2021

ANNUAL REVIEW

Activities and Members

ESMIG
WE MAKE ENERGY SMART

THE EUROPEAN SMART ENERGY SOLUTION PROVIDERS

WHAT'S INSIDE

Adapting to a changing landscape

No doubt the ongoing pandemic throughout 2020 presented a number of unique and difficult challenges for all our members and ESMIG alike. The work we all do is profoundly important to keep the worlds critical energy infrastructure running to ensure the ''lights stay on''.

As a community I saw us adapt to the changing landscape, embrace meeting virtually, and emerge stronger as a group of dedicated companies focused on helping the digital transition throughout the energy sector.

Regulation continues to adapt and promote decarbonisation and digitalisation within the energy sector as the Member States look to meet and exceed their climate and energy goals in a timely manner before 2030. In this, there is huge opportunity for all our members to contribute to this exciting period of change and have a respected and heard voice when it comes to the Clean Energy Package, EU Electricity Directive and EU Cybersecurity Act.

Throughout 2020 we streamlined the number of working groups inside the association to cover a larger focus and carry out work on three key work streams as part of our ''way forward'' initiative. I am sure our activities on the roll-out of smart metering, smart meter data and interoperability of demand-side flexibility will continue to strengthen our voice as a recognised key stakeholder within EU institutions.

Thank you to all who have actively participated in our new working group structure and to our new working group chairs. All the work we do in the individual working groups underpins the achievement of our strategic goals for 2021.

Task force initiatives like "Enhancing the Benefits of Smart Meters" and "Fair Competition in the Energy Industry" continue to complement the work done in the individual working groups and I look forward to the release of new position papers in 2021.

Additionally, I am hopeful that we can meet in person during the course of next year. In the meantime, the work continues, and with much appreciated support from the ESMIG Secretariat and Executive Committee, we remain at our members disposal to promote our common goals and prosperous future.

Nigel Hughes
ESMIG President

About ESMIG

ESMIG is the European voice of the smart energy solution providers. We represent companies which provide products, information technology and services for multi-commodity metering, display and management of energy consumption and production at consumer premises.

These products and services help in making energy cleaner, more affordable and more reliable by enabling:

- a precise overview of consumption and manageable demand
- customised tariffs and accurate bills
- better outage detection
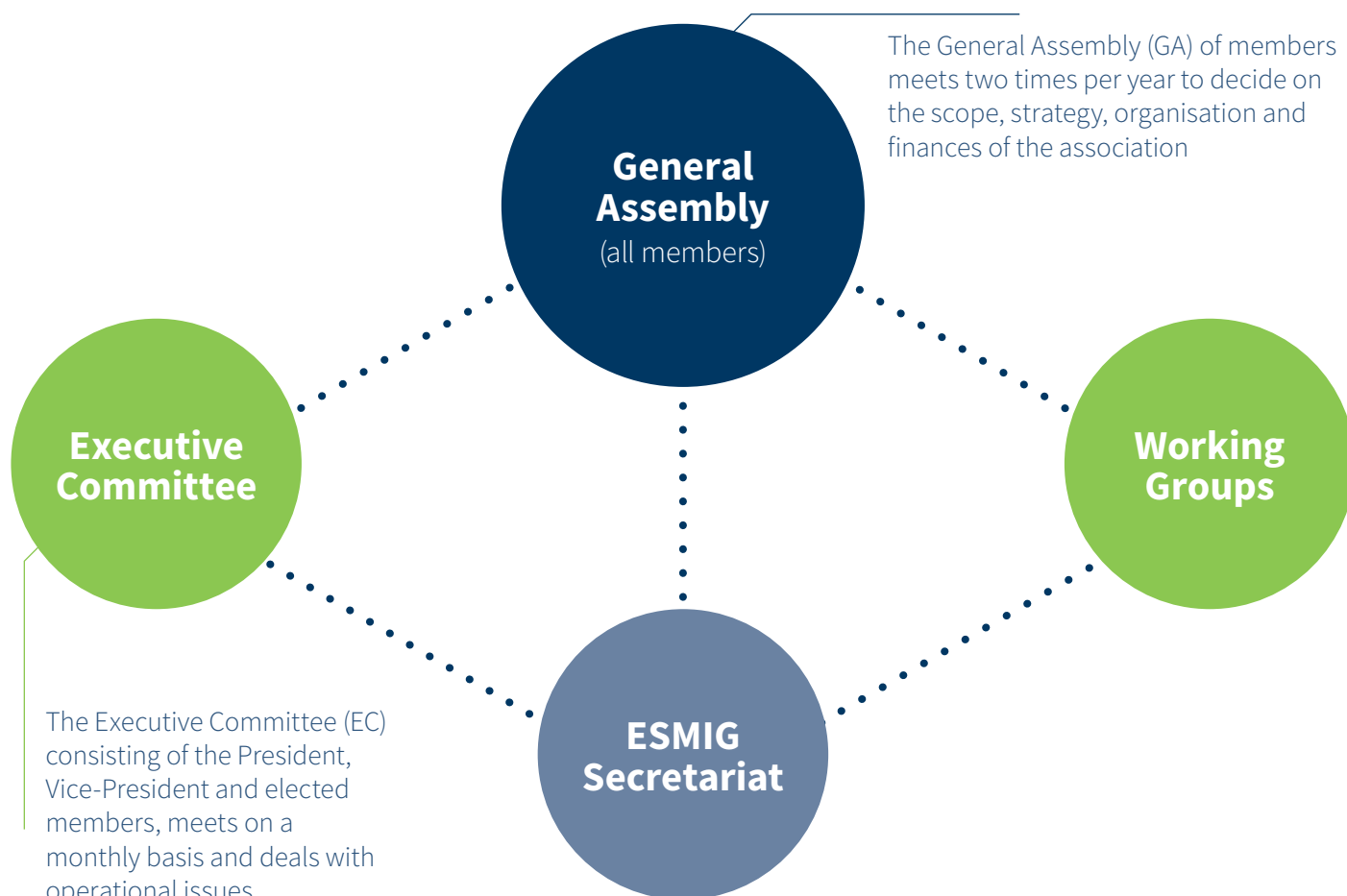
Information is at the core of our innovation
Our members' products and services provide the crucial ingredients in smart consumer energy management: they accurately measure, transfer and process energy related data while ensuring this data is relevant, safe and reliable.

We advocate for a regulatory framework that accelerates the introduction of our members' innovative products and services, which are fundamental to the smart energy and water systems of Europe's future.

We actively contribute to the creation of a competitive internal energy market by development of architectures and open standards that allow efficient implementation and integration of new energy management technologies and services.

How are we structured

General
Assembly
(all members)

The General Assembly (GA) of members meets two times per year to decide on the scope, strategy, organisation and finances of the association

Executive
Committee

Working
Groups

ESMIG
Secretariat

The Executive Committee (EC) consisting of the President, Vice-President and elected members, meets on a monthly basis and deals with operational issues

Executive Committee

Nigel Hughes
ESMIG President and
Regional Vice-President
of Sales at Itron

Miguel Gaspar Silva
ESMIG Vice-President
and Global Head Utilities
IBU at SAP

Francis D'Souza
Vice-President of Strategy and Marketing
for Analytics and IoT Solutions at Thales

Javier Rodriguez Roncero
Sales Director EMEA
at Landis+Gyr

Working Groups and Task Forces

Data Communication and Protection (DCP)
The main focus for the DCP group is security management and removing barriers for data access, transfer, processing, and protection.

Chair: **Francis D'Souza**, Thales

Marketing and Events Group (MEG)
The MEG defines and implements ESMIG's communication strategy, including all events where ESMIG is represented, its involvement in exhibitions and conferences, its online presence, and any printed materials.

Chair: TBC

Regulation and Privacy Group (RPG)
Maintaining a watch on EU regulatory and legislative developments with the potential to affect any aspect of smart energy management in Europe, the RPG strives to ensure effective and coherent policy development and coordinates ESMIG's responses to political developments that affect the membership.

Chair: **Mojca Markizeti**, Iskraemeco

Empower Prosumers Group (EMP)
The EMP group focuses on interoperability for demand-side flexibility with members looking at use cases, infrastructure definition and all available communication standards.

Chair: **Cami Dodge-Lamm**, cyberGRID

Multi Utility Metering Group (MUM)
Focusing on the metrological and legal aspects of the advanced metering infrastructure, the MUM group also manages relationships with related industry associations. Additionally, it reviews national requirements for smart metering.

