on certain types of large distribution connected windfarms clusters in Ireland
  - Examining the experience from this innovative project trial and findings from the device implementation
  - Investigating the means and processes for screening and assessment of impact of activation of TSO System Services provided by distribution connected resources
- Tony Hearne**, *Future Networks Manager - ESB Networks*
- 10:00 **LV Monitoring – optimising the functionality of LV monitoring systems to ensure cost-efficient visibility of the end-to-end digital grid**
- Exploring how visibility and control of the LV network can lead to better network management and greater reliability of the link between smart meters and the control room
  - Applying innovative approaches to utilize load monitoring data in combination with other sources of data to achieve network modeling accuracy and optimize network investment
  - Monitoring high volumes of data from AMI and DER systems to support and control LV networks
  - Investigating the opportunities for integrating new low-cost LV management systems with SCADA/DMS to provide extensive visibility of the digital grid
  - Quantifying the benefits in grid performance when applying remote control to LV networks
- Walter Schaffer**, *Head of Load Distributor Center - Salzburg Netz*  
**Stefan Straubinger**, *Electrical Engineer - Salzburg Netz*
- 10:30 **Morning refreshments, networking and exhibition**
- 11:00 **Vendor Panel Discussion – leveraging the opportunities and managing the risks of cloud based SCADA systems to support advanced and flexible operation of the digital grid**
- Identifying drivers for migrating towards a cloud based SCADA system in terms of:
    - Range of functionality
    - Speed of access
    - Cost-effectiveness
  - Evaluating a hybrid SCADA in the cloud model and determining which functionality should be cloud based and which inhouse
  - Overcoming the challenges of maintaining constant and cost-effective connectivity up time through a variety of solutions
  - Identifying security vulnerabilities of SCADA in the cloud solutions and determining technically robust ways to address this
  - Examining how utilities can maintain control over their SCADA information and performance once migrated to the cloud
- Biren Gandhi**, *Global Work & Asset Optimisation and Renewable Energy Solutions Leader - IBM*
- 12:30 **Lunch, networking and exhibition**
- 14:00 **Alarm Management – designing and implementing smart alarm management functionality to better inform operator decisions and significantly reduce unplanned outages**
- Implementing a well-defined alarm policy backed up by training and development to ensure effective operator alarm management
  - Ensuring an efficient alarm classification approach to pre-empt cascading alarms and take action in a timely manner
  - Introducing the functionality into the system to intelligently recognize certain situations that could cause cascading alarms
  - Working effectively with suppliers to develop advanced alarm management systems that meet current and future needs
  - Quantifying the benefits of smart alarm management in terms of reduced grid disruption and outages
- (Speaker to be confirmed)*
- 14:30 **Data Processing – achieving effective system integration, data handling and data analytics, to support effective operational decision making for the evolving digital grid**
- Understanding the changing grid environment and the role that data processing plays in grid development and meeting business objectives
  - Developing the SCADA architecture for more advanced real-time data collection, analysis and storage
  - Achieving system interoperability to drive the smooth transfer of complex and unstructured data from legacy substations to SCADA systems
  - Handling the increasingly large volumes of smart meter data to gain a better understanding of customer and grid requirements
  - Effectively correlating high volumes of incomplete data with external sources to drive forecasting accuracy
  - Understanding the latest requirements in data protection and developing cyber security approaches to address these
  - Identifying the optimal data processing roadmap to maximise the ROI of grid investment
- Anne Van der Molen**, *Expert Asset Management, Grid Strategy – Stedin*
- 15:00 **SCADA in Gas Networks – attaining effective gas flow control and gas composition through the implementation of state of the art SCADA systems to achieve operational efficiency and cost-effectiveness**
- Highlighting the challenges for gas transmission and distribution systems in the digital age
  - Examining the safety risks and identifying cost-effective ways to detect, manage, and evaluate incidents
  - Enabling next generation support, where operators and dispatchers are able to perceive with high accuracy how the incident will develop and are able to mobilise effective and efficient countermeasures
  - Understanding and managing the challenges of implementing new digital support to ensure success
- Jeroen Fiddler**, *Manager - Accenture*
- 15:30 **Afternoon refreshments, networking and exhibition**
- 16:00 **Forecasting – integrating multiple sources of data to enhance forecasting methodology and quantifying the value of improved forecasting**
- Identifying how a more dynamic and volatile digital grid is driving the need for more forecasting tools and processes
  - Complementing data sources and advanced algorithms to significantly enhance accuracy
  - Leveraging forecasting methodologies and algorithms to effectively integrate renewable energy sources into the advanced digital grid
  - Quantifying the value of improved forecasting
- Nuno Pinho da Silva**, *Researcher - R&D Nester*
- 16:30 **CIM – achieving seamless integration and interoperability between SCADA and other internal and external systems to support the smooth transfer of multiple data streams**
- Comparing CIM with other interoperability models for ease of implementation, cost-efficiency and technical performance
  - Breaking down the key components of CIM to simplify and understand its application in the SCADA environment
  - Leveraging CIM as a semantic model in establishing a common and effective interoperability framework
  - Identifying ways to speed up the implementation of CIM
  - Optimising CIM implementation costs and determining how they can be reduced
  - Building a business case to achieve speedy management approval for CIM implementation
- Paul Plessiez**, *Project Manager and member of EDI WG group ENTSO-E - RTE*  
**David Aubril**, *Enterprise Architect - RTE*
- 17:10 **Closing remarks from the chair and end of main conference**

