

Power coordination in Europe: past, present and future

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Power Coordination Europe Conference

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The **Challenge** – Energy Transition

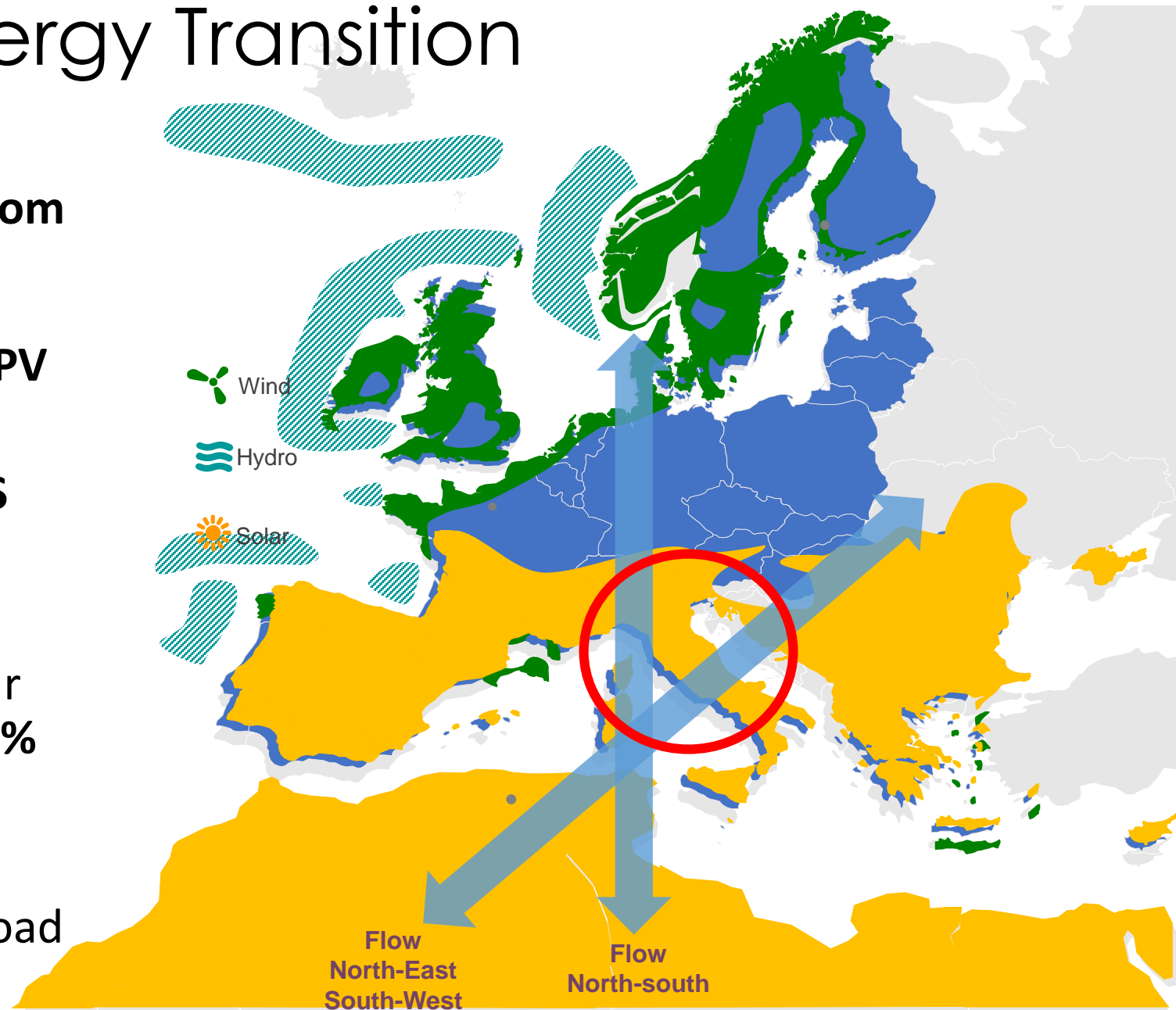
50% Of the **generating capacity** from **variable RES** by 2030