Chair: **Henri Teboulle**, Sagemcom

Task Forces:
- Standard Essential Patents Task Force
- Fair Competition in the Energy Industry Task Force
- Enhancing the Benefits of Smart Meters Task Force
- Next Generation Smart Meters Task Force
- Security Certification Task Force
- Consumption Data Task Force

Our work

2020 was a year marked by the global pandemic, an unprecedented crisis, and economic consequences which affected all sectors and supply chains. It was also a year marked by a push from the EU to accelerate the dual digital and green transition, the pillars of Europe's ambitious Recovery Plan, driving Europe's policy agenda for the coming years.

In 2020 ESMIG, in close cooperation with the European institutions and in strengthening ties with partner organisations, represented its members' interests and achieved results at political and technical level. Additionally, our association launched a new strategy on the way forward, updated its mission and vision statement, and redefined the scope and activities of the working groups to address new challenges and opportunities.

At political level, the European Green Deal, with the revised 2030 climate and energy targets and the 2050 climate neutrality objective, set the framework for our advocacy work. Participating in consultations and meeting with EU officials on the upcoming revision of the Energy Efficiency and Energy Performance in Buildings Directives, these are two pieces of legislation where smart energy solutions can really make a difference and ensure the participation of end-users in the energy system.

ESMIG has been closely following the implications of the e-Privacy regulation proposal and initiated actions in a coalition with other associations in the energy sector to ensure the regulation does not negatively impact the development of new, innovative business models.

Working together with partner organisations on Standard Essential Patents (SEPs), ESMIG has been addressing how SEPs specifically affect the smart metering industry, and potentially impact the costs of the energy transition.

Additionally, a key initiative launched by ESMIG in 2020 is the position and campaign on fair competition in the energy sector. We highlight the negative consequences and risks faced due to unfair competitive practices in non-EU countries, while underlining the urgent need to reinforce high-level standards. ESMIG has been advocating its position to the relevant departments in the Commission, focusing on aspects related to competition and public procurement.

At technical level, ESMIG continued to support the Commission in the Smart Grid Task Force with the objective of exploring smart grid services and operations, and how best to deliver smart grids for the benefit of the energy system and its users.

ESMIG had an active role in supporting the standardisation work of CEN, CENELEC and ETSI, working closely with the Commission to monitor and coordinate the development of formal interoperability standards for smart metering. ESMIG also supported the first set of harmonised requirements and the resulting security certification approach developed by CEN, CENELEC and ETSI.

Going forward, in 2021 ESMIG will be ensuring that European standardisation and certification efforts related to recent policies, such as the Clean Energy Package and Cybersecurity Act, as well as national schemes, consider the investments made by our industry.

ESMIG is also exploring what the role of smart meters in demand-side flexibility will be, how to cope with fast changing communication technologies, and the security requirements that will be needed.

Promoting ESMIG member's interests in the European Green Deal legislative package and the role of smart energy solutions to support energy efficiency and ambitious climate targets for 2030 will remain a key priority alongside ensuring a level-playing field for fair competition.

On every front we will continue our outreach and communication, multiplying our levels of activity and visibility, making our voice heard in Europe.

Tomás Llobet
Managing Director

Ensuring smart metering technology brings tangible benefits for consumers and society

With a clear focus on digitalisation and the clean energy transition in Europe, ESMIG and the introduction of smart meters have an important role to play. As a key first step, smart meters are essential for a digitalised and decentralised energy system.

Economic benefits such as savings on energy bills and reduced meter costs are key, but the long-term results of these changes will see our current energy system transform to a smart, demand driven, flexible and green one, with tangible benefits for empowered energy consumers.

While we advocate for such a transition, there are crucial intermediate steps that need to be taken to ensure this transition is possible and carried out according to the correct standard. This includes additional services and technologies as part of a larger eco-system that will enable us to reach the full potential of smart meters.

To realise this, we are continuously working with the European Institutions to support the smart meter roll-out and creating the right conditions for reaping all the benefits of the technology.

Our new Vision and Mission Statement

To define the focus and direction of ESMIG, a new vision and mission statement was developed to outline our vision for the future energy landscape and the crucial steps required to achieve this.

Vision:

A green transition that fully empowers consumers, through actionable insights from smart energy solutions.

Mission:

- Building trust in new energy technologies and empowering consumers in playing an active role, providing opportunities to create energy savings, and reducing greenhouse gas emissions.

- Adopting future-proof rules and modern energy transition regulatory and technical standards to foster innovative new business models, unleashing the full potential of technologies and data.

- Accelerating the roll-out of smart meters across Europe, promoting their relevance, the use, access and protection of smart meters, and the data generated.

- Securing Europe's international leadership and strategic autonomy in the dual digital and green transitions and ensuring fair competition on a truly global level playing field.

Driving the deliverables of the European Green Deal

This year was marked by a huge drive from the European Institutions for the dual digital and green transition, the two pillars of Europe's ambitious Recovery Plan. Through our continuous work supporting the implementation of the Clean Energy Package and the European Green Deal initiatives, we have welcomed the EU's agenda towards climate neutrality by 2050 and their ambition for addressing climate change through a modern, resource efficient and competitive economy.

In the drive for a sustainable EU economy, we support the deployment of green technology solutions, ensuring that the energy system becomes smarter and more efficient.

Recognising the relationship between digital technologies and energy is key for supporting the implementation of smart solutions and driving the roll-out across Member States.

The Energy Efficiency Directive and the participation of users in the smart energy system

The European Commission is revising the Energy Efficiency Directive (EED) to support the ambitious new 2030 climate objectives of 55% GHG emission reductions under the European Green Deal.

The goal of this revision is to not only achieve a more ambitious efficiency target for 2030 but to also address any remaining gaps in the plans and activities for the target for 2030, essentially requiring more efforts in achieving energy efficiency.

To discuss the revision and share our insights, ESMIG participated in the public consultation on the EED and met with the responsible officials at the European Commission - DG ENER in April 2021.

Article 9, which is of particular importance for smart metering, was highlighted as we must ensure the participation of end-users in the smart energy system. This article must be clarified as it is subjected to interpretation and leads to uncertainty as it creates loopholes which opens the possibility of avoiding smart meter deployment.

Renovation Wave and the Energy Performance in Buildings Directive

ESMIG has been actively following developments for the Energy Performance in Buildings Directive (EPBD) as an initiative for improving the energy performance of buildings in Europe. The Renovation Wave Strategy, a key pillar of the Directive, will ensure renovations lead to higher energy and resource efficiency, supporting the reduction of greenhouse gas emissions.

With buildings responsible for 40% of the European Union's energy consumption, ESMIG responded to the roadmap on the revision of the Directive. In a nutshell, there needs to be an ambitious review which will not only reduce the energy consumption of buildings, but will also enable a more end-user focused, more decarbonised, and more digital energy system.

The Smart Readiness Indicator, a key milestone for energy efficiency and technology

Supporting the goal of improving the energy performance of building's, the Smart Readiness Indicator (SRI) assesses a building's ability to adapt to advanced technologies in terms of energy efficiency and flexibility. This is a crucial step in ensuring buildings are future proof. Welcoming the announcement of the delegated regulations in December 2020, setting the technical framework for the implementation, ESMIG and 11 partner associations co-signed a letter to the Energy Commissioner, Kadri Simson, in May 2021 calling for the European Commission and Member States to ensure the effective, ambitious, and consistent implementation of the approved scheme across the EU to avoid a multiplication of local and non-comparable schemes.

Together, ESMIG and partners highlighted the importance of harmonisation and a common methodology to avoid a fragmentation of the EU market to ensure the free circulation of services.

Shaped under the Clean Energy Package, the SRI should also serve the achievement of the Green Deal goals, especially the Renovation Wave initiative and the Energy System Integration Strategy with its key roles to play in making European buildings healthy, efficient, and smart.

Standard Essential Patents supporting a strong energy industry

Standardisation based on patented technologies is a key contributor to innovation and competitiveness. Patents provide incentives for carrying out research and development while also facilitating knowledge sharing, encouraging the roll-out of new technologies, and interoperability between products.

As an important issue for technology manufacturers, ESMIG has continued its work on Standard Essential Patents (SEPs) aiming to remove unnecessary barriers to encourage a flourishing smart energy industry.

ESMIG has had a several fruitful conversations with the European Commission, with both DG ENER and DG CONNECT, to inform about this major issue faced by the energy sector, and, more specifically, how this is affecting the smart metering industry and can thereby potentially impact the costs of the energy transition. We will continue to monitor developments and make our voice heard, ensuring the right conditions for our industry.

