Key components of the Demand Connection Code

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DCC information session
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Reliable Sustainable Connected

A look back on the past 1,5 year

DCC in the portfolio of all Network Codes

Basic elements of the DCC

Relationship with present practices

A look back on the past 1,5 year

- DCC in the portfolio of all Network Codes
- Basic elements of the DCC
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A look back on the past 1,5 year

> 10 meetings with DSO Technical Expert Group

- Started in July 2011
- Involved in every phase of the code development

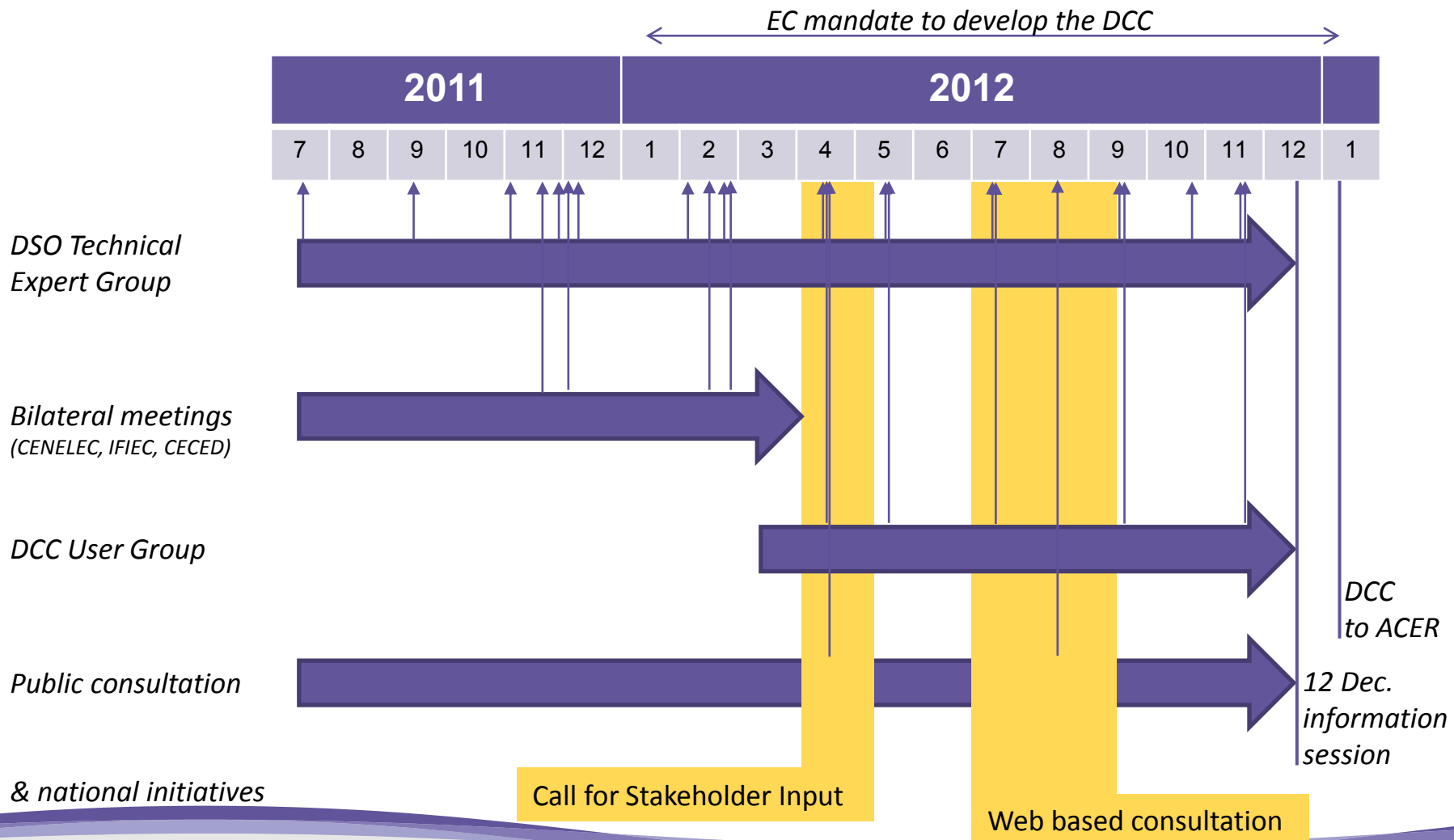
5 DCC User Group meetings

Two-stage consultation:

- Call for Stakeholder Input on key topics
- Consultation on draft code (1500 comments)

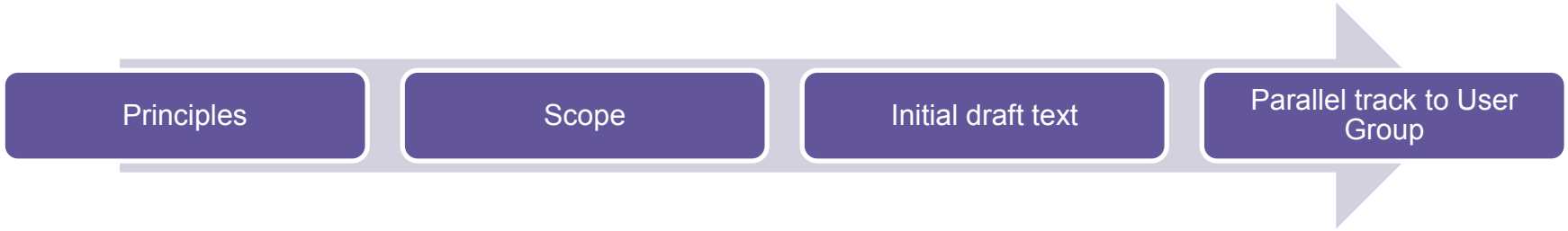
Regular informal meetings with ACER and EC

A look back on the past 1,5 year



- **DSO Technical Expert Group**

– Experts nominated by CEDEC, EDSO for Smartgrids, Eurelectric DSO, Geode



- **DCC User Group**

– European-wide associations with a relevant stake in the scope of the DCC

– Main forum to be continuously involved during the consultation process, liaise with their members and discuss latest draft code improvements

– 14 participants – open to ACER and EC – all outcome publicly accessible

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How do all the Network Codes fit together?

Connection Codes

HVDC

RfG

Both linked to energy efficiency directive

All connection codes link to BAL

CP

DCC

Linked to smart grid initiatives through DSR

Operational Codes

All connection codes link to OS

All connection codes linked to existing standards

All connection codes link to OS

LFCR closely linked to BAL

LFCR

OS

OPS

LFCR/OS/ OPS all linked

ST

CC link to OS/OPS due to CGM

EP

Market Codes

All connection codes link to BAL

DA/ID link to Governance guideline

ID

BAL

All market codes link to transparency regulation

DA

LFCR closely linked to BAL

FCA

CC

FCA Linked to MIFID

CC link to OS/OPS due to CGM

- **Requirements for Generators**

– Distribution Networks to ensure that capabilities of embedded generation can be used in system events.

– Design of equipment of grid users to reflect potential situations in which generators are asked to give support