- 08:00 **Registration and refreshments**
- 08:50 **Welcome back from the chair**  
**Glenn Janssen, Senior Manager – Accenture**
- 09:00 **Threat Landscape – understanding evolving hacker trends and how these are presenting new and more sophisticated forms of SCADA infrastructure cyber attacks**
- Identifying trends in the type, volume and severity of utility cyber-attacks to determine the implications for next generation security policies and procedures
  - Investigating the implications of ransomware attacks on SCADA systems, the evolving grid and the utility business as a whole
  - Identifying efficient ways of uncovering DDoS attacks to limit remote damage to valuable parts of SCADA systems
  - Applying reverse engineering techniques to fully stress test security concepts and guard against the whole spectrum of future attacks
  - Appropriately accumulating and sharing knowledge of recent cyber-security incidents to develop new and more effective cyber defence strategies
- Dr. Christian Doerr, Assistant Professor Cyber Security - TU Delft**
- 09:30 **SCADA System Vulnerabilities – identifying the most critical points of vulnerability in high functionality SCADA systems and how these can be addressed with state of the art cyber-security approaches**
- Carrying out robust vulnerability analyses to pinpoint key system weaknesses across the SCADA infrastructure
  - Implementing SCADA security solutions that support high levels of system functionality
  - Identifying the threat level of sniffing software attack and implementing a range of solutions to combat this
  - Extending the security of SCADA into connected IT/OT systems to limit the external points of system entry
  - Striking the balance between functionality and security to ensure grid efficiency and development
- Boaz Landsberger, Information Security - Israel Electric Company**
- 10:00 **Smart Meters to SCADA – determining the extent to which smart meter infrastructure can pose a security threat to SCADA systems and identifying robust and cost-effective security measures to combat this**
- Examining the nature of recent cyber-attacks on smart meter AMI infrastructure and the impact on SCADA systems
  - Evaluating a range of prevention and detection approaches to effectively secure data exchange between smart meters and SCADA infrastructure
  - Identifying robust and cost-effective ways of securing wireless communication networks used to transfer data from smart meters to AMI and SCADA infrastructure
  - Determining cost-effective measures for the continuous upgrading of smart meter security to minimise the risk of attack as the volumes of smart meter deployment go up
  - Quantifying the return on investment in cyber security taking into account the implications of both detected and potential threats
- 10:30 **Morning refreshments, networking and exhibition**
- 11:00 **Technology Innovation Panel – during this session leading power grid cyber-security solution providers will present their advanced approaches to prevention, detection, response and post-event recovery, for both internal SCADA systems and SCADA in the Cloud solutions.**  
**Johan Malmstrom, Cyber Security Manager, PG Grid Integration – ABB**
- 12:30 **Lunch, networking and exhibition**
- 14:00 **Substation to SCADA Information Security – evaluating how substation security can be compromised and adversely impact SCADA infrastructure, and identifying ways in which advanced cyber-security solutions can combat this**
- Identifying the key entry points for cyber-attacks as digital substation automation becomes prevalent in TSO and DSO environments
  - Effectively securing key end points such as RTUs for both legacy and new substation devices, components and systems
  - Mitigating the risk of cyber-attacks via IP/Ethernet based communication networks to enable secure data transfer
  - Implementing continuous monitoring systems to rapidly detect and mitigate perceived risks
  - Implementing the behavioural analytics and anomaly detection algorithms in remote and geographically distributed substations
  - Mitigating the cyber-security risks of a mobile maintenance workforce to enable more secure access to the system
- Markus Lenzin, Head of Substation Automation – Swissgrid**
- 14:30 **Identification and Detection – optimising the speed and accuracy of detection techniques to safeguard SCADA systems before unforeseen intrusions take root**
- Evaluating the state of the art intrusion detection systems and identifying optimal solutions to achieve advanced situational awareness
  - Balancing the need for intrusion detection with allocating SCADA system resources to support this
  - Ensuring effective configuration of detection tools both at the outset and ongoing as new threats arrive
  - Seamlessly interworking detection systems with prevention and response approaches
  - Improving the accuracy of detection interpretation and response and recovery techniques to create a robust feedback mechanism and continuously fine-tune your organisational strategy
- Abdo Saad, Department Manager – Con Edison**
- 15:00 **Response & Recovery – establishing and communicating a robust framework for responding to cyber-attacks to ensure effective incident containment and recovery**
- Creating operational response and recovery guidelines taking into account:
    - Internal cyber attacks
    - External cyber attacks
    - Regulatory guidelines
    - Changing threat landscape
    - Roles and responsibilities of internal departments
  - Using cyber threat intelligence to determine attacker motives, capabilities and likely actions to more easily disrupt and degrade their efforts
  - Conducting exercises and tests that address real-world recovery building, train organizational “muscle memory” and identify areas for improvement
  - Identifying improvements from lessons learned during actual cyber-attack recovery actions
  - Implementing effective measurement and monitoring techniques to calculate recovery performance over time
  - Mitigating the likelihood and impact of future incidents based on the lessons learned from the incident as well as from other organizations and industry practices
- Lhoussain Lhassani, Data Communication and Cyber Security Expertise - Stedin**
- 15:30 **Afternoon refreshments, networking and exhibition**
- 16:00 **SCADA Security and Regulatory Landscape - discussing the core components of Operators of Essential Services and understanding the implications of the EU NIS directive for European utilities**
- Breaking down the guidelines and rules set-out by NIS Directive, and its implications for SCADA system security
  - Analysing new requirements on data protection as outlined by the GDPR and assessing the extent to which they will affect utilities data protection procedures
  - Accurately interpreting and validating regulatory guidelines for ease of implementation and maintenance
  - Effectively interworking EU and national guidelines to ensure a robust regulatory compliance
  - Driving utility objectives within the context of regulatory demands
- Paraskevi Kasse, Network & Information Security Officer – ENISA**
- 16:30 **Training & Development – developing a cyber security training programme to bring IT and OT staff onto the same knowledge platform and empower them to work together effectively in combatting cyber crime**
- Managing cultural change by understanding the background, interests and drivers of IT and OT teams
  - Managing training by bringing IT and OT training programmes together under the umbrella of the ISO 27001 framework
  - Developing cyber security governance by assigning roles and responsibilities in a security organization to support collaboration and exchange of know-how
  - Raising awareness through introducing the human firewall campaign
- Alexander Harsch, Head of Cyber Security Resilience – Innogy**  
**Fabian Cholewa, Group Security, Head of Human Firewall Campaign – Innogy**
- 17:00 **Closing remarks from the chair and end of conference**