New task force highlights the untapped potential of smart meters

Smart meters are a key enabler of the energy transition. To ensure that we continue to support the roll-out and a regulatory environment to unleash the full potential of the technology, the 'Enhancing the Benefits of Smart Meters Task Force' was established.

This task force acknowledges the huge potential and wide range of benefits for the energy system, the environment, and consumers that smart metering solutions can bring. It will highlight what has been achieved in Europe so far, and what has not yet been achieved, with a focus on the EU regulatory framework and its implementation in Member States. In addition, the task force will focus on the untapped potential in relation to access, use, and interoperability of data.

ESMIG will drive home the message that smart meters are a key component and enabler of the energy transition and a technology whose massive potential needs to be better explored and recognised.

Ensuring the use of smart meter data to its full potential by all authorised energy market participants

A crucial feature of the energy transition is not only the roll-out of smart meters across Europe, but the new level of detail and information about consumer patterns and performance that can be provided through data. This data can benefit all actors in the energy market including consumers, network operators, such as DSOs and TSOs, retailers and new energy service providers.

For these benefits to be used to their full potential, we need to ensure that the data available is transferred, processed, and analysed in the best way. It also needs to be assessed in a safe, efficient, and non-discriminatory way by all authorised participants in the energy market.

To achieve this, our goal is to find the best technical solutions that can ensure this process while advocating for European standards that detail requirements for data and a universal approach across Member States.

e-Privacy: ensuring a secure and efficient digital environment in the energy sector

As critical legislation for the energy industry, we keep a close eye on the consequences and implications the e-Privacy regulation proposal has for the energy sector. Data is a crucial component for reaching the potential of the market and as such, we need to ensure it does not negatively impact the development of new, innovative business models. To make our position heard, ESMIG co-signed two declarations voicing thoughts on e-Privacy and calling for the conditions that will not harm or impede the energy industry.

While we acknowledge that the regulation for electronic communications is a complex matter as it must strike a balance between protecting the users' data on the one hand and boost digitalisation in the EU on the other, there are some concerns.

Together with EHPA and Eurelectic, we wrote to the Council of the European Union in February 2021 highlighting developments that, over the past years, have had a negative impact on the green and digital transitions and where further efforts are required.

Following this, together with Eurelectic, E.DSO and EHPA, we wrote again to the Council in May 2021

reiterating the importance of protecting data integrity as well as consumers' privacy and confidentiality, with concerns that these proposals might heavily undermine and delay Europe's 2030 climate and energy as well as its 'Digital Decade' objectives.

Additionally, ESMIG has been exchanging with representatives of the energy sector working on digitalisation topics, with e-Privacy being a key focus alongside data, cybersecurity, and demand-side flexibility.

It is key for us to continue monitoring developments, ensuring the protection of the energy services customer data without heavily undermining digitalisation of the energy sector.

Sustainable Energy Week 2020 session: Energy Data at Your Fingertips?!

As a key event for the energy sector, ESMIG co-organised a webinar with the European Commission – DG ENER and EER, as part of the annual EU Sustainable Energy Week in June 2020.

Moderated by the European Commission, DG ENER, we welcomed the Director for the Internal Energy Market alongside several exciting speakers to take part in discussions focused on crucial access to data for retail energy markets and the development and implementation of the Clean Energy Package. Together, we addressed what needs to be done to achieve energy data at our fingertips and to create an energy environment that works to the benefit of both European consumers and businesses alike.

Highlighting the importance of consumer engagement, interoperability, and transparent access to data for all stakeholders, panellists explored the opportunities and challenges in our energy market and acknowledged the opportunities that will come with more data available and the deployment of smart meters.

Solar and Storage Live 2020 webinars explore data and smart home technology

Taking part in three online sessions over the course of three days from 2-4 December, ESMIG representatives shared expert insights into several topics surrounding the importance of data in the energy sector.

In the session exploring *'How Smart Home Technology will encourage the adaption of renewables'* ESMIG highlighted three key drivers in energy usage and consumption: smart meters, EV's and smart home technology. The key question being, how do we encourage interoperability and make all smart home technologies for energy use and consumption management work together to support a flexible grid? While exploring the *'Smart Home of the Future'* ESMIG shared insights on how energy data can help inform customer propositions required to reach the ambition targets of 68% carbon reductions by 2030.

The Chair of ESMIG's Empower Prosumers Working Group moderated a final session *'The importance of Data in Energy Storage'* exploring how we can use data to change our use of batteries for the better and highlighted the importance of data in battery storage for optimal grid operation.

Advocating for security and interoperability of the advanced metering infrastructure

All over Europe, companies have created impressive technologies for smart metering and home energy management. However, solutions are not yet connected in a way that can empower consumers and maximise savings. If products and systems cannot communicate with one another, the benefits they promise cannot be realised. Therefore, interoperability is crucial in engaging consumers to participate in the management of their energy usage.

Additionally, security of the advanced metering infrastructure is essential in gaining consumer trust and protecting their data, as well as the hardware from attacks. Recognising this, we have made it our priority to advocate for and promote the importance of security and interoperability.

Our work on a European standard for security certification of smart meters

The first set of harmonised requirements and the resulting security certification approach, the 'Protection Profile', developed by CEN/CENELEC/ETSI Coordination Group for Smart Meters, with the support of ESMIG, was officially approved by CEN/CENELEC and certified under Common Criteria by the Dutch certification body NSCIB in 2020.

Following this, in 2021, the CEN/CENELEC Joint Technical Committee TC13 adopted the 'Protection Profile for Smart Meters' and will turn it into an official CEN/CENELEC Technical Specification.

ESMIG presented the Smart Meter Protection Profile at a CCLAB workshop in April 2021, sharing the benefits of a European approach for security certification and common security requirements and highlighting the importance of ESMIG's activities in the European Commission's Smart Meter Coordination Group.

New task force on 5G will explore opportunities for smart metering offered by the new telecom technologies

Connected to ESMIG's Data Communication and Protection Working Group, the Task Force on 5G will investigate the impact of 5G for our sector. It is not only the higher speeds enabled by 5G but also additional features such as improved security, low power, and low latency connections to a massive number of devices that are of interest.

Drawing on different areas of expertise, the task force will define and investigate the communication requirements for the next generation and future of smart metering.

ESMIG video highlights the potential of an interoperable, multi-vendor smart meter and smart home

With more meters being installed, the potential of using meter data for the benefit of consumers and grid operators is rising exponentially.

To highlight this, ESMIG developed an animated video showcasing exciting possibilities and advantages of using meter data by putting together a narrative that portrays an innovative, interoperable, multi-vendor smart meter infrastructure that not only enables the collection of billing data but also facilitates smart meter-based grid management and provision of real-time data for consumer-focused applications.

This infrastructure is based on existing standards such as CIM (IEC 61968-9), DLMS/ COSEM and MBUS and shows a fully cloud-based interoperable solution for grid operators and energy suppliers and consumers highlighting that:

- The industry has the necessary technology and solution for reaching full interoperability.

- The technology is available to securely process data from smart meters in cloud applications and manage the protection of metering assets as well as their data transfer and storage.

- Real-time consumption data feedback results in substantial savings for consumers.

Supporting the European Commission' Expert Group 1 and 2 of the Smart Grid Task Force

Established in 2009 by the European Commission, ESMIG continues to support the Smart Grid Task Force with the objective of exploring smart grid services and operations, and how best to deliver smart grids for the benefit of the energy system and its users.

With our support, the task force has finalised its work on drafting an Implementing Act containing the interoperability requirements for consumption data access. ESMIG specifically focussed on defining the requirements for the local interface on the smart meter providing real-time data directly to the consumer.

The Electricity Directive, which is part of the Clean Energy Package, requires the Commission to prepare such an Implementing Act to define the interoperability requirements for access to consumption data by energy market parties.

Additionally, Expert Group 2 of the Smart Grid Task Force advises the European Commission on policy and regulation frameworks related to the security aspects of smart grids. In December 2020, ESMIG provided substantial comments on the draft Network Code for Cyber Security that has been developed by the European grid operators.

CEN/CENELEC/ETSI Coordination Group for Smart Meters

Bringing together a variety of stakeholders in the energy sector, this group works closely with the European Commission in its aim to monitor and coordinate the development and maintenance of formal interoperability standards that are applied across the European single market for smart metering.

