ESMIG

2023 ANNUAL REVIEW

The European voice of smart energy solution providers

Introduction

WHAT'S INSIDE

Dear ESMIG Members and Stakeholders,

As we embark on a new era of technological innovation and sustainable development in the energy industry, ESMIG continues to play an essential role in driving innovation, advocating for policies that promote sustainable energy management, and fostering collaboration among our diverse membership. Our association remains committed to being at the forefront of the energy transition as we navigate the challenges and opportunities presented by the swiftly changing energy landscape.

The European energy sector is undergoing a massive transformation, and we are facing challenging times as we adapt to this change. At ESMIG, we recognise the significant role we must play in supporting our members and the wider energy industry to master this transformation. To ensure that we are moving in the right direction, we have worked closely with our members to develop a comprehensive roadmap and action plan for the next two years. Our primary goals are data management, data assessment that complies with privacy rules, and utilising this data to empower consumers and improve overall energy efficiency. We understand that digital transformation is crucial to the success of the energy sector, and smart meters are a vital element of this transformation.

Over the past years, ESMIG has been actively engaged in promoting smart metering and smart grid solutions as key enablers of efficient, secure, and sustainable energy systems. We have been advocating for policies and regulations that support the deployment of these technologies while prioritising the interests of consumers and the environment. And we have been actively fostering

dialogue and knowledge sharing among our members through various events, workshops, and collaborative initiatives. Creating a smart energy infrastructure in Europe, with smart meters at its core while prioritising data utilisation, data assessment, and cybersecurity remains our primary focus.

Our work with the European institutions in Brussels has been outstanding, and we will continue to build on this progress by extending our activities to Member States to gain their endorsement of our objectives. ESMIG continues to be a trusted voice in the smart energy industry, representing our members' interests at national, regional, and international levels. We have been actively engaging with policymakers, regulators, and other stakeholders to ensure that the needs and perspectives of our members are considered when shaping energy policies and regulations. To ensure that these technologies are implemented securely and reliably, we have also actively promoted interoperability, data privacy, and cybersecurity in smart metering and smart grid deployments. To this end, we will seek to build further alliances with other associations to follow our objectives more effectively in member states and will continue to enhance ESMIG to serve the interests of its members.

Moreover, ESMIG remains committed to supporting a culture of sustainability to accelerate the green transition. We have been actively promoting sustainability principles in our activities, and we are dedicated to driving the adoption of smart metering and smart grid solutions as key instruments in achieving the United Nations' Sustainable Development Goals. We also continue to work towards promoting diversity and inclusion within our association, as we believe that a diverse membership is crucial for driving innovation and meaningful change in the energy industry.

I want to extend my deepest gratitude to our esteemed Executive Committee, our dedicated team, and all of our members for their unwavering support and commitment to our mission. It is through your collective efforts that ESMIG continues to thrive and make a positive impact on the energy industry and society as a whole.

As we look towards the future, I am confident that ESMIG will continue to be a prominent voice in the energy and smart metering industries, advocating for sustainable and innovative solutions, fostering collaboration, and driving positive change. I am honoured to serve as the President of ESMIG, and I am excited to work together with all our members and stakeholders to shape the future of energy management.

Thank you for your continued support, and I invite you to explore our annual report to learn more about our accomplishments and initiatives.

Sincerely,

Luis Goncalves
President, ESMIG
CEO, Iskraemeco

About ESMIG

ESMIG is the European voice of smart energy solution providers. We represent companies that 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

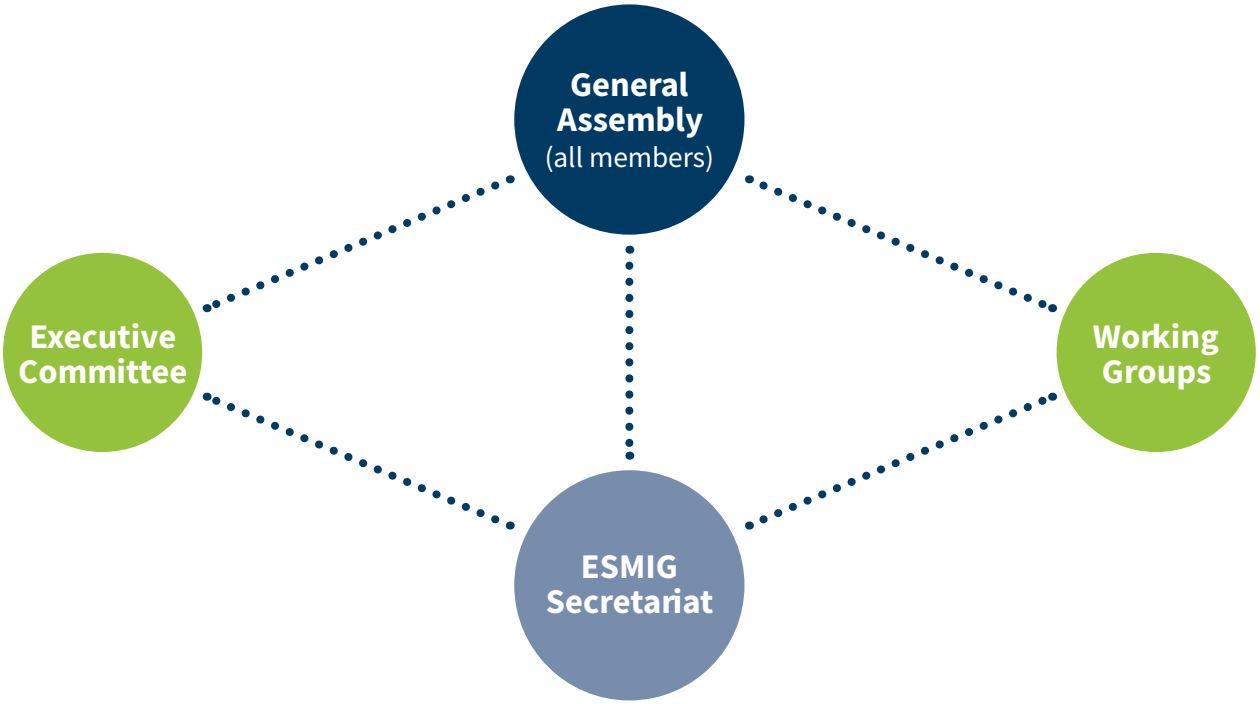
Our members' products and services provide the crucial ingredients in smart consumer energy management: they accurately measure, transfer and process energy related data while ensuring this data is relevant, safe and reliable.

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

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



Executive Committee

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

Luis Goncalves
ESMIG President
and CEO at Iskraemeco

Daniela Haldy-Sellmann
Global Vice-President
and Head of Industry
Business Unit Utilities at SAP

Javier Rodriguez
Sales Director EMEA at
Landis+Gyr

Michael Somersmith
Director of Product
Management at Itron

Working Groups and Task Forces

Data Communication and Protection Working Group

The main focus for this group is monitoring and reviewing security regulations and removing barriers for data access, transfer, processing, and protection. This group also evaluates communication technologies to get insight in applicability for smart metering.

Chair: **Jani Vehkalahti**, Wirepas

Marketing and Events Working Group

This group defines and implements ESMIG's communication strategy, including all events where ESMIG is represented, involvement in exhibitions and conferences, and our online presence.

Regulation and Policy Working Group

Maintaining a watch on EU regulatory and legislative developments with the potential to affect any aspect of smart energy management in Europe is the main goal of this group. Members strive to ensure effective and coherent policy development and coordinates ESMIG's responses to political developments that affect the membership.

Empower Prosumers Working Group

Focusing on interoperability for demand-side flexibility and consumer engagement, members explore use cases, infrastructure definition and standards selection.

Chair: **Ferry Cserep**, Netinium

Multi Utility Metering Working Group

Diving into the metrological and legal aspects of the advanced metering infrastructure, this group also manages relationships with related industry associations. In addition, members develop concepts for the future metering infrastructure.

