

CONNECT

JUNE 2026

DSO ENTITY JOURNAL



LOCAL BY NATURE... EUROPEAN BY IMPACT



Five years after its creation, DSO Entity has become a central voice in Europe's energy transition. President **Vincenzo Ranieri** looks back on the organisation's first five years and ahead to the opportunities and challenges facing Europe's distribution grids *By Staš Zgonik*

Vincenzo Ranieri is the president of DSO Entity and CEO of E-Distribuzione, the biggest Italian DSO, serving over 30 million connections and covering about 85% of the Italian distribution market. He was present from the very beginning of DSO Entity. "We felt more like a start-up than a European organisation", he told us.

But in five years, they managed to transform a legal mandate by the European Commission into a trusted European platform, bringing together DSOs in all their diversity. "This is the real strength of DSO Entity, to help deliver a just energy transition where it truly happens, in local distribution networks."

Mr. Ranieri, what is the biggest challenge DSO Entity and European DSOs in general are currently facing?

I see four extremely relevant challenges in front of us. Firstly, there is the need to keep up with the pace and scale of the energy transition. There is an acceleration of renewables, an acceleration of electric vehicles and heat pump installations... but the reinforcement of

grids requires time and the proper conditions. We need European and national frameworks to better stimulate and support DSOs in their investments.

The second is the need to build up capability to manage the upcoming complexity. The past decade was the decade of decarbonisation. The next decade will be the decade of electrification. We must make sure that our customers can participate in the evolution of the energy sector. DSOs will have to act as market orchestrators to ensure the most efficient demand-response.

Thirdly, we must consider the security of our systems. Because we are increasingly faced with extreme weather events, cyber-attacks, armed conflicts and other threats to system integrity, security and resilience must become the precondition for the strategic evolution of the sector.

The fourth challenge, which is perhaps the most important one and depends heavily on the other three, is affordability of prices. The electricity bill and network costs must stay affordable for our customers. We cannot expect European citizens to applaud the energy

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transition if their energy bills keep growing.

In that light, there's a lot of talk about the need to strengthen the distribution networks to facilitate the energy transition. But with rapid development of demand side flexibility, there are some that doubt the rationality of large grid investments. What's the right balance between investing in strengthening the grid and counting on demand side flexibility?

We must be very bold and clear about that – this is not an either/or choice. There is no tradeoff between grid reinforcement and flexibility. Reinforcements are needed to host additional capacity and to make the grid resilient against extreme events.

On the other hand, flexibility is absolutely relevant to identify ways for better and more efficient use of the grid.

To find the right balance, flexibility must be embedded in the process from the very beginning. We must pursue flexibility with an end-to-end approach, from planning to execution. And grid reinforcement requires that investments are valued based on the expected benefits. So, a cost-benefit approach to reinforcements and an end-to-end approach to flexibility is the way to maximise both the role of DSOs and the role of its customers.

It's been five years since the establishment of DSO Entity. What do you see as its biggest achievement so far?

Helping translate the growing recognition of the importance of distribution networks into a more structured and established role in the European energy agenda. Until we came along, DSOs were seen as pure technical entities, as stewards of wires. And I think we managed to establish a recognition that DSOs are key enablers of the energy transition, decarbonisation, competence and resilience.

It is at the DSO level that most renewables connect to the grid. 70% of renewables are connected to distribution networks. Electrification takes shape on distribution grids, because 99% of customers are connected to medium and low voltage. Basically, it is on the distribution network where the energy system meets the citizens.

Empowered by different perspectives, we managed to speak with a united and unique voice to boost DSO impact at the European level.

Are there any other achievements you're proud of?

Cooperation is an aspect that becomes ever more important with rising complexity. And I would say that we have built a strong, result-oriented cooperation with key European partners, namely DG ENER, ENTSO-E and ACER. This cooperation was aimed at sharing priorities and defining coordinated action across the energy system. I think this kind of alignment between TSOs and DSOs is crucial from a technical and strategic perspective, as well as a business and customer one, to make sure that the right things happen when and where they're needed.

“When you have a company to manage, your decisions are final. When you are the president of a large European organisation, your job is to create consensus and decide in unison.”



11th Energy Infrastructure Forum, organised by European Commission, 02/06/2025, Copenhagen

Secondly, we have managed to build a community of experts, and this community in turn managed to create a common language across Europe. There are thousands of DSOs in Europe, each of them with its own view on technical difficulties and planning priorities. Having a group of experts that can speak the same language helped us greatly in the knowledge sharing activities we engage in every single day, to help and support our members to work together on a common goal.

Thirdly, we managed to build up a Technical Vision that was developed with the contributions from the experts, but also with active contributions from the board members, to define a shared, forward-looking framework for DSOs. We succeeded in defining the core building blocks that can be accommodated and adapted with respect to specific DSO landscapes and their level of maturity.

The main prerequisite is DSOs need to have a customer-centric approach, to guarantee that our goals are achieved in the interest of the citizens and the customers we serve every day.

How do you remember the beginnings of DSO Entity?

When we started our journey, we felt more like a startup than a European organisation. At the very beginning, there were just three of us. There were no policies, no technical rules, no protocols...

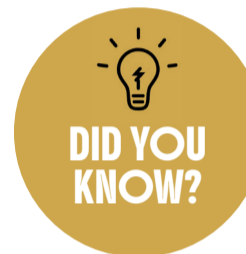
At the first board meeting, there were many diverse perspectives, some skepticism was also present. But after intense work and a very demanding period, we gradually built the trust that every institution ultimately needs to rely on. Everything else we have achieved was built on that foundation.

