## In-depth Insights On:

- **System implementation and integration**: exploring next-generation GIS systems and how to integrate them with a range of IT and OT systems including SCADA and ERP
- **Data quality**: taking steps to ensure GIS data meets the standards required for smart grid applications and provides a complete map of geospatial network information
- **Advanced functionality**: building GIS platforms and tools which provide a full suite of functionalities to support a wide range of business users from multiple departments
- **Cross-platform functionality**: developing support for advanced GIS applications in desktop, web-based, and mobile formats
- **Visualisations**: producing accessible, interactive maps and visualisations which make insights accessible to a variety of internal and external stakeholders
- **Open-source GIS**: exploiting the growth in performance of QGIS to complement your existing tools, add flexibility, and even replace proprietary systems

## 14+ Utility Case Studies from:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mait Rahi</td>
<td>Development Manager</td>
<td>Digital Projects Elektrilevi</td>
</tr>
<tr>
<td>Pedro Gama</td>
<td>Senior Manager, Mission Critical Systems EDP</td>
<td></td>
</tr>
<tr>
<td>Sami Vehmasvaara</td>
<td>System Engineer NIS/GIS Elenia</td>
<td></td>
</tr>
<tr>
<td>Vladimir Stojicic</td>
<td>GIS/GNSS Project Leader</td>
<td>EPS Distribucija</td>
</tr>
<tr>
<td>Maarten van Roest</td>
<td>Functional Manager Geo-information</td>
<td>TenneT</td>
</tr>
<tr>
<td>Raffael Hilber</td>
<td>Head of Development Network Information</td>
<td>BKW</td>
</tr>
<tr>
<td>Ain-Joonas Toose</td>
<td>Chief Specialist Elektrilevi</td>
<td></td>
</tr>
<tr>
<td>Elisa Schafer</td>
<td>Planner, Asset Digitalisation</td>
<td>Fingrid</td>
</tr>
<tr>
<td>Alex Jakeman</td>
<td>Innovation Project Leader</td>
<td>UK Power Networks</td>
</tr>
<tr>
<td>Ingrid den Uijl</td>
<td>Teamleader Asset Information System</td>
<td>Stedin</td>
</tr>
<tr>
<td>Peter De Koning</td>
<td>Lead Architect</td>
<td>Alliander</td>
</tr>
<tr>
<td>Matthias Franssens</td>
<td>GIS System Manager</td>
<td>Sibelga</td>
</tr>
</tbody>
</table>

## Technology Innovations from:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martin Lubach</td>
<td>Business Manager, Utility &amp; Telecom Esri</td>
<td></td>
</tr>
<tr>
<td>Tigran Andjelic</td>
<td>Principal Software Architect</td>
<td>GE</td>
</tr>
</tbody>
</table>

## Expert Advice from:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonathan Piraux</td>
<td>GIS Functional Analyst</td>
<td>Capgemini</td>
</tr>
<tr>
<td>Marco Bernasocchi</td>
<td>Founder</td>
<td>OpenGIS.ch</td>
</tr>
<tr>
<td>Soeradj J. Raghunath</td>
<td>Senior Manager, GIS Solutions Accenture</td>
<td></td>
</tr>
</tbody>
</table>

---

**Supporting Partners:**

- IEC
- EDSO
- OSGP
- DIGITAL SUBSTATION
- GeoInformatics
- GeoConnections
- MundoGEO
- GESpacial World
- GeoInformatics
- GIS magazine
- GIS Professional

**Produced by:**

Phoenix Forums t/a Smart Grid Forums 2018

www.smartgrid-forums.com/gis
Dear Colleague,

Welcome to the premier GISSmartGrid 2018 conference, exhibition and networking forum. Designed to meet the specific information needs of GIS teams working within the smart utility sector, this independently researched, case-study focused GIS forum provides the information and inspiration you need to drive your GIS people, processes, and platforms to the next level.

There is no denying that GIS departments are under more pressure than ever to provide accurate, real-time and meaningful topological information to a variety of internal and external stakeholders. Legacy GIS systems, traditionally utilised for asset management processes, must now be overhauled and upgraded to provide new functionalities to support a greater range of use cases essential to a more complex grid scenario.

Join 120+ GIS implementation leaders and system specialists from across the European power grid sector for 3 intensive days of advanced GIS implementation reviews. Over three intensive days, 14+ TSOs and DSOs will share with you how they are implementing next-generation GIS solutions, integrating them with their IT and OT systems, and providing new functionalities and support for a wide range of end users throughout their smart utility organisations.