Chair: **Henri Teboulle**, Sagemcom

Task Forces:

- Standard Essential Patents
- Next Generation Smart Metering
- Cybersecurity Regulation
- Smart Meter Gateway Concept
- H1 Interoperability
- Multi-Utility Gateway
- 5G
- Germany

Our work

In the past year, ESMIG represented its members' interests to achieve results at political and technical level, working with the EU institutions and in close cooperation with partner organisations in Europe and Member States.

2022 was marked by an unprecedented energy price and supply crisis in Europe. To address this, a series of measures were proposed by the EU and national governments, stressing the importance of smart energy solutions as essential tools to deliver energy efficiency and savings for the benefit of consumers, reducing their bills.

The crisis showed that the EU must strongly leverage on the potential of smart metering, a key enabler for accelerating the green transition and the digital transformation of the energy system, making energy more secure and affordable for empowered consumers.

Using the power of energy data can have a massive impact on savings for consumers and reducing overall system costs. Moreover, ensuring that smart energy infrastructures and data are secure, without creating additional barriers, is paramount.

At political level, in 2022 and early 2023, we highlight our work on:

- The European Commission's **Action Plan to digitalise the energy system** (October 2022), providing an opportunity for ESMIG to promote smart metering and data-driven solutions, emphasising the importance of removing barriers to energy data access and sharing. The adopted plan now highlights the importance of smart meters, calling for a swift roll-out and new cost-benefit analyses to support the objectives of the Green Deal.
- The **Electricity Market Design reform** (March 2023), which reviews the regulatory framework for the electricity market drawing the following the energy crisis. ESMIG focuses on emphasising the need for a stronger role for demand-side flexibility, and on the distinction and roles that smart meters and sub-metering must play.
- The **Net Zero Industry Act** (March 2023), to support European technology in aligning industry policy with Green Deal targets and maintain its leadership in the twin transition. ESMIG's lobbying efforts secured the inclusion of advanced metering infrastructure as part of grid technologies, to potentially benefit from funding and accelerated permitting.
- The **Regulation on Standard Essential Patents** (April 2023), where we advocate for a balanced system that facilitates fair access to technologies, rewards innovation and promotes competition, resolving issues regarding licensing in the smart energy industry.

At technical level, we continued to play an active role on standardisation in CEN, CENELEC and ETSI and supported the European Commission in the Smart Grids Task Force. We highlight our work on:

- The **Measuring Instruments Directive**, which is currently being evaluated. As the current directive is no longer fit for purpose, as smart meter technology has evolved,

ESMIG calls for a swift revision to reflect the innovation made by industry and ensure the directive is future proof. Together with the DLMS User Association, we also proposed the use of a legally relevant external display.

- The **Cybersecurity Resilience Act**, focusing on new cybersecurity rules for digital products and ancillary services. ESMIG discussed the act with EU institutions and outlined key concerns regarding industry involvement when classifying products according to the security risks and on the need to involve industry stakeholders when carrying out the risk assessment.
- The Delegated Act for the **Radio Equipment Directive**, including cybersecurity requirements. New harmonised standards will support the smart metering industry in offering a ‘’presumption of conformity’’ with the directive when applied.

In 2022, ESMIG began to focus more on **Germany**, as the country proposed a new act to relaunch the digitalisation of the energy transition. This includes a binding roadmap with clear targets for the accelerated installation of smart meters, making roll-outs more agile and cutting red tape. ESMIG’s engagement with stakeholders in Germany, supporting the acceleration of the smart meter roll-out and use of smart metering solutions to their full potential, will continue as a key priority in 2023 and beyond.

ESMIG also introduced a series of **new communication features** to highlight the work of its members and reach key audiences, while strengthening our presence on our channels. In addition to this, participation in big industry **events** was crucial for increasing our visibility further, including Enlit Europe in November 2022 in Frankfurt and at E-World in Essen, Germany’s largest energy fair, in May 2023

Going forward, in 2023 we will continue to promote our member’s interests, with a strong focus on data use, access and sharing, to harness the full potential of smart metering to support the twin transition, while cybersecurity will remain an important part of our work. ESMIG will make sure the voice of our industry, with its innovative products and services, is heard as smart energy solution are more important than ever to exit the energy crisis and address future challenges.

Tomás Llobet
Managing Director

Willem Strabbing
Technical Director

Ensuring smart metering brings tangible benefits for consumers and society

With a clear focus on the twin digital and clean energy transition in Europe, the smart metering industry is more important than ever. Smart meters are an essential component for enabling a digitalised and decentralised energy system.

Efficiency and economic benefits such as savings on energy bills and reduced system costs are tangible today. Smart metering technologies and solutions will see our current energy system transform to a smart, demand driven, flexible and green one, with clear benefits for empowered energy consumers.

While we advocate for an ambitious energy transition, there are crucial intermediate steps that need to be taken to ensure that this transition is possible and carried out to a high standard. This includes unleashing the power of granular metering data, enabling additional services to fully harness the potential the technology can bring to a larger eco-system that will enable us to reach the all the benefits smart meters.

To realise this, we are working together with the European Institutions and other key stakeholders, including partner organisations, to support the smart meter roll-out and advocating for the right framework that will allow us to take advantage of all the benefits that our members' technology and services can offer.

Delivering the European Green Deal

Our mission is to drive and accelerate the dual digital and green transition. Through our work supporting the implementation of the Clean Energy Package and the European Green Deal initiatives, we strongly support the EU's agenda towards climate neutrality by 2050 and the ambitious plans for addressing climate change through a modern, resource-efficient, and competitive economy.

The deployment of clean technology solutions is crucial for a sustainable transition, ensuring that the energy system becomes smarter and more efficient.

Recognising the contribution of digitalisation and technologies as a driver for the green energy transition is key for supporting the implementation of smart energy solutions and accelerating the smart meter roll-out across Member States.

As part of the European Commission's package of proposals to ''deliver on the European Green Deal'' we have been actively working on the revision of key legislative initiatives, especially the Energy Efficiency Directive, to support the ambitious new 2030 climate objective of 55% GHG emission reductions on the pathway to climate neutrality in 2050. We have also started working in 2023 on the proposal for a reform of the Electricity Market Design and the Net Zero Industry Act.

Electricity Market Design reform must recognise the role of smart meters

In January 2023, we submitted our **response** to the public consultation on the reform of the Electricity Market Design, focusing on two main topics, demand-side flexibility, and sub-metering. To highlight our position, we developed a new position paper underlining the role of smart meters as an enabler to support a consumer-centric electricity market and the development of flexibility solutions. As an additional activity, we signed a **joint statement** with 11 fellow associations outlining 7 key recommendations to unlock demand-side flexibility potential.

The potential of smart solutions for saving, and notably a stronger role for demand-side flexibility, needs to be at the heart of emergency measures proposed by the EU and national Governments and in the review of the Electricity Market Design launched in March 2023. As such, we have been actively advocating for the European Commission, Member State Governments and European energy regulators to fully recognise

the contribution of smart energy solutions for energy security and affordability and swiftly implement existing EU and national legislation.

As a key development, on 14 March 2023, the Commission released their proposal for the reform to improve and optimise the EU's electricity market design with new provisions on demand-side flexibility. While we welcome the proposal, harnessing the benefits of smart meters is essential to enable demand-side flexibility and must be a focal point. With the expected adoption of the legislation by the end of 2023, we will continue to follow development and advocate for the implementation of all provisions for flexible consumption and generation in Member States.

Net Zero Industry Act supports European technology and manufacturing

In March 2023, we welcomed the Commission's announcement to support European technology and the manufacturing ecosystem through aligning European industry policy with EU Green Deal targets through the new Net Zero Industry Act proposal.