- **Operational codes**

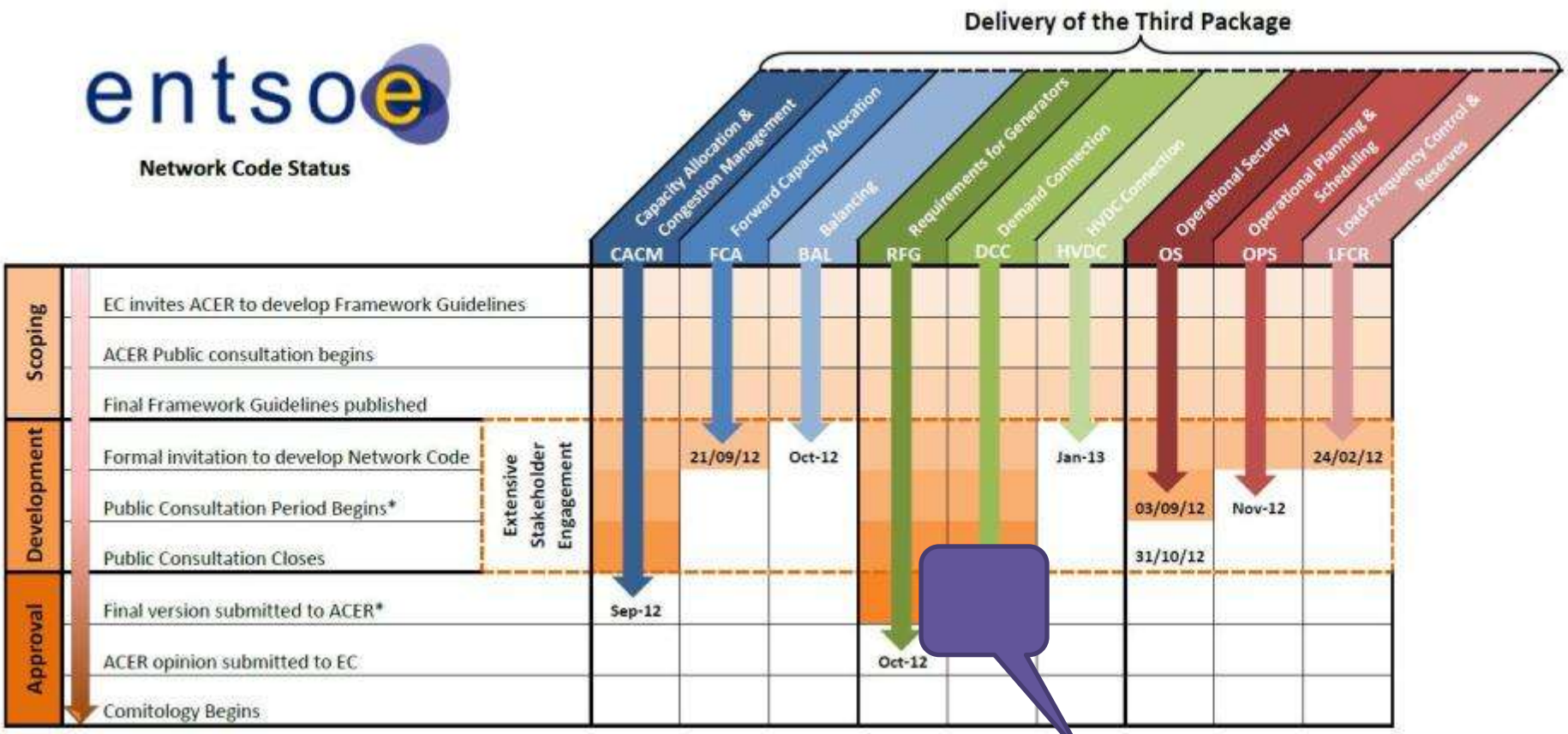
– Little impact of DSR SFC on LFC&R (system events vs. normal system operation)

– Emergency Procedures: not yet started, but will expected to build on capabilities of LFDD/LVDD schemes

- **Market codes**

– DCC prescribes basic functionalities and compliance rules to ensure delivery of cross-border related demand response services