Technology choices, implementation lessons and future roadmaps will be discussed in the context of organisational objectives and regulatory pressures, providing robust guidance to help you benchmark your own GIS strategy, fine-tune your own implementation plans, and drive your own GIS department to its next level of success.

Event highlights include:

- **Case study programme** - gain in-depth insights into the GIS experiences of 14+ pioneering European utilities and understand how new system functionalities and use-cases are being introduced in the context of organisational objectives and pressures

- **Utility driven speaker line-up** - selected on the strength of the GIS projects they are involved in, their pivotal roles in implementation decision making, and their insights into the lessons learnt and future roadmaps created

- **Technology innovation panel** - quiz the technology innovators on the strength of their current GIS product offerings, their R&D pipelines and their vision for the future of smart utility GIS

- **Opensource tutorial** - through a 90-minute tutorial at the end of conference day three, take advantage of this opportunity to assess the immediate and longer-term potential of Opensource GIS solutions as a part of your technology mix

- **Roundtable discussions** - bring your specific GIS challenges to the table and brainstorm and problem solve intensively with the entire smart utility GIS community

- **Networking evening reception** - relax and unwind after an intensive day of presentations and panel discussions, meet with colleagues from across the European smart utility GIS community, allow new ideas to cement and new partnership opportunities to emerge

We look forward to welcoming you to the event in November 2018!

Kind Regards,

Robin Sarfas
Producer | Smart Grid Forums

PS: Very Early Bird Rates – Save €400 on delegate places and €2,000 on exhibitor places by booking before Friday 28th September 2018!

PPS: Group Booking Discounts – Save a further 10% on 3+ delegates booked by the same organisation at the same time!

---

**Sponsorship & Exhibition Opportunities**

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

Our adjoining exhibition area provides the perfect platform for you to do this and more! Capped at 10 stands we ensure a focused and relevant display of the latest tools, technologies and services for our audience and maximum visibility for each exhibitor.

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

Call: +44 (0)20 8349 6362
Email: registration@smartgrid-forums.com
Download: Exhibition Opportunities Brochure

---

**Testimonials from Past Events**

“Great event and a unique opportunity to discuss with utility peers and vendors the challenges and opportunities of the total transformation on network operation systems.”

Aurelio Blanquet, EDP @ NextGen SCADA Europe 2018

“This conference provided an array of technically detailed presentations. Rather than being too generic and high level, the material presented facilitated much learning in a short time frame. There was also an excellent level of informal interaction among participants. A couple of days well spent.”

Cormac Long, ESB Ireland @ UtiliNet Europe 2018

“Good opportunity to share updates with colleagues in IT/OT. Discover different approaches for the same problems. Learn new market developments.”

Ton Rijnan, Tennet @ NextGen SCADA Europe 2018

“A very useful time, open exchange of ideas and information. Excellent real-world presentations.”

Allan Wales, SP Energy Networks @ IEC 61850 Europe 2018

“For me the IEC 61850 is quite new. The workshop was very useful to get a better idea of what the IEC 61850 is and what it means. Different use cases that were presented gives me a good idea of the benefits and options.”

Hans Slootjes, Stedin @ IEC 61850 Europe 2018
GIS System Integration – connecting multiple systems with diverse data models to allow broader combinations of data and deepen network insights
- Implementing highly customised interfaces to ensure the smooth flow of data between systems with different network models from multiple vendors
- Working with vendors to develop bespoke tools for exporting master GIS data for use in various network activities
- Combining data of different types including real-time, historic, and asset data to expand the range of possible applications and support multiple business units
- Leveraging the CIM standard to expand data flow from assets in the more complex low voltage network
- Exploiting the improved access to multi-dimensional network data to unlock advanced use cases in a number of grid domains, including automation of outage communications to key stakeholders

Matthias Franssens, GIS System Manager – Sib eliga
Jonathan Piraux, GIS Functional Analyst – Capgemini

Afternoon refreshments, networking, and exhibition

NIS System Implementation – utilising a comprehensive network model to support a more holistic view of grid behaviour and operations
- Using GIS as a single source of truth for geospatial information to increase the reliability of data and maintain full dimensionality
- Overcoming discrepancies in different network systems through dedicated master databases to handle varying types of information
- Putting in place system support to ensure efficient network asset management and quality control
- Maintaining an up-to-date network model and network operations despite constant changes in the grid landscape
- Introducing commonality between internal and external users to mitigate security threats and protect critical data
- Creating robust connections between systems which will stand the test of time while responding quickly to new business needs
- Leveraging advances in mobile technology to improve support for users in the field
- Developing custom interfaces to further utilise network data through collaboration with external systems and partners
- Creating a fully integrated network of systems to simplify the flow of reliable data and unlock more applications to support grid operations

