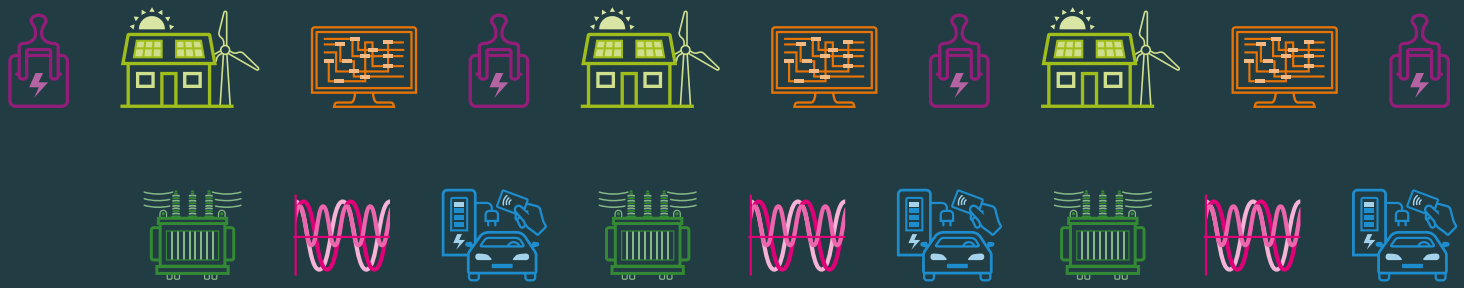
CIRED
GENEVA, SWITZERLAND
16 – 19 JUNE 2025

28th International Conference and Exhibition on Electricity Distribution

16 – 19 June 2025 | Geneva, Switzerland

Europe's leading international conference and exhibition on electricity distribution

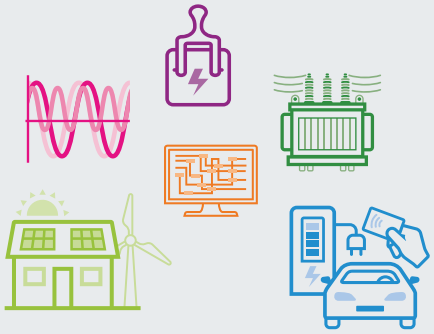


Call for Papers

Submit your abstract at **cired2025.org** by 13 September 2024

Showcase your latest research, results, and innovations in electricity distribution to hundreds of engineers and business leaders. Presenting your work at CIRED is a fantastic opportunity to bring your name in front of a wide, international audience.

CIRED is your unique opportunity to be part of the programme of Europe's most important electricity distribution conference. Submitting a paper is a prime opportunity to raise your professional profile in the sector, and showcase your work to 1,600 key players from utilities, industrial users, manufacturers, regulators, consultants and academics.



Why submit a paper?

- Every accepted paper will be published by CIRED with indexing in some of the most important databases, including IEEE Xplore, IET Inspec, Ei Compendex, and Scopus.
- Every author of an accepted paper has the opportunity to display their work in CIRED's renowned interactive poster session with guided tour. These sessions bring interested delegates directly to you, and opens up in-depth discussion.
- Authors of especially high scoring papers will be invited by the session chair to give an oral presentation in the main sessions, with the aim of ensuring an interesting and balanced debate.
- Papers with a special focus on research and innovation will be selected for presentation and discussion in a Research Innovation Forum (RIF) session.

Key dates to note

Abstract submission deadline	**Friday 13 September 2024**
Author notification	**Friday 8 November 2024**
Full papers deadline	**Friday 24 January 2025**
Author notification	**Friday 28 March 2025**
Author paper amendment deadline	**Friday 11 April 2025**
Author registration deadline	**Monday 28 April 2025**

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Technical scope

Session 1

Network Components

Session 1 deals with all aspects related to the components used in the electricity distribution networks: cables, overhead lines, primary and secondary substations, transformers, switchgear, protection and monitoring systems, power electronics. It covers topics related to the life cycle of assets from design to end of life management.

The session also covers environmental concern including eco-design and life cycle analysis, standardisation, ergonomics and safety. It aims at providing an overview of the state-of-the-art and proposals for future components, including those needed for smart grids, e-mobility, smart cities and microgrids, as well as components for more resilient networks in the context of climate change anticipation.

This session is an opportunity for DSOs and manufacturers to share their objectives.

- Components for smart distribution grids
- Components reliability, diagnosis and maintenance strategy
- Components for large cities distribution networks
- Towards “greener components”
- Innovation in design of components

Session 2

Power Quality and Safety

Session 2 deals with any phenomena related to power quality (PQ). This includes e.g. flicker, unbalance, distortion in the frequency range from DC up to 500 kHz as well as events like sags or swells.