DCC in the portfolio of all Network Codes



DCC is the 3rd NC finalized by ENTSO-E after NC RfG and NC CACM

A look back on the past 1,5 year

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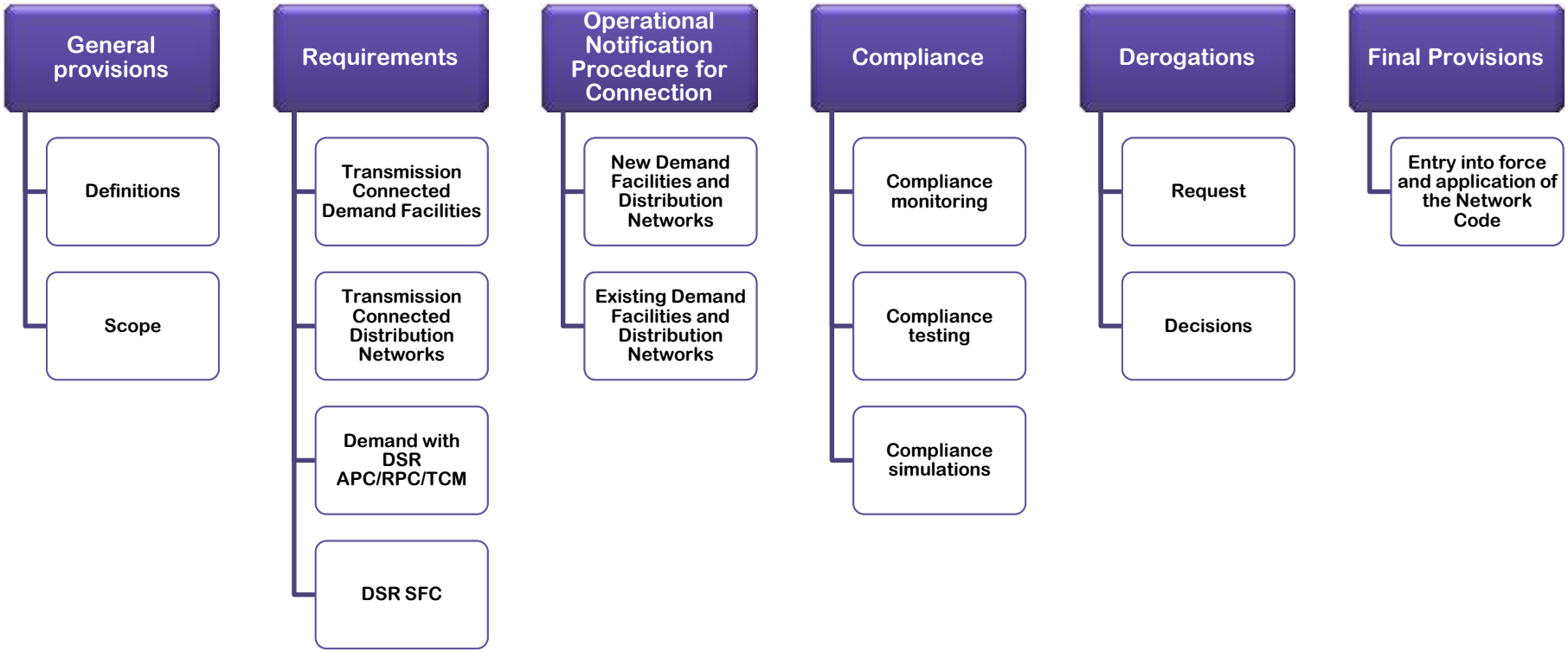
Basic elements of the DCC



- *DCC focus is on transmission-connected demand and all cross-border relevant DSR*
- *Operational Notification and Compliance enforcement is proportional and efficient*