What is the difference between running a large DSO and being president of a European organisation?

When you have a company to manage, your decisions are final. When you are the president of a large European organisation, your job is to create consensus and decide in unison. And building consensus requires a humbler approach. You must be a servant. So, I acted as a servant leader of the board members and a servant leader of an organisation that needed to define its priorities

Were you concerned that the job you were given won't turn out the way you imagined?

After five years, I would say I have an enormous sense of gratitude. At the very beginning, I can confess I was not aware of how much complexity I would have to deal with, not just in managing an organisation, but also contributing through our DSOs platform to address the crises we, as Europe-



DSO Entity moved this year to a brand-new headquarters in the middle of the European neighbourhood! Come visit us at Rue Belliard 35, Brussels 1040

ans, had to deal with in this relatively short time.

What made me particularly proud were the moments when we needed a decision and we became stuck due to differences in opinion. In the end, all of the board members were willing to give up their personal positions to the benefit of a European perspective. When this happens, all the effort we put in is paid back.

I can say that the board of directors and DSO Entity as a whole made me a better person, a better manager and a better leader. A special recognition also goes to the DSO Entity staff for their professionalism, dedication and commitment throughout these years. Their contribution was essential in transforming an ambitious mandate into a respected European organisation.

Which of your expectations from five years ago came true already and which ones are still “pending”?

One of the key expectations was to build a platform, capable of turning a diverse landscape into a coordinated European voice and to be a driver of practical solutions. We must turn ideas into direction, direction into action and action into practical solutions. I think that was an important goal that we managed to achieve, together with all our members and member states.

The one thing still pending is a clear alignment between ambition and delivery. I think there are many things that still need to happen in practice, for example addressing the long lead times in grid connections, building a clear, forward-looking framework for investment, and strengthening of the supply chain.

The next three to five to ten years for Europe need to be the years of delivery. And this is what all institutions need to focus on. A key opportunity to further increase our impact is opening a new chapter for DSO Entity through the integration of gas DSOs. This is an important evolution: it broadens our perspective, strengthens coordination across energy vectors and brings additional expertise into our work.

European DSOs, as you already mentioned, are very diverse, but they are united in that diversity, thanks to DSO Entity. What is the most important common characteristic that binds them together?

We share a motto across the entire DSO Entity: DSOs are local by nature and European by impact. Each single DSO is managing its own priorities, its own grids' faults, and its own connections. But all put together, we have a European impact, especially because the distribution grid is where most of the energy transition is happening.

Staš Zgonik is Editor-in-chief of *NAŠ STIK* energy magazine.



EXPERT INSIGHT

Paul de Wit
(Alliander) Chair Expert Group Data Interoperability

Data is becoming the backbone of the energy transition. As grid congestion grows across Europe, customers need access to clear, real-time information to actively support a smarter and more flexible energy system.

This is where data interoperability becomes critical. It enables solutions to work across borders and helps DSOs provide the insights needed on consumption, flexibility and grid capacity. One of the Expert Group's first achievements was contributing to EU legislation on interoperability for metering and consumption data.

FOR ALL OF EUROPE

From local cooperatives serving a few thousand customers to national operators managing millions of connections, Europe's DSOs reflect the diversity of the continent's energy landscape. Together, they form the backbone of the energy transition, connecting citizens, businesses and renewable energy sources across every Member State. Today, DSO Entity brings together this diverse network under a common European platform, helping translate local realities into a shared voice at EU level.

> 250 Million

Connected customers
(household and industries)