The session also covers all aspects of electromagnetic compatibility (EMC) including emission, immunity, its coordination and the related standardisation. Conducted and radiated electromagnetic interferences, electric and magnetic fields (EMF) as well as grounding issues are addressed.

- PQ related to modern technologies
- PQ measurement, analysis and system monitoring
- Continuity of supply, PQ standards and regulatory issues
- Electric and magnetic fields, immunity and safety issues
- PQ issues at the interface between distribution and transmission grids

See the full technical scope and submit your abstract at **cired2025.org** by 13 September 2024

Technical scope

Session 3

Operation

Session 3 deals with operational use of components (Session 1) and systems (Session 4) in public, industrial and private distribution networks in normal operation as well as in any case of disturbance.

Session 3 covers all aspects of grid operation including strategies and management topics, challenges and new application, the integration of DER and special applications. Focus is on the use of new technologies such as artificial intelligence and the operational challenges to integrate and operate new types of load, such as electric vehicles and storage.

- Strategies and Management
- Operation Centre
- Operation in the Field
- New Use Cases and Special Applications

Session 4

Protection, Control and Automation

Session 4 deals with design and implementation of systems for protection, control and automation in distribution networks.

The consideration of historical grown concepts as well as the latest developments in the world of protection, control, communication, and automation are topics in this session. Emphasis is also placed on practical application and experience in operating the systems. But the latest developments, scientific findings and considerations as well as algorithms and simulations are also of great importance.

- Protection
- Control and Monitoring
- Communication and IT Security
- Automation

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Technical scope

Session 5

Planning of Power Distribution Systems

Session 5 deals with short- and long-term development of high, medium and low voltage distribution networks, concerning the changing requirements for electricity distribution including, but not limited to, smart grids and active distribution networks, electrification and electromobility, energy storage, flexibility, distributed energy resources integration, present and future customer quality of supply requirements, and optimum asset utilisation techniques and strategies.

Papers dealing with meeting the energy transition goals, rural electrification, and strategies to increase resiliency are also expected.

- Demand and generation forecast
- Performance requirements, results, and benchmarking
- Network schemes and design criteria
- Network planning
- Investment strategies

Session 6

Customers, Regulation, DSO Business and Risk Management

The energy transition is well under way, where policies are shaped, reinforced and clarified with the target to speed-up the transition, increase security of supply and system resilience, and enable flexibility.

The DSOs are in the centre of this transition both to secure the current situation and enable the coming steps. This is certainly a challenging situation, but also a situation with a lot of possibilities and a high degree of engagement. Key aspects for Session 6 include policy/regulation, business management, customer interaction, digitalisation and cybersecurity.

- Policy, regulation, integrated energy systems and DSO roles
- Customer interaction, energy sharing, e-mobility and flexibility
- DSO business risk management
- Digitalisation, AI, business processes and cybersecurity

See the full technical scope and submit your abstract at **cired2025.org** by 13 September 2024