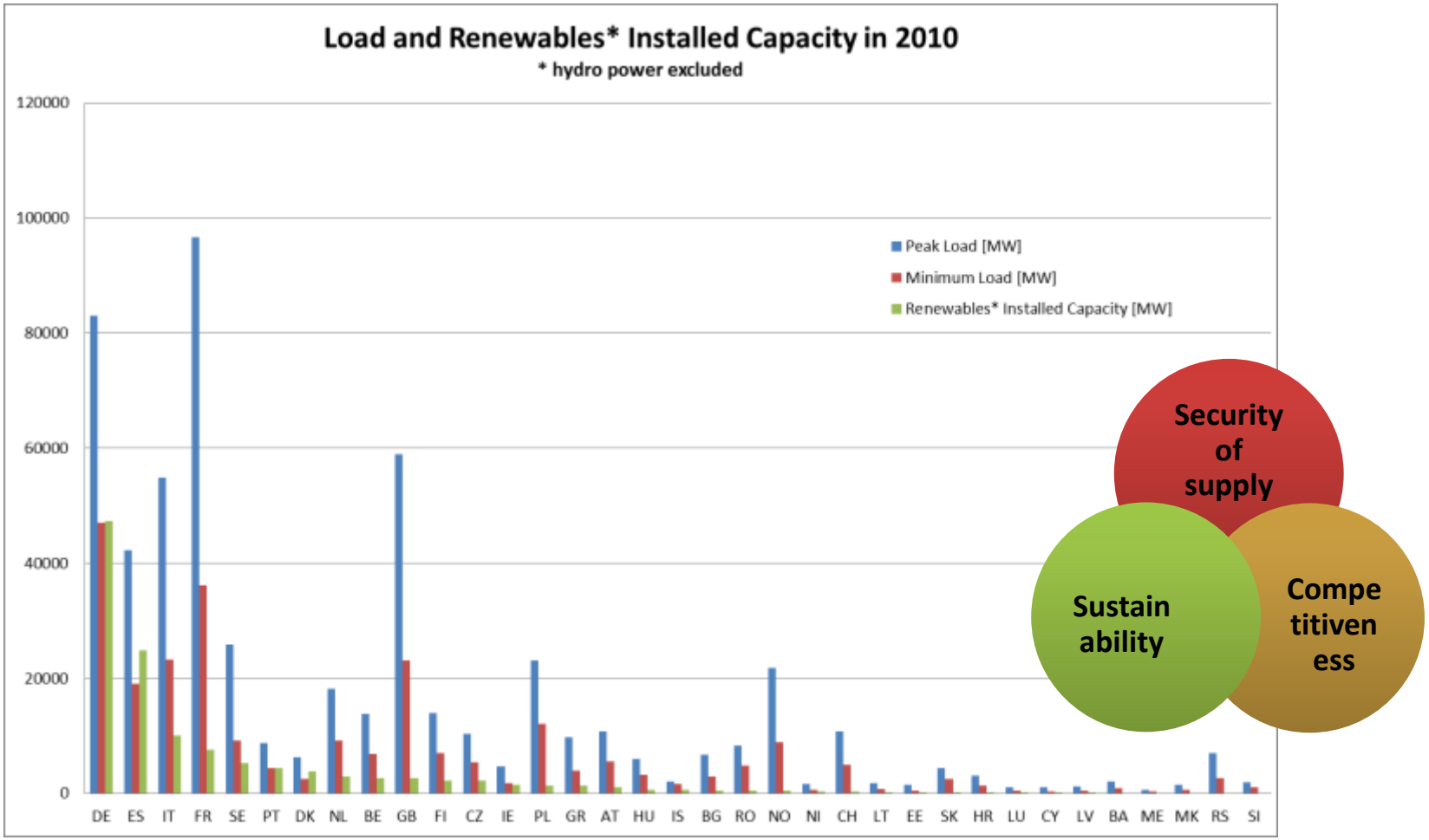
A look back on the past 1,5 year

DCC in the portfolio of all Network Codes

Basic elements of the DCC

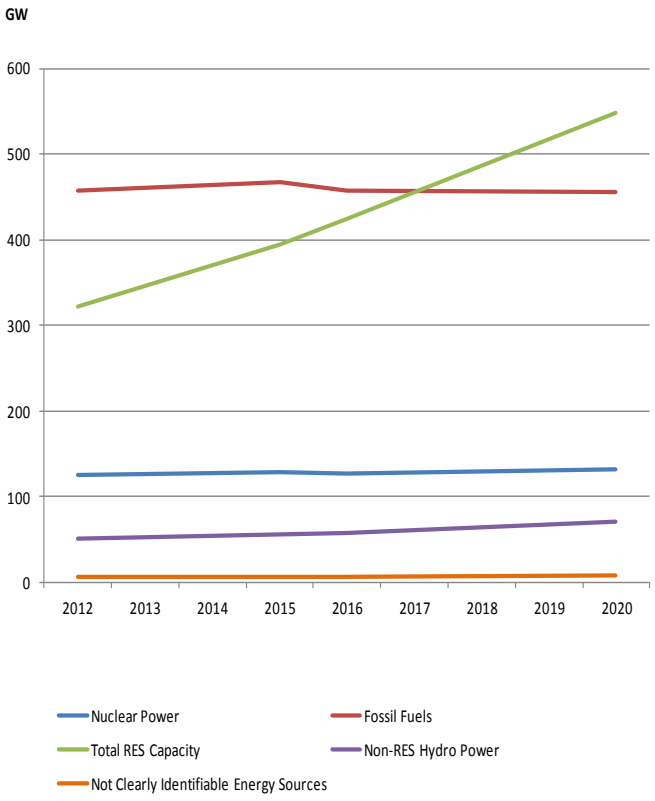
Relationship with present practices

Relationship with present practices:
Relevance of the DCC is to cope with challenges in the decades to come!