18 Million KM

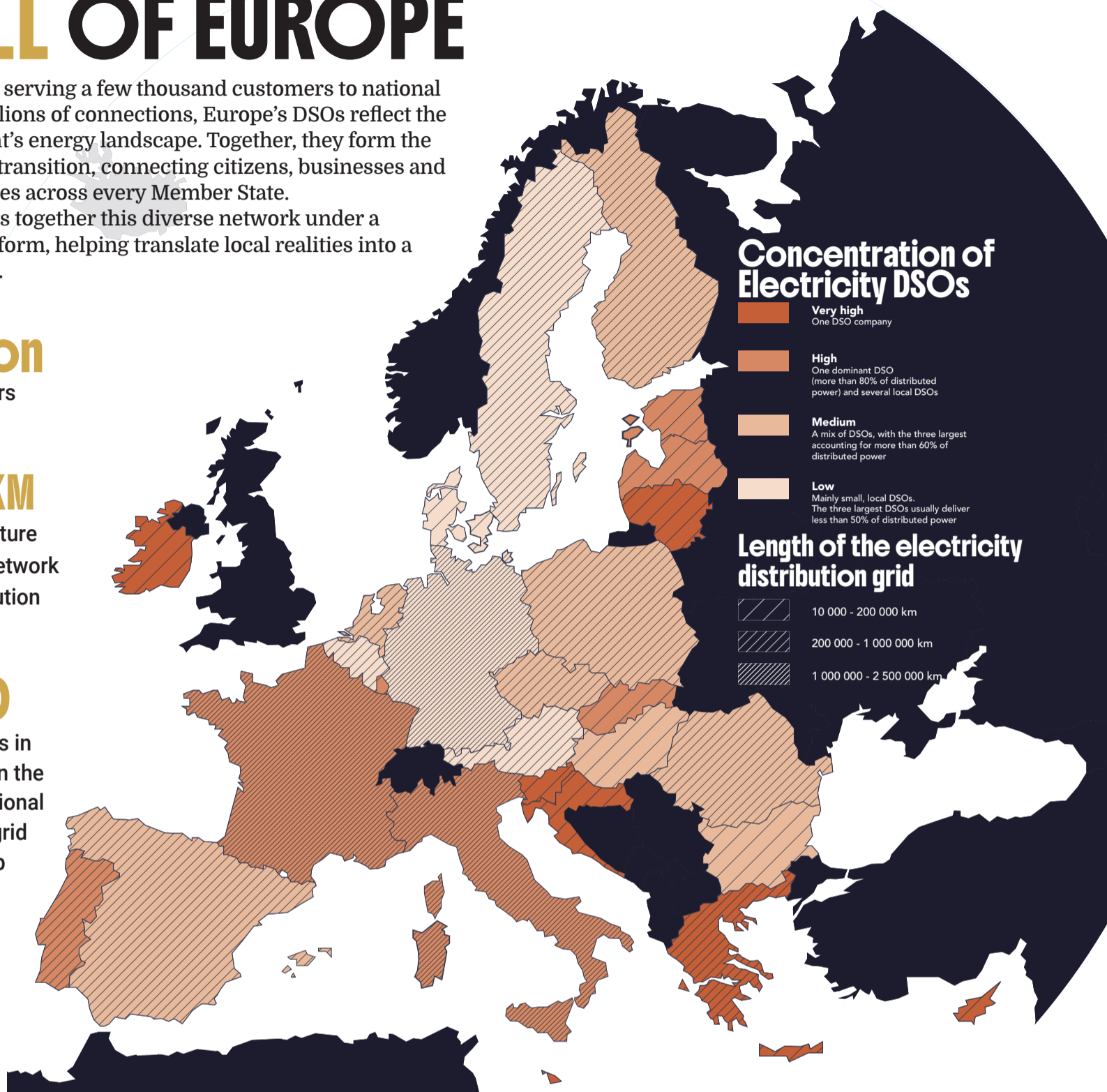
of cable and infrastructure
of the EU's distribution network
and **4 million** distribution
transformers

835,000

direct and indirect jobs in
electricity distribution in the
EU and **2 million** additional
workforce needed if grid
investments pair up
with demand

>2,570

diverse DSOs
in the EU



STORIES FROM THE NETWORK

From expert groups to strategic partnerships, DSO Entity's strength lies in the people and organisations behind it. Members and partners reflect on the collaboration, shared expertise and collective ambition that have shaped the organisation over the past five years.

MEMBER SUCCESS STORIES

Ramon Gallart Fernandez
(Anell) DSO Entity Board

Being part of DSO Entity has placed ANELL at the centre of energy discussions in Europe. This helps us anticipate changes in regulations and technology, while strengthening our working relationships. We particularly highlight the efforts in local flexibility, digitalisation, and network codes, which are essential for integrating renewable energy and improving system operations. These exchanges allow us to learn from others and apply new ideas in our own context. In summary, the main advantage is building a unified voice for DSOs across Europe. This strengthens ANELL's commitment to a more sustainable, resilient, and people-centered electricity system.



Torsten Knop
(E.ON) Expert Group
Distributed
Flexibility Chair

The 26 DSOs of E.ON group joined DSO Entity because they are convinced that – in addition to suitable national regulatory regimes – we need a European framework facilitating affordable decarbonisation. Flexibility plays a key role by enabling DSOs to plan, develop and operate optimal grids. EG Distributed Flexibility is working on essential topics in this respect. The Network Code Demand Response (NCDR), which will be the central instrument to realise the flexibility potential. The Flexibility Needs Assessments, that will guarantee sufficient national focus. Grid Hosting Capacity measures, which provide transparency for network customers. Through this daily work, we believe sharing best practice - in particular thanks to our reports - enables us to learn from each other.



PARTNER SUCCESS STORIES

Laurence Poirier-Dietz
(GRDF) CEO

The progressive integration of gas DSOs into DSO Entity is not a technical detail: it's a structural and positive evolution. For the first time, electricity and gas DSOs will cooperate within a common European framework to shape network codes, system planning and integration pathways. That is exactly the direction Europe must take. System integration cannot happen in silos, it must happen together, to the benefit of the energy mix and the resilience of energy systems, and to enable a successful energy transition.



Sonya Twohig
(ENTSO-E) Secretary General

Coordination between system operators across voltage levels is essential to deliver an affordable, secure, and decarbonised energy system. Our collaboration with DSO Entity has matured significantly, enabling key results and stronger alignment on strategic priorities. Looking ahead, we will continue to deepen this partnership in support of Europe's energy transition.



