



20th CIRED Czech National Committee Conference

Tabor

The role of CIRED in the development of present distribution systems

Theodor Connor

Siemens AG

Erlangen, Germany

CIRED Chairman of the Directing Committee

CIRED

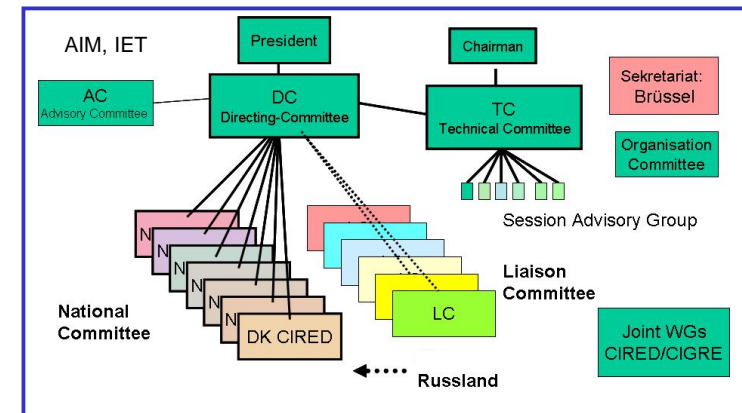
Congrès International des Réseaux Electriques de Distribution
International Conference on Electricity Distribution

Participants:

Utilities, network operator, manufactures, universities,
institutes, consultants, regulators, ...

Venue:

CIRED each second year



DC / LC member countries

The 19 DC members:

Belgium	Czech Republic
Austria	Croatia
Spain	Slovenia
Netherland	Denmark
Italy	Sweden
Switzerland	
England	United States
Finland	China
France	
Germany	
Norway	
Portugal	

The 19 LC members:

Hungary	India
Montenegro	Indonesia
Poland	Malaysia
Rumania	Korea
Russia	Japan
Serbia	
Bosnian Herzegovina	
Greece	
	Argentina
Egypt	Australia
Iran	Brazil
	Canada