Ahead of the official publication of the proposal we called for the inclusion of smart meters as part of grid technologies. In our **public statement**, we highlight how smart meters and advanced metering infrastructures play an essential role for smart grids and offer tangible benefits for energy efficiency, savings and empower consumers. This will support the maintenance of Europe's leadership in clean tech sectors which is exposed to unfair competition from third countries and enhance Europe's strategic autonomy in the twin digital and green transition.

Digitalising the energy system – a European action plan for moving forward

In October 2022, the European Commission introduced their action plan for digitalising the energy system. As it impacts our industry, it provided the great opportunity to advocate for the benefits of smart metering and data-driven solutions in the energy sector. It also highlights the need to remove barriers on access to and sharing of energy data, recognising that data can be a core asset for the energy transition, to improve system efficiency, savings and empower consumers. This also needs to be fully recognised in the implementation of the RePowerEU Plan which aims to make Europe's energy system more resilient and independent of fossil fuel imports.

Highlighting how technologies can help to improve the efficient use of energy resources, facilitate the integration of renewables into the grid, and save costs for EU consumers and energy companies, we welcomed the initiative as a key step to transform the energy system.

In particular, we were glad to see proposals regarding access to and sharing of energy data as large amounts of data can be a core asset to improve system efficiency and empower consumers and the creation of the "Data for Energy" (D4E) expert group that will help the Commission to develop and roll-out a common European data space for energy.

In addition to this, the action plan underlines the importance of having a smart electricity meter installed in consumers' homes, underlying the critical need to speed up efforts to complete the smart meter roll-out, repeating Cost Benefit Analysis in countries where they were negative to support the goals of the Green Deal and REPower EU.

As a next step, implementing provisions making data interoperable and available (near) real-time to consumers, as mandated by the Electricity Directive, is key for unleashing the power of energy data and achieving the ambitions of the action plan!

Taking advantage of smart energy solutions to address Europe's energy crisis

As Europe has been facing an unprecedented energy price and supply crises, Europe must leverage the potential of the digital transformation as a key enabler for both accelerating the green energy transition and making energy more secure and affordable for consumers. Deploying smart energy solutions and unleashing the power of energy data can have a major positive impact on savings and consumer bills and must be fully taken advantage of.

In our position paper **'Energy affordability and savings: the role of smart energy solutions'** (November 2022), we set out three key actions that can be carried out as part of the solution to tackle energy price and supply issues, as the important role of smart energy solutions needs to be better recognised by policymakers and regulators:

1. Accelerate and complete the roll-out of smart meters across Europe
2. Remove barriers on energy data access and sharing and make real-time data available to consumers
3. Implement and enable demand-side flexibility and energy management, and eliminate regulatory barriers

Standard Essential Patents in the energy industry

Standardisation based on patented technologies is a crucial 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, we have continued our work on Standard Essential Patents (SEPs) over the past years aiming to remove unnecessary barriers to encourage a competitive, smart energy industry and participated in several events as part of our cooperation with fellow European associations on this issue.

As an important step forward, on 27 April 2023, the European Commission adopted a draft Regulation on Standard Essential Patents and, before adoption, ESMIG met with EU officials to share our support on the need to increase transparency and enable a balanced system that facilitates access to technologies. Going forward, ESMIG will work together with the European Parliament and EU Council to ensure that the regulation facilitates fair access to technologies, rewards innovation and promotes competition in the market, resolving pressing issues regarding licensing in the smart energy industry.

New task force to support accelerated roll-out of smart meters in Germany

In October 2022, the Germany Task Force was launched in the aim to follow developments at national level and identify concrete opportunities for engagement with stakeholders in Germany to support the acceleration of the smart meter roll-out.

The task force began its work at a crucial point as Germany was set to propose a new act to relaunch the digitalisation of the energy transition, including a binding roadmap with clear targets for the accelerated installation of smart electricity meters, making roll-outs more agile and cutting red tape.

Furthermore, the act includes provisions on reducing overall costs for consumers and the system, through introducing dynamic tariffs among other important provisions. While the specific German “gateway architecture” is not changed, smart meters can be bundled in one gateway, and the Act is expected to lead to a significantly more pragmatic approach, accelerating roll-outs and making sure that consumers will reap the benefits smart meters bring, and support the energy transition through a series of use cases.

Going forward, the task force will continue to liaise with stakeholders and partners at national level and explore activities and events for ESMIG in Germany. As a first step, ESMIG exhibited at E-World 2023 in Essen, Germany’s top energy fair, together with several members and organised a forum session to present a European perspective on smart metering.

Ensuring the use of smart meter data to its full potential

The roll-out of smart meters across Europe is a key enabler, but the granular information about consumer patterns and performance that can be provided through smart metering data is crucial for the energy transition. This data can benefit all actors in the energy market including consumers, network operators, such as DSOs and TSOs, suppliers and innovative energy service providers.

For the data-driven 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 lifting barriers on data access, sharing and use and for standards that detail requirements for data and a universal approach across Member States.

The revision of the Energy Performance of Buildings Directive

ESMIG actively follows developments for the revision of the Energy Performance in Buildings Directive as a key initiative for the decarbonisation of buildings in Europe. Decarbonisation is vital to deliver on the EU's climate and energy objectives, with buildings responsible for 40% of the European Union's energy consumption.

Energy efficiency is an essential element and smart meters are an indispensable feature for achieving energy savings. The smart meter is the only way to have a reliable and certified measurement of the energy consumed and/or generated by a building at a specific time of use.

We shared feedback to the European Commission, particularly on Article 14 on data exchange, to ensure that authorised building owners, tenants, and managers as well as energy suppliers and energy services providers, have access to consumers energy consumptions in real time. It is crucial to have access to energy consumption data for buildings to be energy efficient.

Measuring Instruments Directive: not fit for purpose

We have been involved in the European Commission's Measuring Instruments Working Group and discussions regarding necessary changes, arguing that the directive is not fit for purpose anymore.

The current version of the Measuring Instruments Directive was introduced in 2014. Since then, smart meter technology has greatly evolved and there are multiple tariff registers in the meter and more user-friendly alternatives for reading these registers via the internal meter display are available.

For example, the requirement to have an internal display to check certified measurements in case there is a dispute about the registered power consumption is not practical. The meter contains more data because of the application of multiple tariffs, internal metering, and power generation.

Working together with the DLMS User Association, we **proposed** the use of a legally relevant external display. The European Commission is now considering evaluating the directive and submitting it to a 'fitness check' in 2023, with a legislative review process expected to begin at the end of 2023 or in early 2024, pending the outcome of the fitness check.

The upcoming evaluation and subsequent revisions will be a key priority for both ESMIG's advocacy and technical work, and we will remain actively involved, feeding into the Commission's work on the directive's evaluation and upcoming review.

Task force highlights importance of access to energy data

To address the importance of access to energy data, a task force was formed to develop a position paper ahead of the publishing of the European Commission's Action Plan on the Digitalisation of the Energy Sector (released October 2022). The paper highlighted how energy data is key for achieving the EU's energy and climate objectives for 2030 and how it can be a core asset for the energy transition, to improve system efficiency, savings and empower consumers.

ESMIG presented its position to the Commission in August 2022, also highlighting that access to energy data must be ensured in a non-discriminatory and secure manner for all authorised energy market participants.

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.

New task forces take a deep dive into new solutions

Our Multi-Utility Metering Working Group has launched a new task force called ''Multi-Utility Gateway''. This task force will define functionalities and requirements for a gateway function connecting multiple meters to networks such as LAN, HAN and WAN. Use cases and applicable standards will be identified for the different interfaces such as a gateway should support. The work of this task force is performed in cooperation with the DLMS User Association.

Additionally, our Empower Consumers Working Group established a new task force to define interoperability requirements for the ''near real-time interface'' on the meter internationally referred to as ''H1''. As there are many different solutions and flavours of standards, such as the P1 interface from The Netherlands, the aim is to create a more uniform European solution for this interface.