# Speaker Biographies

(in order of appearance)



**Mark Ossel**, Vice President - Networked Energy Services Corporation & Board member **OSGP Alliance**

Mark B.M. Ossel (1955), Vice President NES, is focussed on developing the Energy and Utility market for Networked Energy Services. He is involved in AMR since 2001, when Echelon started with Enel (It) the world largest AMR project, and has been involved in most large scale deployments in Europe. He was selected in 2015 as one of top 40 most influential people in Europe by metering International. Mark is also member of the board of OSGP Alliance, the international industry & utility user group publishing OSGP (Open Smart Grid Protocol), and involved in international standardization efforts. Active member in ETSI, various IEC and CEN /CENELEC Technical committees (TC13,TC57), ESMIG and member European Commission Coordination Group - Smart Electricity Grid (SEG-CG) and actively involved in mandates M441 and M490. Mark has a background of more than 20 years in various management functions in the Information & Communication Technology market (Burroughs/Unisys), before he became involved in energy management, smart metering and Smart Grids in 2001. Mark has a degree in marketing and economics, and attended additional courses in The Netherlands, UK and USA; he has a special interest in applying new technology. Based on his experience, and the contacts with many utilities cross EMEA & APJ, he is frequently invited on many international events as speaker, chairman and forum member on the subjects of energy management; smart metering, smart grid, smart home & smart building. Mark has a Dutch nationality, lives in the Netherlands and is a.o. a member of Rotary International, non-executive member of various boards and active in the Unesco World Heritage program.



