

European Network Codes

Background

Developing a harmonised European energy market

The European Third Energy Package came into law on 3 March 2011, with the aim of enabling a greater penetration of renewables, improving security of supply and enhancing competition.

It looks to do this by developing a European internal energy market through the creation of a regulatory framework to support the harmonisation and integration of European Energy Markets. This is underpinned by the European Network Codes which form a legally binding set of common technical and commercial rules and obligations. All of the European Network Codes have now entered into force.

Creation of ENTSO-E / ENTSOG

The role of the ENTSOs (European Network of Transmission System Operators for Gas or Electricity) is to facilitate and enhance cooperation between national transmission system operators (TSOs) across Europe in order to ensure the development of a pan-European transmission system in line with European Union energy goals. National Grid is a member of both ENTSO-e and ENTSOG.

Creation of Pan-European Network Codes

The ENTSOs are tasked with drafting binding network codes. They develop these codes by engaging with national TSOs and making use of their expertise.

The process begins with a request from the European Commission (EC) to ACER (Agency for the Cooperation of Energy Regulators) to submit a Framework Guideline. The ENTSOs then develop the related network code in line with the ACER Framework Guideline, conducting extensive public consultations throughout the development process. The code then goes through a Comitology process, when Member States agree on the final text. Then, on the EC's approval, the network code becomes legally binding, being adopted in accordance with existing legislative processes. The GB parties involved in each stage of this process are shown below.

Do they affect me?

The European Network Codes introduce changes across the GB electricity industry to deliver the Single Energy Market. There are eight electricity European Network Codes, each placing obligations on GB with varying degrees of impact that will affect GB parties. Please see the table showing impacted parties by code overleaf.

When will it happen?

Each European Network Code has its own date for entry into force and timescales for implementation; this generally ranges from 2017 through to 2023 for some elements. Our fact sheets summarise each of the codes and what the timescales and impacts are.

You can find the fact sheets on our website [here](#).

How can I get involved?

Where possible, we will be using existing GB frameworks and processes to implement the European Network Codes.

Sign up to the Joint European Stakeholder Group (JESG) newsletter to get updates sent to your inbox. Email europencodes.electricity@nationalgrid.com.



The 8 electricity European Network Codes are grouped into 3 areas of focus

Markets	<i>Establishes a platform for managing capacity and flow around the interconnected system to facilitate the setup of a single EU market</i>		
	Capacity Allocation & Congestion Management (“CACM”)	Forward Capacity Allocation (“FCA”)	Electricity Balancing Guideline (“EB GL”)
	Likely applicability Includes: Trading, Power Exchanges, Interconnectors, Transmission System Operators, Distribution System Operators, Generators, Demand, Balancing Services		
System Operation	<i>Harmonises the processes Transmission System Operators have to manage their systems, including system restoration</i>		
	System Operation Guideline (“SOGL”)	Emergency & Restoration (“E&R”)	
	Likely applicability Includes: Generators >1MW, Transmission Connected Demand Facilities, Transmission System Operators, Distribution System Operators, Demand Side Response Services, HVDC systems		
Grid Connection	<i>Sets consistent technical requirements across EU for new connections of user equipment (e.g. generation/interconnectors)</i>		
	Requirements for Generators (“RfG”)	High Voltage Direct Current (“HVDC”)	Demand Connection Code (“DCC”)
	Direct applicability Includes: New generators ≥800W, Operators of new HVDC Links, new DC-connected offshore power park modules, new directly-connected Demand Users, new providers of Demand Side Response, Equipment Manufacturers		

GB Parties likely to be impacted by each European Network Code*

	Generator	Distribution Network Operator (DNO)	Transmission System Owner (TSO)	Onshore & Offshore Transmission Owner	Interconnector Owner	Power Exchange	Energy Trader	Supplier	Aggregator	Demand Side Response provider (DSR)	Directly Connected Demand	Equipment Manufacturer
CACM	✓*	✓*	✓	✓*	✓	✓	✓					
FCA	✓*	✓*	✓	✓*			✓					
EBGL	✓	✓	✓		✓			✓	✓	✓	✓	
SOGL	✓	✓	✓	✓	✓*				✓*	✓*	✓*	✓*
E&R	✓	✓	✓	✓	✓ ^{BSU}							
RfG	✓		✓	✓								✓
HVDC	✓ ^{PPM}		✓	✓	✓							✓
DCC		✓	✓	✓					✓	✓	✓	✓

Key: ✓ Impact ✓* Minor impact ✓^{BSU}: Black Start Unit ✓^{PPM}: DC-connected Power Park Modules only

*National Grid has identified groups of Stakeholders who may be interested in particular events we do not limit the attendance or potential interests to only those we have specified. We take note that the events may be of interest to stakeholders who have not been identified.