

5th Annual Conference, Exhibition and Networking Forum

SMART GRID FORUMS | SGTech Week 2024

Driving grid innovation under increased regulatory pressure, intense cybersecurity threat, and rapidly rising demand for renewables integration

18 – 22 March 2024 | NH Noordwijk Conference Centre, The Netherlands
5-Day Conference, Exhibition & Networking Forum

Monday 18th March: Choice of IEC Standardization Workshops - IEC 61850, IEC CIM, IEC 62443

Tuesday 19th to Thursday 21st March: Smart Grid Innovation Conference & Exhibition

Friday 22nd March: Communication Briefing

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National Grid



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Manager National Control Centre
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Matteo Masotti
Head of Data Competence Centre
Enel



Shawn McBurnie
Head of IT/OT Security & Compliance
Northland Power



Fouad Abou Chakra
Senior Specialist for Special Projects and Innovation
DEWA



Carsten Strunge
Business Architect Grid Control Systems
Energinet



Amadou Louh
Telecom Strategist
Stedin



Tobias Kaiser
Head of Grid Connection Management
BKW Energie



Henrik Hagberg
Smart Metering Program Manager
Ellevio



Benoit De Neuville
Senior Grid Expert
Sibelga



Joyce Van de Garde
Director of Telecommunication
Westnergia



Damien Ploix
Head of IACS Cybersecurity Department
Enedis



Adrian Ferguson
Transmission OT Manager
SSEN



Anders Karlsson
Technical Specialist
Ellevio

The most technically in-depth review of grid innovation and implementation projects!

6 Conference Tracks:

Digital Substations



SCADA & Control Room



Utility Telecom



Smart Metering



Big Data



Cybersecurity



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5th Annual Conference, Exhibition & Networking Forum

Dear Colleague,

Welcome to the 5th annual **SGTech Week 2024**, the most technically in-depth review of smart grid innovation and implementation projects.

This year we are excited to bring you an expanded programme with 6 case-study driven conference tracks, 3 standardisation workshops and a leading edge communication briefing to help grid technical teams translate the technical know-how into organisational language that will help maximise their influence in the energy transition.

Please review the enclosed programme, mark the dates in your diary, and invite your wider team to join you at this key date in the calendar.

The week breaks down as follows:

Monday 18th March 2024: Fundamentals Workshops: IEC 61850, IEC CIM, IEC 62443

The week begins with a choice of three practical workshops providing participants with a strong foundation in the essential building blocks of the most critical standards for the smart grid: IEC 61850 for substations, IEC CIM for operational systems, IEC 62443 for OT cybersecurity.

Tuesday 19th to Thursday 21st March 2024: Case-Study Conference & Exhibition

The main conference begins with a series of morning plenary sessions focused on the most critical macro issues impacting the sector, and then breaks out into six tracks focused on each of the most innovation intensive grid domains: Digital Substations, SCADA & Control Rooms, Utility Telecoms, Smart Meters, Big Data, Cybersecurity. With 70+ case-studies scheduled across the three days, this utility driven conference is complemented by a Solution Zone where next generation grid modernisation products and services will be displayed, and a networking reception where participants get the opportunity to meet with like-minded colleagues from across the sector.

Friday 22nd March 2024: Communication Briefing

The week wraps up with a Communication briefing, designed to provide technical teams with the skills to turn their technical know-how into organisational language, that compels commercial colleagues, influences the Board, and secures long-term technology investment.

We look forward to welcoming you and your colleague to the event in March 2024.

Kind Regards,



Mandana White
CEO | **Smart Grid Forums**

PS: Group Booking Discounts – Save 10% on 3+ delegates, 20% on 5+ delegates, 30% on 10+ delegates booked from the same organisation at the same time!



Join the Solution Zone

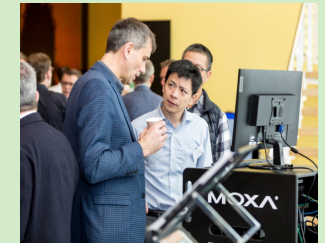
Would you like the opportunity to raise your brand profile, demonstrate your products and services, and share your expertise with a highly concentrated and influential group of utility smart grid technical professionals?

Our adjoining exhibition area provides the perfect environment for you to do this and more! Capped at 50 stands we ensure a focused and relevant display of the latest smart grid products and services for our audience and maximum visibility and interactivity levels for our exhibitors.

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

Call: **+44 (0)20 8057 1700**

Email: **mandana.white@smartgrid-forums.com**



Testimonials from Past Events



“It is very helpful to see what is done in other countries. Especially for a regional company such as mine.”

Barbara Blöser, Senior Consultant Strategy & Geodata, **Mainzer Netze GmbH**



“Helped us stay up to date and review new options for making a smart grid more efficient and speed the electrification transition.”

Rafael San Juan, IT Innovation & Digital Platforms, **Iberdrola**



“Thoroughly enjoyed this conference, and learnt a lot from every talk, which I will be using to influence the business I work in.”

Harshil Sumaria, Power Systems & Data Analytics Engineer, **UK Power Networks**



“A great vendor agnostic conference focused on utility experiences.”

Loïc Rebours, IT Engineer, **Enedis**

Choice of 3 Practical Workshops: Monday 18th March 2024

Fundamentals of IEC 61850 for Substation Automation • IEC 62443 for OT Cybersecurity • IEC CIM for Operational System Data Exchange

Registration and Refreshments: 10:00 | Programme: 10:30 to 17:00

IEC 61850 Workshop



Workshop Leader
Christoph Brunner, Convenor
TC57 WG10

The IEC 61850 standard is an extensive and complex set of international standards specifically designed for substation automation and the smart grid. Now universally recognised as the de-facto standard for power grid compliance, it presents as many challenges as it does opportunities. During this workshop Christoph Brunner, Convenor of IEC TC57 WG10 provides a comprehensive and in-depth insight into the building blocks, key applications, and optimal operations of the standard within the substation environment and beyond. Whether you are just at the start of your IEC 61850 investigations or have several years' practical implementation experience, this workshop will provide you with a much needed update on the fundamentals of this evolving standard

Session 1: Fundamentals of IEC 61850 - Main features of the standard and implications for the utility engineer

This session is a short introduction to IEC 61850. The concept of IEC 61850 is introduced to support interoperability, free configuration and long term stability. A comparison with other communication standards will be made, and the impact on the utility engineer will be clarified. Edition 1 will be reviewed in relation to its application in different domains. The main features of IEC 61850 communication, application modelling and engineering process will be introduced including GOOSE messaging and Process bus with sampled values

Session 2: Evolution of the standard - Improvements, wider smart grid applications and suitability for new domains

Understand how the standard grows from Edition 1, the backward compatibility aspects, new features and functionalities, the rate of take up within vendor products and feedback from utility implementations. In this session the major new features introduced will be discussed. The session will also talk about IEC 61850 implementations across the wider smart grid, as well as in new domains such as hydroelectric power plants, distributed energy resources and wind turbines

Session 3: Advanced maintenance testing - Challenges of testing in a live Substation

Understand the challenges of maintenance testing in live substations and how the various features available in IEC 61850 can address those challenges. Consider testing for various topologies and how to use simulation and hierarchical control of test mode. The session will address how the test source of InRef can be used to solve issues. Requirements for modelling and engineering of the test system will be addressed

Session 4: Advanced engineering process - How IEC 61850 is evolving to enhance interoperability of the engineering process

This session will examine the engineering process across the entire lifecycle of IEC 61850 systems. The challenges of the early implementations will be discussed and how user feedback is helping to enhance the process. Learn, how extensions made to Ed 2.1 of IEC 61850 contribute to the improvement, understand how the specification process will evolve, to assure your automation system will work as expected. The session will address further ongoing work in CIGRE as well as EU-funded research projects

Session 5: Cybersecurity Fundamentals for IEC 61850

Understand the basic cybersecurity issues and requirements for communicating with IEC 61850 protocols using the IEC 62351 cybersecurity standards, with a focus on authentication of connections, data integrity of messages and role-based access control for authorization of actions

Session 6: Practical Demonstrations and Q&A

In this final session some practical demonstrations will bring to life the application of IEC 61850 and provide attendees with the chance to have all their questions answered in great depth and detail by the workshop leaders

IEC 62443 Workshop



Workshop Leader
Gabriel Faifman, Co-Convenor
TC65 WG10

This one-day practical workshop provides both experienced power grid cybersecurity practitioners and those who are new to the profession with an efficient way to learn about the fundamental building blocks of the IEC 62443 series of standards. Participants will obtain knowledge of how the standard can best be applied to the power grid environment. Gabriel Faifman, Co-Convenor of TC65 WG10 kicks off the day with an overview of concepts, terminology and models, and goes on to review the application of the different parts of the standard. Through discussions the participants will learn on how IEC 62443 can be used at different stages of the lifecycle of Industrial and Automation Control Systems (IACS) and how knowledge applies to the power grid. The day wraps up with an analysis of how IEC 62443 can be leveraged to strengthen risk management and defence in depth strategies

Session 1: Concept - Understanding the ISA/IEC 62443-1-1 terminology, concepts and models

In this session participants will receive a comprehensive introduction to cybersecurity for Industrial Automation and Control Systems (IACS). You will understand the latest trends in cybersecurity and cybersecurity incidents in the power grid domain, and be able to break down the framework of how the concepts and models apply to the power grid environment

Session 2: Utility Application - Establishing an industrial automation and control system security programme (CSMS)

Understand your risk profile, how it is evolving, and how best to apply IEC 62443 in your environment. Develop a CSMS programme that gains management buy-in and can be easily mobilised across the workforce and organisation. Manage cybersecurity lifecycles and patch management programmes