As a long-time member of this key group, ESMIG continues its active role in supporting the standardisation work of CEN, CENELEC and ETSI. In 2021 the two existing coordination groups for smart meters and smart grids will merge into a new coordination group that will cover the whole smart grid scope.
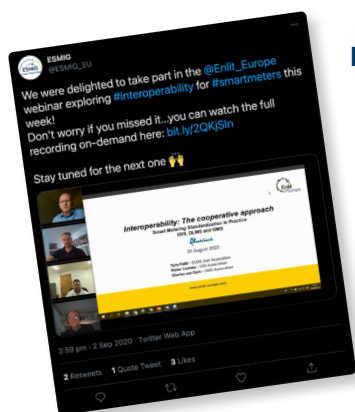
Key activities with the Stakeholders for Cybersecurity Certification Group

Established by the Cybersecurity Act in 2019, the Stakeholders for Cybersecurity Certification Group

(SCCG) is monitoring and supporting the work of ENISA, the European Union Agency for Cybersecurity, on new cybersecurity and certification schemes while also offering advice and assisting the Commission in the preparation of the work programme.

A key goal of the group is to create market driven certification schemes to help reduce fragmentation between various existing schemes in Member States. ESMIG is currently involved in the work to support the preparation of a candidate EU cybersecurity certification scheme as a successor to the existing schemes operating under the SOG-IS MRA.

This successor has been named 'EUCC' and it looks into the certification of ICT products and cybersecurity, based on Common Criteria. For ESMIG, the EUCC is the most importance scheme since the Smart Meter Protection Profile and is also based on Common Criteria.

experiences, this episode highlighted the work done so far in reaching full interoperability for smart meters. It also outlined what has proved to be a successful approach to interoperability in the real world.

Sharing insights on the critical role of cybersecurity
Exploring the latest issues regarding cybersecurity in the energy sector, ESMIG joined the discussions for Enlit Europe's Datatopia episode on cybersecurity on 16 November 2020.

From the most common hacking attacks to questioning the ownership of data when the safety of the energy grids is at stake and the role of the regulator, these are key topics that concern all stakeholders in the energy sector. Contributing to the debate, ESMIG shared insights into mission critical infrastructure and how we work to address potential threats and attacks through smart meter identity, lifecycle management and IoT security.

ESMIG moderates Enlit Europe webinar exploring interoperability

ESMIG joined forces with Enlit Europe on 31 August 2020 to moderate a session *'Interoperability: the cooperative approach'*. Drawing on first-hand

Driving the deployment of flexible demand-side resources to support EU's clean energy transition

Demand-side flexibility will play a key role in fulfilling the energy transition. It not only benefits and empowers consumers but also reduces system costs and facilitates renewable integration. Additionally, it contributes to building Europe's smart energy leadership while supporting the clean energy transition driven by the Clean Energy Package.

To reap the benefits, demand-side flexibility requires energy consumption to increase, depending on the availability of energy generated by sustainable resources. For this to happen, consumers must have the chance to participate, managing and tracking their energy consumption, and get rewarded if they choose to do so. Smart metering systems are the necessary element in this process as they are used for measuring and settlement based on the time of production and consumption. As such, they form the basis for a flexible demand-driven energy market.

New task force explores the next generation of smart meters

The 'Next Generation Smart Meter Task Force' was established in 2021 to work on a new concept for smart meters. Through this task force, ESMIG is exploring what the role of smart meters in demand-side flexibility will be, how to cope with fast changing communication technologies, and the security requirements that will be needed.

As a key action, we will define the use cases and technical requirements for the smart metering infrastructure of the future.

ESMIG's participation in the European Commission's Measuring Instruments Working Group

ESMIG is involved in the discussions with the European Commission - DG-GROW regarding the necessary changes in the Measuring Instruments Directive (MID).

As an example, the Directive currently refers to the use of the local display of the smart meter to show the measurement results that will be used as a basis for generating bills. Moving forward, smart meters will work more with Time of Use Measurements and with multiple tariffs, and as such, the use of the local display and a push button to scroll through all measurements is getting cumbersome.

Recognising this, ESMIG put forward the case that technology has evolved substantially since 2004, when the last version of the Directive was presented, and there are now state of the art alternatives for using the local display available.

ESMIG will continue its cooperation with the Commission sharing insights into best practice, new technologies and solutions that form the infrastructure for measuring use, establishing the groundwork for demand-side flexibility.

Putting energy efficiency at the core of the Fit for 55 Package

In the European Commission's work programme, the revision of legislation and new initiatives linked to the European Green Deal's climate ambition, and the European Climate Law's 55% net reduction target in 2030, are presented under the 'Fit for 55 Package'.

In ensuring that this package fosters system efficiency through the empowerment and active participation of all European and energy end-users, ESMIG, together with 16 fellow energy system stakeholders, wrote to the Executive Vice-President for the Green Deal, Frans Timmermans, and Energy Commissioner, Kadri Simson, to call for an ambitions action plan in May 2021.

This plan must allow end-users to take advantage of the opportunities presented by demand-side flexibility from demand response as well as establishing distributed energy storage and a renewable and efficient generation.

Demand-side flexibility is the bridging solution supporting greater electrification and smart sector integration while contributing to climate neutrality. It is also a reliable, accessible, and competitive resource to meet the new requirements of the decarbonisation.

The many potentials and benefits should also be recognised in further legation such as the Renewable Energy Directive, Energy Efficiency Directive, and the Alternative Fuels Infrastructure.

Advocating for fair competition in the energy industry

In Europe, companies are increasingly faced with unfair competition from third country producers in the EU market. In particular, subsidies granted by non-EU governments to companies competing in the Single Market have a negative impact on competition.

In the absence of a true international level playing field, third country producers who are subsidised by their governments and are successfully entering the EU market, can afford to compete with lower prices against European companies that are subject to EU State aid control.

ESMIG members strongly defend open markets and free competition as indispensable pillars for innovation, technology development and a well-functioning economy. However, competition needs to be fair and transparent and should take into consideration the specificities of strategically important sectors and mission critical infrastructures.

New task force addresses the importance of a level playing field in the energy industry

The creation of the 'Fair Competition in the Energy Industry Task Force' in 2020, came at a highly relevant time.

This topic is garnering more attention from the Institutions with the European Commission releasing, in June 2020, its White Paper 'on levelling the playing field as regards foreign subsidies' as well as announcing a new regulation on foreign subsidies, addressing potential market distortions as part of the updated Industrial Strategy, in May 2021.

Within this task force, a position paper was developed to highlight the negative consequences and risks faced due to unfair practices, while also underlining where there is an urgent need to legislate and reinforce high-level standards.

To present ESMIG's position, we organised several meetings with European Commission representatives at the Directorate-General for Energy (DG ENER) and the Directorate-General for Internal Market, Industry, Entrepreneurship and SME's (DG GROW) and policy officers at the European Parliament to which ESMIG members participated, representing various segments.

Additionally, ESMIG presented the impact of the COVID-19 crisis on the energy industry and supply chains alongside our stance on fair competition at the European Commission's Measuring Instruments Working Group in April 2021.

These meetings allow for key exchange related to public procurement as well as the proposals to tackle negative implications from foreign subsidies distorting the market.
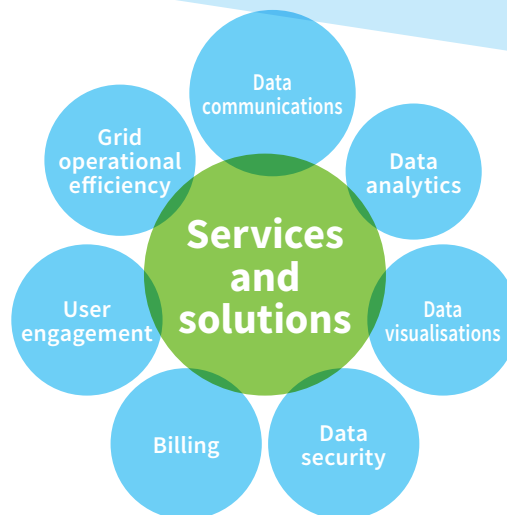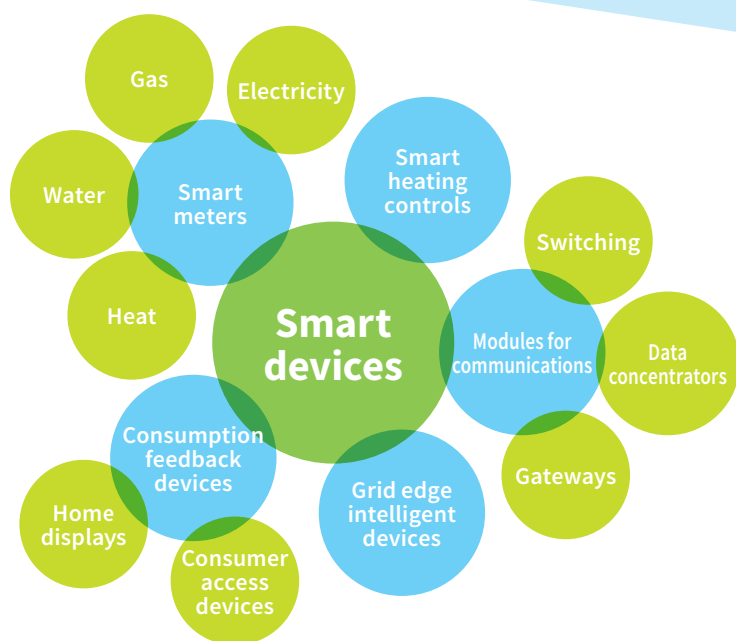
ESMIG will continue driving these discussions with the institutions with the objectives to raise awareness surrounding competitiveness and their impact on value chains critical for the dual digital and green transition.