Sam Vehmasvaa, System Engineer NIS/GIS – Elenia

Leveraging CIM – identifying the critical point at which implementing CIM will deliver real value in sharing data across internal systems and with external market participants
- Rationalising your data model in CIM to allow for the interoperable extraction of spatial data for use in applications outside of the GIS
- Building a CIM mapping for your network geography and topology which is compatible with other systems
- Establishing the criteria to review vendor implementations of CIM to ensure your interoperability with their systems
- Actively engaging with the CIM community to share experience of functionality and collaborate on its further development
- Reviewing the lessons learnt from CIM user groups on the optimal application of CIM in TSO and DSO environments
- Effectively utilising CIM to support the smooth flow of data between systems and organisations and support a variety of use cases

Ingrid den Uijl, Teamleader Asset Information System, Data Scientist – Stedin

Roundtable discussions – during this session the audience breaks out into several smaller working groups, each focussed on specific themes 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. Key issues raised, and solutions proposed, will be collated for presentation to the wider group at the end of the session.

Networking reception – time to relax after an intensive day of presentations and discussion? 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.

Close of conference day one
08:00 Registration and refreshments

08:45 Chair’s opening remarks

09:00 Developing New Functionality – exploiting a combination of in-built tools, vendor-supported applications, and self-configured modules to deliver a fully customised GIS
- Prioritising the implementation of tools to radically transform end users’ ability to extract value from GIS
- Leveraging new tailored utility GIS platforms and fully optimising them to the needs of your organisation
- Collaborating with suppliers to develop and test further new smart-grid functionalities
- Identifying the supplier-partners and other third parties with utility solutions best suited to your specific needs
- Developing internal capabilities to build bespoke functionality to augment and support proprietary systems using open-source products
- Ensuring the flexibility to quickly adapt to new user demands and meeting them in a cost-effective manner

Peter De Koning, Lead Architect – Alliander

09:45 GIS Visualisation Tools – creating user-friendly visualisations and tools for a variety of end users to provide advanced network insights with complete geographic and topological context
- Using the inherent visual properties of the GIS to support powerful graphical output and the creation of flexible, interactive monitoring tools
- Integrating OT systems with the GIS to extract data to be overlaid onto GIS maps without compromising their core functionality
- Supporting a number of real-time data streams connected to the GIS to facilitate active network monitoring
- Ensuring consistency of visual output with existing standards to limit the risk of human error
- Creating intuitive visual tools to translate spatial analyses to non-specialised stakeholders throughout the organisation and beyond

10:30 Morning refreshments, networking, and exhibition

11:00 Technology Innovation Panel – exploring innovations at the cutting edge of GIS tools, specifically designed to support smart utilities
During this session, each technology innovator will give a 15-minute presentation on results achieved from the application of their solution in the smart utility environment, as well as their research and development activity to meet future utility needs. The presentations will be followed by 30 minutes of Q&A and panel discussion, whereby you will get the opportunity to quiz the tech experts, understand their innovation plans more fully, and influence the direction of new product development to better meet your GIS requirements.

Martin Lubach, Business Manager – Esri
Tigran Andjelic, Principal Software Architect – GE

12:30 Lunch, networking, and exhibition

14:00 Low-Voltage Topology and Control – integrating GIS data with SCADA systems to develop full grid awareness and automate LV-network control
- Extending accurate GIS coverage to the low voltage network and integrating real-time network data to oversee its status and management
- Leveraging data gathered from new IoT devices in the network to monitor grid demand and performance
- Using GIS to support a holistic view of network operations and allow automated switching in complex grid topologies
- Rapidly processing large quantities of real-time data in combination with GIS to support the use of power electronics to balance loads between transformers at high and low capacity
- Using next-generation GIS to extend high-value use cases to the low-voltage network

Alex Jakeman, Innovation Project Leader – UK Power Networks

14:45 Self-Service Mapping – simplifying GIS access and building competences for the generation of useful maps to support multiple end users through a variety of applications
- Empowering users from different operational business units to create their own maps to improve the efficiency of day-to-day tasks
- Verifying the accuracy of data to ensure the maps generated can be fully trusted upon for use in the field
- Building bespoke views to simplify user interface and make it easy for anyone to access key information in a comprehensive manner
- Combining with other streams of data to allow the generation of maps with information beyond the geospatial domain
- Leveraging desktop, web, and mobile applications to make GIS access convenient for all users
- Empowering end users with usable, reliable tools to flexibly access information to improve their performance as the need arises