Activities on the conference

Main session

Round tables

Guided poster tours

Session advisory groups

Working groups

Joint working groups

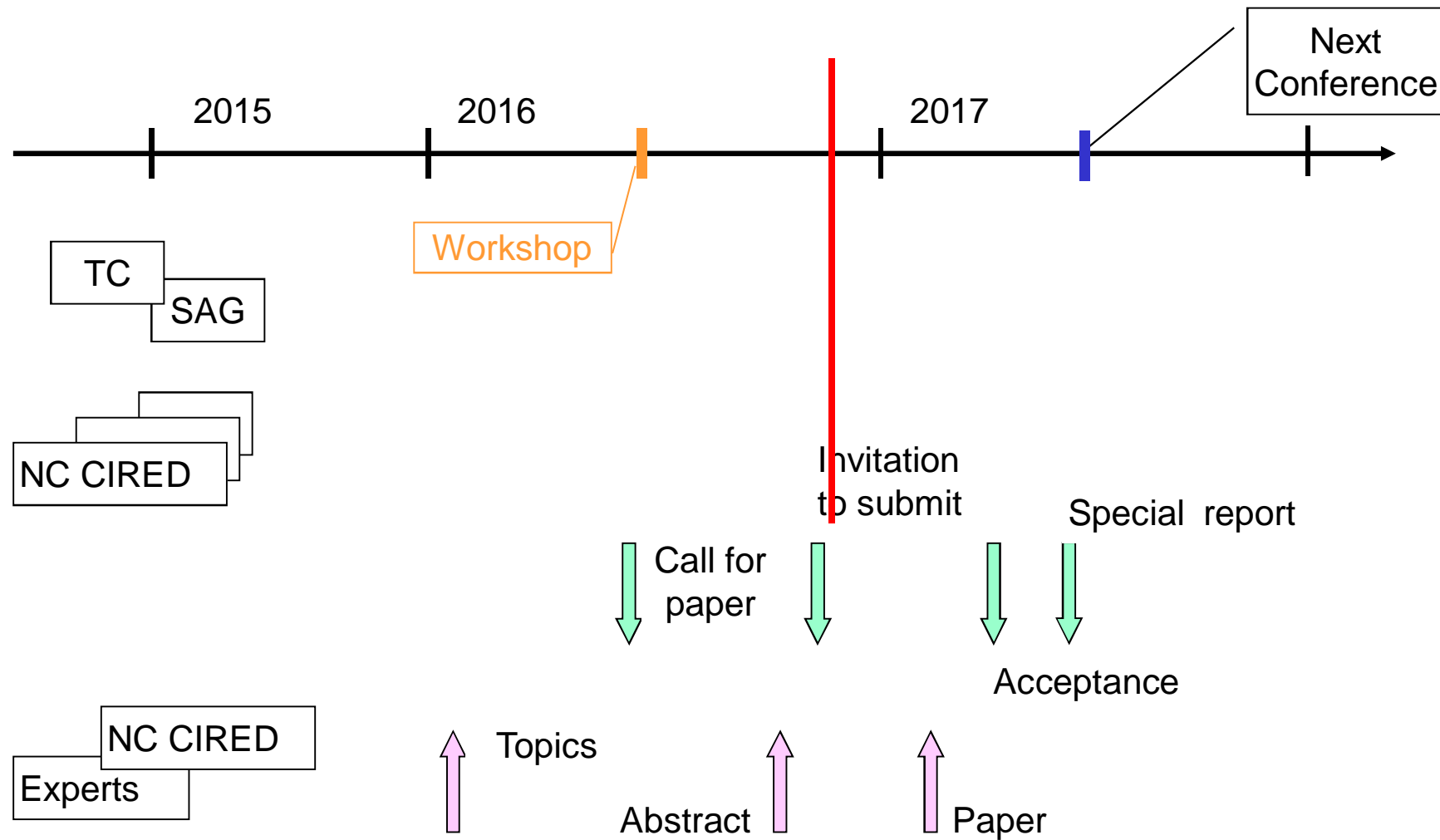
Tutorials

Exhibition

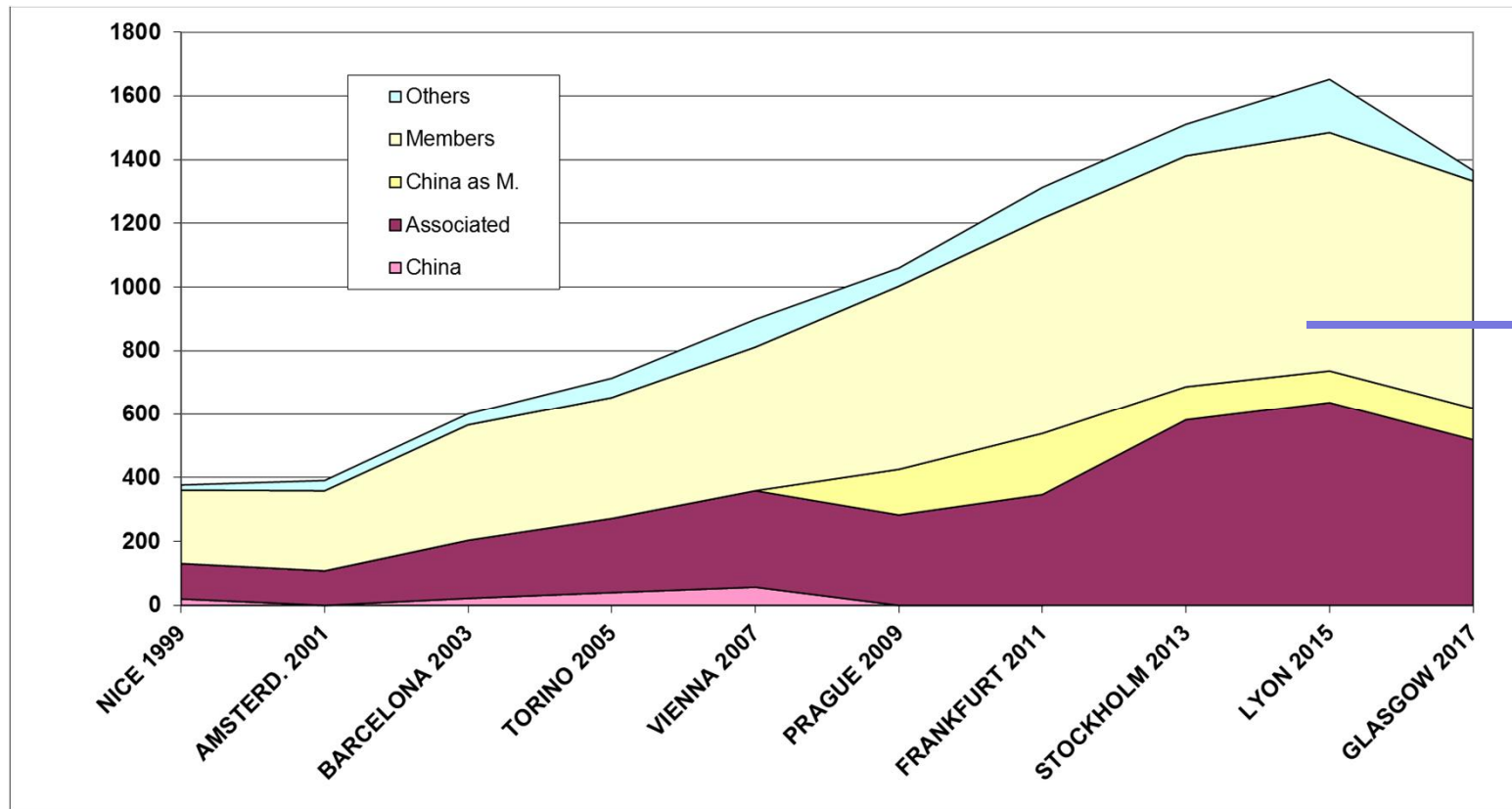
Technical visits



Sequence of activities