Our members

ESMIG member companies provide:

Smart devices
Gas · Electricity · Water · Smart meters · Smart heating controls · Heat · Switching · Modules for communications · Data concentrators · Consumption feedback devices · Home displays · Consumer access devices · Grid edge intelligent devices · Gateways

Services and solutions
Data communications · Grid operational efficiency · Data analytics · User engagement · Data visualisations · Billing · Data security

Revenue

Total of ESMIG member companies **€ 83.5 B**

The revenue of the smallest company in the ESMIG membership **€ 1.1 M**

The revenue of the biggest company in the ESMIG membership **€ 32 B**

Breakdown by revenue

Large companies (revenue > 50 mil EUR)

Small companies (revenue < 10 mil EUR)

Medium companies (revenue between 10 and 50 mil EUR)

Employees

Total employees of ESMIG member companies **356 203**

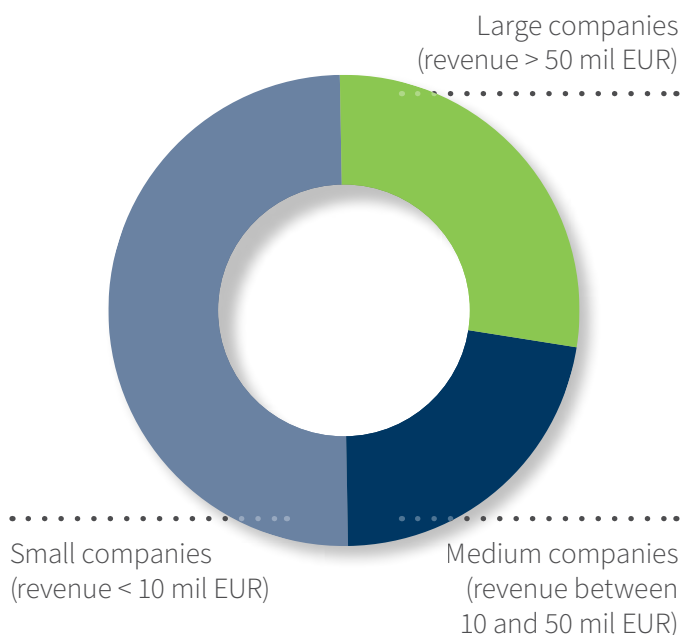The smallest company in terms of employees in the ESMIG membership **20**

The largest company in terms of employees in the ESMIG membership **135 000**

Other facts

ESMIG member factories/software development centres/excellence centres in Europe **69**

ESMIG member headquarters in Europe **16**

Reach

ESMIG members cover all European countries and some of them more than **180 countries** globally.

Arkossa Smart Solutions, SL

Arkossa is an independent personalised services provider for smart metering systems planning, deployment, maintenance and operations optimisation.

Our services and solutions support utility companies overcome the recent challenges arising from the introduction of smart metering and smart grids in the electricity sector.

With a large and broad hands-on field experience around smart meters deployments and an in-depth understanding of the practicalities of deploying, optimising, maintaining, and operating powerline communications networks, Arkossa offers a unique value for providing customized services and solutions to satisfy the needs of our customers related to powerline smart metering systems.

www.arkossa.com

Granada
Spain
HQ

Main products

The roll-out of smart meters with the added value of guaranteeing reachability and readability. We manage the powerline networks to keep the reachability and readability to the maximum level, and we operate and maintain the network with the added value of, using data analysis, identifying, and solving issues, including fraud, load-balancing, powerline, and communications issues.

Arkossa offers:

- Compliance with the regulatory framework, such as GDPR
- AMI monitoring
- Network security
- Integral maintenance of the AMI
- Operations management
- Information security and backup
- Specialised technical support
- Power quality

Markets where the company is present

EU countries: Spain, Portugal, Italy, Slovenia, Denmark, Estonia, Croatia, Romania, Poland, Bulgaria

Outside EU: Peru, Argentina, Colombia, Israel, Qatar, Pakistan, Ethiopia, Australia

Number of employees

In Europe	**38**
In total	**38**

Highlights from the past year

- Increasing added value PLC metering roll-out services, principally in Iberia and Central-Eastern Europe, with the main DSOs in each country.

- In Iberia area, PLC optimisation and monitoring metering digital networks services allow Arkossa to be a reference in these kind of innovation services in market.

cyberGRID GmbH & Co KG

cyberGRID technology adds intelligence to the various energy systems (transmission, distribution, and supply).

A European leader in pioneering ICT solutions and consulting services in the EU energy sector, cyberGRID provides a cloud-based platform helping operators to manage different flexibility assets by seamlessly integrating loads, renewable energies, storage/battery devices with energy markets of various sizes.

In doing so, the cyberGRID system boosts the efficiency of the entire energy system, thereby supporting European-wide decarbonisation efforts, such as the EU Green Deal.

www.cyber-grid.com

Vienna
Austria
HQ

Main products

- cyberNOC – cyberGRID's proprietary Flexibility Management Platform allows a large number of energy assets, i.e. "flexibilities", to be connected to various electricity markets.

- Assets typically include Commercial and Industrial loads (C&I), distributed (DG) and renewable energy generation plants (RES), and Battery Energy Storage Systems (BESS).

- Energy market consulting and research

Manufacturing/assembly plants in Europe

1

Markets where the company is present

Commercial Projects: Austria, Slovenia, Germany

Innovation Projects: Europe-wide (EU and non-EU).

Number of employees

In Europe **20**

In total **20**

Highlights from the past year

- Actively involved in 4 Horizon Europe R&D projects featuring its cyberNOC platform (CrossBow, Talent, InterConnect, and MAESHA).

- Implemented commercial projects in Austria and Slovenia to support large-scale utility customers to maximize their revenues.

- Mentioned as a Key Innovator in the development of the digital solution "Cooperative Ownership of Flexibility Assets (CFP)" in project CrossBow, recognized by the EU Innovation Radar 2021.

- Received the Power Network Innovation Award in May 2019 for cyberGRID's technology and its concrete impact on the future of the power networks, specifically on battery integration and providing services to grid operators and the markets.

IDEMIA

Idemia provides Augmented Identity for international clients from financial, telecom, identity, public security, and IoT sectors. Serving clients in 180 countries and trusted by over 500 mobile operators globally.

With over 900 million SIM cards shipped, 100 + eSIM platform references and over 2.2 eSIM consumer transactions in 2020, IDEMIA is leading the way in eSIM and remote subscription management for consumer and M2M spaces. Benefiting from its worldwide footprint and cutting-edge security data centers in Europe and the United States. It's continuous innovation is fuelled by strong R&D investments and close partnerships in IoT/M2M – connectivity – biometrics – security – encryption – QoS – advanced SIM and services areas.

🌐 www.idemia.com

📍 Courbevoie
France
HQ

Main products

SIM: IoT/M2M   **IoT security:** IoT SAFE

Digital solutions:
Suscription Management, OTA

Markets where the company is present

Worldwide   **180**

Number of employees

In Europe   **5 000**

In total   **15 000**

Highlights from the past year

IoT activities

- Telefonica UK (O2) and IDEMIA working to securely connect 23 million homes in the UK with smart meters by 2025.

- IDEMIA and Kudelski IoT first-to-market with GSMA IoT-SAFE solution.