Session 3: Risk Analysis (part 1) - implementing a defence in depth approach to power grid cybersecurity within the framework of IEC 62443

Get to grips with the use of IEC-62443 for risk assessment following a step-by-step approach provided in part IEC-62443-3-2. Understand the interworking of cybersecurity strategies for IT and OT assets. Determine the optimal layers of security for different parts of the grid. Balance segmentation and security with operational efficiency

Session 4: Risk Analysis (part 2) - Implementing a defence in depth approach to power grid cybersecurity within the framework of IEC 62443

Evaluate the use of IEC-62443 for risk assessments following a step-by-step approach provided in part IEC-62443-3-2. Learn about the interworking of the cybersecurity strategy for IT and OT assets. Determine the optimal layers of security for different parts of the grid. Balance segmentation and security with operational efficiency

Session 5: Supplier Application - Developing products and systems that are secure by design through the optimal application of IEC 62443

Understand the implications of IEC 62443 for suppliers of power grid products and systems. Work with lifecycle and patch management constraints of the power grid environment. Ensure ease of IEC 62443 certification for products and systems

Session 6: System Integrator Application - Leveraging IEC 62443 to achieve seamless integration of new products and systems and ease the quality assurance process

Understand the implications of IEC 62443 for systems integrators. Work seamlessly with power grid operators and technology suppliers to ensure the seamless interworking of the standard. Achieve best practice in system validation to achieve certification

IEC CIM Workshop



Workshop Leader
Svein Olsen, Lead Member
TC57 WG 13, 14 & 16

The CIM series of standards are designed to support the integration of a wide range of internal systems, integration of the utility with other critical infrastructure organisations, and with a host of new flexibility market players. Understanding the implementation implications of the series is often a complex, time consuming, and baffling process for those new to the standard. In this workshop, Svein Olsen, Lead Member of IEC TC57 WG 13,14 & 16 will help break down the essential building blocks of the standard, so that participants understand its optimal application within the utility environment, and get to grips with its current vulnerabilities and future evolution. By the end of the workshop you will be equipped to apply the knowledge gained to create an efficient implementation plan tailored to the needs of your organisation

Session 1: Introduction to CIM - UML, XML, and RDF/XML

In this session participants receive an overview of the Unified Modelling Language (UML) and its components such as class diagrams and its role as the fundamental building block for modelling CIM data, as well as explanation of the Extensible Markup Language (XML) and its components, such as elements, attributes, and namespaces, and how it is used to represent and exchange CIM data using RDF/XML, XML and JSON. You will also get an introduction to open source and licensed UML modelling tools and XML schema generators, alongside techniques used to visualise, read, and validate UML and XML models

Session 2: Introduction to CIM Profiles

Understand the role of CIM profiles as standardized subsets of the CIM Canonical Model to define specific data exchange requirements between different utility systems. Gain an overview of commonly used domain specific and implementation specific CIM profiles, their construction, and their use cases. Get an introduction to the processes involved in implementing a CIM profile from identifying requirements, profile selection, systems analysis, data mapping, validation, documentation, to profile maintenance. Familiarise with the tools and techniques used to implement and validate CIM profiles

Session 3: Introduction to CIM Extensions

Understand the need for modification or addition to a standard CIM profile when it does not meet the specific requirements or needs of a particular system, application, or organisation. Examine common instances where transmission and distribution operators may require additional information on network topology and network elements, or specific data-exchange requirements that are not included in the standard CIM profiles. Gain an overview of the processes involved in extending a CIM profile

Session 4: Inter-utility Use Case - CIM for Grid Models Exchange

Overview of how CIM provides a standardized data exchange format for grid development and network code processes across regional or pan-European boundaries. Evaluate the challenges around the exchange of equipment information, topology information, power system state variables, and steady state hypothesis information. Understand how the Common Grid Model Exchange Specification (CGMES) enables the use of power system data for load flow and contingency analysis, short circuit calculations, market information transparency, capacity calculation for capacity allocation and congestion management, and dynamic security assessment, ensuring compatibility between different applications used by TSOs and DSOs

Session 5: Intra-utility Use Case - Operational, Planning, and Asset Management Data Exchange

Overview of the process for exchanging data between internal systems using CIM standards, such as data flow, data transformation, and data validation. Explanation of the different types of data exchanges and their use cases, such as real-time data exchange for monitoring and control, and batch data exchange for reporting and analysis. Examination of the challenges and best practices for designing and implementing internal systems data exchange, such as data quality, data consistency, data security, and data governance

Session 6: Utility to Flexibility Players and Markets Use Case

Overview of the of the evolving data-exchange requirements and challenges brought about by the transition to a low-carbon, decentralized energy system, and increasing demands of energy consumers and stakeholders. Understand how a common network model derived from CIM can provide the basis for standardising network and system operator datasets, minimise duplication of efforts, enable innovation, and remove barriers to entry for new market participants and service providers

Conference Day One: Tuesday 19th March 2024 - Morning

08:00 **Registration & Refreshments**

08:20 **Welcome Address from the Chair**

08:30 **Energy Security – Engaging to align governmental and societal decarbonisation goals with the operational realities of grid modernization**

- Harmonizing pan-European energy system transformation to accelerate the transition to renewable energy sources and ensure long-term energy security
- Driving transparency, accountability, and collaboration between interconnected stakeholders to enable smart grid development, advanced metering implementation and grid flexibility
- Facilitating the creation of a single, competitive, efficient, and sustainable internal market for gas and electricity in Europe to consolidate investment in infrastructure development, transform market design and pricing mechanisms, and gain public acceptance for change

Speaker to be confirmed

09:00 **Renewables Integration – Speeding up grid modernisation through flexibility and storage to manage demand and capacity constraints**

- Collaborating to overcome the technical challenges of transitioning from traditional, synchronous conventional energy sources to variable renewable energy sources
- Defining common standards and protocols to support seamless integration and communication between generation, storage, and demand-side devices for the efficient coordination and control of distributed energy resources
- Developing robust information-sharing mechanisms, forging innovation partnerships, and coordinating grid management to optimise supply-demand and improve the reliability and stability of the grid

Roberto Zangrandi, Secretary General, **E.DSO**

Philippe Vangeel, Secretary General, **AVERE**

Rene Kerkmeester, Global Vice President, Energy Transition & Utilities, Smart Grids, **Capgemini**

09:45 **Workforce Development – Aligning organisational culture and capabilities to meet the needs of the future grid**

- Proactively engaging with customers, local authorities and internal teams to become a purpose-driven organisation enabling net zero
- Gaining internal buy-in for the transformation from a silent service to a customer-facing organisation and enabler of regional change
- Developing stakeholder data-sharing relationships to inform investment, anticipate growth, and unlock potential for renewables integration and flexibility

Cordi O'Hara, Divisional President, **National Grid**

10:15 **Morning Refreshments, Exhibition & Networking**

10:45 **Change Management – Mobilising teams and projects to meet transformation goals with a balanced approach to risk, finance, and compliance**

- Developing a comprehensive, integrated approach to governance to enable large-scale transformation initiatives
- Navigating evolving national and European regulatory frameworks, managing complex internal and external stakeholder demands, and balancing the need for capital investment with financial constraints
- Leveraging strategic planning, risk management frameworks, and project management methodologies to enable renewable energy installations, grid upgrades, and energy storage deployments

Christopher Hayton, Director of Corporate Affairs Electricity Distribution, **National Grid**

11:15 **Cybersecurity – Embedding an understanding of the threat landscape and adversarial capabilities to enable a proactive approach to cybersecurity**

- Accelerating preparedness to counter nation-state threats to critical energy infrastructure with a harmonized approach to cybersecurity
- Leveraging the NCCS to define stakeholder accountability, and orchestrating effective cyber-exercising to enable a joined-up response capability between utilities, supply chain, regulators, and militaries
- Providing clarity on current capabilities and vulnerabilities to define a strategy for mitigating the risk of serious cyberattack on critical operational systems

Anjos Nijk, Managing Director, **ENCS**

11:45 **AI for Real-time Operations - Effectively collecting, processing and applying high volumes of data to better manage an increasingly complex and dynamic energy system**

- Identifying and prioritising data for collection
- Enabling real-time data handling
- Appropriately applying AI for data processing to co-pilot the energy system

Bas Kruimer, Business Director, Digital Grid Operations & Cybersecurity, **DNV**

12:30 **Live Demo Introductions - During this session the Live Demo Labs sponsor provide an introduction to their solutions and invite participation for their 1:1 demonstrations**

13:00 **Lunch, Exhibition & Networking**

Conference Day One: Tuesday 19th March 2024 - Afternoon

Digital Substation Track

SCADA Systems Track

Utility Telecom Track

Smart Metering Track

Big Data Track

OT Cybersecurity Track

14:30

Energy Transition – Determining the role of substation virtualisation in driving technical and cost efficiency in the migration toward a flexible renewables driven grid

- Achieving cost savings with virtual technology in the design, construction, engineering and operation of stations
- Building new substations and upgrading existing ones through grid extension to support the large number of renewables and electrification of energy vectors
- Using Software-Defined Substation (SDS) technology and software to leverage digitalization, centralization and virtualization and to improve the lead time for automating substations

Frans Campfens, Senior Energy Consultant, **Qirion**

Control Room of the Future – Exploring the potential of next generation SCADA systems to support the cybersecurity management of high-volume data transmitting across the extended grid in real-time

- Creating effective energy management system solutions to mitigate the cybersecurity risks associated with developing an efficient and sustainable grid
- Investigating the techniques and expertise necessary for monitoring and controlling multiple assets harmoniously to establish a cybersecurity network

Jan Vorrink, Manager National Control Centres, Systems Operations, **Tennet**
Dr Alex Stefanov, Director of Control Room of the Future (CroF) Technology Centre, **TuDelft**

Influencing Regulation - Driving engagement to consolidate regulation and government policy with the rapid evolution of utilities and telecoms

- Orchestrating cohesive network solutions to satisfy the data requirements of the smart grid transition to net zero
- Spearheading long-term collective engagement with regulators to drive economies of scale, and a harmonised approach to managing change
- Developing standards-based solutions to reduce cost and ensure long-term vendor support, verified interoperability, cybersecurity, and scalability

Julian Stafford, Secretary General, **EUTC**

Smart Metering Roadmap - Developing an enabling distributed grid intelligence as and real time consumer billing

- Making the case for capitalising on initial investment in smart meter, and evolving meters from low-cost billing assets to high value edge intelligence devices
- Determining the benefits of investing grid edge intelligence in the meter to support decentralised control and demand response, enable smart home services and integrate DER
- Who owns the meter, is it a customer facing or a network function? To what extent will utilities' internal silo structures impact metering development in the long term?