**Aurelio Blanquet**, Director, Division of Automation and Telecommunications & Chair EE-ISAC - **EDP**

Aurélio Blanquet is graduated in Electronics Engineering and MBA in business administration. Since 2007, he is Director for Automation and Telecommunications in the Portuguese DSO EDP Distribuição. Mr. Blanquet was also former Project Leader in the InovGrid Project development, the Portuguese Smart Grid's innovation initiative pursuing the upgrade of the Distribution Network to face the new needs and challenges of the electricity market. Actually, he is the responsible for the Distribution Automation, Telecommunications and Cyber Security projects within this Program. He is also Board Member at EUTC - European Telecom Utilities Telecom Council, and member at Eurelectric's WG Distribution System Design.



**Jan Vorrink**, Manager National Control Centre, System Operations - **Tennet**

Jan Vorrink has a BSc and an MBA from Kingston University. Since 2001, he has been working in the electricity market, as a project-manager and as manager for the Dutch TSO TenneT. He is an active participant in several European associations like ENTSO and the former UCTE. He is responsible for the National Control Centre of the Netherlands for Grid safety calculations and for the (inter)national Balancing of the electricity market.



**Raido Rosenberg**, Head of Network Systems Development - **Elektrilevi**

Raido Rosenberg holds a M.Sc in Electrical Power Engineering from Tallinn University of Technology. Raido started in Elektrilevi, Estonia's largest DSO, with leading the grid automation program within Control Centre before moving on to managing various large scale IT/OT development projects in Elektrilevi. Today Raido is managing the Network Systems Development Department and is responsible for systems related development projects, systems architecture and data analytics within Elektrilevi.



**Alexander Krauss**, Project Manager - **Siemens**

Alexander Krauss is Senior Key Expert for Control Center Technology within the organization of the Smart Grid Division, Infrastructure & Cities Sector, Siemens AG. He studied Electrical Engineering at Georg-Simon-Ohm University of Nuremberg. His professional career started as a software developer working on Siemens' control center platform. The following two years he moved and worked at Siemens A/S Oslo, Norway being responsible as technical project manager for Scandinavian projects. From 1996 to 2001 he relocated to Siemens Minneapolis, USA executing major projects such as Hydro Quebec as Senior Project Manager. He continued project management for customers world-wide at Siemens Germany

from 2001 onwards. During the same time providing consulting and training in the area of Power and Control Center technology as well. Since 2012 Alexander Krauss is the responsible Senior Key Expert in the Sales Department of Siemens Smart Grid Division, IC.



**Frederic Wauquiez**, Distribution & Smart Grid Senior Product Manager - **GE Grid Software Solutions**

Frédéric Wauquiez is Senior Product Manager for Distributed Energy Resources within GE Grid Software Solutions. He is in charge of defining the strategy and the roadmap for GE's DERM solution, designed to help utilities address the challenges of DER disruption. Previously, Frédéric led the operational and financial setup of innovative Smart Grid pilot projects for utilities globally. He led the packaging, marketing and selling of Smart Grid solutions resulting from these projects. Frédéric has over nineteen years of experience in international B2B Business Development, in the Space, Telecom Infrastructure, Energy Efficiency and Power Grid domains. He held various positions in tendering management, marketing, business development, solution management and entrepreneurship. A power solution and service line that he co-founded for telecom networks in areas with poor electricity supply received European Commission's Sustainable Energy Europe prize in 2010. Frédéric graduated as an engineer from SUPAERO, leading French aerospace engineering school, and has a degree in Entrepreneurship from ESCP Europe Business School.



**Laurent van Groningen**, Lead Architect - **Alliander**

Laurent van Groningen and Peter de Koning both are Lead-architect at Alliander IT-Asset, where today's and tomorrow's substation automation, SCADA and Geographical Information Systems' challenges are answered. Laurent van Groningen started his career on supplier side with product management on primary electrical equipment. Next, as product life cycle manager he developed a portfolio of condition monitoring hardware, substation condition monitoring and asset data management solutions as lead in an international solution team. In 2015 he joined Alliander as Lead Architect with focus on digital grid technology like automation and SCADA system with focus on integration and security.



**Peter de Koning**, Lead Architect - **Alliander**

Peter de Koning started as consultant and developer for ERP, mobile workorder and GIS solutions for electric, gas and water utilities. Later he switched to project management and solution architecture roles for distribution management and risk-based asset management processes and projects. In 2014 he joined Alliander and currently works as Lead Architect with focus on especially Geo/GIS architecture and strategy and it's relation to outage management, digital grid related solutions and processes.



**Arjen Jongepier**, Innovation & Sustainability - **Enduris**

Arjen Jongepier has more than 25 years' experience in the energy utility industry. He holds an M.Sc. and a Ph.D degree power system engineering, with an emphasis on the technical and financial optimization of the energy chain. This chain is a close cooperation between production from various sources, via robust and safe transmission and balancing systems, to consumers of energy, great and small. As a system innovator, Arjen is very interested in opportunities to improve the optimization by new cooperation schemes with customers and stakeholders, while maintaining the societal KPI's sustainable, reliable and affordable.