5 YEARS OF

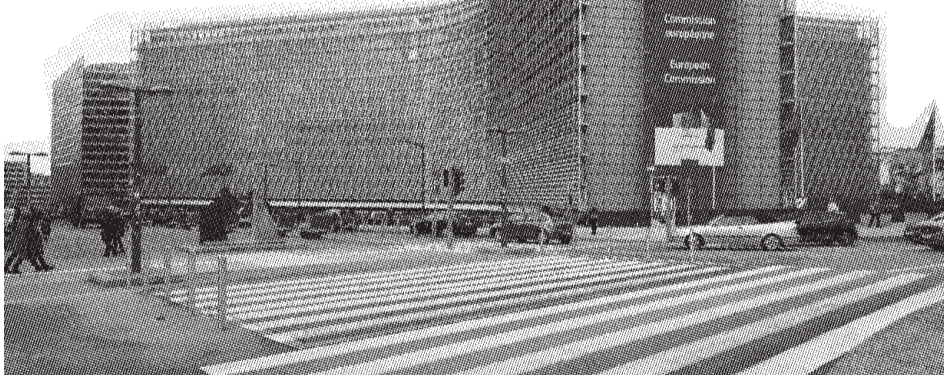
From the Clean Energy Package to the Technical Vision,

2019/2020

THE EU GREEN DEAL, THE FIT FOR 55 PACKAGE AND THE FIRST EU CLIMATE LAW marked a turning point in EU energy policies by setting binding targets to cut the EU's GHG emissions by 55% by 2030 and achieve Europe's carbon neutrality by 2050. A target of 42.5% of renewable energy sources in the EU's energy mix by 2030 was proposed, initiating a surge of grid connection requests. DSO Entity plays a role to facilitate the RES integration and deal with connection issues and data centres.

JANUARY

Clean Energy Package (entry into force) including the revision of the Electricity Regulation establishing DSO Entity under Art. 52-56 as the first EU mandated association representing DSOs in the EU and involving them in the development of network codes and other European technical legislation.



2020



24 JUNE

DSO Entity Statutes containing the rules of governance were formally submitted to the Agency for the Cooperation of Energy Regulators (ACER) and the European Commission. It is mandated to be an expert body working for the common interest of the EU to increase efficiencies in the electricity distribution networks of the EU, while ensuring close cooperation with transmission system operators (TSOs) and the European Network of Transmission System Operators for Electricity (ENTSO-E).

2021

6 MAY

DSO Entity's work has officially started following its first General Assembly meeting. President Vincenzo Ranieri (E-Distribuzione SpA), newly elected by the Board pending final endorsement from the second meeting of the General Assembly on 30 June 2021, said: "An important step has been taken today in setting up an active platform for the electricity DSOs. This comes at the right time given the challenges that need to be addressed by our industry, and which will allow the electricity DSOs to contribute actively to achieving the EU's climate neutrality goals. I am looking forward to collaborating with my colleagues on the board and make this a success."



JUNE

Peter Vermaat is appointed as Secretary General, and starts to work from a first, temporary office in Brussels.



Official launch of DSO Entity, 06/05/2021

2022



Sonya Twohig and Peter Vermaat signing the DSO Entity-ENTSO-E MoU, 11/01/2022

JANUARY

EG Cybersecurity submitted the Network Code Cybersecurity.

11 JANUARY

DSO Entity and ENTSO-E have signed a Memorandum of Understanding (MoU) as a first step in their cooperation. In the MoU the two associations state their willingness to cooperate as equal partners, with a result-driven, consensus-seeking, and full-system view. This cooperation will take the form of regular meetings, the creation of joint task forces with a balanced representation of TSO and DSO experts, and an alignment of their annual work programs on shared priorities.



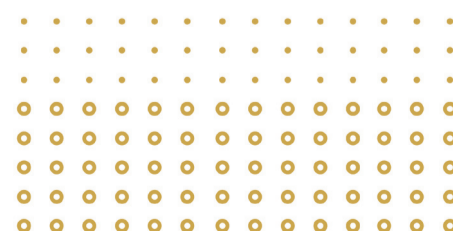
First DSO Entity Board Meeting, 19/05/2022

1 APRIL

DSO Entity and the four DSO associations met within the new Strategic Advisory Group established by the Statutes. The new governance body provides space to collaborate and develop joint initiatives sharing the perspective of European DSOs like the recent joint statement on the Grids Package published in March 2026.

18 MAY

REPowerEU set out the EU's strategy to rapidly end dependence on Russian fossil fuels by combining immediate energy savings, diversification of gas supplies, and a major acceleration of RES deployment. It included both policy initiatives (e.g. the EU Solar Strategy, hydrogen targets, and joint gas purchasing) and funding measures, notably the introduction of dedicated REPowerEU chapters within the Recovery and Resilience Facility.



EXPERT INSIGHT

Flore Patrat-Delon
(E.ON) Chair Task Force DESAP

Europe's power systems are growing more complex, and system operators must master that complexity. In 2025, DSO Entity and ENTSO-E launched the DSO/TSO Technopedia: a landmark tool empowering system operator to actively manage the energy transition, rather than merely adapt to it. The DSO/TSO Technopedia showcased 12 technologies and their use cases. It received 30 applications from system operators and technology providers, and we continued the DSO/TSO Technopedia development in 2026 by opening a call for applications for an additional 12 new technologies.

PROGRESS

explore the milestones that shaped DSO Entity's first five years.

2023

JUNE

DSO Entity joined the European Stakeholder Committees, co-organised by ACER and ENTSO-E, to engage in the amendment of existing network codes, particularly the Grid Connection Codes.

17 NOVEMBER

DSO Entity hosted its first annual event in a time of "European Grid momentum" with distribution grids in the spotlight as European DSOs see their role as key participants of the energy transition grow. The event triggered fruitful exchanges and brought to life the manifold realities of European DSOs.