Brian Collins, Director, Digital Grid Consulting, **Ernst and Young**

Data Exchange Framework – Developing a framework to establish the preconditions for safe and interoperable data exchange between all parties in the grid ecosystem

- Building a trusted governance framework to meet the data exchange requirements of multiple stakeholders involved in the end-to-end supply of energy in the Netherlands
- Engaging with market players as an independent framework administrator to ensure ecosystem-wide conformity to data management best practice and compliance to privacy regulations such as GDPR

Klaas Hommes, Managing Director, **MFF BAS**

Regulation – Interworking NIS2 and local regulatory guidelines to create a clear and effective framework for cybersecurity regulatory compliance

- Evaluating the distinctions between NIS1 and NIS2 and establishing a European platform for exchanging information, addressing challenges, and sharing solutions to optimise the application of NIS2 within European utilities
- Leveraging the synergies between NIS2 and local guidelines to improve the management of cybersecurity incidence and ensure cybersecurity asset management and supply chain management

Gaetano Sanacore, Group Security & Cyber Defence, OT Security Manager, **A2A**

15:15

Lifecycle Management – Establishing a maintenance regime that will maximise the lifecycle of digital substation systems built on a mix of new and legacy components

- Maintaining asset health through an in-depth life-cycle assessment of all primary and secondary stations
- Creating a replacement programme to cover the integration of new technologies and retire legacy components
- Gaining visibility of all stages of product life including introduction, maturity/stability, and decline

Anders Karlsson, Power System Specialist, **Ellevio**

Advanced SCADA-EMS – Leveraging advanced system functionalities to support the effective transport management of multiple energy networks

- Developing a next generation Energy Transport Management System to support multiple networks with a variety of energy carriers (including Natural Gas, H2, Heat and CO2)
- Launching a user-centric control system to provide comprehensive information in a heterogeneous transportation environment, using advanced network models and topologies

Erwin Van de Velde, Product Manager Physical Energy Transport, **N.V. Nederlandse**

Outsourcing – Aligning stakeholder capabilities, technical criteria, cost and criticality to establish the business case for the integration of outsourced and internal network services

- Developing future-proofed infrastructure to meet the demand for real-time communication of an increasingly dynamic grid
- Defining operational expenditure savings over the lifecycle of a private network and assessing reliability and availability of external network operator service to inform capital expenditure decision-making

Amadou Louh, Telecom Strategist, **Stedin**

Grid Edge Intelligence - Examining the latest developments in grid edge computing and real time data analytics to enable smart, connected infrastructure at the edge to support grid optimisation

- Developing future-proofed infrastructure to meet the demand for real-time communication of an increasingly dynamic grid
- Defining operational expenditure savings over the lifecycle of a private network and assessing reliability and availability of external network operator service to inform capital expenditure decision-making

Henrik Hagberg, Smart Metering Program Manager, **Ellevio**

Big Data Project Governance – Implementing large-scale enabler projects within an agile organization

- Overcoming the disconnect between disparate agile planning teams and a waterfall approach to enable large-scale IT infrastructure change
- Managing the complexity of migrating multiple projects working with SAP Hana to AWS and implementing middleware standardized on Kafka

Frans Campfens, Principal Consultant Energy Consulting, **Qirion**

ISO 27001 – Extending the use of ISO 27001 across IT and OT infrastructure and achieving certification in a time and cost-efficient manner

- Fostering effective communication and understanding among top management, cybersecurity teams, IT teams, and OT teams, to establish a common language regarding risk management and enable the implementation of the standard
- Framoting, sharing and understanding of how ISO 27001 impacts different departments to advance harmonious communication, investment, and behaviours, and ensure the deployment of cybersecurity solutions

Razvan Tudor, Director of Risk Management, **Electrica**

16:00

Afternoon Refreshments, Exhibition & Networking

16:30

Large-Scale Roll-Out – Defining a roll-out plan and engaging Board support to secure long term investment for the complete deployment of digital substations

- Promoting grid modernization and smart grid initiatives through enhanced substation capabilities that enable greater interoperability of new technologies and future grid infrastructure
- Overcoming high initial investment complexities with legacy system integration, communication infrastructure and cybersecurity risks by leveraging available substation standards and protocols
- Enhancing grid flexibility by optimising substation automation and increasing data-driven grid planning

Rui Almeida, Project Manager, **E-REDES**

Advanced SCADA-ADMS - Developing a comprehensive ADMS roadmap to respond to the changing needs of the power grid, including the integration of renewable energy

- Developing the roadmap
- Constructing effective governance procedures, requiring extensive internal efforts, to align existing systems and integrate them with the ADMS interface
- Presenting the outcomes and challenges of implementing new ADMS to assess the effectiveness of the system within three geographic locations (Portugal, Spain, and Brazil)

Rui Almeida, Project Manager, **E-REDES**

Hybrid MNO Strategy – Demonstrating the success criteria for orchestrating a multi-network environment with a core MVNO to increase control, build resilience and reduce risk

- Collaborating with operators and regulators to enable 5G and other advanced technology for advanced grid applications
- Contextualising the use of public networks in specific grid communications use cases and defining external operator requirements based on criticality, risk and cost

Sergio Ramos, Deputy Director, **E-REDES**

AMI Roll-Out - Outlining Ellevio's smart meter roll-out in Sweden

- Optimising the technology procurement process starting with a technology agnostic services criteria
- Planning for third party interfaces to support future additional smart home services
- Planning for smart meter infrastructure to support decentralised control and demand response, enable smart home services, and integrate DER

Henrik Hagberg, Smart Metering Program Manager, **Ellevio**

Optimising Asset Investment – Proactively leveraging asset health, demand forecasting, and operational data to simultaneously drive efficient investment and inform wider business change strategy

- Gaining visibility of network data to facilitate demand forecasting and meet increased intensity of demand on the network
- Leveraging advanced data analytics with operational technology data to inform an integrated investment and asset management strategy within the confines of economic regulation frameworks

Dan Wilson, Asset Analytics Manager, **Electricity North West Ltd**

IEC 62443 – Determining the opportunities and challenges of IEC 62443 to fully secure and certify power grid OT infrastructure on primary substations

- Exploring the use of IEC 62443 as the basis for securing primary substations in response to its growing acceptance among suppliers and operators
- Utilising IEC 62443 to establish a clear framework for identifying and implementing the most suitable security measures to protect IT and OT devices
- Leveraging IEC 62443 to meticulously design and construct a durable and highly secure primary substation

Damien Ploix, Cybersecurity Manager, **Enedis**

17:15

Process Bus – Evaluating the technical advantages and cost-benefit analysis of process bus architectures for transmission and distribution environments and determining a deployment timeline that will deliver ROI

- Supporting design, installation, and maintenance of protection and control systems to simplify commissioning of substations
- Managing substation installation costs whilst remaining in line with project timelines

Mohseen Mohammed, Protection and Control Engineering Manager, **SSEN**

Modular System Design – Developing a Modular System, next to the wide range of internal and external systems, as an effective multi-vendor Ecosystem for Control Centers that integrates capabilities such as SCADA functionality at the highest level of cyber-security

- Designing a flexible modular system to provide transparent and complete data without the typically associated risks and delays when implementing new SCADA systems

Ralf Heisig, Product Manager MCCS, **50Hertz**

DMR - Overcoming regulatory and technical challenges when implementing a 10.5GHz DMR system in the MV network to improve reliability and enable flexibility and scalability

- Transitioning to DMR for secondary automation control and emergency voice to manage congestion, rural coverage, and the decommissioning of 3G
- Managing rigorous acceptance testing of solutions with network management and control systems to verify interoperability with security and tooling applications

Stuart Boydell, Radio Planning Manager, **ENWL**

AMI - Outlining BKW's smart meter roll-out in Switzerland

- Making a virtue of necessity, industrialization of the AMI roll-out and operations
- Finding the optimum communication technology in terms of cost, performance and reliability
- Understanding the practical challenges of meter installations

Tobias Kaiser, Head of Grid Connection Management & Metering Point Operation, **BKW Energie**

Grid Calculations – Implementing a big data cloud platform to create synergy between grid calculation use-cases

- Harmonizing data modelling across grid operations, asset management, investment planning, and customer demand to enable the energy transition
- Optimising the development process to support diverse grid calculation use-cases from real-time grid control centre applications to long-term infrastructure development and transformation strategy

Robin Hagemans, Managing Partner, **Infiniote**

Threat Management and ChatGPT – Mapping out the evolving OT threat landscape in the era of ChatGPT and exploring the use security-by-design and robust technical strategies to combat these

- Evaluating the ways in which ChatGPT has brought a paradigm shift in the OT threat landscape
- Assessing the methods to manage newer threats in the era of Generative AI and considering its challenges for digital transformation