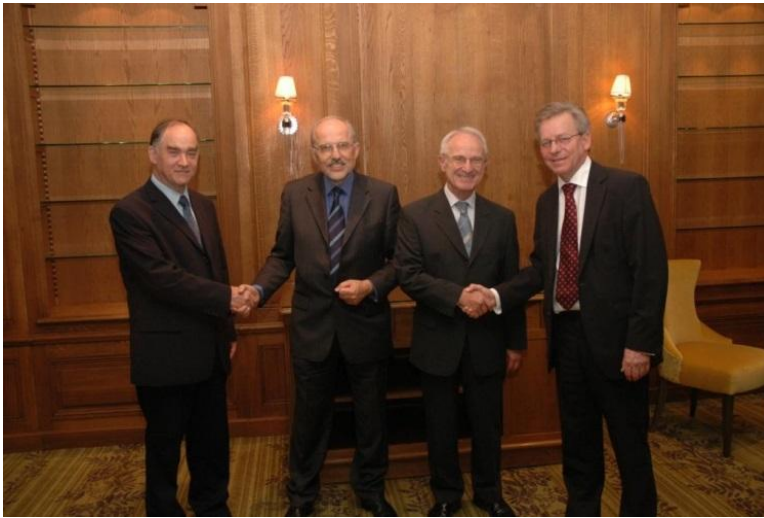


Development of abstracts submitted in the past 18 years



1367 Abstracts ! → 850 Beiträge

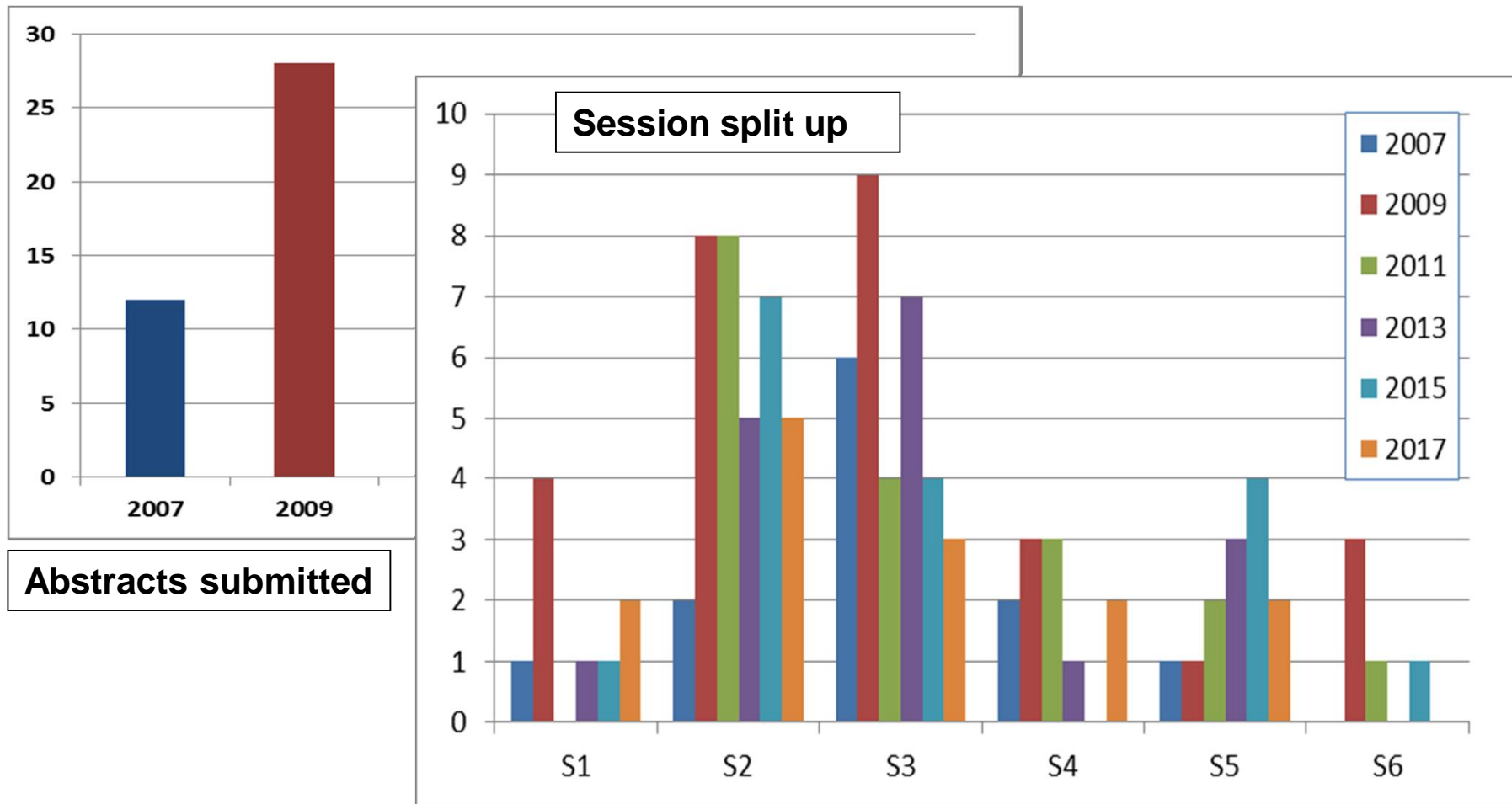
Czech Republic became DC member in 2008



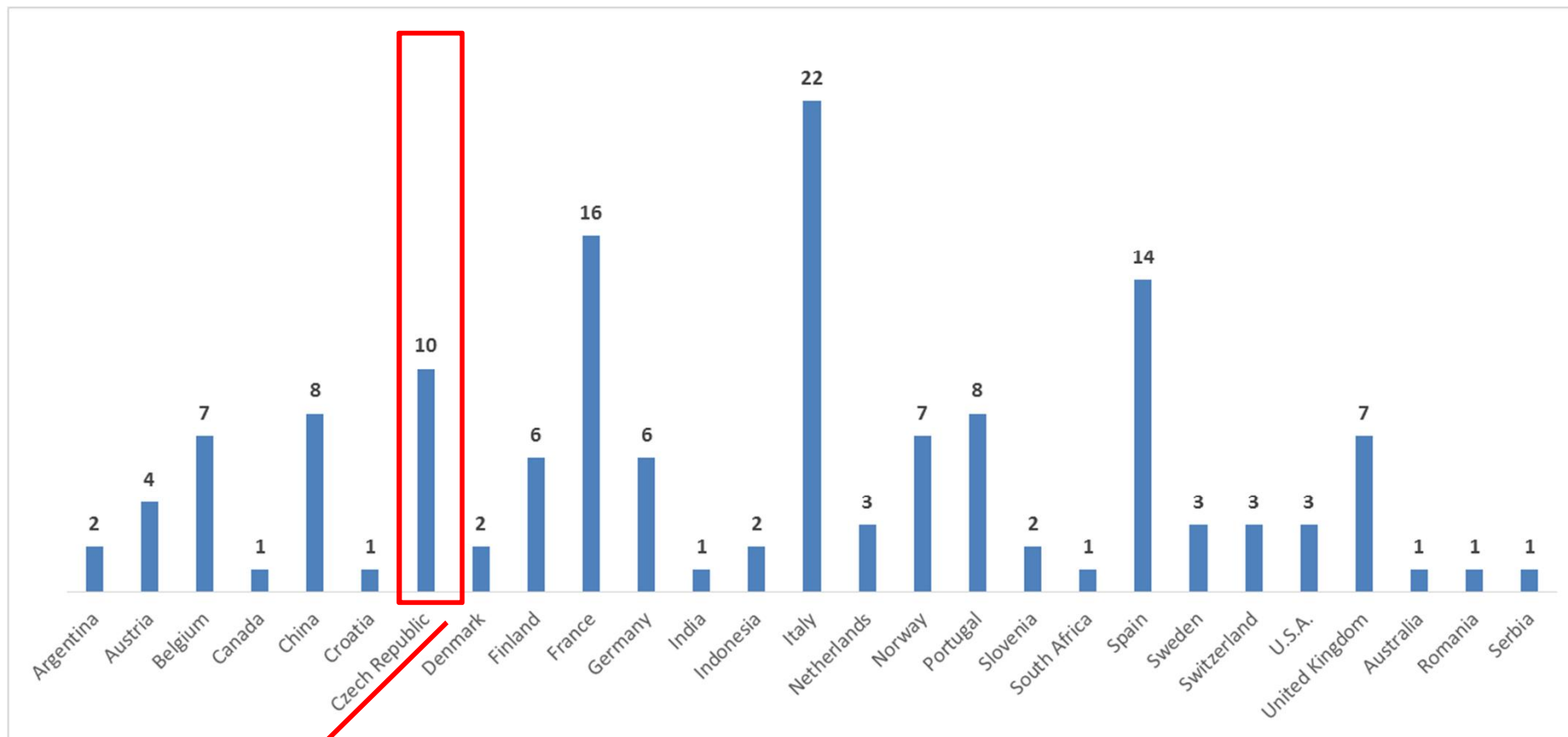
DC meeting in Versailles



Czech contribution to conferences



Working Groups



CIRED Workshop 2016

**14. – 15. June 2016
Helsinki, Finland**

www.cired2016-workshop.org

- **Power distribution companies (DSOs) supporting smart cities**
- **Resilient distribution system planning and operation**
- **Customer/energy services to enable flexibility and energy efficiency**