**Gert Rietveld**, Senior Scientist - **VSL**

Gert Rietveld is chief metrologist of VSL, the national metrology institute of The Netherlands. His research focuses on precision measurements for electricity grids. This covers phasor measurements using PMUs, metering, instrument transformers, and transformer loss measurements. He is active in several international committees of CIGRE, IEC, IEEE, and the International Committee for Weights and Measures (CIPM).



**Jose Manuel Corera Sanchez**, Head of Control Systems - **Iberdrola**

Electrical engineer from Bilbao Superior Engineering School and MSc from Cranfield Institute of Technology, UK. MBA from Euroforum Escorial, Spain. After working in automation firm Robotiker joined Iberdrola in 1989. He is now responsible for the Control Systems Department in Iberdrola Distribution, with the responsibilities for control systems, metering systems and cyber security. He also coordinates the integration activity for control systems in Iberdrola networks (international). He has been responsible for Iberdrola for several R&D collaborative National and European projects, and among others acting as coordinator of FP6 project FENIX. He is involved in CIGRE, CIREN and IEC Conferences win tasks related to network management.



**Arūnas Medekša**, EMS/SCADA Architect - **LitGrid**

Arunas is an EMS/SCADA architect at Lithuanian Electricity Transmission System Operator "Litgrid". He is responsible for implementation of a new EMS/SCADA system provided by GE. The project team of Lithuania is the first globally that has virtualized GE EMS/SCADA production environment. Arunas works at Litgrid for 3 years, but his interest in automation lasts much longer - he has been interested in cars electronic systems since high school - he knows how to start engine with no keys of many cars. In his free time, Arunas likes DIY home automation systems, travelling and photography.



**Gediminas Černiauskas**, Head of Control Systems Group - **LitGrid**

Gediminas Černiauskas, has over 17 years of experience in SCADA-EMS and RTU's administration, serving in various roles such as Senior Engineer, Management System Architect of Transmission Network, and his most recent promotion, Head of control system group at LITGRID AB. His main responsibility is to ensure SCADA systems security, stability, availability and recovery time. The most important achievement is IP based solutions integrations in SCADA systems to simplify real time data management, diagnostic and recovery time.



**Jorge Hidalgo López**, Centre for Electrical Control and Integration of Renewable Energy - **Red Eléctrica de España**

Jorge Hidalgo obtained his Expert Degree in Industrial Engineering in 2006 from Deusto University of Bilbao. He has been working since then for the Spanish TSO: Red Eléctrica de España (REE) giving support and supervising the real time work done in both the Electrical Control Centre (CECOEL) and the Control Centre for Renewable (CECRE). He is nowadays Coordinator of the technical office of the Grid Control Centre (CECORE) and associate professor of Carlos III University. During this time he has participated in several international events concerning renewable energy integration and in working groups responsible for the development of multilateral agreements and new European regulations.



**Tony Hearne**, Future Networks Manager - **ESB Networks**

Tony Hearne began working with ESB in 1978 as an apprentice electrician. He worked a variety of disciplines, in the field. In 1996 having acquired an internal scholarship, he received a degree in Electrical Engineering from University College Dublin. He worked in the areas of Network Operations and Protection. In 2006 he was appointed Manager, Renewable Planning, where he managed the issue of connection offers for some 3000MW of generation connection, most of which were wind. More recently, he has taken up a more strategic role within ESB Networks and has been made responsible for the development of an Integrated Vision for an Active ESB Distribution Network.



**Walter Schaffer**, Head of Load Distributor Center - **Salzburg Netz**

Walter Schaffer, Head of Electrical Grids and Smart Grids Program Manager, Salzburg Netz GmbH (Austria) Walter Schaffer is responsible for the electrical distribution grid in Salzburg and the corresponding smart grids projects. The SGMS combines several national and European funded projects and was set up to develop the smart infrastructure of the future. During his

# Speaker Biographies

(in order of appearance)

time at Salzburg Netz GmbH he worked as an asset manager and network planning engineer and was head of the network operating center. He holds a Dipl.-Ing. in Electrical Power Engineering from Graz University of Technology and a Master of Business Engineering (MBE) from Steinbeis University Berlin.