Tahir Saleem, Senior Manager, OT Security, **DEWA**

18:00

Roundtable Discussions - During this session the audience breaks out into several smaller working groups, each focused on a specific theme that arose during the day's presentations. Each working group will comprise of representatives of the entire smart grid technical community to ensure a well-rounded and holistic discussion

19:00

Roundtable Summaries - During this session each working group leader will provide a 5-min summary back to the wider group, highlighting the issues raised, solutions discussed, and the recommendations made to take the matter to the next level

20:00

Networking Reception - Time to relax after an intensive day of presentations and discussions! All participants are invited to join this networking reception where you will have the opportunity to enjoy the company of colleagues from across the European smart grid technical community, in a relaxed and informal setting

22:00

Close of Conference Day One

Conference Day Two: Wednesday 20th March 2024 - Morning

08:00 Registration & Refreshments

Digital Substation Track

SCADA Systems Track

Utility Telecom Track

Smart Metering Track

Big Data Track

OT Cybersecurity Track

08:20 Welcome from the Chair

Welcome from the Chair

Welcome from the Chair

Welcome from the Chair

Welcome from the Chair

Welcome from the Chair

Standards – Reviewing the latest developments with standards such as IEC 61850 and IEC 62351 among others to support substation digitisation and grid integration with renewables

- Defining communication infrastructure within substations to support HV, MV, and LW power transmission and distribution
- Simplifying substation processes through a centralised platform to encourage virtualisation and speed up substation roll-out
- Promoting network functionality and IT-OT security through the mixed use of IEC 61850 and IEC 62351

Christoph Brunner, Convener, IEC TC57 WG10

Agile Development – Planning the cost-effective implementation of next generation SCADA systems taking into account information management and the IT/OT landscape

- Responding to legislative and cybersecurity changes in the power system market to guarantee the timely development and implementation of systems
- Resourcing and implementing a multi-vendor system which successfully responds to the new power system landscape
- Streamlining the project management of SCADA systems to implement them within a year, in contrast to traditional processes

Carsten Strunge, Business Architect Grid Control Systems, Energinet

Blackout Resilience – Acquiring the technical capability needed to develop resilient independent infrastructure for a wide-area emergency voice and remote blackout restoration solution

- Enabling a quick, coordinated response between multiple stakeholders in a blackout situation to meet regulatory requirements and improve public safety
- Integrating voice communication networks, remote monitoring and control systems, data analytics platforms, and outage management systems to guarantee interoperability, reliability and cybersecurity
- Developing a resilient emergency voice solution to improve service continuity, drive customer satisfaction and reduce cost

Christian Freudenmann, Manager MZM Products, 450 Connect

Smart Metering Communication – Making the case for using NB-IoT/LTE-M lower connectivity cellular networks for residential smart meters

- Outlining the main current communications options for smart metering and criteria for determining the best technology choice
- Assessing the benefits of cellular of commercial meter deployments
- Making the case for using NB-IoT/LTE-M lower connectivity cellular networks for residential smart meters

Davy Michiels, Project Manager Digital Meters, Fluvius

Customer Sustainability – Training customer data models to reduce waste, drive engagement, and enable product uptake

- Leveraging data science to enable the “One planet strategy” and achieve integrated customer sustainability at scale
- Detecting and collecting the right high resolution training data from Smart IoT devices and continuously monitoring, and upgrading data models to provide smart customer insights
- Moving towards the integration of forecasting data to encourage self-consumption and reduce grid imbalance

Kaustav Basu, Lead Data Scientist, Eneco

IT-OT Integration – Optimising the interworking of people, processes, policies and platforms to achieve seamless cybersecurity without adverse effects

- Establishing the common points between OT and IT domains to ensure that an attack in one domain does not extend to the other
- Evaluating the repercussions associated with domain splitting in the event of an attack is crucial to safeguard the security of IT and OT technologies, ensuring their resilience even if the other domain is compromised
- Conducting real-time testing and observation of the disconnection between IT and OT domains, accompanied by tabletop exercises, to verify the self-operability of OT in the event of an IT attack

Salim Bouramman, Expert OT Cyber Resilience and Cyber Range, E.ON Stockholm

09:15 SUBSTATION GOLD SPONSOR

In this session a leading Substation solution provider will present lessons learnt from the practical application of their technology in the field. They will outline the innovations they leveraged, map out how they overcame the practical application challenges, and highlight the technical and final efficiencies.

SCADA SYSTEM GOLD SPONSOR

In this session a leading SCADA solution provider will present lessons learnt from the practical application of their technology in the field. They will outline the innovations they leveraged, map out how they overcame the practical application challenges, and highlight the technical and final efficiencies.

UTILITY TELECOM GOLD SPONSOR

In this session a leading Utility Telecom solution provider will present lessons learnt from the practical application of their technology in the field. They will outline the innovations they leveraged, map out how they overcame the practical application challenges, and highlight the technical and final efficiencies.

SMART METER GOLD SPONSOR

In this session a leading Smart Metering solution provider will present lessons learnt from the practical application of their technology in the field. They will outline the innovations they leveraged, map out how they overcame the practical application challenges, and highlight the technical and final efficiencies.

BIG DATA GOLD SPONSOR

In this session a leading Big Data solution provider will present lessons learnt from the practical application of their technology in the field. They will outline the innovations they leveraged, map out how they overcame the practical application challenges, and highlight the technical and final efficiencies.

CYBERSECURITY GOLD SPONSOR

In this session a leading Cybersecurity solution provider will present lessons learnt from the practical application of their technology in the field. They will outline the innovations they leveraged, map out how they overcame the practical application challenges, and highlight the technical and final efficiencies.

10:00 Morning Refreshments, Exhibition and Networking Reception

10:30 SUBSTATION TECHNOLOGY INNOVATION PANEL

During this session 3-4 Substation solution providers will present the application of their technology in the smart grid environment and share the results that they achieved. This is your opportunity to quiz the tech experts, present your end-user needs, and influence the direction of their product development activities to suit utility needs.

SCADA SYSTEM TECHNOLOGY INNOVATION PANEL

During this session 3-4 SCADA solution providers will present the application of their technology in the smart grid environment and share the results that they achieved. This is your opportunity to quiz the tech experts, present your end-user needs, and influence the direction of their product development activities to suit utility needs.

UTILITY TELECOM TECHNOLOGY INNOVATION PANEL

During this session 3-4 Telecom solution providers will present the application of their technology in the smart grid environment and share the results that they achieved. This is your opportunity to quiz the tech experts, present your end-user needs, and influence the direction of their product development activities to suit utility needs.

SMART METERING TECHNOLOGY INNOVATION PANEL

During this session 3-4 Metering solution providers will present the application of their technology in the smart grid environment and share the results that they achieved. This is your opportunity to quiz the tech experts, present your end-user needs, and influence the direction of their product development activities to suit utility needs.

BIG DATA TECHNOLOGY INNOVATION PANEL

During this session 3-4 Big Data solution providers will present the application of their technology in the smart grid environment and share the results that they achieved. This is your opportunity to quiz the tech experts, present your end-user needs, and influence the direction of their product development activities to suit utility needs.

CYBERSECURITY TECHNOLOGY INNOVATION PANEL

During this session 3-4 Cybersecurity solution providers will present the application of their technology in the smart grid environment and share the results that they achieved. This is your opportunity to quiz the tech experts, present your end-user needs, and influence the direction of their product development activities to suit utility needs.

12:00 Lunch, Exhibition and Networking Reception



Conference Day Two: Wednesday 20th March 2024 - Afternoon

Digital Substation Track

SCADA Systems Track

Utility Telecom Track

Smart Metering Track

Big Data Track

OT Cybersecurity Track

13:30

DER Integration – Determining the impact of renewables integration on substation architectures and operations

- Integrating DER systems with substation architectures to allow for voltage and power flow control and supporting increasing power demand
- Navigating DER integration in active grids challenged with hosting capacity, network security, and voltage violations
- Creating a smart grid through real-time control of distributed generation and achieving net-zero targets

Speaker to be Confirmed

Change Management – Adopting a structured process of preparing for, implementing, and managing changes to systems and processes within the control room

- Setting up a flexible SCADA system that incorporates robust ICT security measures to meet rising customer expectations and ascertain secure integration of decentralized energy
- Establishing clear workforce responsibilities and promoting effective communication to overcome cultural challenges in the operating room
- Breaking down new control room procedures and technologies to manage the integration of new systems and renewable energy sources into the grid

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

Smart Metering - Implementing a combination of Cellular Networks, BPL, LPWAN and Wireless Mesh Networks to improve the availability and reliability of smart meter data while reducing cost and complexity of installation

- Establishing a robust communications backbone to efficiently collect, transmit, and manage large volumes of smart-meter data
- Harmonising diverse communication technologies and networks to ensure seamless interoperability and flexibility of components in the system
- Deploying cost effective solutions to provide transparent, timely communication of meter data for optimised billing and asset monitoring

Jacek Kozbial, Expert AMI and Smart Communication, **Pomiar**

NB-IoT/LTE - Outlining the SEV roll out and operation of AMI and their transition to NB-IoT/LTE for communications

- Outlining the specific challenges of the AMI roll out on the Faroe Islands and the on-going operational challenges
- Outlining the drivers for using NB-IoT/LTE-M lower connectivity cellular networks for residential smart meters
- Detailing the roll out challenges of NB-IoT/LTE-M networks

Thomas Arnold Thomsen, Team Manager Metering, **SEV**

Solar Forecasting – Optimising the use of satellite data and real-time PV measurements with AI to enable better utilization of solar generation