Our response to the Cybersecurity Resilience Act

The Cybersecurity Resilience Act is looking at new cybersecurity rules for digital products and ancillary services. ESMIG responded to the European Commission's public consultation and call for evidence, and developed a position paper to outline key concerns, notably regarding industry involvement when classifying products according to the security risks they introduce. Furthermore, industry stakeholders should be involved when carrying out the risk assessment.

Our position and proposals for amendments was also shared with key MEP's working on the file in the European Parliament.

We have expressed our position regarding the multiple assessments smart meters must undergo (as a result of the Measuring Instruments Directive and Radio Equipment Directive as well as the Cyber Resilience Act) for cybersecurity requirements.

In our position paper **'Addressing Smart Energy Solutions in the Cyber Resilience Act**' we share our concerns and recommendations. While we support any action to improve cyber resilience in products and address cybersecurity risks, it is key that the legislation does not become a burden to manufacturers and continues to enable innovation.

ESMIG produced a second position paper focusing on the development of a generic, unified cybersecurity assessment for EU market access of products based on the Cyber Resilience Act's requirements and the EUCC certification framework developed by ENISA. ESMIG met with the Commission (DG CNECT) and ENISA to express its position and find a solution for a unified assessment.

Harmonised cybersecurity requirements in the Radio Equipment Directive

The development of a Delegated Regulation for the Radio Equipment Directive began in 2021, with the aim to include cybersecurity requirements. CEN/CENELEC was requested by the European Commission to define harmonised

standards with security requirements that can be linked to this Directive. ESMIG began working with CEN/CENELEC to develop such a harmonised standard and the work is progressing in WG8 of CEN/CLC JTC13.

This standard will support our industry as it offers a ''presumption of conformity'' with the directive when applied. This implies that the manufacturer can do a self-assessment and provides the necessary documentation to the notified body that issues the certificate.

New report on next generation smart metering

Technological developments are moving fast and the trend in infrastructure is modularity to be able to cope with developments for components of the Automated Metering Infrastructure. This implies more interfaces and increased complexity of standards that must be able to support developments in technology that are yet to come.

To address this, our 5G Task Force and Next Generation Smart Metering Task Force have studied the future architecture and requirements of the Advanced Metering Infrastructure. This work has resulted in a **new report**, launched in March 2023, containing a description of the next generation architecture, functional use cases and communication requirements. The aim of the report is to identify new smart metering use cases for the next decade and the impact on the communication infrastructure.

Supporting the European Commission's Smart Grid Task Force on interoperability, cybersecurity and demand-side flexibility

We continue to support the Smart Grid Task Force, established in 2009

by the European Commission, 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. Under this task force, some expert groups work on key topics for the introduction of smart grids.

Expert Group 1 focusses on interoperability. With our support, this group has finalised its work on drafting an Implementing Act containing the interoperability requirements for consumption data access, data exchange for supplier switch and demand response.

The Electricity Directive requires the Commission to prepare such an Implementing Act to define the interoperability requirements for data exchange among energy market parties.

Expert Group 2 began at the end of 2022 with creating an inventory of cybersecurity legislation and standards, relevant for smart grids.

CEN/CENELEC/ETSI Coordination Group on 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 multi-utility smart metering. In 2021, this group merged with the Coordination Group on Smart Grids with having smart meter related topics covered in a sub-group that had several meetings in 2022. This sub-group aims to revise the original smart meter reference architecture and list of applicable standards developed in 2011 (TR50572).

As a long-time member of both coordination groups, ESMIG continues to play an active role in supporting the standardisation work of CEN, CENELEC and ETSI.

Key activities with the Stakeholders for Cybersecurity Certification Group

Established by the Cybersecurity Act in 2019, the Stakeholders for Cybersecurity Certification Group 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 European Commission in the preparation of the work programme.

A key goal of the group is to support the creation of market driven certification schemes to help reduce fragmentation between various existing schemes in Member States. As a first activity, the group supported the preparation of the 'EUCC' by ENISA that covers the certification of ICT products and cybersecurity, based on Common Criteria. For us, the EUCC is the most important scheme since the **Protection Profile for Smart Meters** is also based on Common Criteria. Currently we promote the use of EUCC and our Protection Profile as a generic solution for proving compliance with the security requirements of Cyber Resilience Act, Radio Equipment Directive and Measuring Instruments Directive.

Driving the deployment of flexible demand-side resources to support the 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.

To reap the benefits, demand-side flexibility requires customers to adapt their energy consumption in response to market signals, depending on the availability of energy generated by sustainable resources. For this to happen, consumers must be able to manage and track their energy consumption. Smart metering systems are the necessary element as they are used for measuring and communicating consumption. As such, they form the basis for a flexible demand-driven energy market.

Supporting the European Commission's Smart Grid Expert Group on Demand-Side Flexibility

In 2022, the European Commission announced that a new Smart Grid Expert Group 3 would be established to focus on policy and regulation frameworks related to demand-side flexibility, looking at regulatory barriers. The Smart Grids Task Force is key for providing advice to the Commission during the preparation of crucial technical and policy initiatives.

While we are already active in two other expert groups, Expert Group 1 on standards and interoperability and Expert Group 2 on privacy, data protection and cybersecurity, we are contributing with our knowledge to this new group and making sure our industry's views are represented.

At the end of 2022, the group finalised a paper on short term actions that consumers can take and tools that are available to reduce energy consumption.

Demand-side flexibility in the Electricity Market Design

In October 2022, alongside fellow European Associations, we wrote a **letter** to the President of the European Commission, Ursula von der Leyen, Executive Vice-President for the European Green Deal, Frans Timmerman, and Energy Commissioner, Kadri Simson, to urge focus on consumers' flexibility as an available, reliable, and immediate response to rising energy prices and increased European resilience as a result of Russia's invasion of Ukraine.

Demand reduction and optimisation are at the heart of recent emergency interventions adopted by the EU. It requires a signal to which consumers can react. Hence, the Commission should refrain from suggesting market interventions and blunted price signals that undermine the foundations of the consumer-centric EU Electricity Market Design adopted in 2019.

The strategic answer – both short and long-term – is to empower all consumers with decentralised energy resources and allow them to self-consume, adjust and trade their energy consumption, storage, and on-site renewable and efficient generation, directly, or through local communities and aggregators.

Along with improved energy efficiency, the roll-out of renewables, and access to competitive electricity supply, we highlighted key areas of priority to focus on.

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.

The importance of a level playing field in the energy industry

The creation of our Fair Competition in the Energy Industry Task Force in 2020, came at a crucial time. With the publication of the European Commission's White Paper on '' levelling the playing field as regards foreign subsidies'' followed by the proposal for a Regulation on Foreign Subsidies Distorting the Internal Market in May 2021, the need to address potential market distortions as part of the updated Industrial Strategy was garnering more attention.

Considering the unfair practices that companies face from third country producers operating in the Single Market, and with risks of unfair competition closely connected to the safety of the electricity and gas grids, privacy, and data security, this regulation has been a key focus for us.

In 2021 and 2022, we published two **position papers** to highlight the negative consequences and risks, while also underlining where there is an urgent need to legislate and reinforce high-level standards. We have also actively promoted our position to the EU Institutions, with the European Parliament and EU Council officially adopting their position in May 2022.

We supported the European Commission's proposal to introduce a mechanism of prior notification of foreign financial contributions in the context of public procurement procedures. However, most of the European industries were excluded from this procedure with the proposed threshold, some of them being critical for the European Union. On this matter, we welcomed the references to ''critical infrastructure' in the European Parliament's report which recognised our industry's specific situation and is a valuable improvement from the European Commission's initial proposal.

The Foreign Subsidies Regulation entered into force on 12 January 2023. We gladly welcomed this progress as it will provide a key tool to help guarantee a level playing field in the internal market. In particular, we were pleased to see that the reference to ''critical infrastructure'' that ESMIG actively advocated for, was maintained in the final text.

We will continue our efforts to ensure that this regulation guarantees a level playing field in the internal market for these fundamental industries for the European Union.