**Stefan Straubinger**, Electrical Engineer - **Salzburg Netz**

Stefan Straubinger graduated from Graz University of Technology in 2014 as a Dipl.-Ing. in Electrical Engineering. Since 2014 he works at Salzburg Netz GmbH in the department of electrical grids. His work focuses on several network analysis applications within the central control system as well as the GIS system. In this respect he is involved in a Smart Grids Project dealing with Volt-Var-Control. Furthermore he is responsible for condition assessments on various assets within Salzburg Netz.



**Biren Gandhi**, Global Work & Asset Optimisation and Renewable Energy Solutions Leader - **IBM**

Biren Gandhi leads and manages global advisory consulting practice in the Work & Asset Optimization and Renewable Energy domain, practice is comprised of subject matter experts based in the US, Europe and Asia. He advises and works with clients globally in the area of digital transformation (digitization of the energy value chain), Cognitive solutions, work and asset optimization, power generation business processes, OHT Integration Strategy, Operations and maintenance Service transformation, setup of cloud based service delivery platforms. He is a regular speaker at the industry conferences and forums on the topic of digital transformation data and analysis, Wind O&M and Internet of things in the energy and utilities industry. He is an Instrumentation Engineer from Mumbai University -1998 and a M.B.A from Stuttgart, Germany -2002.



**Anne Van der Molen**, Expert Asset Management, Grid Strategy - **Stedin**

Anne van der Molen is grid strategist for the Dutch DSO Stedin He joined Stedin in 2011 to help develop Stedin's emergence as digital DSO. In the past five years, he has been involved in strategy planning and asset management, distribution automation programs and programs around digital asset lifecycle management, analytics and digital grid operations. Anne has represented Stedin in several national task forces and is member of EDSO's technology committee. Previously, Anne worked as solution manager and strategic product manager for a major telecoms equipment and services company. He holds a Msc degree in Electrical Engineering.



**Nuno Pinho da Silva**, Researcher - **R&D Nester**

Nuno Pinho da Silva is Researcher at R&D Nester. Prior to joining R&D Nester, Nuno was responsible for Operations Research RD&I activities at Albatroz Engineering. Nuno was full member of the Larsys and visiting researcher at the GaTech GVU centre. He served as principal investigator at the Instituto Superior Técnico of the University of Lisbon and as professor at the High Institute of Engineering of Lisbon and at the School of Business and Administration of Setúbal. Nuno Pinho da Silva holds a 5-year Degree, M.Sc. and Ph.D. in Electrical and Computer Engineering from the Instituto Superior Técnico of the University of Lisbon, with major in Systems, Decision and Control. He holds an Executive Master in Applied Business Analytics from the INDEG-IUL Executive Education and a certificate in the Regulation of Power Sector from the Florence School of Regulation, both with honours. He is senior member of the regulatory and licensing body for the engineering profession in Portugal with the highest degree of qualification. Nuno is actively engaged with ENTSO-E and ETIP-SNET.



**Paul Plessiez**, Project Manager and member of **EDI WG** group **ENTSO-E - RTE**

Paul Plessiez works as an IT project manager at RTE, the French Transmission System Operator. As such, he is involved in various European IT implementation projects related to electricity interconnections. He is also part of ENTSO-E working groups focusing on data exchange standardization and electricity market modelling.



**Glenn Janssen**, Senior Manager - **Accenture**

Glenn is a Senior Manager at Accenture Security, with more than 10 years of experience in advising clients on cyber security, implementation of organisational changes and new technologies. He has particular experience in industrial control systems security, advanced cyber security monitoring, evolving security regulations as well as employee behavioral awareness. Glenn focuses on advising clients in the Energy and Utilities industries and has a deep understanding of his clients business and needs to increase security posture.



**Dr. Christian Doerr**, Assistant Professor Cyber Security - **TU Delft**

Christian is working in the broad area of network security and critical infrastructure protection. His research focus is designing resilient network systems, localizing and estimating current threats through real-time situational awareness in networks as well as conducting threat intelligence on adversaries. Prior to joining Delft University of Technology, he was at the University of Colorado, USA, where I received my Ph.D. in Computer Science and Cognitive Science. While most of his work focuses on technology, he also integrate socio-technical aspects of cyber security with this background in his research.



**Boaz Landsberger**, Information Security - **Israel Electric Company**

Boaz Landsberger has more than 25 years of experience in the IT industry, specializing in Cyber Security. Since 2002 Boaz is one of the leaders of Cyber Security at Israel Electric Corporation (IEC). As of now, Boaz is deputy manager of the Cyber Security Department at IEC, specializing in regulation (SOX, PCI and Privacy Protection Law), Risk Management, Data Leakage Prevention and Cyber Initiatives abroad. Boaz is a computer science engineer, graduating from the Technion - Israel Institute of Technology. Boaz served for 20 years in the army in the IT and Cyber Security fields and retired as a Lieutenant Colonel.