Table of topics

Session	Asset management	Flexibility Management and DSO/TSO interface	Microgrids, citizens energy communities, local markets	Energy transition, sector coupling, Hydrogen and e-mobility	Resiliency, reliability and the impact of climate change	Digital transformation, artificial intelligence and cybersecurity
SESSION 1 **Network Components**	- New, recycled and bio-sourced materials - Greener components eco design, life cycle analysis - Limitation of visual and noise impact - Life extension, upgradeability - Standards - Safety and ergonomics	- Components and sensors for voltage control and power flow management - Power-electronics based components for load and generation management - Storage devices	- Components for microgrids - Components for disconnection and reconnection with main grid	- Components for charging station and DER connection - Components for large cities (high ampacity, superconductivity, fault current limiters...) - Reduction of losses - Components for DC and AC/DC hybrid networks - Power electronics	- Condition assessment, ageing models - Diagnostics and monitoring and related sensors - Resilient components, impact of climate change	- Digital solutions for maintenance - Data analytics and AI for asset management - Components' digital twins - Local intelligence and communication capabilities - Components for smart metering systems
SESSION 2 **Power Quality and Safety**	- Integration of PQ functionalities into secondary equipment - Immunity of equipment and installations - Impact of PQ on lifetime of equipment - Efficient design of grounding systems	- PQ requirements for flexible and efficient operation - Influence of flexible assets, including EV on PQ in distribution grids - PQ coordination between DSO and TSO	- Challenges related to LV DC grids - Voltage and frequency stability as well as PQ related issues - Aspects of PQ regulation	- PQ Issues related to storage, distributed energy resources and e-mobility - Challenges related to grids with high share of inverter-based generation, including charging stations - Revision of PQ standards and EMC concepts	- Voltage dip immunity and ride through capability of grid-interactive inverters including on board equipment - Lightning and switching overvoltages - New trends in PQ standards related to climate change	- Data mining and data analytics for PQ related data, including the application of AI - Novel methods for PQ data visualisation - Efficient design and implementation of PQ monitoring campaigns
SESSION 3 **Operation**	- Inspection and Condition assessment - Maintenance strategies and processes - Wide area load and generation data acquisition - Real time monitoring and control systems - Training and Education - Occupational risk assessment and safety (EN50110)	- Operational planning (e.g. day ahead) in distribution network - Capacity calculation and management - Customer interfaces for flexibility in generation and load - Interaction between DSO and TSO - Reactive power management	- Operation of microgrids - Integrated operation of local energy communities - Detection, operation and resynchronising of islanded grids - Decentralisation of intelligence (e.g. edge computing) - Interface to local markets and communities	- Forecast for generation from DER - Multi-energy system operation – storage and power2X - Role of distribution networks in integrating low carbon, sustainable energy supplies - Cross vector coupling of SCADA-systems	- Resolving constraints in distribution systems - Crisis management - Blackout and restoration strategies - Implementation of energy intervention - High level automation in network control - Integration of social and environmental criteria in network operation	- Large scale data analytics for grid operation - Forecast for operational planning - State estimation - New applications in grid operation (e.g. AI, quantum and edge computing) - Augmented reality operation - Operation in case of cybersecurity disturbances
SESSION 4 **Protection, Control and Automation**	- SCADA Systems regarded as an asset, with a limited lifecycle due to new requirements - Refurbishment strategies for secondary technology to implement innovative schemes and functions	- New SCADA functions and AI applications - TSO/DSO interface for use flexibility - New Protection schemes and system protection features - IT-Security and resilience aspects for access and exchange of information	- Detecting islanding grids - Protection and control for grids hosting lot of decentralised generation units and microgrids - Control solutions in energy communities	- Control and Monitoring systems developments for sectors coupling energy systems - Contribution of automation to the energy transition	- Solutions of resiliency for converging communication and power systems - SCADA and local automation concepts for large outages, blackout and crisis scenarios	- AI in SCADA and network - Remote access and IT-security - Multivendor solutions – security and interoperability - Virtualisation, centralisation of secondary technology and testing
SESSION 5 **Planning of Power Distribution Systems**	- Managing ageing in complex installations - Multi- annual experiences - AI applications - HILP Risk based asset management	- Load and generation forecast - Uncertainty and risk management - Flexibility and distribution development - DSO as system dispatcher - TSO/DSO integrated/coordinated distribution planning	- Microgrids and local energy communities - Rural electrification - DC distribution - DERMS and system development - V2G and storage	- Planning for energy transition - E-mobility and sector coupling - Fast development of distribution systems - Hosting capacity assessment	- HILP events in planning - Reliability vs resiliency - Resiliency and reliability in smart grids - New network schemes for resiliency	- Data analytics and AI for Customer/ Prosumers segmentation - P2P markets in planning - Planning with (generative) AI
SESSION 6 **Customers, Regulation, DSO Business and Risk Management**	- Standardisation including ISO55000 - Evolved DSO business processes - Risk management methods, processes and tools - Data and information management	- Regulation incentives for flexibility, lower loses and more efficient use of the grid - Flexibility services on different system levels - Coordination/integration of energy systems	- Accelerated grid capacity with integrated flexibility - Role of DSOs in relation to prosumers, energy communities, energy sharing, microgrids and storage - Fairness in energy – energy justice and energy poverty - Off-grid possibilities	- Regulation and market mechanism accelerating the energy transition and sustainability - Coordination / integration of energy systems including hydrogen - Bi-directional e-mobility (V2X) – business models and case studies - Sector integration for DSOs including local energy optimisation	- Regulation and practices to measure and incentivise resilience - Management of extreme weather events and environmental impacts - Short- and long-term forecasting - Data resilience	- Cybersecurity best practices and case studies - Open data implementation and case studies - Digitalisation of business (including customer) processes - Cloud based solutions vs on-prem solutions - Unlock the potential of (generative) AI - Edge computing

Maximise your presence with a sponsorship or exhibition package

Bring your brand to the electricity distribution industry's decision makers, including C-Level executives, DNOs, utilities, innovation managers, business development managers and leading researchers. With 1,600 conference attendees from 60+ countries and 3,000 exhibition visitors, CIRED is the place to be seen and drive new business.

Sponsorship packages

Choose from a range of options, or let us put together a bespoke package that best meets your organisation's brand and business needs. Sponsorship opportunities at CIRED 2025 include the conference dinner, welcome reception, water refill stations, best paper awards, or brand an area of the show floor, such as the start-up village or business lounges.

Exhibition space

CIRED 2025 stand space is available to book in increments of 9sqm, either as shell scheme stands (with the option of premium upgrade) or as free space.

To find out more about sponsorship and exhibition opportunities, please get in touch:

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