Leadership and other

- IDEMIA's facial recognition ranked #1 in NIST's latest FRVT test.

- 2019 Best Practices Award in the Global Smart Cards Market.

- GREENCONNECT by IDEMIA gives mobile operators a way to achieve sustainable connectivity.

- Honeywell and IDEMIA announce strategic alliance to develop intelligent building offering.

- IDEMIA Collaborates with Microsoft to Deliver Secure, Digital Verified Credentials Solution.

Iskraemeco

Since the company's founding, Iskraemeco employees have been transforming their invaluable experience, innovation, and thorough understanding of customers' needs into comprehensive energy management solutions. Iskraemeco is a globally recognised brand with its solutions found in more than 80 countries worldwide. For more than seven decades, Iskraemeco has been delivering quality products, solutions and services that make efficient energy use a reality to energy companies worldwide. Digitalised solutions based on IoT, data lakes and smart cities give utilities the necessary data to manage energy use, anticipate demand, and optimize costs. It also helps consumers act more sustainably, while significantly lowering their energy bills.

www.iskraemeco.com

Kranj
Slovenia
HQ

Main products

- Electricity Meters (for residential, commercial, industrial application, prepayment)
- Water and Heat Solutions
- Communication Tools

- Software Solutions (Head-end System, MDM)
- Support Services
- Managed Services
- Smart Energy Solutions (Smart Metering, Energy IoT, Digital Grid, Prepayment, Smart City)

Manufacturing/assembly plants in Europe

2

Markets where the company is present

Europe **30**

Worldwide **+80**

Number of employees

Worldwide **1 500**

Highlights from the past year

Iskraemeco continues to work on numerous projects and is keeping its leading position in the metering industry on the European markets and, in parallel, strengthening its position outside Europe by expanding the business in Africa, Middle East, and India. Recently, Iskraemeco further extended its commercial reach by expanding the business into the new Energy and Water segment, addressing the most important challenges of

modern water utilities. As part of the operational strategy, the company invested in the renovation and modernisation of the manufacturing facility at Iskraemeco Kranj, which will strengthen the company's competitiveness and presence in Europe. Iskraemeco is one of the few manufacturing companies in Europe that produces all of its product in one place. Based on its recent analysis of the global smart meter market, Frost & Sullivan recognised

Iskraemeco with the Global Growth Excellence Leadership Award. Additionally, Iskraemeco is extremely proud to have celebrated their 75th anniversary in 2020. Their knowledge and experience fuelled the development of the end-to-end solutions, which are comprehensively customised to meet and exceed specific customer requirements.

Itron

Itron enables utilities and cities to safely, securely, and reliably deliver critical infrastructure services to communities in more than 100 countries. Their portfolio of smart networks, software, services, meters, and sensors helps customers to better manage electricity, gas and water resources for the people they serve. By working with customers to ensure their success, Itron helps to improve quality of life, ensure safety and promote the wellbeing of millions of people around the globe. Itron is dedicated to creating a more resourceful world.

www.itron.com

Liberty Lake, WA
USA
HQ

Main products

- Metering and sensing devices
- Secure IIOT networks
- Actionable data analytics
- Outcome-based enterprise applications

- Smart city solutions
- Global delivery and managed services

Manufacturing/assembly plants in Europe

Centres of excellence in Germany, France and Hungary

Markets where the company is present

A strong presence in the Nordics, Western and Southern Europe.

Itron customers are located in more than 100 countries world-wide.

Number of employees

In total **+7 000**

Highlights from the past year

Broader challenges such as the impacts of more frequent natural disasters is changing the relationships between utilities, technologies, and communities. Amid these challenges, Itron wants to keep building strong technology partnerships to improve safety, save money and expand services for communities.

They will do this through:

- Continuing to provide solutions that empower customers' ability to harness the power of intelligent, connected devices through advanced networks and data analytics to improve the efficiency of cities and utilities.

- Continuing to build on IIOT leadership in the smart energy and smart city space through innovative solutions and enabling a large partner ecosystem to better serve customers.

Kamstrup

kamstrup

Kamstrup is a world-leading supplier of energy and water metering solutions. Their solutions support utilities and are also applied in properties with individual metering. For 70 years, Kamstrup has delivered reliable, cost-effective ways to measure and manage energy and water consumption worldwide. By anticipating customers' challenges, they enable them to run a better business and inspire smarter, more responsible solutions for the communities they serve. Solutions include consumption meters, smart metering systems, hosting and services, analytics, and smart grid applications. All products are produced with the highest certifications for environmental safety and quality in automated production facilities in Denmark and the US.

www.kamstrup.com

HQ Skanderborg
Denmark

Main products

- Consumption meters
- Meter communication infrastructure
- Meter data management systems
- Smart Grid applications
- Hosted solutions
- Operation and meter data analyses within water, heat, cooling and electricity

Manufacturing/assembly plants in Europe

1

Markets where the company is present

EU countries	**17**
Outside EU	**8**

Number of employees

In Europe	**1 500**
In total	**1 500**

Highlights from the past year

- Kamstrup's water solution with acoustic leak detection, including the water meter flowIQ 2200, won the innovation award Aqua Pro Gaz in Switzerland.

- Several projects were completed in 2020 including a partnership with Radius where one million remote-read electricity meters were installed in Copenhagen and parts of Zeeland, becoming Northern Europe's largest roll-out of a smart metering solution.

Landis+Gyr

Landis+Gyr
manage energy better

Landis+Gyr is a leading global provider of integrated energy management solutions for the utility sector. Offering one of the broadest portfolios, we deliver innovative and flexible solutions to help utilities solve their complex challenges in Smart Metering, Grid Edge Intelligence and Smart Infrastructure. With sales of USD 1.7 billion in FY 2019, Landis+Gyr employs approximately 5,500 people in over 30 countries across five continents, with the sole mission of helping the world manage energy better.

www.landisgyr.eu

Cham
Switzerland
HQ

Main products

- Utility IoT and energy management solutions
- Intelligent IoT endpoints for Residential, Industrial and Commercial segments
- Flexible communications technologies
- IoT Connectivity as a Service

- Head End Systems
- Meter Data Management
- Managed Services (SaaS, MaaS, professional Services)
- Grid Edge Solutions
- E2E security solutions
- Advanced Load Management
- Training

Manufacturing/assembly plants in Europe

Corinth (GR), Montluçon (FR), Nuremberg (DE), Stockport (UK)

Markets where the company is present

EU countries **14**

Outside EU **13**

Number of employees

5 700 employees worldwide

Highlights from the past year

- In the ongoing large-scale smart meter roll-out in the UK, 23m Landis+Gyr smart meters are under contract and 12m are still to be delivered.
- In France, more than 31m Linky smart meters are already installed and a further 11m to be deployed until 2026.
- Landis+Gyr is strengthening its leading position in Managed Services by extending several customer contracts in Finland

and broadening its customer base in Sweden and Denmark.

- In Germany, Landis+Gyr has launched Infrastructure-as-a-Service to serve small and medium sized utilities.
- Acquisitions of start-ups in the Cybersecurity and EV charging spaces: Rhebo and True Energy.
- Landis+Gyr AG and Google Ireland Limited ("Google Cloud") have signed a strategic, multi-

year partnership to accelerate Landis+Gyr's transition to the cloud and co-innovate new products and services.

- Landis+Gyr and Vodafone Business announced partnership to deliver innovative cellular IoT capabilities for energy management
- Landis+Gyr has earned the Gold Recognition Level in EcoVadis Sustainability Rating and scores among the top 5% in the industry.

LUNA ELEKTRİK ELEKTRONİK SANAYİ VE TİCARET A.Ş

The corporate group including LUNA was founded in 1991, in the business of design and manufacturing of electronic circuits and products for controlling and measuring electrical energy.

LUNA carries out its design and production of electricity meters, the development of software and hardware for the communication between the meters, in its own registered R&D Centre and warehouse in Izmir, TURKEY.

Currently with 400.000 meters monthly production rate, it is the biggest supplier to the public and government metering needs in Turkey with its ready plug n play smart grid solutions as a complete system for electrical energy management as well as water metering solutions.

www.lunatr.com

Izmir
Turkey
HQ

Main products

- Electricity Meters for residential, commercial, industrial applications
- Smart Electricity Meters
- Water Meters

- Operation and meter data analyses within electricity and water
- Meter Data Management Systems
- Head-End Systems

Manufacturing/assembly plants in Europe

Izmir, Turkey

Markets where the company is present

EU countries	**10**
Outside EU	**48**

Number of employees

In Europe	**10**
In total	**750**

Highlights from the past year

Blueport: Meters can be read via optical port. This device has both optical port and also a bluetooth connection. Thus, meters are read via bluetooth hand held terminals. Luna also has a mobile application which is used as a hand held terminal.