28 NOVEMBER

Following the first EU high-level forum dedicated to electricity grids in September 2023, the EU Grids Action Plan marks the start of a European grid momentum. For the first time, grids are identified as the missing piece of the energy transition puzzle and technical enablers behind most of the EU's energy objectives. DSO Entity is recognised as a key institutional partner for its implementation, receiving core assignments on network planning, funding for DSOs, supply chain and digitalisation of grid connection.

30 NOVEMBER

DSO Entity and the European Network for Cyber Security (ENCS) signed on 30 November 2023 in Paris a Memorandum of Understanding (MoU) to develop the state of the art of cybersecurity regulation, practices, and standards for the electricity distribution system.



DSO Entity 1st Anniversary event, 17/11/2023

2024

8 MAY

DSO Entity and ENTSO-E submitted to ACER a joint proposal for Network Code Demand Response, establishing common EU rules supporting the participation of demand-side flexibility resources in electricity markets.

JUNE

The revision of the gas/H2 market regulation entered into force on 4 August 2024 and prescribed the integration of gas DSOs into the existing structure of DSO Entity. The cooperation of gas DSOs through DSO Entity was proposed in Art. 36f of the Regulation.

16 JULY

The reform of the EU's electricity market design entered into force on 16 July 2024 as a response to 2022's high and volatile energy prices, providing key provisions for DSOs and assigning DSO Entity with developing the Flexibility Needs Methodology by April 2025.



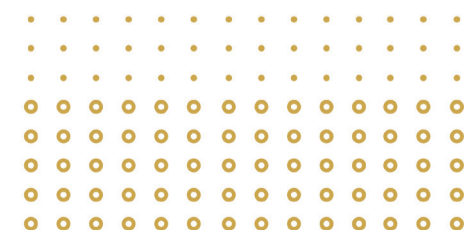
Technical Vision launch, 05/12/2024

OCTOBER

Launch of the Task Force Legal supporting the 200+ experts engaged in DSO Entity's Expert Groups and Task Forces.

5 DECEMBER

DSO Entity presented its Technical Vision, with which it aims to establish unified framework and common language among DSOs, to guide a new system-of-systems to emerge that not only serves customers with a reliable, affordable and sustainable system but also strengthens the competitiveness of European industry.



2025



Technopedia launch at European Commission's PCI Energy Days, 03/12/2025

17 APRIL

DSO Entity and ENTSO-E submitted to ACER a joint proposal for Flexibility Needs Assessment methodology, providing a common framework enabling TSOs and DSOs to assess flexibility needs and support Member States in defining non-fossil flexibility targets.

29 APRIL

DSO Entity and ENTSO-E unveil the DSO/TSO Technopedia platform, a new initiative stemming from the European Commission's Action Plan for EU Grids released on 28 November 2023. This plan outlined a series of measures to accelerate the development of electricity infrastructure, assigning DSO Entity and ENTSO-E with the role of advancing smart grid adoption, boosting network efficiency, and promoting innovative technologies.

13 JUNE

DSO Entity and ENTSO-E published Version 1.0 of the Cybersecurity Risk Assessment Methodology and the Cyber-attack Classification Scale Methodology as part of the first NCCS implementation package, together with:

- Provisional list of standards and controls
- Provisional list of Union-wide high-impact processes
- Provisional Electricity Cybersecurity Impact Index

These documents operationalise the requirements of the NCCS after its entry into force in June 2024.

7 JULY

ENTSO-E and DSO Entity launched the Joint Working Group (JWG) Data Interoperability Repository, a new digital platform developed in line with the European Commission's Implementing Regulation (EU) 2023/1162. This initiative marks a key milestone in the implementation of the EU's data interoperability framework and supports the broader goals of the energy transition.

10 DECEMBER

The publication of the Grids Package confirms the recognition of electricity grids as the backbone of a resilient, competitive and sustainable Europe with key measures on planning, permitting and connecting. DSO Entity is assigned with two new tasks, establishing a platform for Distribution Network Development Plans and providing jointly with ENTSO-E an EU-wide overview of national connection queues.

2026 >



FEBRUARY

Security and energy independence are high on the EU agenda amid geopolitical tensions and rising energy prices. DSO Entity's Resilience Report highlights the critical role of DSOs in strengthening Europe's energy resilience, while showcasing best practices from its Country Expert Group, which brings together representatives from all 27 EU Member States.

JUNE

The integration of gas/H2 DSOs into the existing structure of DSO Entity is started.

THE TECHNICAL VISION: REIMAGINING EUROPE'S DISTRIBUTION GRID

Carlos Castel, Team Lead Expert Groups & Task Forces, on flexibility, resilience, digitalisation and the future role of Europe's distribution grids.



When DSO Entity launched its Technical Vision for electricity grids in early 2025, the objective was to provide a common framework to guide this transition. One year on, that Vision is no longer a purely strategic reference point; it is increasingly reflected in the methodologies, interoperability frameworks, and planning tools developed through DSO Entity's technical work. What is becoming clear is that the real challenge is no longer defining the direction of travel but delivering it in practice.

Across key areas, including flexibility integration, system operation and data management, the focus has shifted from defining principles to implementing solutions as system complexity continues to increase.

FROM FLEXIBILITY TO SYSTEM INTEGRATION

One of the clearest lessons from the past year is that flexibility is no longer a theoretical concept. It is an operational reality. As distributed energy resources scale, the challenge is how to integrate flexibility into system management in a way that is both efficient and reliable.