350 Additional **GW** of wind and PV to be connected by 2030

20% Higher installed **variable RES** capacity compared to peak demand

14 Countries with wind and solar outputs likely **higher than 80% demand** already in 2025

20% Reduction of dispatchable capacity margin over peak load

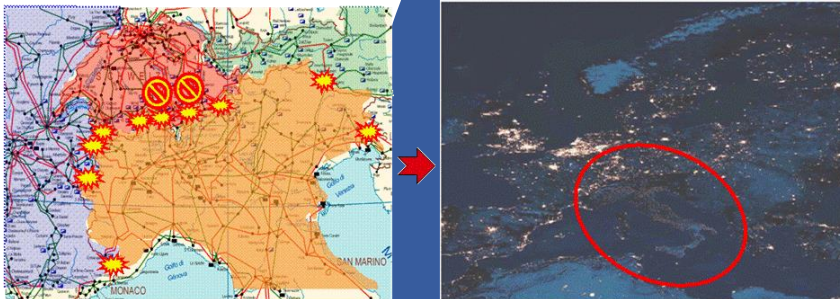


The Past – Significant System Events

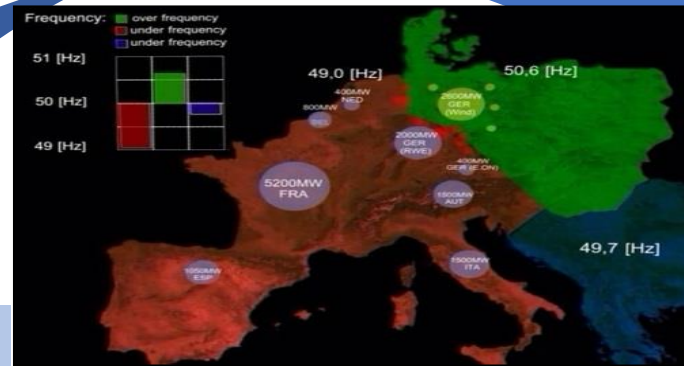
Dry summer 2005 with supply interruptions and disturbances in GB, FR, DE