IDIS/SML: Luna already have DLMS certification, working on both IDIS and SML protocols.

STS: On the water meter side Luna has STS certification, working on it for the electricity meter side as well.

NBIoT: Luna is ready to promote their NBIoT solutions.

Prevent Tampering: There are various tampering methods. On the east side of the Turkey Luna has prevented more than 60% of tampering attempts.

Medium Voltage Line Tracking: This is a special project where a device with rf, tracks consumption of medium voltage line. There is a mechanical clamp to attach on the line.

Street lighting: Luna has street lighting solutions with dimming option communicating via PLC.

Monophase Meter Without Notr Connection: Luna is working on a project where the meter will continue to measure the consumption even if there is no notr connection.

Meter&Control

METER&CONTROL
Solutions for smart energy management

Meter&Control manufactures state-of-the-art AMI devices and software for smart energy management in industrial and residential environments. Established in 2008, the entire research, development, production, testing and verification process takes place at their integrated facility in Belgrade.

Their broad range of products features integrated and modular smart electricity meters with PLC, G3-PLC and GPRS/3G/LTE communication, modems, disconnectors, data concentrators and gateways, as well as AMM/AMI software. Products are compliant with the leading industry standards and certificates, including IDIS 1/2, MID-B, MID-D, METAS, G3-PLC and DLMS/COSEM.

Meter&Control solutions support utilities in their efficiency and sustainability goals and help them to keep the pace with fast transitions in the energy market.

www.meterandcontrol.com

Belgrade
Serbia
HQ

Main products

- Integrated and modular smart electricity meters
- Communication modules
- Disconnectors
- Data concentrators

- HES software
- Solutions for local reading and parameterisation
- Smart public lighting solutions

Manufacturing/assembly plants in Europe

1

Markets where the company is present

EU countries: Romania, Slovakia

Outside EU: Switzerland, Serbia, Montenegro, Bosnia and Herzegovina, Russia, Kazakhstan, Azerbaijan, UAE, Bahrain, Colombia

Number of employees

In Europe

100

Highlights from the past year

- Development of sLUMEN smart public lighting solution.

Netinium

The Netinium smart energy platform delivers exceptional cost savings to grid operators, energy retailers and third-party service providers that need to deploy, control, and operate multi-vendor, multi-utility smart metering and smart grid infrastructures. This next generation head-end system offers high quality data collection, comprehensive device management, industry-strength security and extensive automation. It readily integrates with third party software like SAP, MDM's or data analytics applications using industry standard interfaces and enables our customers to optimize their IT-stack to process and fan-out massive amounts of data to various end-points. With the Netinium smart energy platform customers are able to address the smart grid evolution with less complexity, less integration and less operational costs than operating multiple head-end solutions.

www.netinium.com

Wormer
The Netherlands

Main products

The Netinium smart energy platform

Markets where the company is present

EU countries: Europe

Outside EU: Middle East, Africa

Number of employees

In Europe — **25**

In total — **25**

Highlights from the past year

- Building on over 20 years of R&D, Netinium enables you to take control of your smart meter network and monitor your LV power grid.

- At the end of 2020, Netinium reached 5.7 million fully managed smart meters and is adding 3000 more each day.

Oracle Utilities

ORACLE
Utilities

Oracle Utilities delivers proven applications on-premises or in the cloud including electric, gas and water utilities worldwide, achieving performance excellence. Their customer, network, work and asset, mobile workforce, meter data, analytics and project management solutions integrate with Oracle's leading enterprise applications, BI tools, middleware, database technologies, servers and storage.

As the largest provider of cloud services in the industry, serving the utility value chain from the grid to the meter to end customer, their software enables customers to adapt more nimbly to market deregulation, meet ever-evolving customer demands, and deliver on environmental conservation commitments.

🌐 www.oracle.com

📍 Austin, TX
USA
HQ

Main products

- Advanced Metering Solution (AMS)
- Advanced Metering Infrastructure (AMI) Analytics
- Advanced Meter Solution Clouds Service (MSCS)

- Smart Device Management
- Customer Cloud Service (CCS)
- Customer to Meter (C2M)
- Digital Self Service
- Customer Experience
- Analytics Insights

Markets where the company is present

Worldwide

Number of employees

In total

135 000

Highlights from the past year

- In 2021, Guidehouse named Oracle Utilities the leader in smart meter analytics.

- Latest Oracle Utilities Application Framework 4.4.0.3.0 released incorporating new features available for Oracle Utilities products.

Sagemcom Energy & Telecom

Sagemcom Energy & Telecom concentrates Sagemcom's expertise in telecom and metering, enabling the supply of customized connected systems to utilities, telecom operators and services operators worldwide. Thanks to the talents of its R&D and its industrial capacities, Sagemcom Energy & Telecom operates in smart meter, smart grid, smart sites, smart infrastructure, and smart services markets. The combination of these activities allows addressing increasing needs of verticals markets and allows Energy & Telecom Business Unit to propose efficient end-to-end turnkey solutions through its high value-added equipment and platforms making easily smart environments a reality.

www.sagemcom.com

Rueil-Malmaison
France
HQ

Main products

- Electricity
- Gas and Water Smart Meters
- Communication modems
- Data Concentrators
- Head-End System

- Meter Data Management
- Energy Gateways
- Smart Grid sensors
- Energy Management Consumer devices and sensors

Manufacturing/assembly plants in Europe

Dinan (France), Rostock (Germany), Citta di Castello (Italy)

Markets where the company is present

EU countries **18**

Outside EU **19**

Number of employees

5 500 employees worldwide

Highlights from the past year

- At E-World 2020, Sagemcom premiered its first fully certified Smart Metering System. The iMSys is the first rollout-ready system from a manufacture on the German market.

- In 2021, Sagemcom was awarded an end-to-end project

for the roll-out of 1.2 million electricity meters from Lithuania distribution operator, Energijos Skirstymo Operatorius (ESO), to be completed by 2023.

- Sagemcom's smart meter gateway Siconia® SMARTY IQ has received further confirmation of

a high level of interoperability with three other GWA systems. Now users of the GWA systems can use Sagemcom Dr. Neuaus Smart Meter Gateways for the recently announced rollout of the intelligent metering systems in Germany.

SAP

SAP is the leading provider of premise and cloud-based utilities solutions worldwide. SAP for Utilities solutions help improve operational efficiency, mitigate risk, and increase profitability, helping clients gain enterprise-wide visibility for better decision making and improved responsiveness in mission-critical areas. More than 4,600 utilities, in over 118 countries, in power generation, transmission, distribution, retail, gas, water, waste and recycling run SAP Utilities software focusing on improving energy efficiency and sustainability.

www.sap.com

Walldorf
Germany
HQ

Main products

Enterprise Asset Management
- Portfolio and Project Management
- Asset Operations and Maintenance
- Asset Performance Management
- Asset Collaboration
- Environment, Health and Safety

Metering
- Device Operations and Maintenance
- Meter Reading and Energy Data Management
- Utilities Planning and Analytics

Customer Experience & Service Excellence
- Marketing as Growth Driver

- Customer Service Excellence
- Empowering Sales to Sell More
- Omnichannel Commerce

Bill to Cash
- Billing of Energy, Water and Services
- Revenue Management for Energy, Water and Services
- Subscription Management

SAP Cloud for Utilities
Procurement and Networks
Cloud and Data Platforms
Internet of Things (IoT)
Human Resources
Finance
Analytics

Manufacturing/assembly plants in Europe

SAP has locations of SAP offices in

130 countries

Markets where the company is present

SAP serves +440 000 customers in +180 countries and has locations of SAP offices in 130 countries.

Number of employees

102 430 employees worldwide

Highlights from the past year

SAP Cloud for Utilities is SAP's new SaaS suit addressing the core business processes of the individual utilities market roles with focus on energy, water, and services. This suit is developed in co-innovation with utilities companies and provides seamless integration of the relevant end-to-end processes.

The cloud-based software **SAP E-Mobility** joins the family of solutions helping customers achieve their decarbonisation goals. It provides a complete package to Charge Point Operators (CPOs) to run the business efficiently and effectively.

Sigma Telas

JSC "Sigma Telas", founded in 1992, is a Smart Metering and AMI/MDM Software developer and system integrator, with extended expertise in large-scale projects.