In my view, this is where the role of DSOs is evolving most rapidly. Integrating flexibility requires coordination between system operators, market actors, and regulators, alongside a shared understanding of how flexibility should be activated. Work within DSO Entity's expert groups is already translating this into practical approaches, informed by operational experience and implementation of dialogue.

At the same time, active consumers are reshaping the system. Energy sharing and demand-side participation are becoming structural features of the electricity landscape. Ensuring this participation is seamless, secure, and scalable is now a core responsibility for DSOs.

PLANNING AHEAD: GRIDS FOR ELECTRIFICATION

The scale of transformation is placing pressure on Europe's distribution grids. While flexibility and improved coordination can enhance efficiency and system reliability to maximise grid utilisation, they cannot replace the need for significant infrastructure investments. This is a critical point. Anticipating future demand and generation patterns is, therefore, not just a technical exercise but a strategic necessity.

A more forward-looking approach to planning is emerging, driven by improved data, greater transparency, and better visibility of available capacity. New tools, such as Flexibility Needs Assessment Methodology (FNAM) and Capacitypedia, are playing an important role in improving system insight and supporting informed decision-making, including the development of anticipatory investment strategies.

However, delivering the required grid expansion

for the energy transition ultimately depends on the right regulatory and investment conditions. Without timely investment, electrification will outpace system capacity.

FROM PASSIVE NETWORKS TO ACTIVE SYSTEM OPERATION

This transformation is also changing how DSOs operate. Passive network management is giving way to a more dynamic approach, where DSOs manage bidirectional flows, integrate distributed resources, and respond to more complex system conditions.

Recent operational experience, including major system events, has underlined the need for stronger coordination methodologies and shared technical approaches. Working on grid-forming capabilities of guidance and evolving network codes helps DSOs adapt.

In practice, DSOs are playing a more active role in managing an increasingly decentralised grid in real time. This shift requires new capabilities, new tools, and much closer coordination with TSOs and across the energy system.

DATA AS CRITICAL INFRASTRUCTURE

Underlying these developments is a fundamental shift in the role of data. As the system becomes more complex, interoperable data frameworks are essential. Effective coordination depends on the ability to exchange and process data in a consistent and secure way.

Progress in areas such as demand response is already demonstrating the value of aligned interoperability frameworks. More broadly, data architecture is emerging as an infrastructure in its own right, underpinning planning, operations, and customer engagement.

BUILDING RESILIENCE IN A CHANGING SYSTEM

Resilience is becoming an increasingly central

consideration. Climate change is intensifying extreme weather events, while digitalisation is expanding exposure to cybersecurity risks. At the same time, the electrification of the economy and the growing integration of renewable energy sources are strengthening long-term resilience. These challenges are deeply interconnected.

Addressing them requires more collaborative approaches to risk management, including common methodologies for cybersecurity and business continuity. Recent experience has reinforced the importance of preparedness, coordination, and effective crisis response.

Resilience is no longer a separate objective. It is a core requirement for ensuring reliable and secure energy supply.



EXPERT INSIGHT

Florentien Benedict
(Stedin) Chair Expert Group
on Existing Network Codes

The Expert Group on Existing Network Codes was among the first to be established, reflecting the early priority given to both the revision and practical implementation of existing rules. Our work is highly technical, providing structured input, notes, and coordinated positions to support both the revision and consistent implementation, especially of grid connection network codes and system operation topics, such as lessons learnt from the Iberian Peninsula incident.

Recognising the growing importance of distribution system operation, alongside the rapid growth of renewable resources and the evolving requirements of energy transition technologies, the amended technical network codes should fully reflect the rights and obligations of DSOs. As Chair, I am pleased to work on these issues with a diverse group of highly knowledgeable experts from across Europe.

OVERVIEW OF TECHNICAL VISION DELIVERABLES

PILLAR	KEY DELIVERABLES
MARKET FACILITATION >	Distributed flexibility best practices report; Demand Response Expert Stakeholder Group (DRESG) implementation dialogue support
PLANNING >	Flexibility Needs Assessment Methodology (FNAM); Capacitypedia; Distribution Network Development Plan (DNDDP) contributions; investment and financing analyses
ACTIVE SYSTEM OPERATION >	Iberian incident expert panel contribution; grid forming capability guidance; network codes contributions on Requirements for Generators (RfG) and System Operation Guidelines (SOGL)
DATA & DIGITALISATION >	Harmonised Electricity Model Role Model (HEMRM); Implementing Regulation on Demand Response (IR DR); digital twin concepts
RESILIENCE >	Cybersecurity methodologies; classification scale; business continuity tools



FROM VISION TO IMPLEMENTATION

One year on, the Technical Vision is beginning to deliver on its ambition of providing a practical framework to navigate this transformation. Through its expert groups and technical initiatives, DSO Entity is translating strategic priorities into concrete solutions and shared approaches.

But the work is far from complete. As electrification accelerates and system complexity grows, the Technical Vision will need to evolve alongside it. In my view, its real value lies in its ability to connect strategic ambition with technical implementation, ensuring that Europe's distribution grids can support a more sustainable, resilient, and customer-driven energy future.



Europe's distribution grids will require **€55–67 billion** in annual investment until 2050 to power the energy transition and support renewables, EVs, heat pumps and industrial electrification.

(Source: Tariffs and Incentives: a premier for the future Published: 12 January, 2026)



INTEGRATING GAS AND H2 DSOs

THE INTEGRATION OF GAS DISTRIBUTION system operators marked a significant milestone in the evolution of DSO Entity. What began as a platform for electricity DSOs is now expanding to reflect a broader reality: Europe's energy systems are becoming increasingly interconnected.