- Managing the complexities of using satellite data to optimise load balancing, flexibility decisioning, and energy management systems for grid stakeholders
- Harnessing electrical engineering expertise alongside satellite data and numerical weather prediction models to enable solar generation use cases
- Leveraging AI and deep learning to overcome real-time data quality issues, improve accuracy, and provide near-real-time actionable insights

Miha Grabner, CEO & Co-founder, **Predictive**

Security by Design – Effectively specifying, procuring, and enhancing systems to ensure that they are secure by design and guarantee backward compatibility with legacy infrastructure

- Enhancing the security and stability of existing systems and infrastructure to enable the seamless integration of accurate data necessary for the successful integration of 100% renewable energy sources
- Redesigning the control centre to prioritise information dependency over system dependency to address the concerns of operators regarding the growing complexity of systems

Peter Lyck Ingerslev, Chief Architect, **Energinet**

14:15

Energy Storage – Reviewing the latest advances in grid-scale energy storage solutions and the implications for the deployment of next generation digital substations

- Monitoring the loads and the current coming to the substation and capturing the energy produced to reduce imbalances between energy demand and production
- Considering valuation complexities to gain funding for increased energy storage across the grid through accurately quantifying costs and benefits
- Meeting energy demand and recovering faster from power outages through support of renewable energy systems

Timothy Okuneye, Electrical Project Engineer, **UK Power Networks**

Congestion Management – Leveraging new system functionalities to support cybersecure, cost-efficient, and fully automated congestion management in DER integrated networks

- Determining the impact of renewables integration on congestion management
- Creating the infrastructure, processes and real-time data exchange necessary to support real-time fully automated decisions and ensure effective grid management in a more volatile grid environment
- Demonstrating the value of the investment in reduced levels of grid investment or dispatching

François Gorlier, Head of System Operations, **Elia**

DERMS - Developing a roadmap towards an intelligent approach to achieving real-time dynamic management of variable loads on the distribution network and enabling smart grid applications

- Understanding the need for intelligent edge solutions to manage the data demands of the new paradigm of distributed assets
- Establishing the business case for investing in innovative solutions leveraging IoT, AI, and Blockchain to unlock grid use cases
- Developing intelligent distribution solutions to reduce congestion, optimise EV charging, and accelerate renewable energy integration

John Dorn, Digital Grid Chief Architect, **Intelligent Grid Services**

AMI Security - Building security into the AMI to reduce the potential of cyber-attacks and secure customer data

- Outlining the potential security risks of the AMI communications network, the data layer and the metering hardware
- Determining the optimum encryption and verification solutions to secure AMI data
- Evaluating Intrusion Detection Systems as tools to identify suspicious behaviour at the block and the communication layers

Philip Steele, Future Technologies Evangelist, **Octopus Energy**

Data Democratisation – Implementing a datamesh approach to ensure availability and observability of high-quality versioned data from distinct data lakes across the business

- Understanding how data democratisation can unlock the potential of generative AI, NLP, and quantum computing to ensure data quality by design
- Driving behavioural change to embed accountability for aligned data quality and governance across global business lines and establish clear rules to standardise the generation and use of data
- Leveraging organisation-wide access to high-quality data to optimize business processes, streamline investment decisions, and enable growth

Matteo Masotti, Head of Data Competence Centre, **Enel**

Supply Chain Cybersecurity – Collaboratively developing a framework for driving security standards across the supply chain, to encourage a mutual commitment to cybersecurity and address shared responsibilities

- Establishing a common approach that caters to the requirements of most utilities to reduce the workload for individual cybersecurity teams and ensure clarity for suppliers
- Effectively determining and communicating clear ownership within each area of the supply chain to align assumptions, distribute and share responsibility, determine decision-making processes, and ensure the regular reassessment of security risks as they evolve
- Coproducing comprehensive, universally applicable, and beneficial OT-specific guidance for the energy sector

Tania Wallis, Research Associate, **University of Glasgow**

15:00

Afternoon refreshments, exhibition and networking reception

15:30

Data Deluge – Identifying the most useful sources of substation data and managing the storage, analysis and reporting of this data to help improve grid processes

- Increasing the number of intelligent devices and integrating advanced technologies for more accurate data processing within digital substations
- Overcoming data storage and management challenges through improved infrastructure and information management strategies
- Obtaining data security and privacy through increased data integration as well as a skilled workforce with appropriate expertise

Speaker to be confirmed

Active Network Management – Optimising system functionality to support cost-efficient congestion management in DER integrated distribution networks

- Evaluating the effectiveness of active network management in the absence of grid reinforcement options
- Identifying cost-effective ways of building in system flexibility to support changing requirements and unforeseen trends
- Comparing the technical and societal cost of active network management versus grid reinforcement

Prof.dr. J.K. Koen Kok, Full Professor of Intelligent Energy Systems, **Eindhoven University of Technology**

LTE-M – Decomplexifying the application of cellular technologies to IoT use cases in smart metering, asset tracking, remote monitoring, and industrial automation

- Keeping abreast of LPWA cellular technologies for IoT devices to optimize applications in support of the grid transformation
- Understanding latency and positional power requirements of smart-grid applications to inform investment in reliable, cost-effective connectivity solutions and avoid common pitfalls
- Aligning system design choices with wireless connectivity requirements to improve signal penetration, extend range and increase power management efficiency

Andy Haig, M2M - Smart Metering and Smart Grid Business Development Manager, **Vodafone**

Data - Outlining Elektro Celje's methodology for big data analysis, cleaning and substitution of smart meter data anomalies, to ensure the data can be leveraged for dynamic pricing and demand-response programmes

- Outlining the challenges of smart meter data reliability and outages, particularly with PLC meters
- Understanding how missing smart meter data limits the opportunity for dynamic pricing or demand-response and flexibility programmes
- Developing algorithms within big data platforms to clean the smart meter data anomalies and substitute the missing values

Leon Maruša, Data Scientist – AMI, **Elektro Celje**

Powerflow Management – Developing accurate powerflow calculation in both look-ahead study and real-time mode to meet DSO flexibility targets

- Formulating precise forecasting methodologies based on powerflow to gain oversight of flexibility services required to operate the grid within technical constraints
- Resolving data quality and data privacy challenges to extract historical data for accurate load and generation profiles, allow for unbalanced power flow within acceptable error tolerance, and enable state estimation on feeders with partial observability obtained from single phase loading measurements at the device level
- Improving load and generation modelling with the required level of granularity for different types of consumers and microgeneration to identify congestion and voltage issues and increase network visibility

Ilija Atlagic, Manager Digital Grid Consulting, **EN**
Edmund O'Carroll, Manager NNLG Programme, **ESB Networks**

Advanced Defence Strategies – Integrating EDR solutions with a range of other advanced defence strategies, such as unidirectional gateways, advanced firewalls, CCTV and HR records, to achieve a layered and comprehensive defence-in-depth approach

- Determining a robust framework of layered security measures to effectively counter threats emerging from both top-down sources and directly from within the deep core of the OT environment
- Leveraging automation and SOC SAR, particularly in cloud security, to differentiate between insignificant and real threats and enable the precise identification and prioritisation of security risks
- Simulating real-world hacking scenarios to ensure the effectiveness of the project and presenting the long-term goals for seamless integration of new devices and systems, eliminating the need for manual uploads or configurations

Speaker to be confirmed

16:15

Cloud – Evaluating the suitability of cloud services for the secure and reliable management of substation data

- Rapidly digitalising data-based operations through cloud-based environments to drive innovation and empower the energy landscape
- Reviewing data security and network connectivity limitations for data transfer through improved service reliability and regulatory compliance
- Leveraging cloud for data storage and accessibility to gain insights into substation performance and reliability

Digital Twin and Fault Management – Using advanced hardware in the loop (HIL) simulation for a decentralized fault location and supply restoration (FLISR)

- Simulating in real-time the effectiveness of the decentralised FLISR to improve network reliability and resiliency to improve the Customer Minutes Loss (CML) of the grid
- Creating a well coordinated FLISR algorithm, with protection devices and peer-to-peer communication protocols, to create a decentralised FLISR with improved responsiveness, scalability and reliability
- Development of a digital twin of the distribution network using our HIL platform to test and validate several scenarios for a decentralised FLISR

Dr. Moustafa Shahin, Manager of Distribution Grid Development, **DEWA**

Lifecycle Management – Overcoming the disparity in the lifecycle of OT assets and the rapid evolution of telecommunication technologies to drive long-term operability and reliability

- Developing a coherent innovation strategy to establish a cost-effective distributed data asset model, ensure long-term systems interoperability and meet regulatory demands
- Navigating the complex stakeholder landscape to find a balanced, collaborative approach to funding, testing, and deploying interoperable intelligent solutions
- Forging an intelligent approach to supply chain wide technology evolution to improve grid resilience, asset management and data driven decision making

John Dorn, Digital Grid Chief Architect, **Intelligent Grid Services**
Dale Taylor, Head of IoT Solution Specialists, **Vodafone**

Leveraging Smart Meter Data - Effectively leveraging AMI data to better plan, monitor and operate the smart grid

- Improving the operational efficiency of distribution networks into smart network using smart meter data rather than installing additional network sensors
- Determining the smart meter data that is valuable for voltage monitoring, GIS, outage management
- Comparing smart meter data with ADMS and SCADA data to get a full picture of network operation

Markku Kauppinen, Senior Specialist Smart Metering, **Elenia**

Skills Deployment - Establishing enterprise capability with a data-product driven approach to deploying data analytics and business expertise within the organisation

- Using a combination of datamesh, data fabric, and agile approaches to facilitate autonomous data-use at different levels of the organisation while maintaining interoperability
- Benchmarking and aligning skills and capabilities with external best practice frameworks and organisational needs to overcome cultural barriers and technical challenges
- Federating data governance under a central guiding policy to allow different levels of granularity and control of data based on functional requirements and maturity

