



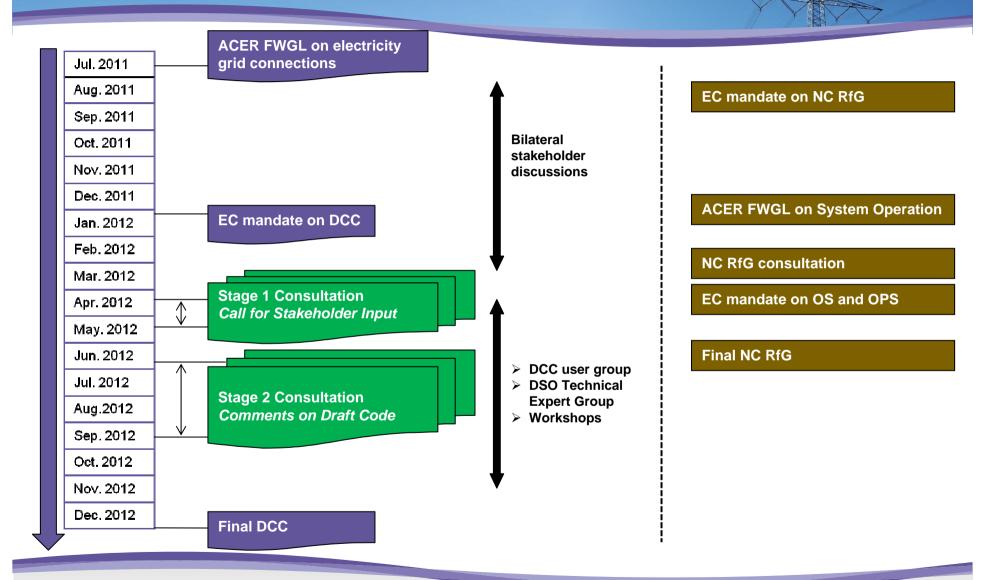
Overview Network Codes



Deliverable	2011				2012				2013			2014				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Products/legislation relevant for effective implemention of the	е ІЕ	M														
FG on capacity allocation and congestion management					Г											
NC on capacity allocation and congestion management ¹					\$											
NC on forw ard markets ²									\(\bar{\pi} \)							
Regional progress, setup and testing (incl. AESAG process and Regional Initiatives Work Program)																
EC comitology guideline on governance ³					_											
FG on grid connection ⁴	(
NC on grid connection ⁵				<u> </u>										,		
NC on DSO and industrial load connection						\rightarrow										
FG on system operation ⁶			\$													
NC on operational security						\(\bar{\pi} \)										
NC on operational planning and scheduling							\(\phi \)									
NC on load-frequency control and reserves								\(\bar{\pi} \)								
NC on operational training																
NC on requirements and operational procedures in emergency																
FG on balancing																
NC on balancing ⁷										\$						
EC comitology guideline on transparency		,														



Demand Connection Code – Timeline & context





DSO Technical Expert Group

- Nominated by CEDEC, EDSO-SG, Eurelectric DSO and Geode
- Sequence of 7 meetings since July 2011
- A further meeting held post workshop

IFIEC

- First meeting on DCC principles
- Second meeting on initial draft code

CENELEC

- Links with standardization and ongoing work under Mandate 490
- Two meetings to date

CECED

• Initial discussion on demand response by domestic appliances



Principle / topics published as DCC preliminary scope arising from frame work guideline.

Stakeholders discussion continue as of this stage by means of a DCC user group.

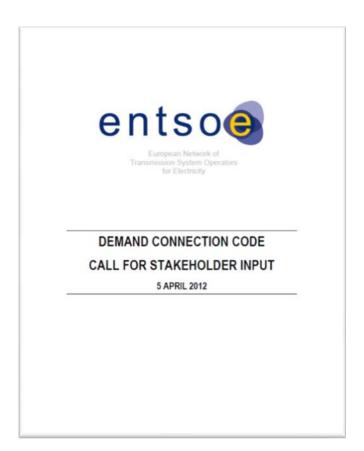


Framework Guidelines

Frequency and voltage parameters	Section 2.1
Requirements for reactive power	Section 2.1
Load-frequency control related issues	Section 2.1
Short-circuit current	Section 2.1
Requirements for protection devices	Section 2.1
Balancing capabilities and provision of ancillary services	Section 2.1, 2.1.1,and 2.1.2
Equipment requirements at connection point	Section 2.1.1 and 2.1.2
Disconnection/Islanding/Reconnection	Section 2.1.3
Instructions provide by TSO/DSO to user	Section 2.1.2 and 3.2
Information/Data exchange	Section 3
Compliance	Section 2.4
Derogation	Section 2.2
Enforcement period	Section 2.3



- Published on 5 April.
- The big challenge indentified
 & associated questions.
- Five topics identified which are new to many grid codes:
 - Demand Side Response for Reserves
 - Demand Side Response for System Frequency Control
 - Reactive Power Exchange capability
 - Voltage & Frequency withstand capabilities





ENTSO-E proposes options for each, underpinned by illustrating case studies, including CBAs. Viewpoints and supporting data on these are requested.

- Alternative for five topics identified & questions raised.
- Feedbacks are to be provided by 9
 May (see website for details).
 Responses will be published.
- The responses will be used to draft/re-draft the DCC & supporting justification documents