Event participation in Europe

To expand our reach, and present our association and members, we participate in numerous events around Europe each year. This provides the opportunity for us to not only make connections with fellow players in the energy industry but also highlight the key areas that we are working on and how we, with the crucial support of members', are advocating for a green transition that embodies smart energy solutions and empowered consumers.

EU Sustainable Energy Week webinar exploring data and energy efficiency

On 22 September 2022, we hosted a **webinar**, moderated by our Managing Director, Tomás Llobet, taking a deep dive into how data can improve the efficiency of the energy system, empower consumers, and foster the update of decentralised energy resources.

Co-organised with the European Commission, EuropeOn, SmartEn, European Energy Retailers and REScoop.eu speakers explored energy data as a means to drive the green transition.

A clear conclusion from the debate? That removing barriers to data access is key to reap the benefits of digitalisation!

Highlighting the potential of an interoperable, multi-vendor smart meter and smart home at Enlit Europe

Each year we join the industry event Enlit Europe alongside our members to showcase our association and what we advocate for. As a key focus, with more smart meters being installed, the potential of using meter data for the benefit of consumers and grid operators is rising exponentially.

To highlight this, each year we develop an interoperable architecture to present, showcasing the latest technology and solutions developed by our members. At Enlit Europe 2022 in Frankfurt, Germany, we included home energy management functionality and demonstrated how the metering infrastructure is connected to smart appliances such as a heat pump and EV charging station via a gateway.

As each year brings innovation, make sure to visit our booth at the event to see us demonstrate new and exciting technologies and solutions that look to the future!

SAP's International Conference for Utilities

Joining forces with our member, SAP, we took part in their annual International Conference for Utilities, which took place from 5-7 July 2022 in Munich, Germany.

Tomás Llobet, took part in two micro forum sessions alongside SAP to explore the need to accelerate the roll-out of smart meters and their untapped benefits. Diving into key topics, Tomás presented the current state of smart metering in Europe and the status of the roll-out in Member States, the potential for next generation smart meters and the importance of data access and sharing, and real-time access to data consumption.

Joint webinar on cybersecurity regulation in Europe

On 16 May 2023, we joined forces with E.DSO to host a webinar **'Is EU Regulation supporting the cyber revolution for the energy sector?'**.

Welcoming key speakers from the European Commission, as well as representatives from DSO's and TSO's, discussions took a deep dive into current cybersecurity legislation, with a focus on further developments with conclusions providing insights into how legislation could be streamlined, avoiding overlaps and cost increase.

ESMIG and members exhibit at E-World energy & water

On 23-24 May 2023, ESMIG exhibited at E-World energy & water with a community booth for the very first time, alongside our members Cuculus, Sense, Iskraemeco, Meter&Control and Wirepas.

Gathering ESMIG's exhibiting members to share their expertise, we also hosted a forum session on 24 May to explore the status of the roll-out of smart meters and the untapped potential of smart metering in Europe. As Germany is set to accelerate its roll-out in 2023, this was the perfect opportunity to specifically focus on the situation in the country and provide insights on best practice and 'lessons learned'.

Our members in a nutshell

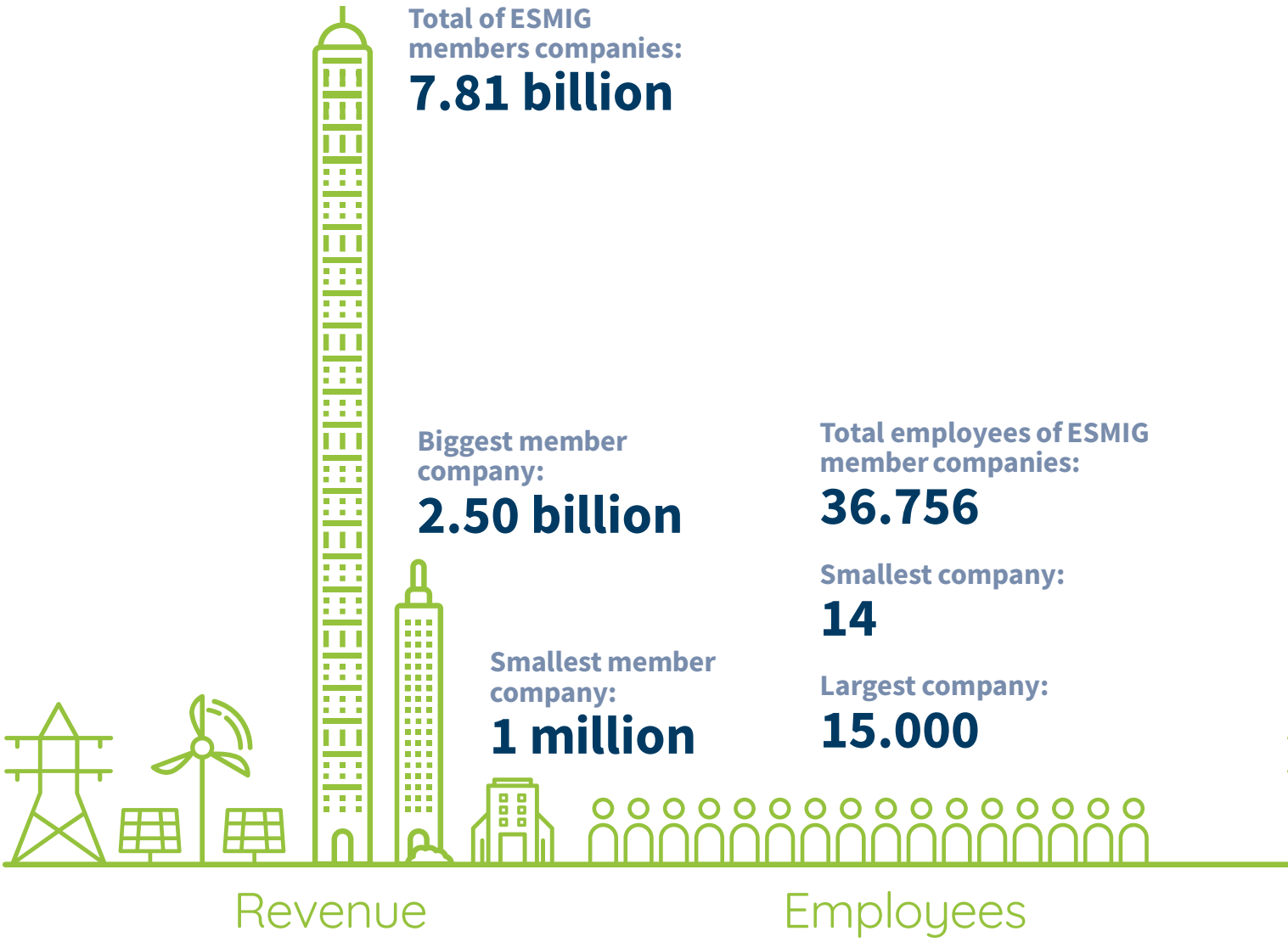
ESMIG member companies provide:

Smart devices

- Smart meters
- Smart heating controls
- Consumption feedback devices
- Grid edge intelligent devices
- Modules for communications

Services and solutions

- Data communications
- User engagement
- Data analytics
- Billing
- Grid operational efficiency
- Data visualisations
- Data security



Total of ESMIG members companies:
7.81 billion

Biggest member company:
2.50 billion

Smallest member company:
1 million

Total employees of ESMIG member companies:
36.756

Smallest company:
14

Largest company:
15.000

Revenue

Employees

Our members in a nutshell

ESMIG members cover

all European countries

and some of them more than

180 globally

ESMIG member factories/software development centres in Europe:

19

ESMIG membership headquarters in Europe:

17

Aidon

Aidon is a leading innovator and provider of smart metering and smart grid solutions, applications and services. Making use of the latest technologies and combined with in-depth knowledge of the Nordic energy markets, they help distribution system operators fulfil their primary responsibility: to ensure reliable energy distribution to end users and also to cope with the big changes that are underway in the energy sector. Digitalisation is altering the energy market, leading to automated networks and processes. Aidon is committed to providing customers with the solutions and services they need to take advantage of a smarter grid.