UCTE System-Split November 2006

Italy blackout September 2003



Summer 2002 in Scandinavia

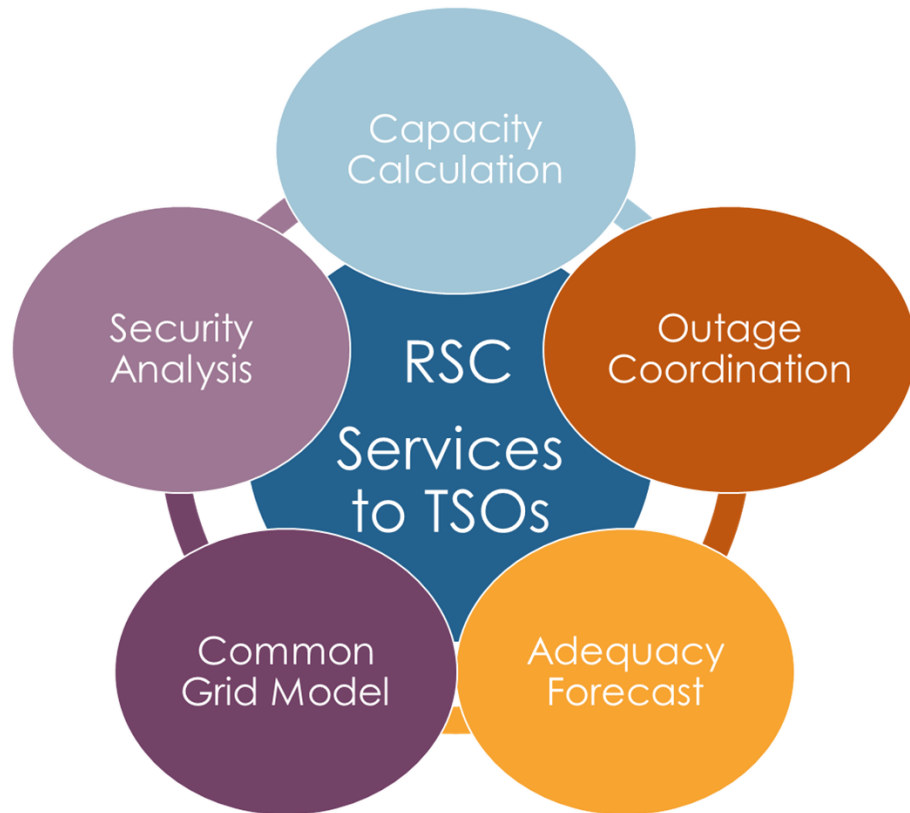


Growing market and renewables since 2006

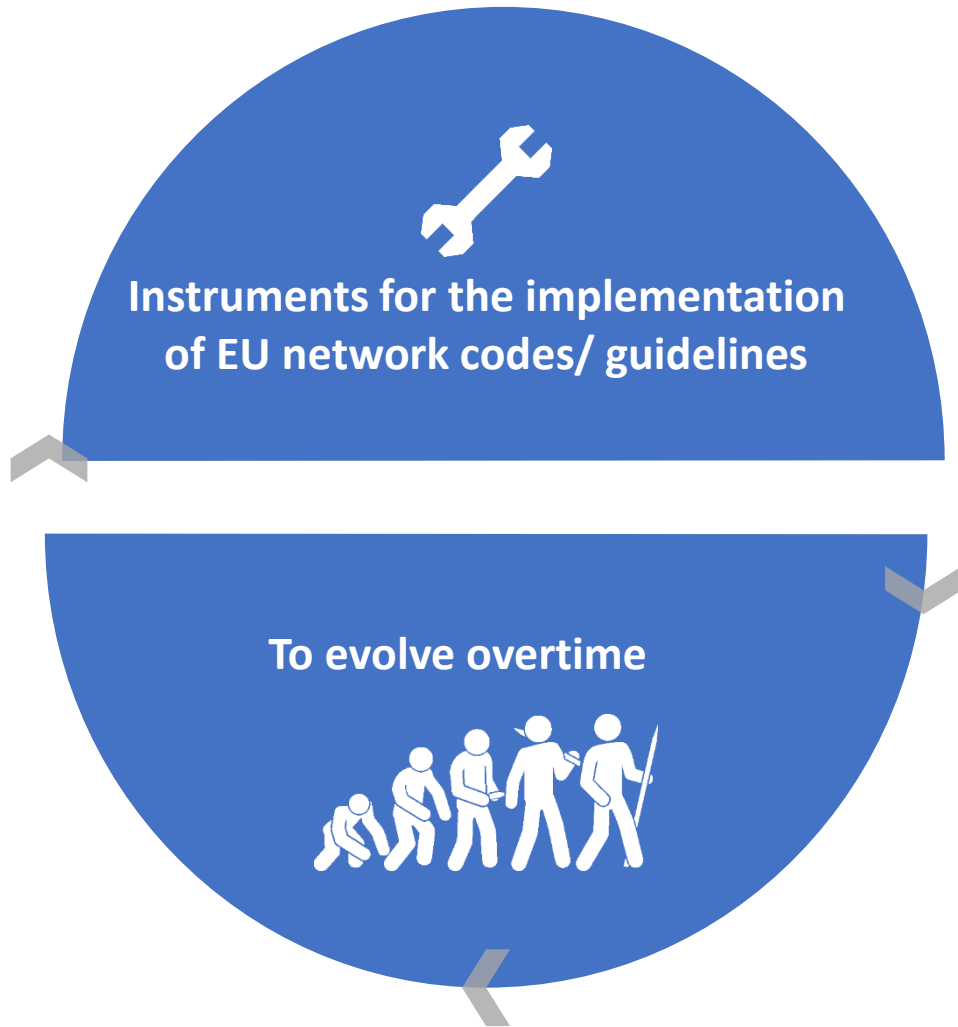
2008 – TSOs develop effective measures and coordination

- ✓ **Regional Security Coordination Initiatives started in 2008**
- ✓ **Work begins on System Operation Codes / Guidelines**

The **Present** – TSOs and RSCs – the new face of regional coordination



The **Future** – Regional Coordination will evolve



TSOs MAINTAINING OPERATIONAL DECISION MAKING:

- Minimises risk of wide area events
- Minimises risk of cyber and terrorist attacks
- Cost control

MORE COORDINATION BRINGS:

- More security
- Optimised operation
- Economies of scale
- Market integration
- Maximised transmission capacity to markets
- Links between operational security analysis and market support functions

The Roadmap – Evolution of Regional Coordination

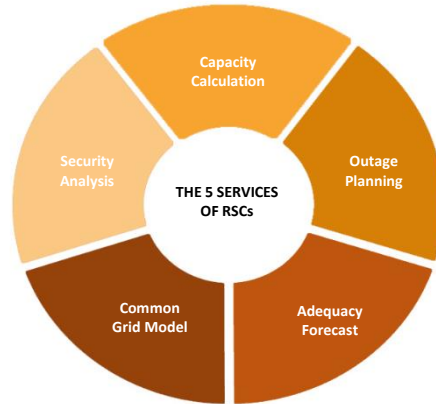
2016

2018

2020

2022 and beyond

- CORESO (2008)
- TSC (2008)
- SCC (2015)
- Baltic RSC (2016)
- Nordic RSC (2016)



5 RSCs established

RSCs operational with 5 Services

Full NCs & Guidelines implementation completed

Strengthening of policy cooperation between member states / regulators

Enhanced Regional cooperation of TSOs