Reference projects include three National Grid Operating Companies with Transmission System Operator LitGrid in Lithuania, national electricity operators BelEnergo in Belarus and KEGOC in Kazakhstan, national system in Kyrgyzstan, large installations for electricity, gas and heat distribution companies, national railway companies, large industrial corporations, telecommunication companies and retail chain operators.

Sigma Telas has over 700 implemented projects, with more than 250,000 meters in bigger projects.

www.sigmatelas.eu

Vilnius
Lithuania

Main products

EMCOS Corporate HES/AMI/MDM software

Markets where the company is present

EU countries: Lithuania, Latvia, Estonia

Outside EU: Kazakhstan, Kyrgyzstan, Uzbekistan, Ukraine, Russia

Number of employees

In Europe **50**

In total **50**

Highlights from the past year

- Among the projects completed are large corporate systems. These are projects implemented in energy companies, with systems in AB Lietuvos Geležinkeliai (Lithuanian Railways) and Kazakhstan AO Kazakhstan Temir Žoly (Kazakhstan Railways).

- Additionally, there are systems of mobile communication providers with hundreds and thousands of connected objects in Belarus with Velcom mobile communication provider (up to 2500 objects), in Lithuania (Omnitel, now Telia, communication provider), UzbekTelekom and UMS in Uzbekistan.

- In Kazakhstan, Sigma Telas has installed systems in Kazakhmys Corporation (mining facilities, steel plants, power plants, cities), oil industry companies and power plants.

- The Sigma Telas EMCOS Corporate solution supports over 360 types of meters and data concentrators and supports 7 language.

Thales

THALES
Building a future we can all trust

As a global leader in digital security, Thales brings trust to an increasingly connected world.

Thales connects and secures billions of assets in sensitive sectors including banking or government. Their solutions have already been deployed in millions of smart meters and energy assets around the world.

Additionally, their dedicated smart energy offer encompasses advanced connectivity and cybersecurity solutions to connect and protect massive smart metering deployments over time.

Through enabling future-proof, seamless cellular connectivity, Thales ensures reliable data transfer among connected assets. The cybersecurity offer also leverages leading-edge authentication and encryption technology to protect energy assets and ensure integrity and confidentiality of the data they exchange.

www.thalesgroup.com

Meudon Cedex
France
HQ

Main products

- Cellular connectivity modules (incl. LTE-M and NB IoT)
- Dedicated IoT eSIM and cellular connectivity activation solutions
- BSI-certified Secure Element

- Trusted Key Manager (incl. ID provisioning and credential management solutions, data encryption solutions, award-winning HSM)

Manufacturing/assembly plants in Europe

24

Markets where the company is present

EU countries **27**

Outside EU **+180**

Number of employees

+80 000
employees worldwide

Highlights from the past year

- Thales is actively providing connectivity and end-to-end cybersecurity solutions, for global smart metering deployments. It has been holding the Chair position of ESMIG's Data Communication and Privacy group over the past few years.

- Thales's smart energy offer goes above and beyond to connect and protect the complex, modern smart grid. At all layers of the ecosystem, Thales offers solutions to strengthen reliability, mitigate risk, and simplify deployments and lifecycle management.

- Thales has been supporting smart meter manufacturers, DSOs, and utilities for a quarter of a century, with solutions deployed globally.

u-blox AG

u-blox is a global technology leader in positioning and wireless communication in automotive, industrial, and consumer markets. Their smart and reliable solutions, services and products let people, vehicles, and machines determine their precise position and communicate wirelessly over cellular and short-range networks. With a broad portfolio of chips, modules, and secure data services and connectivity, u blox is uniquely positioned to empower its customers to develop innovative and reliable solutions for the Internet of Things, quickly and cost effectively. With headquarters in Thalwil, Switzerland, the company is globally present with offices in Europe, Asia, and the USA.

www.u-blox.com

Thalwil
Switzerland
HQ

Main products

Cellular products:
- SARA-R54OS module
- ALEX-R5 series
- UBX-R5 series

- SARA-R5 series
- SARA-N3 series
- SARA-R4 series

Manufacturing/assembly plants in Europe

1

Markets where the company is present

EU countries **23**

Outside EU **23**

Number of employees

In total **+1 100**

Highlights from the past year

- As a global provider of leading positioning and wireless communication technologies and services, u-blox announced the launch of its IoT Security-as-a-Service offering. Available on both the u blox SARA-R4 and SARA-R5 series of LTE-M cellular IoT modules, this innovative solution makes protects data from malicious third parties, both on the device and during transmission from the device to the cloud.

- u-blox released the high-performance NORA-B1 Bluetooth module for advanced applications. Based on Nordic Semiconductor's latest nRF5340 Bluetooth low energy chipset – the first to host a powerful Arm® Cortex® M33 dual core MCU – NORA-B1 is designed to meet the needs of performance-oriented applications in areas such as industrial, medical, and smart building and smart city markets.

- As IoT is poised to make an exponential contribution to a more sustainable world, u-blox, as a member of this critical ecosystem, launched its first sustainability report. With a key role in the innovation driving sustainability u-blox is taking action in 5 key areas: business ethics, privacy and security, employees, environmental responsibility, supply chain responsibility and communities.

Wirepas

Wirepas

Wirepas is changing the face of IoT. To set a new standard. To get infinitely scalable connectivity. Gentle on your wallet and way better than cellular 5G. In a network that never fails. Without middlemen or infrastructure. Totally self-managing. Tailored for commercial and industrial applications. Just more than you need. For less. Wirepas gives you very very good IoT.

🌐 www.wirepas.com

📍 Tampere
Finland
HQ

Main products

- **Wirepas Private 5G** connectivity is a de-centralised radio communications protocol serving the ETSI DECT-2020 New Radio standard. Protocol software can be used on off-the-shelf chipsets turning every device in an autonomous router. So, you get 5G network quality without any middlemen or massive cellular infrastructure.

- **Wirepas Massive** IoT connectivity brings industrial-grade performance for massive networks. No matter how many millions of devices, however dense, it always works. Every sensor. Every tag. Every luminaire. In a single, secure, on-premise network.

Markets where the company is present

EU countries: Germany, Finland and France

Outside EU: Australia, India and USA

Number of employees

In Europe   **52**

In total   **59**

Highlights from the past year

- Wirepas Massive is the foundation for the world's largest mesh network: 750 000 smart meters in an infrastructure free communication network in the Greater Oslo Area in Norway.

- Wirepas Massive is one of the leading technologies connecting smart meters in the fast-growing market in India.

- As the main contributor to the DECT-2020 New Radio standard in ETSI and ITU, Wirepas develops a new generation of autonomous and decentralised. communication layer fitting the needs of active grid management, smart metering, and distributed energy resource integration. First research projects in the area of solar integration are underway.

- Wirepas is acting as the validator within the Energy Web Foundation. It contributes to an energy blockchain standard by adding decentralised communication networking to decentralised settlement ledgers.

ZIV

Making the Smart Grid Real

Established in 1993, ZIV is a company, with knowledge in four key areas: protection, control, communications, and metering. Through these areas, ZIV is offering complete solutions for the challenges of the current electrical system.

As a pioneer in the development and deployment of Smart Grid solutions, ZIV is a technology partner with the knowledge, experience, and resources necessary to support your smart meter deployment.

With a commitment to innovation, to an open and flexible approach, and to teamwork, ZIV has grown to become a leader in INTELLIGENT SOLUTIONS for HV, MV and LV Grids.

🌐 www.zivautomation.com

📍 Zamudio, Bizkaia
Spain
HQ

Main products

- Electrical Smart Meters and Data Concentrator Units
- Communication and Automation Solutions
- Electrical Vehicle Charging Solutions

Manufacturing/assembly plants in Europe

1

Markets where the company is present

EU countries	**7**
Outside EU	**11**

Number of employees

In Europe	**339**
In total	**431**

Highlights from the past year

- ZIV performs the FATS for Calama and Capricionio SA Systems in Chile.
- Duna and Huambos Wind Parks in Peru to be equipped with ZIV SAS.

- ZIV and Kenyan partner EZEETEC took part in a five-day training course in Nairobi with KPLC team focused on the 3 Substation Automation Systems, the configuration of the protection relays and on-site trouble-shooting
.

- ZIV supplies Enel Goias in Brazil with substation automation systems.

Your contacts in the ESMIG Secretariat

For more information about us or our work, and for any requests for membership application, don't hesitate to contact us:

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