www.aidon.com

@aidonmakessense

aidon-oy

Jyväskylä, Finland

Markets where the company is present

EU countries: Finland, Sweden, Denmark

Outside EU: Norway

Number of employees

In Europe

70

In total

70

Main products

- Metering as a Service total solution for electricity, district heat and water with automated processes
- SaaS and on-prem AMI head-end system with modern integration interfaces
- Energy Service Devices (smart meters) based on the most widely deployed device platform in the Nordics
- Robust and scalable IoT connectivity solutions with eSIM
- Power Grid Monitoring with embedded analytics
- Map-based solution for DSO's field work management

Highlights

- Since its launch in 2021, 1 million smart meters are connected, or contracted to be connected to Aidon's modern Metering as a Service (MaaS) solution.
- Aidon expanded its business operations to Denmark and opened an office in the country.
- Helen Electricity Network chose Aidon's solution for the renewal of electricity metering system in Helsinki downtown area. The contract includes the delivery 120,000 new metering devices with installation as well as Aidon's MaaS and connectivity service for both the existing installed base and new meters.
- Finnish Vantaa Energy Electricity Networks Ltd and Aidon signed an agreement on the renewal of the electricity metering system. The agreement includes a new metering head-end-system and the delivery and installation of a total of more than 180,000 smart energy metering devices.

Cuculus

Cuculus is the key to providing utilities to all, while protecting the world's precious resources. With the ZONOS IoT Platform, they offer cutting-edge software and technology solutions that address the needs and challenges of utilities - and societies - worldwide.

Their innovative and progressive solutions enable a distributed, safe, cost-effective, and universal supply of electricity, water, and gas for utilities and organisations in their transition to a new era. They have over 15 years of experience providing metering solutions to utilities globally.

www.cuculus.com

cuculus-gmbh

Ilmenau, Germany

Markets where the company is present
EU countries: 8
Outside EU: 16

Number of employees
In Europe
95
In total
100+

Main products

- ZONOS IoT Platform for electricity, water, gas and heat
- Head End System (HES) / Advanced Meter Management (AMM)
- Smart metering solutions: smart residential metering, industrial metering, submetering
- Meter Data Management (MDM)
- Smart grid solutions: distribution management, demand response
- ZONOS CollectAll for pre-payment (vending) and post-payment (billing)
- ZONOS modules for reporting, forecasting, etc.
- Managed Services

Highlights

- Together with local partners, Cuculus is engaged in numerous smart metering projects worldwide addressing utility challenges.
- Cuculus is growing continuously, both its own team, including industry-leading experts, and its partner network across the globe.
- The growth path is accelerated by strengthening its position in Europe, India and the Middle East and further developing its footprint in African and Latin American markets.
- To better serve its customers and partners, Cuculus opened offices in Dubai (United Arab Emirates) and Johannesburg (South Africa).
- Cuculus expanded its product portfolio by offering a billing and vending solution to protect the critical and financial assets of utility companies.

Data Communications Company

The Data Communications Company (DCC) provides the digital backbone of Britain's energy system. They have delivered a unique, secure communications platform that is now available in more than 99% of premises across Britain. It connects tens of millions of smart meters across all of Britain, supporting the nation's journey to net zero.

Main products

- Smart meters

Highlights

- DCC has connected over 25 million smart meters across Britain to their secure network. This prevents the release of an estimated 750,000 tonnes of CO2 every year.

www.smartdcc.co.uk

@SmartDCC

smart-dcc-ltd

HQ London, United Kingdom

Markets where the company is present
EU countries: Britain
Outside EU: NA

Number of employees
In Europe
750
In total
750

Gridspertise

gridspertise
accelerating your electric future

www.gridspertise.com

@gridspertise

gridspertise

HQ Rome, Italy

Markets where the company is present
EU countries: Italy, Spain, Romania, Malta, San Marino, Cyprus, Montenegro
Outside EU: Brazil, Peru, Chile, Colombia, Argentina, India, USA

Number of employees
In Europe
336
In total
384

Gridspertise offers end-to-end cloud-edge platform solutions and services to accelerate the digitalisation of electricity distribution grids in three main areas: metering and grid edge, network infrastructure, field operation. The company's portfolio is designed as an open ecosystem, easy to integrate with DSOs' legacy systems, combining intelligent grid devices with ready-to-use modular applications, running at central level as well as on the edge. Gridspertise works with more than 50 DSOs and in different geographies such as Europe, Latin America and North America and is expanding towards Asia-Pacific and Africa.

Main products

- Electricity Smart Meters
- Field devices
- Metering Data Concentrators
- Head End System
- Smart Grid Solutions
- Substation virtualization edge device
- Field operation solutions
- Managed Services (SaaS, MaaS, Technical Services)

Highlights

- As an accelerator of the transition to clean and renewable energy, they strive to deliver integrated solutions that are sustainable by design. All technologies are intended to help DSOs reduce their carbon footprint facilitating a zero-emission future, while boosting the achievement of the United Nation's Sustainable Development Goals (SDGs).

IDEMIA

www.idemia.com

@IdemiaGroup

IdemiaGroup

IDEMIA

idemiagroup

Courbevoie, France

Markets where the company is present
EU countries: Worldwide
serving 180 countries

Number of employees
In Europe
5,000
In total
15,000

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 920 million SIM cards shipped, 210 + eSIM platform references and over 2.2 eSIM consumer transactions in 2022, 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 & services areas.

Main products

- SIM: IoT/M2M (eUICC, iSIM, UICC)
- Digital solutions: eSIM Suscription Management, IoT OTA platform, AWS and Microsoft cloud-hosting services
- IoT security: IoT SAFE

Highlights

- IoT activities.
- TIM adopts IDEMIA's eSIM solution to meet IoT market demand in Brazil.
- IDEMIA won "Best Mobile Security Solution" at the 2023 GLOMO Awards during MWC Barcelona.
- IDEMIA in top 1% of companies awarded Platinum EcoVadis certification in 2022 for its CSR performance.
- IDEMIA and Telefónica España boost the security of 5G SIM technology with pioneering solutions to protect users' communications (Quantum Safe 5G SIM).
- IDEMIA collaborates with Microsoft to provide next-generation eSIM Connectivity services.
- IDEMIA ensures SK Telecom's successful eSIM management platform migration to the public cloud.
- Telefonica UK (O2) and IDEMIA are working to securely connect 23 million homes in the UK with smart meters by 2025.
- GREENCONNECT by IDEMIA gives mobile operators a way to achieve sustainable connectivity.

Iskraemeco

Since the company's founding, Iskraemeco employees have been transforming their invaluable experience, innovation, and thorough understanding of customers' needs into comprehensive energy and water management solutions. Iskraemeco is a globally recognised brand, with its solutions found in more than 80 countries worldwide, and for more than seven decades they have been delivering high-quality products, solutions and services that make efficient energy and water use a reality to companies worldwide.

www.iskraemeco.com

@iskraemeco

IskraemecoCorporate

@iskraemeco_corporate

iskraemeco

Kranj, Slovenia

Markets where the company is present
EU countries: 30
Outside EU: 80

Number of employees
In total
1500+

Main products

- Electricity Meters (for Residential, Commercial, Industrial application, prepayment, smart)
- Water Meters
- Communication Tools
- Professional Services
- Managed Services
- Data Management Solutions (Symbiot)
- Smart Energy Solutions (Smart Metering, Energy IoT, Digital Grid, Prepayment, Smart City Solutions)
- Smart Water Solutions
- eMobility Solution

Highlights

- Iskraemeco maintains one of the leading positions in the energy industry in Europe while further developing operations in Africa, Middle East, India, South East Asia and LATAM.
- Iskraemeco is expanding its reach by extending its offering within energy and water business and developing comprehensive solutions for efficient and reliable functioning of eMobility within the digital grid environment.
- Iskraemeco is further developing their software suite Symbiot to help maximise the value of the data. Combined with hardware for water, gas, electricity, EV charging, heat and other sensors, the digital platform offers unique solutions for distinct areas of utility services.
- In recognition of Iskraemeco's outstanding performance, the year 2022 ended with several awards for sustainable thinking and innovation.
- As part of its expansion strategy in the water and eMobility markets, Iskraemeco acquired two companies: Holosys, an IoT and ICT solution provider, and GL Charge, a provider of EV charging solutions.