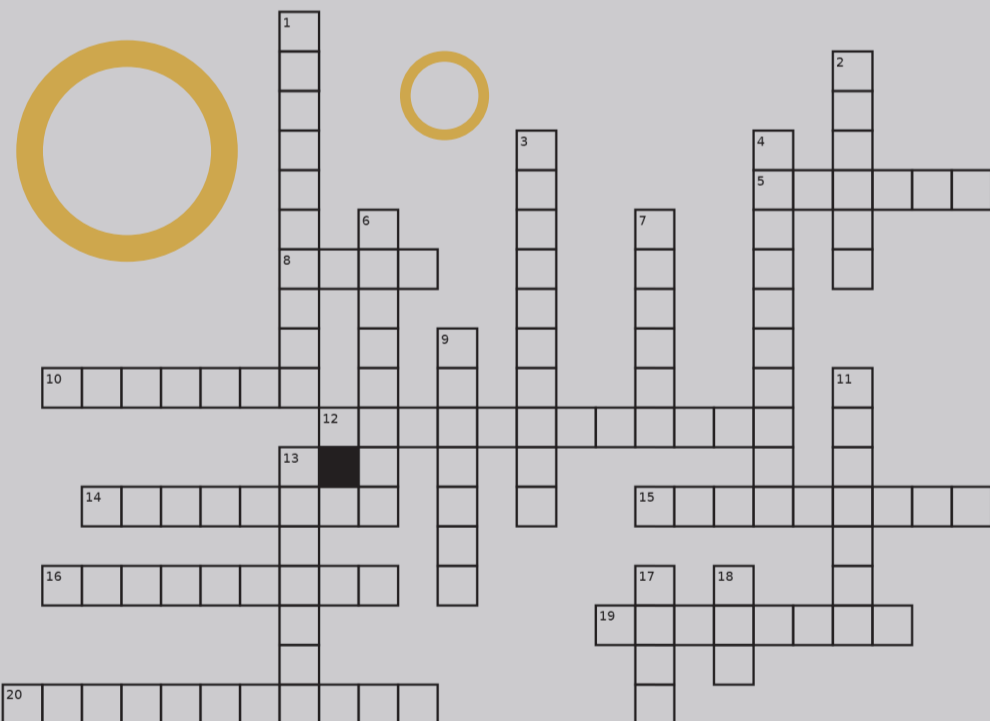
This evolution has been building over time. In June 2024, the revised EU gas and hydrogen market framework formally recognised the role of gas DSOs within a common European structure. By 2026, this integration is being fully realised within DSO Entity, marking a concrete step towards closer cooperation across energy vectors.

With the inclusion of gas and hydrogen networks, DSO Entity is evolving into a more

integrated forum for system operators. This reflects a simple reality: the energy transition cannot be delivered in silos. Electricity, gas and emerging hydrogen networks must work together to support decarbonisation, system flexibility and security of supply.

This integration also strengthens DSO Entity's role at EU level. By bringing together expertise across energy vectors, it enhances its contribution to network codes, system planning and technical frameworks that reflect a more integrated energy system.

As Europe moves towards climate neutrality, this step signals a clear direction of travel: closer coordination, stronger system integration, and a more holistic approach to managing the networks that underpin the energy transition.



DOWN

- 1 Type of energy, obtained from naturally recurring sources which are replenished at a rate equal or faster than their consumption (10)
- 2 Powering homes, businesses and industry (6)
- 3 When part of the grid reaches its thermal, voltage or stability limits, or other operational constraints (10)
- 4 Ability to prepare for, withstand, adapt to, and recover from high-impact, low-probability events and other disturbances, minimising the duration and extend of service interruptions (10)
- 6 Ability of an electric power system to maintain a secure operating state and to withstand credible contingencies, such as equipment failures or sudden changes in generation and load, while preserving system stability and reliability (8)
- 7 Where electricity and flexibility are traded (6)
- 9 Interconnected set of electrical components, including lines, transformers, protection devices..., that allows the transfer and control of electricity from generation sources to end users (7)
- 11 Electrical pressure in a power system (7)
- 13 Grid transformation driven by data and technology (7)
- 17 Infrastructure carrying electricity across Europe (4)
- 18 Operator managing local electricity networks (3)

POWER PLAY

Think you know your flexibility from your frequency response? Put your knowledge to the test.

ACROSS

- 5 Continent driving the energy transition agenda (6)
- 8 EU agency for cooperation of energy regulators (4)
- 10 An important natural factor to keep into account when talking about energy (7)
- 12 Delivery of electricity to homes and businesses from transmission substations through medium and low-voltage networks (12)
- 14 Maximum amount of electricity a grid can safely carry (8)
- 15 EU legal act setting rules for Member States (9)
- 16 Keeping electricity supply and demand aligned (9)
- 19 Consumer who also produces electricity (8)
- 20 Capability of modern electricity systems to respond to variability and uncertainty in generation, demand and network conditions while preserving system security and quality of service (11)