Ain-Joonas Toose, Chief Specialist – Eletkrilevi

15:30 Afternoon refreshments, networking, and exhibition

16:00 GIS for Network Planning – combining load and consumption data with predictive analytics to support the planning of grid reinforcement, upgrades, and expansion within the GIS system
- Employing a holistic GIS approach to drive improvements to the network planning process and to optimise network upgrades
- Creating plans for network expansion within GIS to improve accuracy and automatically update the system with new asset information
- Providing a global view of network upgrades based on geography and capacity
- Using AI and machine learning pattern recognition to further optimise asset deployment
- Exploiting advanced GIS to heighten grid awareness and make the most efficient use of your resources

Roy Gys, Senior Consultant, Data Analytics and Asset Management Excellence – Deloitte

16:45 GIS Data Quality & Completeness – improving processes for collecting high quality data from field engineering work and inputting information about the physical world into the GIS
- Putting in place measures to maximise the integrity and completeness of data collected in the field to meet the demand for high-quality GIS information for the entire network
- Performing comparative analysis of various methods of field data collection to identify problems and identify the best practices
- Exploring the potential for utilisation of unmanned systems to inspect and record data on a variety of field assets and facilities
- Utilising multi-platform support to allow access for a wider variety of end users and using accurate data in a number of business modules
- Eliminating gaps in your picture of the network to ensure total grid awareness and optimise management of the network

Vladimir Stojicic, GIS/GNSS Project Leader – EPS Distribucija

17:30 Close of conference day two
Conference Day Three | Thursday 22nd November 2018

08:00 Registration and refreshments
08:45 Chair’s opening remarks

09:00 GIS for New Connections – extracting and combining data from multiple sources including specific geospatial and customer information to automate responses to new-connection requests
- Processing and responding to new connection requests with minimal or no human intervention to improve service to customers
- Facilitating the combination of customer and GIS data to automatically perform load-flow calculations for potential new connections
- Providing continuous and transparent information to customers about the availability of the existing network to optimize the choice of new connections and minimize necessary network reinforcements
- Standardizing and automating engineering tasks which were previously carried out by hand
- Extending the power of this analysis to a wider-range of new connections including EV charging and heat pumps and further leveraging geospatial and topological data for other grid use cases at scale

Raffael Hilber, Head of Development Network Information – BKW

09:45 Vegetation Management – building a centralised data set in covering the entire vegetation management process and making it accessible to all relevant parties within your GIS
- Supporting the storage and communication of relevant data through each step to support the internal field forces and contractors in reducing instances of environmental disruption to your network
- Creating both a data set which contains all relevant fields for each user and bespoke views to ensure users read and write into the correct fields
- Overcoming bugs and unexpected behaviours in various GIS clients to ensure the correct display of information and maintain a reliable database
- Developing consistent compatibility functionality across various clients and platforms to support users across multiple operating systems and smooth
- Learning from the development process to further improve vegetation management and extend these techniques to other aspects of network management

Maarten van Roest, Functional Manager – Geo-information – TenneT

10:30 Morning refreshments, networking, and exhibition

11:00 GIS for Outage Management – analysing real-time and historic, GIS and OMS data to pinpoint network faults, reduce downtime, and predict future incidents
- Overlying outage management information onto GIS data to create a comprehensive picture of the network in real time
- Ingesting multiple data streams including external data and relating these to geography and topology
- Equipping control room teams with live maps displaying information on current and potential future outages to give early warnings and improve response times
- Using GIS information such as asset type and condition combined with historical outage data to identify failure-prone assets for pre-emptive maintenance or repair
- Creating visual tools to simply convey information about likely outage duration, impact, and cost to the organisation
- Supporting a strategy to reduce the instances of network failure and minimise those which still occur

Pedro Gama, Senior Manager, Mission Critical Systems – EDP

11:45 GIS for Field Force Management – better overseeing and supporting field forces to optimise deployment and supply tools to help carry out engineering tasks more efficiently
- Equipping network operations teams with an up to date map of activity being undertaken in the field to better allocate resources
- Defining appropriate levels of access allowing contractors to log their activities and whereabouts directly to your GIS through mobile-compatible portals
- Staying up to date with the progress of engineering activities in close-to-real time to adjust contracts and revise budgetary expectations
- Equipping fields GIS users with tools such as image recognition systems and augmented reality overlays to encourage best engineering practice
- Quantifying the time and cost efficiencies of smarter field deployments