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

@itroninc

ItronInc

ItronSmartMedia

itroninc

HQ

Washington, USA

Markets where the company is present
Itron customers are located in more than 100 countries world-wide.

Number of employees
In total
+5500

Main products

- Metering and sensing devices
- Secure IIOT networks
- Actionable data analytics
- Outcome-based enterprise applications
- Smart city solutions
- Global delivery and managed services

Highlights

- Broader challenges, such as the impact 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

www.kamstrup.com

Skanderborg, Denmark

Markets where the company is present
EU countries: 17
Outside EU: 8

Number of employees
In Europe
1500
In total
1500

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.

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

Highlights

- 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 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 is a leading global provider of integrated energy management solutions for the utility sector. Offering one of the broadest portfolios, they deliver innovative and flexible solutions to help utilities solve complex challenges in Smart Metering, Grid Edge Intelligence and Smart Infrastructure. With sales of USD 1.7 billion in 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

@landisgyr

landisgyrofficial

landis

Landis+Gyr AG
Cham, Switzerland

Markets where the company is present

EU countries: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Italy, The Netherlands, Poland, Slovakia, Slovenia, Spain, Sweden, United Kingdom
Outside EU: Switzerland, South Africa, USA, Canada, Brazil, India, Australia, New Zealand, China, Hong Kong, Japan, Singapore

Number of employees

In total

+5,700

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

Highlights

- In France, more than 31m Linky smart meters were installed with a further 11m to be deployed, until 2026, to Enedis, overseas territories and medium utilities. Landis+Gyr will supply approximately 20% of the volume.
- 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.
- 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 Top 5% in the industry.

Logarex Smart Metering

Logarex Smart Metering s.r.o. is a Czech company established in 2011. Their main business scope is the development, production and supply of smart metering solutions, including the measurement, processing and transfer of data, offering complex, custom-made solutions according to customer's demands.

They are a member of professional associations, such as The Electrical and Electronic Association of the Czech Republic (ElA), Forum für Netztechnik/Netzbetrieb im VDE (FNN) and International Chamber of Commerce - Czech Republic (ICC Czech Republic).

www.safemeter.com

Prague, Czech Republic

Markets where the company is present

EU countries: Czech Republic, Germany, Austria, Slovakia, Hungary, Bulgaria

Number of employees

In Europe

14

In total

14

Main products

- Electricity smart meters
- Software Solutions, Support Services, Charging Stations

Highlights

- Next Generation Smart Meters
- EV Chargers

Meter&Control

www.meterandcontrol.com

meter&control-beograd

Belgrade, Serbia

Markets where the company is present

EU countries: Czech Republic, Slovakia, Estonia

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

Number of employees

In Europe

150

In total

150

Meter&Control manufactures state-of-the-art devices and software for smart energy management in industrial and residential environments. Entire research, development, manufacturing, and verification processes are based at integrated facility in Belgrade.

They provide integrated and modular smart electricity meters with PLC, cellular and NB IoT communication, modems, disconnectors, data concentrators and gateways, and AMM/AMI software. Products are compliant with the leading industry standards and certificates. They are suitable for massive roll-outs and have a proven track record of high-level end-to-end security and of seamlessly integrating into diverse topologies and networks.

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. They enable full integration of prosumers in the energy market and provide detailed consumption data. In addition to this, they equip the critical smart infrastructure and provide all players in the energy chain with necessary data and functionalities to enable the green energy transition.

Main products

- Integrated and modular smart electricity meters
- Communication modules and gateways
- Disconnectors
- Data concentrators
- HES software
- Solutions for local reading and parameterization
- Smart public lighting solutions

Highlights

- Beginning of serial production of the new generation FLEXY modular smart meters, featuring easily replaceable modem, prosumer integration and rich energy quality data.

NETINIUM

NETINIUM®
The smart energy platform

Netinium provides advanced smart meter and smart energy solutions that lower the cost to operate, improve innovation and agility and increase security for electricity, gas, water and heat utilities. The Netinium platform is a next-generation multi-vendor head-end system that helps utilities to achieve higher data collection success rates, reduce IT complexity, minimise vendor lock-in risks and offers full automation of all meter operations and security processes. It is successfully used in use in roll-outs with millions of meters.

www.netinium.com

Wormer, The Netherlands

Markets where the company is present
EU countries: Europe and Switzerland
Outside EU: Middle East, Africa

Number of employees
In Europe
25
In total
25

Main products

- Vendor-independent Head End System (HES/AMM) for Electricity, Gas, Water and Heat
- Smart Energy IOT platform
- PV and EV Grid Edge Control solutions
- Integrated Security Key Management System
- Direct integration with SAP, MDMs, Data Lake, Azure supporting traditional and Data Driven IT-architectures
- SaaS and on-prem deployments

Highlights

- In the Netherlands, Alliander completed their full roll-out by offering smart meters to more than 5 million customers.
- In Switzerland, ewz started rolling out smart meters using their city-wide Glass fiber network and dedicated Gateways. With Netinium, ewz was able to implement an optimised IT architecture that helped them to increase quality and agility while lowering operational expenses. Their agile team support quickly provided new connectivity solution to combat supply-chain issues.
- In Switzerland, Netinium engaged in a project to deliver active load management and demonstrated a solution to manage PV feed-in.
- Netinium became an official SAP business partner. Their platform provides a direct integration with S4/HANA and Cloud for Energy.

Sagemcom Energy & Telecom

Sagemcom Energy & Telecom concentrates Sagemcom's expertise in telecom and metering, enabling the supply of customised 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

@ Sagemcom

SagemcomOfficial

sagemcom

Rueil-Malmaison, France

Markets where the company is present

EU countries: 18

Outside EU: Switzerland, Serbia, Russia, Algeria, Tunisia, Morocco, Oman, Lebanon, Malaysia, Thailand, Cameroon, Senegal, Mauritania, Sierra Leone, Benin, Turkey, Russia, Indonesia and Egypt

Number of employees

In total

5.500

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

Highlights

- In 2021, Sagemcom was awarded the second phase of the ESM meter roll-out in Ireland and supplied SiconiaTM Head-End System and Electricity Smart Meters.
- In 2021, Fluvius selected Sagemcom's electricity and gas smart meters for its second phase of the smart meter deployment beginning in 2023.
- In 2021, Sagemcom was selected by Liander to supply SMR5 next generation smart electricity meters in The Netherlands.
- In 2022, Sagemcom's Siconia™ Software Suite (HES + MDMS) was selected by Groupe E in Switzerland to deploy an end-to-end smart meter solution.

Sense

Sense's mission is to reduce global carbon emissions by making homes smart and efficient. They empower people to care for their homes and families while contributing to a cleaner, more resilient future by using machine learning technology to provide real-time insights on device behaviour.