EXPERT INSIGHT

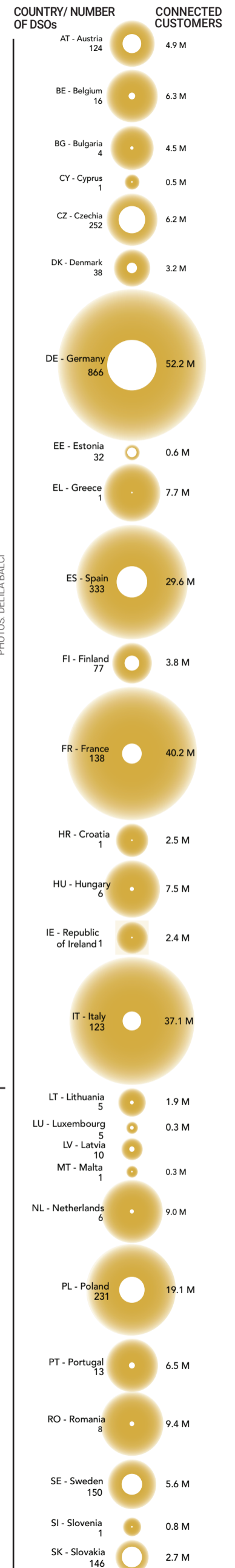
Expert Group Cybersecurity

The full implementation of the NCCS will act as a strong enabler for more resilient and trusted DSO grids across Europe. By setting a common cybersecurity baseline, it helps DSOs anticipate and manage cyber risks in an increasingly digital and interconnected environment. Shared practices for risk assessment, incident handling and crisis coordination will improve collective preparedness and limit the propagation of cyber incidents beyond local networks. The NCCS also reinforces confidence in digital technologies and the supply chain, supporting secure grid modernisation. Ultimately, it strengthens the reliability of electricity distribution and the trust of stakeholders in Europe's energy system.



PHOTOS: DELILA BALCI

TOWER OF POWER



THE TEAM BEHIND THE NETWORK

From technical experts and policy specialists to communications, legal and operational support, DSO Entity Secretariat has helped transform an ambitious European mandate into a trusted platform for cooperation. Over the past five years, their work has supported expert groups, facilitated dialogue across the energy sector and helped give Europe's DSOs a stronger collective voice.

DSO ENTITY CONNECT

SENIOR COMMUNICATIONS MANAGER
Stefania Facco

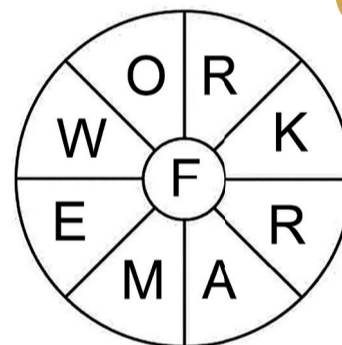
COMMUNICATION OFFICER
Anna Pes

MANAGING EDITOR
Tom McClure

CREATIVE DIRECTOR
Keith Drummond

Rue Belliard 35,
1040 Brussels, Belgium
eudsoentity.eu

POWER PLAY



WORD CIRCLE

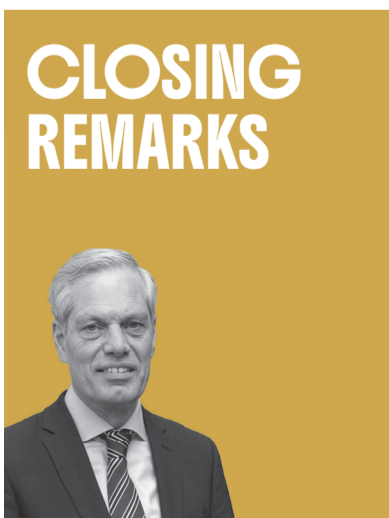
How many words can you make from FRAMEWORK?

We found 45 with four letters or more — see how many you can spot. And no, you can't use ChatGPT.

CROSSWORD ANSWERS:
1. Renewables, 2. Energy, 3. Congestion, 4. Resilience, 5. Europe, 6. Security, 7. Market, 8. ACER, 9. Network, 10. Climate, 11. Voltage, 12. Distribution, 13. Digital, 14. Capacity, 15. Directive, 16. Balancing, 17. Grid, 18. DSO, 19. Prosumer, 20. Flexibility

THE POWER OF DIVERSITY

Secretary General Peter Vermaat reflects on diversity, leadership and the evolution of Europe's DSOs.



CERTAINLY, SIZE AND REPRESENTATION matter, but what makes DSO Entity truly distinctive is not its scale, but its diversity — and that diversity runs deep. Our membership spans the full spectrum of distribution network operators: from lean, small organisations managing a few thousand connections, to sprawling networks serving upwards of thirty million. Size, of course, is never just a number. It shapes culture, dictates operational logic, and defines the pace at which change can take hold.

And change is precisely what is at stake. The energy transition is, at its core, also a cultural one. The rapid growth of renewable energy sources and the emergence of two-way energy flows are rewriting the rules. Distribution networks can no longer be passively managed; they must be actively orchestrated.

This is what we call active system management.

This shift demands more than technical adaptation and digitisation. It demands a change in mindset — one that embraces proactivity, welcomes coordination with external stakeholders, and away from the relative anonymity of the past.

There is also a broader story of recognition to be told. Not so long ago — five, perhaps ten years — the spotlight fell almost exclusively on transmission networks. Distribution remained, largely, in the shadows. The establishment of DSO Entity has helped changing that at EU level. We have worked, deliberately and with conviction, to bring the visibility and strategic importance of DSOs to the fore, at both the European and national level. That shift in perception is no small achievement and helps DSO Entity to unite DSOs to deliver a just energy transition.