Andrew Burns, Global Head of Data Strategy, **National Grid**

Advanced Offensive Strategies – Evaluating the suitability of penetration testing and other offensive strategies in the OT environment

- Building a team to deliver a flexible and effective offensive strategy for Operational Technology, working in partnership with government and private bodies, and developing a test lab to ensure we are prepared to respond to the evolving threat landscape and mitigate potential risks
- Effectively planning and designing the testing lab to ensure testing methods function in both test and live environments
- Presenting successes and lessons learned to demonstrate the value of testing in reducing risks and improving the cybersecurity of the supply chain and staff knowledge

Adrian Ferguson, Transmission OT Manager, **SSEN**

17:00

Close of Conference Day Two

Conference Day Three: Thursday 21st March 2024 - Morning

08:00 Registration & Refreshments

Digital Substation Track

SCADA Systems Track

Utility Telecom Track

Smart Metering Track

Big Data Track

OT Cybersecurity Track

08:20 Welcome from the Chair

Welcome from the Chair

Welcome from the Chair

Welcome from the Chair

Welcome from the Chair

Welcome from the Chair

AI&ML – Leveraging AI&ML to advance grid monitoring, protection and control and ensure effective management of grid capacity and power intermittency in a renewables driven grid to enhance asset performance management

- Using AI&ML to predict patterns and characteristics of faults occurring and to understand how faults are formed
- Re-arranging network processes and substation automation when isolating faults whilst ensuring grid efficiency
- Creating intelligent substations that collect accurate and continuous data which help frame timely risk assessments

Visualisation – Optimising the visual representation of grid operations to ensure effective customer care and communication through online portals

- Enhancing customer experience and transparent communication to enable proactive resolution of issues
- Effectively managing and presenting diverse data from a vast network of interconnected devices in a user-friendly manner
- Establishing engagement metrics to assess self-service utilization and issue resolution efficiency and measure customer satisfaction

IP/MPLS Teleprotection – Overcoming the complexity of testing and integrating packet-based protection and control in legacy infrastructure to achieve low latency, synchronisation, and security

- Incorporating legacy assets with packet-based services and TDM-based services on a single communication platform to offer redundancy in the network
- Developing a test network representative of a production environment to conduct real-time configuration testing, and overcome procurement complexities
- Building synchronisation architecture to improve network reliability, minimise downtime, and enhance control and protection capabilities

Outage Management - Using smart meter data to detect early, identify consumer vulnerability, and determine outages and faults on the network to improve reliability

- Outlining the success of a meter ping functionality to determine the status of the meter
- Using smart meter data to monitor the status of assets and pre-empt outages before they occur
- Addressing the technical challenges of integrating AMI data with outage management systems to determine the time and location of outages and minimise duration

Tania Vázquez, Head of Dept, Data & Grid Intelligence, E-REDES **EDP Networks**

Flexibility Enablement - Applying AI to perform real-time analytics of forecasting data to provide actionable intelligence in support of flexibility markets

- Anticipating the price of flexibility and predicting imbalance to drive market transparency and reduce cost
- Creating a data platform integrating information and analytics on top of a data lake to provide a single view of data for all market stakeholders
- Ensuring the availability of consistent high-quality real-time data to train and run models that can predict reserves for the next day, and imbalance price for the next quarter

Cyber-Physical Strategies - Developing a holistic approach to system resilience to strengthen utilities to effectively respond to the perfect storm of an evolving cyber threat landscape, power system complexity, geopolitical uncertainties, and climate events

- Strengthening techno-human capabilities to effectively deal with all-type hazards, in particular, in the face of evolving geopolitical landscapes, increasing electrification, advanced digitalisation, and climate change
- Defining resilience principles to ensure that all power-grid infrastructure and systems are resilient by design
- Exploring methods to develop a comprehensive, scaled-down replica of the entire power system for the purpose of testing grid resilience and providing valuable staff training opportunities

Fouad Abou Chacra, Senior Specialist for Special Projects and Innovation, **DEWA**

Amadou Louh, Telecom Strategist, **Stedin**

Cedric Charlier, Group Head of Data and Integration, **Elia**

Matija Naglic, Business Developer System Operations, **TenneT**

Predictive Maintenance – Establishing a framework for cost-effective condition based predictive maintenance for legacy and new substations to ensure asset health and maximise product lifecycle

- Maintaining asset health through data transmission supported through online monitoring and strengthening evidence-based supplier communication
- Overcoming data overwhelm by optimising tracking capabilities and data monitoring through colour categorized processes
- Obtaining real-time transparency and visibility of the health of substation components to prevent major issues or physical dangers

Advanced Alarming – Balancing safety and effectiveness in the optimisation of alarming to accurately eliminate false positives and direct operator attention to the most crucial alarms

- Utilizing data driven approaches to separate emerging activity from abnormal behaviour to develop precise alarms which detect advanced cyber-attacks
- Leveraging physics concepts to establish alarm utility and probability to overcome the lack of abnormal data required in designing successful advanced alarming systems
- Effectively reducing false alarms without compromising the accuracy of legitimate alerts to improve the decision-making processes of operators

SIM – Building flexibility and control with a SIM solution combining remote switching platform and EUICC RSP technology to avoid MNO locking, enable secure connectivity, and reduce costs

- Establishing a multi-operator sim environment to manage identifiers, ensure quality of service, and control cost
- Extracting communication data records from multiple operators and mapping the flow of critical information in the network to achieve visibility and control at scale
- Managing automatic remote switching based on reliability of service to build redundancy, stability, and resilience into your mobile network

Demand Response - Optimizing smart meter infrastructure and data to provide accurate consumption models and facilitate demand side response and grid flexibility

- Making the case for leveraging smart meter data infrastructure to support the deployment of demand side flexibility
- Developing best practise to involve, educate and reward the right consumers in demand side response possibilities
- Designing a demand response programme that meets peak load reduction goals and customer requirements

Predictive Maintenance – Utilising innovative data acquisition techniques and advanced analytics to optimise asset maintenance and vegetation management

- Increasing the precision of asset data and reducing reliance on physical monitoring to optimise investment and reduce operational cost
- Using a combination of ML models, rule-based models and computer vision models to calculate health index and remaining useful life of assets in line with OFGEM's RUL methodology and predict vegetation growth around power lines
- Overcoming data quality issues to ensure that geolocation of assets and consumers is accurate using ML models

AI&ML – Maximising cybersecurity in the use of leading-edge tools, for simplifying and automating utility processes

- Implementing AI&ML to improve grid optimization and enhance grid security and resilience
- Integrating AI&ML with existing infrastructure and addressing regulatory and privacy concerns
- Ensuring high-quality data to guarantee robust model validation and testing whilst addressing ethical and regulatory considerations

Stewart Flood, Lifecycle Management Specialist, **ESB**

Dr Fei Teng, Senior Lecturer, **Imperial College London**

Speaker to be confirmed

Jean-Philippe Poirrier, Assistant Director, Smart Grid Solutions Industrialization Program, **Enedis**

Catarina Calhau, Manager of Data Management and Analytics, **EDP**

Speaker to be confirmed – Israel Electric Corporation

10:00 Morning Refreshments, Exhibition and Networking Reception

Remote Management – Utilising advanced tools such as drones, satellite, and AI to drive effective remote monitoring and management of digital substations

- Working toward grid optimisation and asset performance through real-time visibility of digital substations
- Strengthening outage management and substation restoration by accurately identifying, locating and isolating faults within substations
- Reducing maintenance costs and enhancing equipment reliability through advanced remote management tools and data analysis

Cloud – Exploring the benefits of public cloud whilst ensuring connectivity security and data privacy in the transmission process

- Examining the possibilities of leveraging the capabilities of cloud computing in the control room to improve the ability of operators to manage complex operations
- Integrating the use of cybersecure cloud-based systems with SCADA whilst ascertaining high levels of reliable data
- Evaluating the impact of cloud-based systems in the control room and assessing possible restraints on response times

Upskilling – Understanding the skills gap and building competence to enable utilities to deploy and operate resilient networks based on disruptive technologies such as 5G and LTE

- Ensuring the competency needed for the development, and operation of networks to support the data, communication, and cybersecurity demands of the modern grid
- Overcoming supply chain complexity, interoperability challenges, and skills shortages to establish an evolutionary path towards a reliable, scalable field area network based on 5G
- Achieving reliable, ubiquitous low latency wireless communication to revolutionise grid protection and control and enable large-scale DER integration

Outlining 50 Hertz's development of the MCCS NextGen modular control center system to integrate data from DSO infrastructure and respond rapidly and flexibly to complex and changing system needs

Machine Learning – Streamlining development operations to prioritise machine learning modelling, testing, and validation in line with business value generation

- Leveraging ML techniques for predictive maintenance and asset lifecycle decisioning to manage the volume and complexity of data engineering
- Developing and applying software with ML capabilities to increase the efficiency of image analysis to improve fault detection
- Focusing resources to develop ML capabilities that can optimise asset investment strategy and reduce operational cost

Patching of Devices – Establishing a patching regime that keeps OT infrastructure up to date whilst avoiding compatibility issues and minimising disruptions

- Enhancing a patching regime to effectively address the evolving threats within the OT environment and comply with changing regulation
- Implementing architectural changes that enable the effective operation of redundancy, and categorising different parts of the substation based on levels of patching difficulty to allow for the strategic placement of intrusion detection systems
- Presenting the tangible outcomes of the patching project, including before and after results, to showcase the reduction in vulnerabilities within substations