**Johan Malmstrom**, Cyber Security Manager, PG Grid Integration - **ABB**

I have worked with-in IT and OT since the early 1990ies, the last ten years focusing on control system for Power system applications like HVDC and AC transmission. I have a bachelor degree in Computer Science. Current position is Cyber Security Manager for the ABB business unit Grid Integration. I also work with-in the IEC TC57 with IEC 61850 and IEC 62351.



**Markus Lenzin**, Head of Substation Automation - **Swissgrid**

Markus Lenzin is the head of substation automation technology at Swissgrid AG. Swissgrid is the Transmission System Operator in Switzerland. Markus has over 25 years working experience in information technology, information security and SCADA environment area. He has worked in several ICT functions. In the current role in Swissgrid he leads a team in the department Grid Development which main responsibilities are engineering, projects, information security, architecture solutions, system integration and communication regarding substation automation systems.



**Abdo Saad**, Department Manager - **Con Edison**

Abdo Saad joined Consolidated Edison Company of New York, Inc. in 1995 and has held the positions of Sr. System Analyst, Systems Specialist, Systems Manager and Department Manager. In his current capacity at System Operation, he leads several teams supporting the main control centers. His areas of responsibility include the Energy Management Systems (EMS) that monitor and control the Bulk Electric and Steam systems; the Operational Management Systems (OMS); cybersecurity; NERC Critical Infrastructure Protection (CIP) Compliance; physical security; Technical Support & Networks; and 24x7 Watch Engineer (support) desk. Abdo has worked in the areas of process control, communications, database management, system management,

firewall administration, LAN administration and software development. For most of his career he has supported real-time EMS and SCADA and has managed numerous projects from establishing a control center to implementing a new EMS. Abdo holds degrees in Electrical Technology, Engineering Sciences, and Electrical Engineering. He is a member of the Eta Kappa Nu (EKN)—the Electrical Engineering Honor Society and he holds several academic and Company awards. In 2002 he was featured on the cover of Gas Utility Manager's for winning the Industry Innovator Award.



**Lhoussain Lhassani**, Data Communication and Cyber Security Expertise - **Stedin**

Dr Lhoussain Lhassani is senior asset manager within Stedin. Stedin is the grid owner in the west and centre of the Netherlands.

One of his focuses is the implementation of IP network for the communication for the Electric Power Utilities. Stedin is now implementing the protocols IEC-104 and the IEC-61850, based on TCP/IP and Ethernet in the substations and to communicate with the control centers. One of his challenges is the further optimization through the use of All-IP or Ethernet for the communication in the world of high voltage (telemetry, telecommand and teleprotection). Another interest is the optimization of the IT-technology to support the business requirements.



**Paraskevi Kasse**, Network & Information Security Officer - **ENISA**

Paraskevi's work in ENISA focuses on enhancing the cybersecurity posture of utilities in Energy sector (Electricity, Oil and Gas). Furthermore, she is dealing with security aspects of ICS/SCADA systems and cybersecurity aspects related to energy sector in the European NIS Directive. Paraskevi has been awarded a diploma in computer engineering and informatics, she holds a Msc in Information Science and Technology. Prior to joining ENISA, she worked as a security expert for 7 years at the Hellenic National CERT.



**Alexander Harsch**, Head of Cyber Security Resilience - **Innogy**

Alexander Harsch is the Head of Cyber Resilience department within innogy. The Cyber Resilience department supports TSO/DSO with the implementation of an ISMS according to the requirements of the German IT Security Law, which include compliance according to the Standards DIN ISO/IEC 27001 and ISO/IEC TR 27019. Before his time with innogy, Alexander worked for more than 10 years as a business consultant for PricewaterhouseCoopers in the field of „Cyber & Forensics“ and IT-Compliance (e.g. COBIT, ITIL and ISO 27001). Alexander is a certified ISO 27001 Lead Auditor and is certified according to the German „DVGW-Zertifizierung für ISMS-Auditoren nach IT-Sicherheitskatalog“. Alexander has 10+ years experience as a project manager for large projects and worked in that time in IT organisations in several industries.



**Fabian Cholewa**, Group Security, Head of Human Firewall Campaign - **Innogy**

Fabian Cholewa joined RWE/innogy in 2011 as a communications engineer and has worked over the last 6 years as a specialist for communication within the electronic grid.

Fabian is now responsible for the awareness program "Human Firewall" within innogy. The Human Firewall is a campaign to educate employees in cyber security in their day-to-day working environment. It is rolled out internationally and made available to all of innogy's employees.