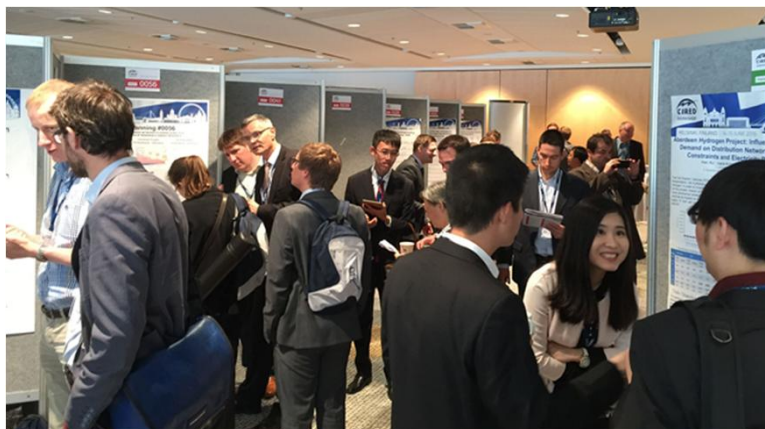
Key dates	
Abstract submission deadline	23 November 2015
Author notification – accepted/rejectedd	18 January 2016
Submission of full papers	14 March 2016
Author notification – oral/poster selection	29 March 2016



CIRED Workshop 2016

404 delegates from
34 countries

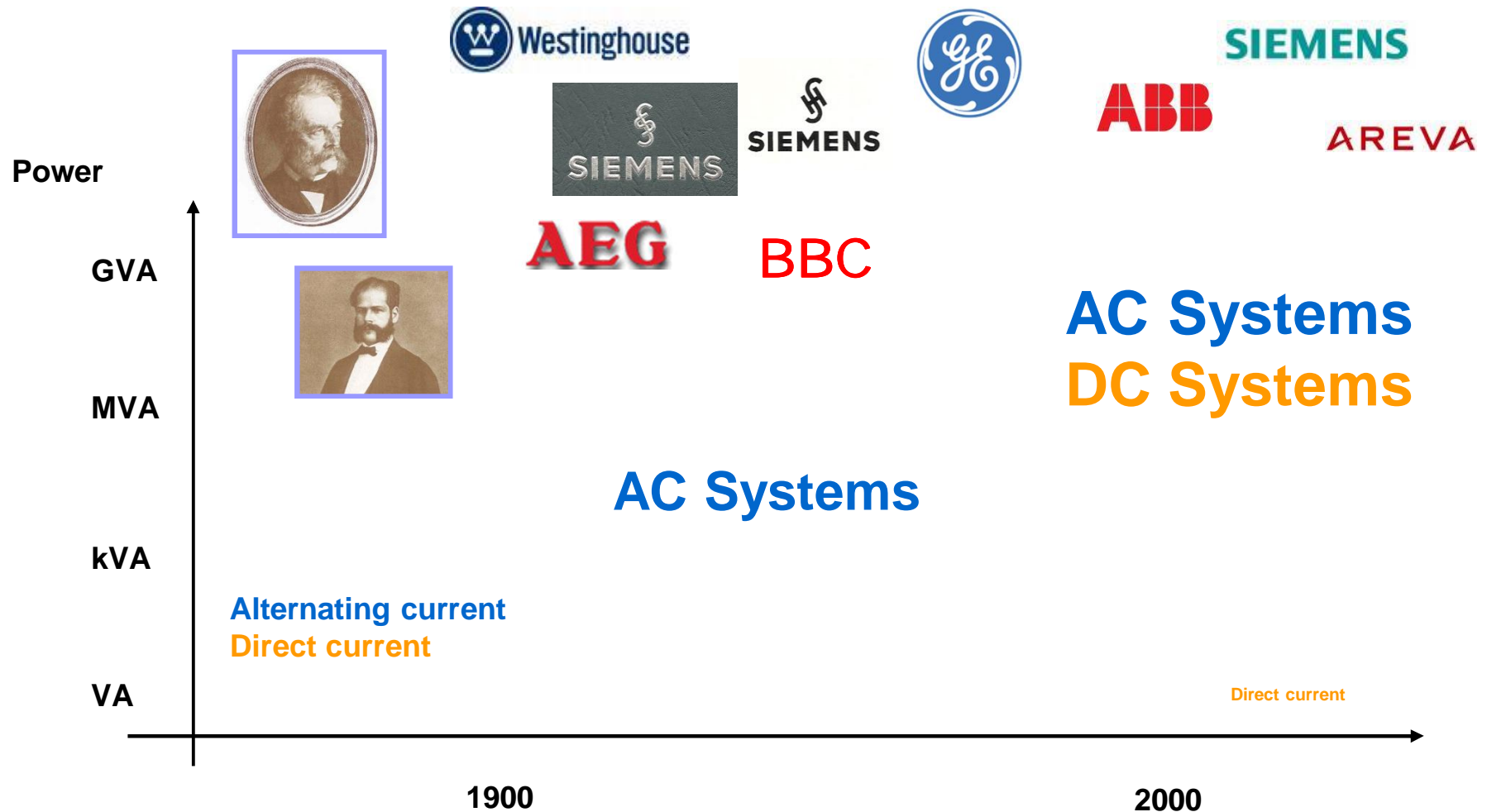
- Keynote
- Selected paper
- Round table
- Poster