Customers rely on Sense for a wide range of uses including monitoring their home appliances, determining whether they left appliances running and identifying how to reduce their energy costs. For energy suppliers and grid operators, Sense's artificial intelligence helps engage customers, enables flexibility at the grid edge, identifies faults on the network, and reduces operating and power costs.

https://sense.com

@Sense

sense

Reading, United Kingdom

Markets where the company is present

EU countries: UK, Netherlands, Germany, Spain, Austria, Switzerland, Italy

Outside EU: United States, Japan, Middle East and Australia

Number of employees

In Europe

8

In total

140

Main products

- Improved customer engagement and satisfaction with real-time, detailed device detection, consumption insights, and in-home intelligence.
- Flexibility behind the meter with Behavioural and Automated Demand Side Response
- Detection and geolocation of faults on the grid e.g. vegetation brush, faulty components
- Enhanced demand forecasting for grid operators and energy suppliers
- Improved consumption reduction for mandated energy efficiency programmes

Highlights

- At $123m, Sense recently raised the largest funding round in this sector, led by European investor, Blue Earth Capital.
- Sense announced a partnership with leading smart meter makers Itron.
- Sense launched a UK pilot with DG Cities and Royal Borough of Greenwich to help council residents understand their energy consumption in real-time.
- Several million Sense-ready smart meters are now rolling out in North America
- Sense celebrated its 10th anniversary.
- Awarded with two industry titles, 'ClimateTech Company of the Year' and 'Connected Home Product of the Year'.

JSC “Sigma Telas”

www.sigmatelas.eu/en

Vilnius, Lithuania

Markets where the company is present
EU countries: Lithuania, Latvia, Estonia
Outside EU: Kazakhstan, Kyrgyzstan, Uzbekistan, Ukraine, Turkmenistan

Number of employees
In Europe
45
In total
45

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. Sigma Telas have their own software product - EMCOS Corporate.

Reference projects include five national level systems: Transmission System Operator LitGrid in Lithuania, national electricity operators BelEnergo in Belarus, Transmission System Operator KEGOC in Kazakhstan, national system in Kyrgyzstan, Gas transmission System Operator UzTransGas (Uzbekistan), 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 400.000 meters in bigger projects. System capability - up to 20.000.000 meters.

Main products

- EMCOS Corporate HES/AMI/MDM software

Highlights

- Among the completed projects, there are many significant corporate systems. These are projects implemented in big energy companies, large enterprises (e.g. Oil refinery, chemical industry), railroads (e.g. AB Lithuanian railways), supermarket chains (Maxima in Lithuania, Latvia and Estonia).
- In addition, there are systems of mobile communication providers with hundreds and thousands of connected sites: in Belarus at the mobile communication provider Velcom (up to 7,800 sites), in Lithuania (communication provider Omnitel, now Telia), in Uzbekistan at UzbekTelekom (up to 4,000 sites) and UMS (up to 6,000 sites).
- In Kazakhstan, Sigma Telas has installed systems in Kazakhmys Corporation (includes mining companies, metallurgical plants, power plants and cities), oil companies and power plants.
- The Sigma Telas EMCOS Corporate solution supports more than 400 types of meters and data concentrators and supports 7 languages (Lithuanian, English, German, Polish, Ukrainian, Uzbek and Russian).

Telit Cinterion

Telit Cinterion

www.telit.com

HQ

Irvine, California

Markets where the company is present
Worldwide

Number of employees
In total
NA

Telit Cinterion is a global enabler of the intelligent edge providing complete solutions that reduce time to market and costs, delivering custom designed, ready for market connected devices in addition to maintaining the industry's broadest portfolio of enterprise-grade wireless communication and positioning modules, cellular MVNO connectivity plans and management services, edge-cloud software and data orchestration, and IoT and Industrial IoT platforms.

As the largest western provider pioneering IoT innovation, Telit Cinterion delivers award-winning and highly secure IoT solutions, modules and services for the industry's top brands as a trusted partner and advisor for the mission critical Industrial Internet of Things (IIoT).

Their solutions have already been deployed in millions of smart meters and energy assets around the world, delivering customer value throughout the full lifecycle of a Smart Energy deployment.

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

Main products

- Main products
- Enterprise-grade wireless communication modules (incl. LTE-M, NB-IoT & Wi-Fi)
- Cellular MVNO connectivity services and eSIM connectivity management
- Device management
- Edge-cloud software and security
- Data orchestration
- IoT and industrial IoT platforms
- All complemented by customer consultancy and support over the full deployment lifecycle

Ubiik

Ubiik is a global IoT solution provider with expertise in LPWAN, cellular connectivity and services to cover the multi-modality of the IoT market. Ubiik has the most comprehensive range of connectivity services, including WeightlessTM LPWAN and LTE technologies, which have already been successfully utilised in AMI projects across Asia. From data collection to data analysis, and from meter reading to energy management, our expertise ranges across the entire smart grid value chain, with more than 300,000 meters connections already deployed. Ubiik is also committed to providing vertical solutions for a variety of industries, such as utilities and energy management.

www.ubiik.com

ubiik-inc

HQ

Taipei, Taiwan

Markets where the company is present

EU countries: France

Outside EU: Taiwan, US, Japan, India, UK

Number of employees

In total

95

Main products

- Smart metering
- AMI solutions
- IoT network solutions
- LPWAN and cellular connectivity services
- Energy management solutions
- Head End Systems
- Meter Data Management

Highlights

- Announcing world-first release 15 LTE-M/NB-IoT Small Cell for private networks.

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

@wirepas

Wirepas

wirepas

Tampere, Finland

Markets where the company is present
EU countries: Finland, France, Germany
Outside EU: Australia, India and the United States

Number of employees
In Europe
62
In total
70

Main products

- Wirepas Connectivity Suite combines field-proven mesh with built-in end-to-end services. The connectivity suite comes in 3 different profiles to best fit clients' needs:
- 5G Mesh pushes the boundaries of massive IoT with even more reliable and cellular-grade mesh-based communications, based on the new global IoT standard, DECT-2020 NR.
- Mesh 2.4GHz uses the 2.4GHz global spectrum and support for low-power or low latency use cases.
- Mesh Sub-GHz are designed for long-range and reliable application in the ISM Sub-GHz bands.

Highlights

Wirepas Mesh is the foundation for the world's largest mesh network: 920 000 smart meters in a communication network in the Greater Oslo Area in Norway.

- The company is one of the leading technology providers currently connecting smart meters in India.
- They have been the main contributor to the DECT NR+ standard in ETSI and ITU. That helps creating structure in the fragmented smart metering playground.
- The Wirepas Mesh stack is an autonomous and decentralised communication layer fitting the needs of active grid management, smart metering, and distributed energy resource integration.

WoodSwallow

WoodSwallow is a technology company with global vision that provides design, development, and consulting services for embedded systems and IoT products. They have more than 17 years of experience in the design of hardware and software embedded systems, as well as in their development, testing, support, and maintenance, and have carried out international projects for multinationals in the Energy (Smart Metering), Electric Mobility and Telecommunications sectors.

WoodSwallow believes that technology only has real value if it improves people's lives, which is why they seek to contribute to projects that aim to make people's lives easier, greener and safer.

woodswallow.tech

@WoodswallowTech

woodswallow

Seville, Spain

Markets where the company is present
EU countries: UK, Spain
Outside EU: United States

Number of employees
In Europe
47
In total
47

Main products

- Business case and Product Strategy development
- Product requirements and Product definition
- Hardware design and development
- Hardware Design Verification test
- Software testing
- Hardware and Software pre-certification testing and certifications
- New Product Introduction and Product launch
- Embedded software design and development
- Software support and maintenance

Highlights

- WoodSwallow was founded in Seville (Spain) in 2017 with a small team of six people. Just five years later, they have 47 people in their team. Their business is now consolidated, and the team have acquired deep knowledge both at a technical and business level in the energy sector, specifically in the territory of smart gas and electricity metering.
- Since WoodSwallow is specialised in smart meters, they are a strategic partner for companies seeking to outsource (either partially or completely) the design or development of these products. They also perform hardware and software pre-certification and certification services for any product. On the other hand, they have experience in the development of smart charging points for electric vehicles at home.
- In the medium term, their objective is to continue growing in these sectors, as well as in electric vehicle charging, self-sufficiency, and energy storage.

Brussel's team

Your contacts in the ESMIG Secretariat

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WE MAKE ENERGY SMART

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