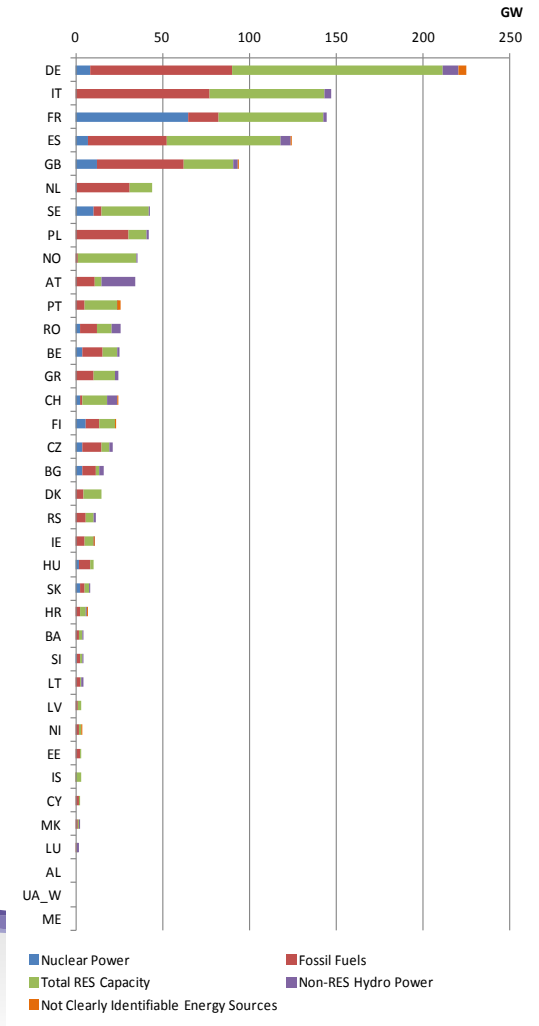


Relationship with present practices:
Relevance of the DCC is to cope with challenges in the decades to come!

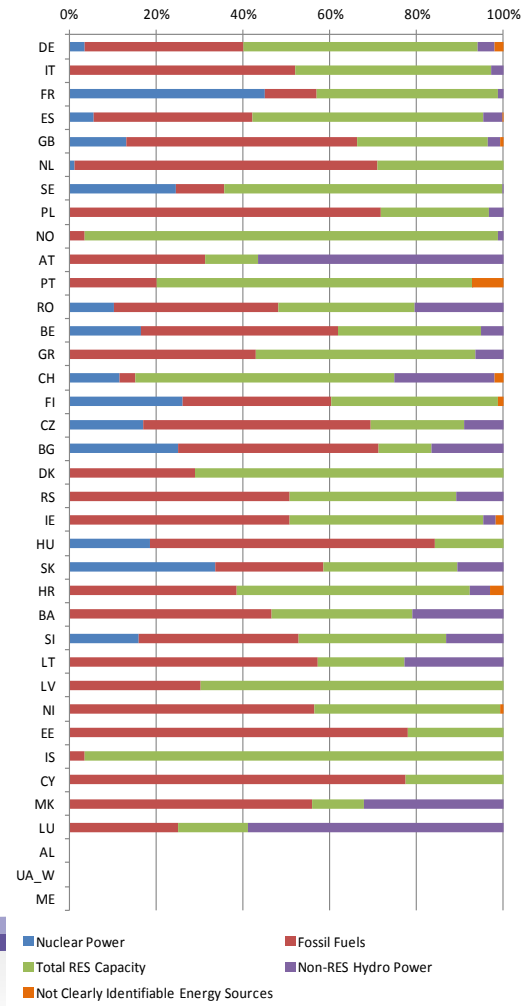
Total NGC breakdown
Scenario EU 2020 - January 7 p.m.



Total NGC breakdown
per country in 2020



Total generation capacity mix
per country in 2020



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Relationship with present practices

- **Structuring of best present practices across Europe**

– See Frequently Asked Questions (FAQ10) for an extensive overview of all requirements in the code and present application in a wide range of ENTSO-E members

- **Alignment with other Network Codes**

– Most notably NC Requirements for Generators – ensuring market based services can be delivered

- **Harmonization of processes**

– Pursuing non-discrimination across Europe on eg. Operational Notifications, Derogations, Demand Side Response

- **Selected requirements in key areas that are new for many Member States in its principles**

– Key areas for consultation in “Call for Stakeholder Input” and further DSO Technical Expert Group / User Group meetings

➢ Key components of the Demand Connection Code

Thank you all for your attention.

Questions?