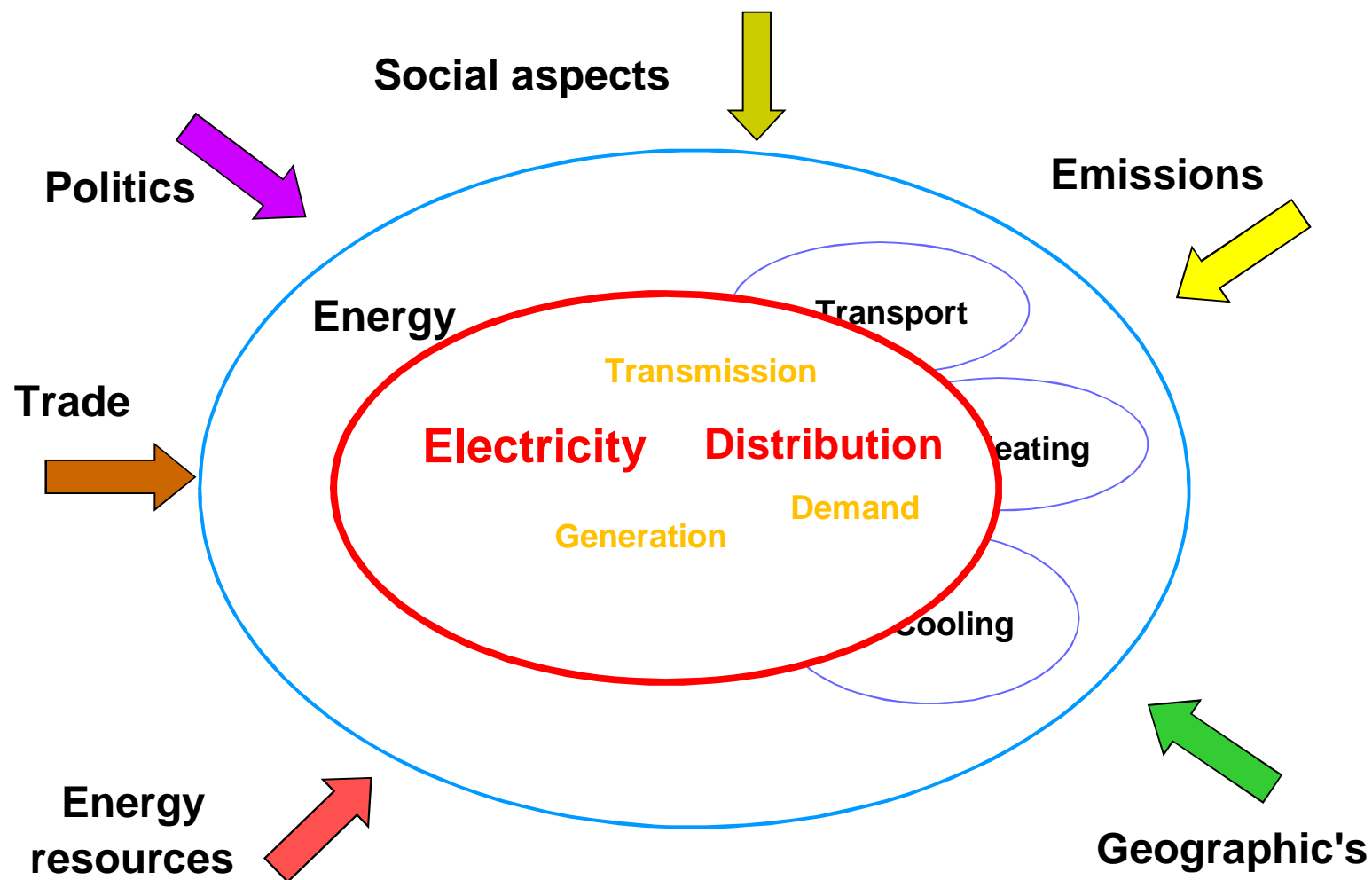
Focus of interest:

- | | |
|--------------|-----|
| • Smart city | 32 |
| • Resilience | 123 |
| • Services | 72 |