Before joining the Human Firewall campaign, Fabian was responsible for conceptual designs of ICT- and telecommunication Systems, SIEMS and IT-architecture.

Fabian is a certified ISO 27001 Lead Auditor. With more than 6 years of practical work with cyber security for DSOs, he is a subject matter expert within innogy's Group Security for cyber security in the grid.



# NextGen SCADA Europe 2018

## Integrating High Functionality Cyber Secure SCADA Systems into the Digital Grid

3-Day Conference, Exhibition & Networking Forum

**30th January to 1st February 2018**

Hotel Casa, Amsterdam, **The Netherlands**

### Participation Fees & Discounts

	Very Early Bird Rate Before Friday 27th October 2017	Early Bird Rate Before Friday 15th December 2017	Standard Rate
<input type="checkbox"/> 3-Day Delegate Package	€2,195 + 21% VAT = €2,655.95	€2,395 + 21% VAT = €2,897.95	€2,595 + 21% VAT = €3,139.95
<input type="checkbox"/> 2-Day Conference Main Conference	€1,495 + 21% VAT = €1,808.95	€1,595 + 21% VAT = €1,929.95	€1,695 + 21% VAT = €2,050.95
<input type="checkbox"/> 1-Day Delegate Cyber Security Seminar	€795 + 21% VAT = €961.95	€895 + 21% VAT = €1,082.95	€995 + 21% VAT = €1,203.95
<input type="checkbox"/> Exhibitor (incl 2 conference passes)	€5,000 + 21% VAT = €6,050.00	€5,500 + 21% VAT = €6,655.00	€6,000 + 21% VAT = €7,260.00

### Registration Method

Please visit the registration page of the event website at: [www.nextgenscada-europe.com/register](http://www.nextgenscada-europe.com/register) fill in your details and select Credit Card, Paypal, or Invoice payment options.

### Venue & Accommodation

**Hotel Casa**  
Eerste Ringdijkstraat 4  
1097 BC Amsterdam  
The Netherlands

Tel: **+31 20 665 1171**  
E-mail: [info@hotelcasa.nl](mailto:info@hotelcasa.nl)  
URL: <https://hotelcasa.nl/>

### Room Reservations

To book your room at the preferential rate reserved for attendees of this conference, please contact the Hotel Casa directly on:  
**+31 20 665 1171**, quoting reference: **SCADA**

### Enquiries

Call: **+44 (0)20 8349 6360**  
Email: [registration@phoenix-forums.com](mailto:registration@phoenix-forums.com)

### Terms & Conditions

**Payment:** payment must be made at the time of booking to guarantee your place, either by credit card, or invoice which must be settled within 7 days and prior to the first day of the conference. If payment has not been received by the first day of the conference then credit card details will be requested onsite and payment will be taken before entry to the conference. Bookings made within 14 days of the conference require payment by credit card on booking.

**Delegate Inclusions:** the delegate fee covers attendance of conference sessions, speaker presentation materials, lunch and refreshments during the course of the conference, and the networking canal cruise. It does not cover the cost of flights, hotel rooms, room service or evening meals. If after booking your place you are unable to attend you may nominate, in writing, another delegate to take your place at any time prior to the start of the conference. Two or more delegates may not 'share' a place at the conference. Please make separate bookings for each delegate.

**Exhibitors:** the exhibition is located in the networking and catering area alongside the conference room to ensure maximum footfall and visibility for all exhibitors. Each exhibitor will be allocated a 3m x 2m space with table, 2 chairs, power sockets and WiFi access. The exact location of each exhibitor will be determined 4 weeks

prior to the conference. Exhibitor set-up commences at 7am on the first day of the conference, and break-down takes place after 4pm on the last day of the conference. Exhibitor packages include 2 conference passes. Additional passes may be purchased at 10% discount on the published rates.

**Cancellations:** regrettably cancellations cannot be facilitated but transfer to a future conference is permissible. We will provide the speaker presentation materials to any delegate who has paid but is unable to attend for any reason. If we have to cancel an event for any reason, we will make a full refund immediately, but disclaim any further liability.

**Alterations:** it may be necessary for us to make alterations to the content, speakers, timing, venue or date of the event compared with the original programme.

**Data Protection:** Phoenix Forums gathers personal data in accordance with the UK Data Protection Act 1998 and we may use this to contact you by post, email, telephone, fax, sms to tell you about other products and services. We may also share your data with carefully selected third parties offering complementary products or services. If you do not wish to receive information about other Phoenix Forums events or products from selected third parties please write to us at: [database@phoenix-forums.com](mailto:database@phoenix-forums.com)