Speaker to be confirmed

Kristian Alsing, **Independent Consultant**

Speaker to be confirmed

Ralf Heisig, Product Manager MCCS NextGen, **50 Hertz**

Per-Oddvar Osland, Research manager, **Glitre Nett**

Michael Knuchel, Head of SAS Engineering, **Swissgrid**

Cyber-Physical Security – Implementing a hybrid defensive-offensive cyber-physical security strategy to fully protect digital substations and fully comply with standardisation

- Using blockchain to observe data patterns and monitor substation devices to help detect and remove vulnerabilities in IT-OT components
- Understanding and agreeing on a mixed cyber-physical implementation roadmap for assessing and securing security risks on substation devices
- Aligning with the market to facilitate the development of software solutions which secure virtual substation processes

IoT – Ensuring the effective collection and analysis of high volumes of IoT and sensor data being deployed across the grid to expand visibility of the LV network and the grid edge

- Combining the use of terrestrial and satellite IoT to provide long-term cost-effective visibility of remote assets
- Testing and establishing the connection between assets and the satellite to ensure successful two-way communication
- Achieving direct connectivity between assets and the satellite to receive reliable and accurate data

5G Edge – Leading innovation and knowledge transfer to enable secure, resilient automation workloads with edge computing and 5G

- Developing connectivity between IoT devices in the edge and the cloud continuum to extract value from data and optimise the network for distributed generation and energy storage
- Deploying intelligent algorithms, virtualised applications, and advanced machine learning models to manage remote updates, control and security certificates of distributed assets at scale
- Leveraging low-latency communication in the edge to reduce operational cost and enable new distribution business models

EV Smart Charging - Examining the potential of the smart meter in developing EV smart charging systems to support the evolution of sustainable energy networks

- Using smart meter data to match supply to demand and adjust EV charging to specific energy (or grid) tariffs
- Making the case for integrating EV power supply controllers with the smart meter
- Addressing the security risks of sharing data between smart meters and EV charging networks

Data Interoperability – Developing an ontology of semantically equivalent objects across grid domains to contextualise data, drive data quality, and improve machine learning models

- Developing an ontology to enable interoperability between knowledge systems with complex interdependencies when building up a data lake
- Learning from approaches in CIM and the IEC SRD 63417 ED1 Guide to develop precise semantically equivalent object definitions within domain information models and a standard for smart energy ontologies
- Relating machine interpreted language to human language with an object-based approach, enhanced by the use of natural language processing when developing data models

IAM Solutions – Leveraging Identity & Access Solutions (IAM) and Privileged Access in your OT environment

- Adopting IAM solutions in the OT environment to ensure maximum security and comply with cybersecurity regulations and standards
- Developing a programme approach and broad Zero Trust model to ensure significant attack surface reduction and overcome the challenges faced in implementing IAM solutions in segmented networks with complex supply chains
- Establishing KPIs to measure risk reduction and compliance across different sites and conducting comprehensive assurance testing across the OT environment

César Cazal, Research Associate, Aachen University, **E.ON Energy Research Center**

Marco Gonzalez Hierro, Head of ICT Department, **Ikerlan**

Arjan Wargers, Innovation Manager Electric Mobility, **Enexis**

Svein Olsen, Enterprise Information Architect, **Statnet**

Kristian Alsing, **Independent Consultant**

12:00 Lunch, Exhibition and Networking Reception

Conference Day Three: Thursday 21st March 2024 - Afternoon

Digital Substation Track

SCADA Systems Track

Utility Telecom Track

Smart Metering Track

Big Data Track

OT Cybersecurity Track

13:30

New Technologies – Evaluating the opportunities and challenges of adopting new technologies and micro-services for more effective asset management in highly congested grid environments

- Integrating new technologies to the network to automate services, improve asset management, and accelerate the digitisation of operational processes
- Re-designing remote monitoring and asset management through the use of AI, drones, RTU and other new technologies
- Gaining visibility of secondary substations by extracting information of non-digital assets and better understanding their level of functionality and performance

Speaker to be confirmed

Real-time Data – Facilitating the storage and analysis of high volumes of real-time data to support the operations and maintenance of a fully connected smart grid

- Establishing a clear and reliable view of the low voltage network to avoid outages, increase response time, and provide timely updates to customers on the status of assets
- Exploring various non-disruptive methods, such as mobile solutions, to customize the view of the low-voltage network and enable on-site modification, migration, and data updating
- Incorporating SAIDI into ADMS to display network availability to customers and generate dependable outage reports

Benoit De Neuville, Senior Grid Expert, **Sibelg**

Network Operation – Overcoming skill shortages, procurement complexity, licensing and permit management, and technical challenges to deploy an operational private LTE network

- Deploying a 450 MGHZ trial towards achieving long-term resilience and control of smart-meter, transmission, and critical voice applications
- Developing capabilities internally and with partner organisations to overcome roadblocks and delays around network development, device interoperability and smart-meter gateway testing
- Demonstrating the feasibility of a private LTE-Network to enhance long-term grid reliability, improve operational efficiency, and enable advanced grid management capabilities

Joyce Van de Garde, Director of Telecommunications, **Westenergia**

Standards - Outlining the latest developments in the IEC TC 13 standard for smart meters and addressing the latest challenges of support for monitoring and managing flexible loads

- Examining the current standards for electricity measurement in billing and load control
- Ensuring cyber security support within the standard and working with IEC 62056 standards for application-layer security
- Evolving IEC standards to monitor and control demand response and DER integration in the grid

Peter Jensen, Chair of IEC Technical Committee 13, **EDF**

Right-sizing PV Assets – Leveraging a cloud-based data analytics platform to enable innovative business models

- Working towards the integration of community energy and hydrogen storage solutions to overcome over-voltage in the grid and meet customer needs for flexible solar contracts
- Combining production, injection, and consumption data from inverters with meteorological data in a digital twin to enable the development of I-V Curve graphs, diagnose under-performance problems, and predict faults
- Establishing KPIs for B2B, B2C, and self-consumption business models to measure performance of solar installations and facilitate smart alternatives to existing transactional plans

Speaker to be confirmed

Edge Computing – Enhancing physical security and cybersecurity through the implementation of edge computing in digital substations

- Employing edge computing within digital substations to create a mini data centre to enhance network segregation and establish different access levels, enabling cybersecurity internal dependency
- Planning the cybersecurity implementation of edge computing, taking into account factors such as varying data transfer latency and conducting site-specific evaluations to determine the appropriate level of security for each substation
- Developing cybersecurity sessions for conducting penetration testing to ensure real-time monitoring, permitting full control over substation assets, protecting both employees and society at large

Marco Enseldo, Digital Platform Architect, **E-REDES**

14:15

Edge Computing – Leveraging the edge computing capabilities of IEDs and RTUs to build grid resilience in DER integrated infrastructures dependent on real-time traffic

- Improving real-time analytics, grid-resilience, and distributed energy resource management
- Overcoming network infrastructure complexities regarding data management and processing capability
- Managing grid surveillance and network sensors to increase grid security and cost efficiency of newly integrated digital assets

Marco Enseldo, Digital Platform Architect, **E-REDES**

Cybersecurity – Applying advanced cybersecurity solutions to next generation SCADA systems to guard against a rapidly growing attack surface fuelled by IoT, sensors and data migration

- Deploying cybersecurity solutions and PKI certifications to create a parallel between OT devices and SCADA systems
- Ensuring the complete migration of historical data whilst creating a system that is flexible, user friendly, and fulfils the networking and information security act
- Measuring the behaviour and status of OT technology to ensure compliance with regulatory laws

Fredi Belavici, Asset Management, **Austrian Power Grid**

Supplier Engagement - Engaging with the supply chain on a technical level to drive standardization, harmonization, and accountability in support of electric grid communication needs for flexibility and priority

- Driving interoperability through standardization to ensure consistent and efficient communication for critical grid operations in support of green deliverables
- Aligning diverse stakeholder interests, regulatory requirements and technologies to reach consensus and define accountability across the supply chain
- Ensuring seamless integration between grid communication systems and devices to accelerate innovation, enable 5G and 6G applications, and reduce cost

Spyridon Louvros, 5G System Architect, 6G Researcher (ORAN WG4), **3GPP consultant, MCNS**

Home Energy Management - Integrating home energy management functionality with smart meters to maximise energy efficiency and deliver additional consumption data to the supplier

- Understanding the technical challenges of enabling home energy management and smart appliances to communicate with the smart meter
- Determining the relative benefits of giving third party access to smart meters or integrating technology into the meter
- Outlining the development of a multi-utility gateway concept by DLMS-UA and ESMIG

Willem Strabbing, Technical Director, **ESMIG**

Smart Meter Data – Developing real-time analytics capability and overcoming scalability and data reliability challenges to unlock the potential of smart meter data

- Leveraging an in-depth knowledge of smart meter technology and grid engineering to develop an in-house advanced analytics function that enables coherent data exchange between smart meters and other domains
- Demonstrating the use of a big data platform to grab, process, and prepare data for advanced use cases and handle missing values in consultation with data substitution techniques
- Understanding how to manage smart meter data to meet the requirements of demand response, advanced analytics, and insight into grid operations

Leon Marusa, Head of Advanced Data Analytics Department, **Elektro Celje**

Law Enforcement – Forming an advanced partnership with law enforcement to support the response, recovery, and resilience process after an attack

- Ensuring coordinated response and information sharing to permit access to specialised expertise and resources for investigating cybercrimes and identifying perpetrators
- Assessing the different jurisdictional boundaries, legal frameworks, and regulations across European countries to balance confidentiality and sensitivity of grid operations with information sharing requirements
- Establishing clear communication channels and protocols and fostering trust and mutual understanding between utilities and law enforcement

Arjan Van der Lann, Program Manager, Energy Transition, **RDI**

15:00 Afternoon refreshments, exhibition and networking reception

15:30

LPITs – Optimising the deployment of LPITs within the grid to benefit from increased data flows in the most cyber-secure and cost-effective way