History of power supply

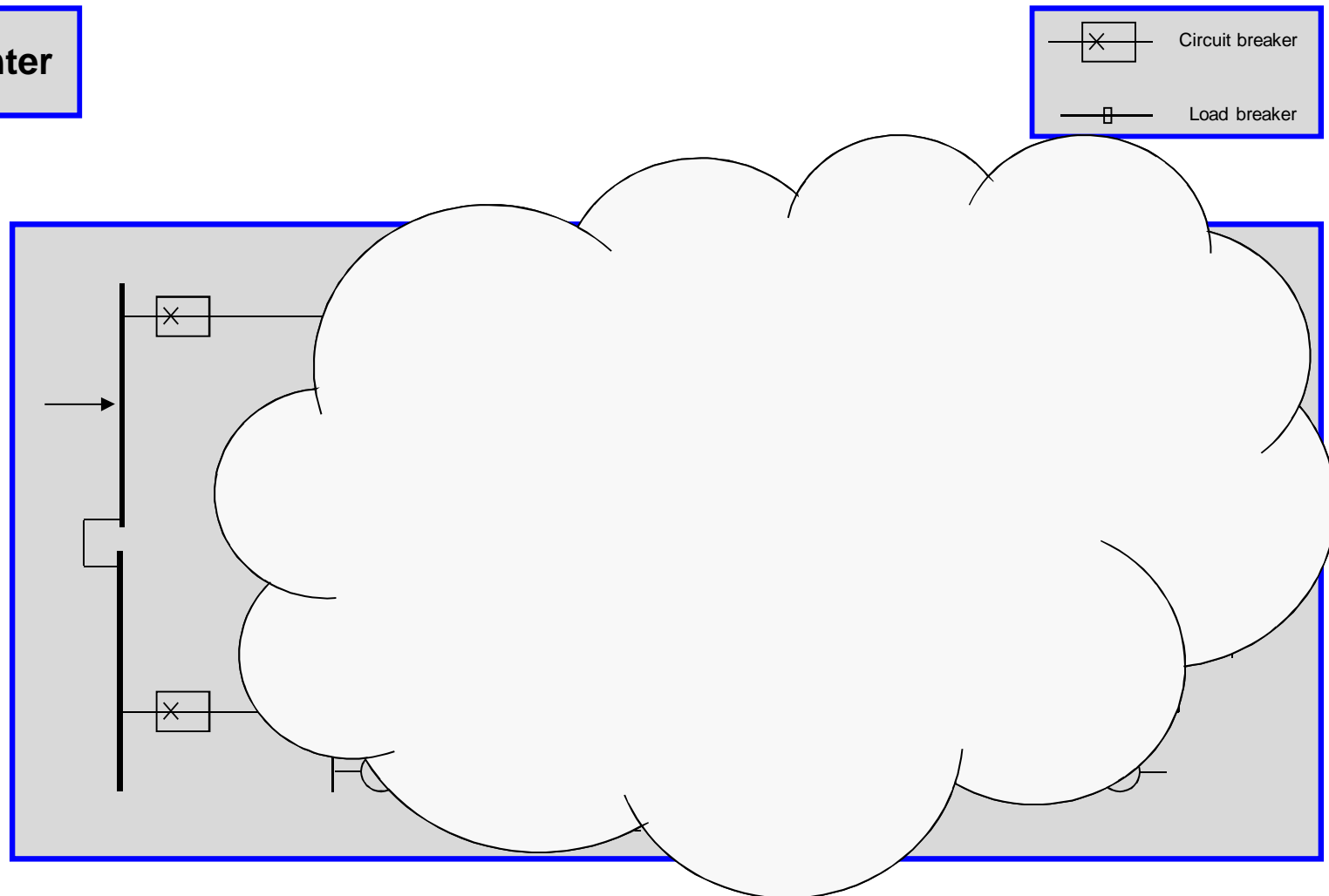


Energy targets

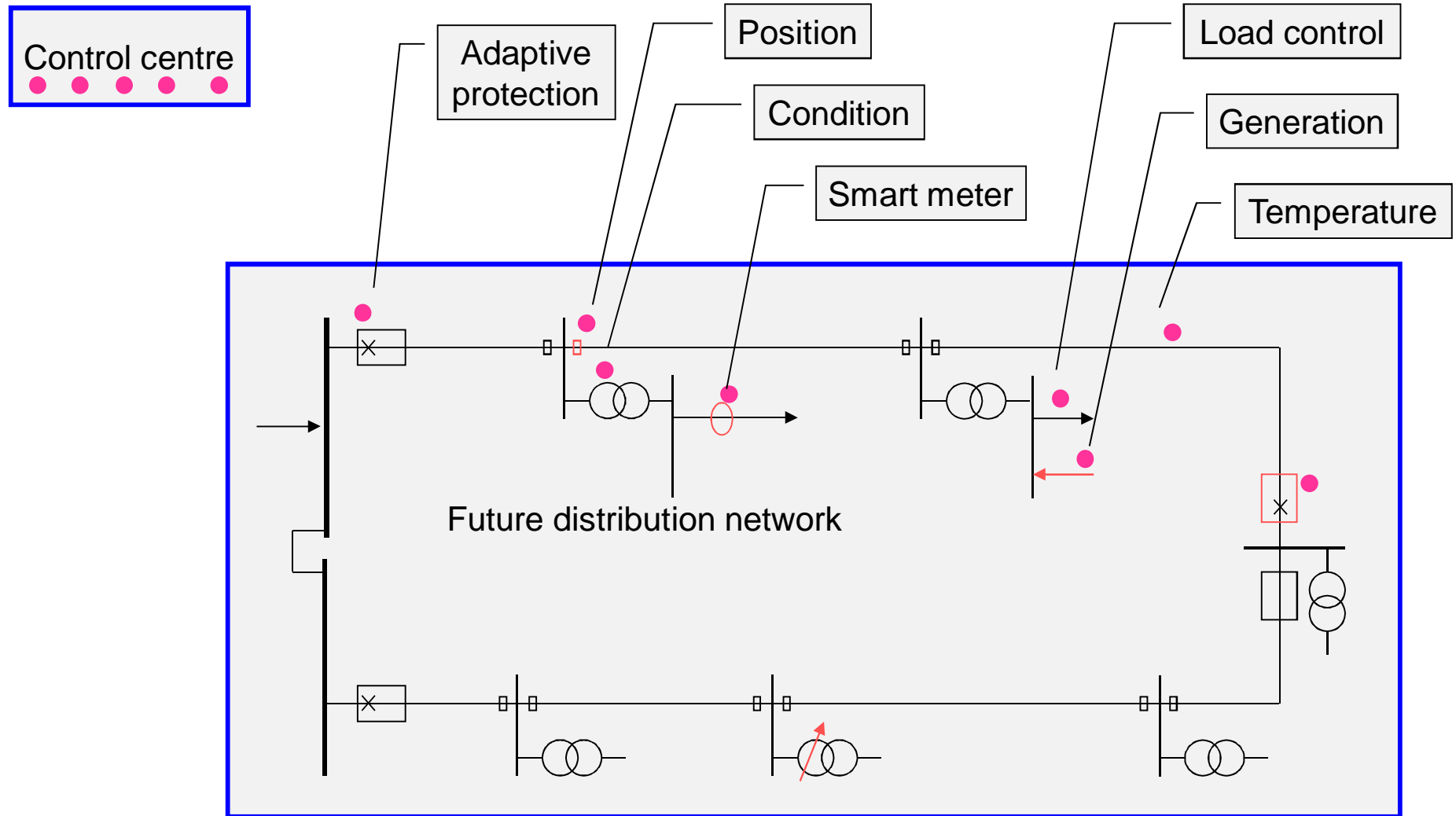


Today's distribution grid

Control center



Future distribution grid



New distribution business

Digitalization

Grid control – grid application – planning and simulation – data analytics

Automation

Smart communication – self healing – smart metering – grid protection – SCADA - grid automation – power quality,

Electrification

Generators
Transformers
Breaker, Switchgear, Fuses
High voltage direct current transmission, FACTS
Overhead lines, cables, compact transmission lines
Isolator, Bushings, Surge Arrestor, Instrument transformer

Session 1

Network Components

Pierre Mallet (France)

- **Components for smart grids and e-mobility**
- **Reliability, diagnosis, maintenance**
- **Components for city distribution**
- **Green components**
- **Innovation in design**
- **Components for rural areas**

Session 2

Power Quality and EMC

Herwig Renner (Austria)

- **Power quality**
- **Voltage dips and interruption**
- **Electromagnetic compatibility**
- **Electromagnetic fields**
- **Safety issues**

Session 3

Operation, Control and Protection

Markus Zdrallek (Germany)

- **Operation**
- **Control and communication**
- **Protection**

Session 4

Distributed Energy Resources and Active Demand Integration

Graham Ault (UK)

- **Distributed energy resources (DER) technologies**
- **Integrating DER in distribution networks**
- **DER roles in system operation**

Session 5

Planning of Power Distribution Systems

Fabrizio Pilo (Italy)

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

Session 6

Challenges for DSO in New Business Environments

Peter Söderström (Sweden)

- **Distribution system operator (DSO) in a digital world**
- **Development of regulation**
- **Enabling flexibility and addressing customer needs**
- **New DSO roles – risk and opportunity**

CIRED conference 2017



www.cired2017.org

12-15 Juni 2017, Glasgow

Paper
accepted!

Call for paper	4.	April 2016
Abstracts	5.	September 2016
Notification	4.	November 2016
Full paper	16.	January 2017