Lunch, networking, and exhibition

13:45 GIS in the Cloud – comparing the benefits and drawbacks of migrating GIS data and/or software to the cloud and overcoming challenges associated with security and cost
- Gauging the merits of hybrid cloud solutions to add flexibility while allowing utilities to retain full control of their GIS data
- Leverage cloud’s inherent accessibility to further support mobile workers and field forces with apps and data
- Taking advantage of cloud processing power to allow more complex visual processing of unstructured GIS data
- Mitigating security risks by retaining on-site data storage to be accessed via the cloud
- Choosing the right cloud provider to reduce performance concerns based on the specific requirements of your business
- Ensuring a smooth migration of any data while retaining its full integrity and accessibility

Soeradj J. Raghunath, Senior Manager, GIS Solutions – Accenture

14:45 Afternoon refreshments, networking, and exhibition

Open Source GIS (QGIS) – comparing open-source GIS clients with proprietary applications, considering cost, user support, flexibility, and security
- Weighing the risks and rewards of moving to a partially or fully open-source GIS architecture
- Balancing the short-term cost of migrating your GIS with the long-term licence savings
- Evaluating the technical support provided by the open community versus the dedicated support available from vendors
- Exploiting the additional flexibility of QGIS to modify the core features of the system at will without the need for vendor approval
- Comparing examples of open-source GIS application and discussing their applicability to utilities’ specific needs
- Examining the additional security afforded by the potential for independent security audits against the dedicated security teams available to vendors
- Quantifying the potential for utilities to harness the benefits of QGIS to supersede vendor GIS without sacrificing functionality or security

Marco Bernasocchi, Founder – OpenGIS.ch

Closing remarks from the chair and end of conference
**Next-Generation Geographic Information Systems to Support Smarter Grid Applications**

**Pricing & Discounts**

<table>
<thead>
<tr>
<th></th>
<th>Very Early Bird Rate</th>
<th>Early Bird Rate</th>
<th>Standard Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Book before</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Friday 28th September</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Day Delegate</td>
<td>€2,195 + 21% VAT</td>
<td>€2,395 + 21% VAT</td>
<td>€2,595 + 21% VAT</td>
</tr>
<tr>
<td></td>
<td>= €2,655.95</td>
<td>= €2,897.95</td>
<td>= €3,139.95</td>
</tr>
<tr>
<td>3-Day Group Booking</td>
<td>€1,975.50 + 21% VAT</td>
<td>€2,155.50 + 21%</td>
<td>€2,335.50 + 21%</td>
</tr>
<tr>
<td>Delegate (3+ Delegates)</td>
<td>= €2,390.35</td>
<td>= €2,608.15</td>
<td>= €2,825.95</td>
</tr>
<tr>
<td>Exhibitor (incl 2 Conference Passes)</td>
<td>€5,000 + 21% VAT</td>
<td>€6,000 + 21% VAT</td>
<td>€7,000 + 21% VAT</td>
</tr>
<tr>
<td></td>
<td>= €6,050.00</td>
<td>= €7,260.00</td>
<td>= €8,470.00</td>
</tr>
</tbody>
</table>

**Register**

Please visit the registration page of the event website at: [www.smartgrid-forums.com/gis](http://www.smartgrid-forums.com/gis) fill in your details, and select Credit Card, PayPal, or invoice payment options.

**Contact Us**

Call: +44 (0)20 8349 6360  
Email: registration@smartgrid-forums.com

**Venue & Accommodation**

Radisson Blu Palace Hotel  
Picképlein 8  
2202 CL Noordwijk aan Zee  
The Netherlands  
Tel: +31 (0)71 365 3016  
Email: Reservations.palacehotelnoordwijk@radissonblu.com

To book a room at the conference venue at the preferential rate reserved for participants at this conference contact the hotel directly quoting: GIS4SmartGrid

**Terms & Conditions**

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

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

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

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

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

**Data Protection:** Phoenix Forums t/a Smart Grid Forums gathers personal data in accordance with EU GDPR 2016 and we may use this to contact you by post, email, telephone, fax, sms to tell you about our other products and services. We may also contact you with information about complementary products and services from carefully selected third parties. If you do not wish to receive information about our other events or products from selected third parties please write to us at: database@smartgrid-forums.com

© Copyright Phoenix Forums t/a Smart Grid Forums 2018

www.smartgrid-forums.com/gis