- Leveraging smaller low-power instrument transformers (LPITs) to provide flexibility and improved measurement of substation performance
- Considering integration challenges of high-accuracy LPITs such as design, testing, and market acceptance
- Having high-reliability and long lifetime expectations of LPITs which can cover all protection and metering requirements for engineering processes

Mika Loukkahti, Systems Manager, **Helen Oy**

Staff Training – Designing a training programme that reinforces new system and process best practice and enables rapid upskilling and operational self-sufficiency

- Laying out a methodology for an effective staff training technique to encourage the process of learning skills whilst working
- Selecting, training and supervising experienced staff as trainers to upskill junior staff at the work site
- Assessing the training programme effectiveness to make any necessary improvements or modification and creating a SCADA Assessment Process, Methodology and Tasks Assessment checklist

Brian Magee, Project Manager, **ESB International**
Dr Kamal Radi, Senior Specialist, Power Systems Planning, SCADA and Energy Management Systems (EMS), **ESB International**

Cybersecurity – Addressing supply chain security and NIS 2 compliance to embed security by design into utility telecom network architecture

- Developing effective and practicable end-to-end supply chain cybersecurity requirements in support of renewables integration, demand response and flexibility
- Understanding how an attack to control access nodes in the distribution network could bypass cryptography and secure-by-design architecture to harden smart-meter gateway security
- Managing data collection regulatory requirements and measurement device software updates to reduce cost and drive efficiency

Frank Borchardt, Senior Product Manager, **VDE**

Data Privacy - Managing smart meter data privacy risks by balancing privacy with the benefits of data access

- Understanding the potential abuse of personal information embedded within smart meter data and consumer privacy concerns
- Outlining existing data protection regulations in different countries and the EU and how they apply to smart meter data
- Evaluating different privacy-preserving techniques such as anonymisation of data, differential privacy, homomorphic encryption, user demand shaping

Lisa Hjerrild, Department of Law, Assistant Professor, Public Law, **Syddansk Universitet**

Advanced Business Intelligence – Empowering decision makers with advanced analytics, quantum computing, generative AI, deep learning, and natural language processing

- Leveraging state-of-the-art technologies to enable data-driven decisioning for enhanced business intelligence and actionable insights
- Overcoming data privacy concerns and resistance to change to unlock the potential of new technologies for grid operations and planning use cases
- Applying learning from early uptake in other industries to manage complex utility use cases such as LV network modelling, fraud detection, and asset modelling

Martin Proctor, Specialist Leader, Director Artificial Intelligence & Data in Industry & Energy, **Deloitte**

Building Cyber Resilience - Transforming Employees into Cybersecurity Champions through a comprehensive in-house cybersecurity training program

- Learning key strategies for creating an engaging in-house cybersecurity training program that aligns with risk management and compliance requirements to foster a cybersecurity culture within the organization
- Discovering empowering tactics that position your employees as the first line of defense against threats to ensure their engagement and effective application of cybersecurity lessons to real-world scenarios
- Gaining insights into harnessing user feedback to assess and enhance your training program's efficacy, improving practical testing methods for robust cybersecurity performance

Indrek Kunaapu, CISO, **Elektrilevi**

16:15

Workforce – Developing a training and development framework that leverages internal and external expertise to upskill substation teams and ensure their confidence and competence with the new digital grid environment

- Understanding the technical skills required to develop digital substations and prioritising cross-functional teams between departments which help break silos within the network
- Developing awareness on the development framework for the new digital grid whilst maintaining decision-making hierarchy and ensuring full transparency of the rules and the tools that utilities have
- Engaging each of the internal stakeholders in a very customer-oriented way to encourage participation and ensure balance between operational safety and digital transformation

João Fonseca, Engineer and Coordinator of Digital Substations, **Netze BW**

CIM – Demonstrating the latest developments in CIM standardisation and how these can be leveraged to fast track internal and external integration of systems and stakeholders

- Implementing CIM data strategy as a common language between both internal and external stakeholders to allow accessibility, reliability, interoperability and scalability
- Using CIM to source all data exchanges from a single point to maintain consistency and avoid misinterpretation of data in network data outputs

Dr Kamal Radi, Senior Specialist, Power Systems Planning, SCADA and Energy Management Systems, **ESB International**
Dr Mohammed Radi, Network Data Modelling Engineer (CIM), **UK Power Networks**

Spectrum – Working with regulators to ensure cost-effective long-term access to reliable connectivity for network operators' critical communications

- Aligning situationally appropriate spectrum to meet utility requirements for interference-free, dedicated frequency bands that enable reliable and secure communication networks
- Navigating diverse regulatory frameworks, spectrum allocation policies and associated costs to harmonize spectrum availability for utilities in line with international standards
- Driving visibility and control of utility networks to enable grid applications and unlock new business models and revenue streams

Gösta Kallner, Executive Chairman, **450 Alliance**

Standards for Data Management - Outlining the work of Project EUREC (European Distributed Data Infrastructure for Energy) to create a secure, scalable, and sustainable infrastructure for energy data management and analysis in Europe

- Outlining the drivers for uniform procedures for smart grid and smart meter data management across Europe to enable interoperability and data sharing
- Establishing customer rights to access energy data and share with service partners of their choice
- Enabling de-centralised, distributed, open-source smart grid data in the EU to enable interoperability between energy companies

Georg Hartner, Vice-Chair of EU DSO Entity's Expert Group on Data Interoperability and Initiator/Technical Coordinator of Project, **EDDIE**

Cloud Strategy – Defining a balanced approach to cloud and on-prem solutions to enable scalability and flexibility while embedding redundancy and ensuring cybersecurity of critical systems

- Identifying business goals, assessing cloud readiness, and selecting appropriate cloud service models to develop a cloud strategy based on data management needs of the grid
- Taking data sensitivity, latency, cost and performance into consideration when determining the balance between on premise and cloud solutions
- Adopting a phased approach to cloud migration, and a cloud-native approach to application development when implementing a hybrid-cloud architecture to ensure data availability and reliability

Sam Julian, Chief Cloud Engineer, **E.ON**

Workforce Collaboration - Developing a collaborative security workshop to improve sector resilience whilst strengthening relationships between OT and IT teams and contribute to the professional development of employees

- Establishing a collaboration that fosters mutual understanding and trust between IT and OT teams, and permits the combination of tools and data across internal and external security teams and government personnel to generate creative solutions to secure infrastructure
- Assessing the risks associated with sharing data with external parties and developing training and guidelines to ensure all attendees comply with privacy policies
- Presenting the outcomes of the collaboration and feedback from participants to demonstrate its success in contributing to the professional development of employees and development of cybersecurity solutions

Shawn McBurnie, Head of IT/OT Security & Compliance, **Northland Power**

17:00

Close of Conference Day Three

Translating Technical Know-How into Organisational Priorities to Influence the Board and Secure Long-term Technology Investment

Registration: 08:00 | Programme: 08:30 to 16:30

During this session participants receive a comprehensive overview of effective communication strategies and techniques for translating technical knowledge into organisational language. Through a series of formal knowledge transfer presentations, break-out group exercises, and practical role-play the learning will be fully embedded and participants will be equipped and empowered to fine-tune their business plans and communicate it in a manner that secures long term Board support and investment. Places are limited to 30 to ensure an intimate and interactive learning experience for all.

Workshop Leaders:

Frank Jacobs, Business Director Congestion Management, DNV & Ashley Baroda, Leadership & Communication Coach, iMA



Programme

Session 1: Communication Framework - Understanding the do's and don'ts of effective communication with senior management and the board

Participants receive a comprehensive overview of tried and tested communication principles and methods, designed to maximise engagement, leverage persuasion and influence, and deliver effective communication with multi-functional teams and senior management. All facets of communication will be addressed including the optimal use of words, tone, and body language

Session 2: Understanding Board Priorities - Getting under the skin of the financial, legal and regulatory priorities of the Board to achieve alignment and maximise engagement

This session clarifies the pressures and priorities of the Utility Board and unpacks their decision making and investment process. It provides insights into the key information required by the CEO and clarifies how they make the most organisationally robust decisions to safeguard long term investments and brand reputation

Session 3: Technical into Financial - Successfully translating technical information into organisational priorities to drive Board engagement and ensure ongoing support

Breaking down technical concepts to make it understandable to non-technical leaders, and leveraging their organisational and financial benefits to communicate the need for technology investment in the language of the Board

Session 4: Creating the Business Plan - Determining the core considerations of the technology investment business plan and mastering the art of business plan writing

Understanding the fundamentals of technology business plan writing and devising a plan that demonstrates the cost-benefit with credibility and impact in the language of the Board

Session 5: Presenting to the Board – leveraging the art and science of persuasion to ensure effective communication of the technology business plan and secure long term investment

Applying communication principles and techniques that amplify your message, engage your audience, and secure investment with ease

Session 6: Communication Roleplay - Practice makes perfect

During this session participants apply the lessons learnt throughout the course of the day, to pitching their technology investment plan, and receive feedback on their communication style and persuasiveness

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Previously air-gapped OT environments are becoming increasingly connected due to Digital Transformation initiatives and a growing need to support distant assets remotely. The fundamental assumption – a discrete OT network – is undermined by this increased connectivity. The Fortinet Security Fabric provides a broad, integrated, and automated platform addressing the challenges of IT-OT convergence and tailored to the constraints found in OT and IT. Solutions to convergence challenges include customizing products to unique OT environmental conditions, such as rugged firewalls and switches, advanced threat protection offerings including endpoint protection, deception, sandboxing, and SOC/NOC tools that can synergistically scale across IT and OT.
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