

# Electricity European Network Codes & Guidelines Summary

1 September 2016

## Grid Connection Codes

	Requirements for Generators (RfG) Regulation (EU) 2016/631	Demand Connection Code (DCC) Regulation (EU) 2016/1388	High-voltage Direct Current (HVDC)
<b>What does it cover?</b>	The regulation will set, or lays down a process for setting, the requirements that new generators must meet to connect to the network. It also sets some requirements for existing generators in very limited cases.	The regulation will define requirements for new demand users and distribution network connections to the network.	The regulation will provide requirements for HVDC connections and offshore DC connected generation.
<b>Who may be impact by it?</b>	All new generators from 800W and above connected at Transmission and Distribution voltages. A generator is considered new if it connects after 2 years after entry in to force of this regulation, unless it has let contracts for major plant before that 2 year deadline. By exception, the European Network Code can be applied retrospectively to existing generators, subject to successful cost benefit analysis and Regulatory approval.	All new 'significant demand' at Transmission and Distribution voltages. Demand is considered new if it connects after 2 years after entry in to force of this regulation, unless it let contract for major plant before that 2 year deadline. Significant demand is that providing a Demand Side Response Service, or connected to the Transmission Network. The European Network Code can be applied retrospectively to existing equipment, subject to successful cost benefit analysis and Regulatory approval.	Operators of new HVDC links, and new offshore Power Park Modules connected to the onshore Network via HVDC.  The European Network Code can be applied retrospectively to existing equipment, subject to successful cost benefit analysis and Regulatory approval.
<b>Potential GB Framework Impact<sup>1</sup></b>	Changes to the Grid Code and Distribution Code were confirmed by code mapping and an implementation plan has been produced.	Code changes will be detailed through code mapping when this is completed.	Code changes will be detailed through code mapping when this is completed.
<b>Latest Text</b>	<a href="#">Final - OJEU Publication</a> (Official Journal of the European Union)	<a href="#">Final - OJEU Publication</a> (Official Journal of the European Union)	Final Provisional Voted. See <a href="#">JESG website</a>
<b>Network Code or Guideline</b>	Network Code	Network Code	Network Code
<b>Phase of development</b>	Member States Implementation	Publication in the OJEU	Comitology - Awaiting European Parliament & Council Approval
<b>Status Update</b>	RfG entered into force (became law) on 17 May 2016  GB Implementation is being considered by <a href="#">GCRP/DCRP RfG Joint Workgroup GC0048</a> . For more information please contact <a href="mailto:grid.code@nationalgrid.com">grid.code@nationalgrid.com</a>	DCC was published in the OJEU on 17 August 2016 as Regulation (EU) 2016/1388. The Regulation will enter into force 20 days following publication.  GB implementation is being considered by <a href="#">GCRP/DCRP DCC Joint Workgroup GC0091</a> . For more information please contact <a href="mailto:grid.code@nationalgrid.com">grid.code@nationalgrid.com</a>	HVDC was adopted by Member States in Comitology on 11 September 2015 and now sits with the European Parliament and Council for approval (expected Q2 2016).  GB implementation is being considered by <a href="#">GCRP HVDC Workgroup GC0090</a> . For more information please contact <a href="mailto:grid.code@nationalgrid.com">grid.code@nationalgrid.com</a>
<b>Next Milestone</b>	Member States Implementation / Compliance	Member States Implementation / Compliance	Subject to approval by the European Parliament and Council, publication in the Official Journal of the European Union (OJEU). Entry into Force being 20 days following this publication.
<b>GB Stakeholder Issues</b>	DBEIS and Ofgem Stakeholder workshop Issues raised can be viewed on the <a href="#">JESG Website</a>	DBEIS and Ofgem Stakeholder workshop Issues raised can be viewed on the <a href="#">JESG Website</a>	DBEIS and Ofgem Stakeholder workshop Issues raised can be viewed on the <a href="#">JESG Website</a>
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<b>Next Stakeholder Engagement Opportunity</b>	Stakeholders can engage in GB implementation through <a href="#">GCRP/DCRP RfG Joint Workgroup GC0048</a>	Stakeholders can engage in GB implementation through <a href="#">GCRP/DCRP DCC Joint Workgroup GC0091</a>	Stakeholders can engage in GB implementation through <a href="#">GCRP HVDC Workgroup GC0090</a>

<sup>1</sup> To implement every Regulation there will need to be an initial exercise to determine which elements apply directly, which need additional action to put in place and, where this is the case, which parts of the GB framework will need to change to achieve this. Implementation will see changes being made to interconnector access rules, charging methodologies, industry codes and licences and is likely to require legislation in a limited number of cases.

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## Market Codes

		Capacity Allocation & Congestion Management (CACM) Regulation (EU) 2015/1222	Forward Capacity Allocation (FCA)	Electricity Balancing (EB)
What does it cover?		The regulation will lay down the rules for operating pan-European day ahead and intraday markets, and will set out the processes for determining how capacity is calculated, congestion is managed and the criteria and process for reviewing bidding zones.	The regulation will set the rules for calculating and buying capacity in forward markets (before day ahead). It also sets rules for hedging price risk between bidding zones in these markets.	The regulation will define the roles and responsibilities of TSOs and market participants in cross-border balancing. It will provide the rules for procurement and exchange of balancing energy, reservation of capacity for balancing purposes and greater harmonisation of settlement arrangements
Who may be impacted by it?		Anyone trading or wishing to trade Interconnector capacity and cross-border energy in the day ahead or intra-day timeframes. TSOs (including Interconnectors) and power exchanges. Generators and demand to provide information on which capacity allocation decisions are made on a regional basis.	Anyone trading Interconnector capacity in the forwards markets. TSOs (Interconnectors)	TSOs, DSOs, Elexon, and providers of balancing services.
Potential GB Framework Impact <sup>1</sup>		Stakeholders have been engaged through individual workshops and through the JESG in relation to framework impacts,	Stakeholders have been engaged through individual workshops and through the JESG in relation to framework impacts.	TBC
Latest Text		OJEU Publication (Final). See <a href="#">JESG website</a>	October 2015 Adopted Version. See <a href="#">JESG website</a> .	8 June Informal Service Level Draft . See <a href="#">JESG website</a>
Network Code or Guideline		Guideline	Guideline	Guideline
Phase of development		Member State Implementation	Comitology - Awaiting European Parliament & Council Approval	Comitology Preparations
Status Update		CACM entered into force (became law) on 21 August 2015.  GB Implementation is considered under <a href="#">JESG Subgroup for CACM &amp; FCA implementation</a> .	FCA was adopted by Member States in Comitology on 30 October 2015 and now sits with the European Parliament and Council for approval (expected Q2 2016).  GB Implementation is considered under <a href="#">JESG Subgroup for CACM &amp; FCA implementation</a> .	Subject to discussions at the cross border committee ahead of entering Comitology. Imbalance Settlement Period (ISP) article/s temporary removal from latest draft, expected to be reinstated into the next draft guideline ahead of the September 2016 cross border committee meeting.
Next Milestone		Member States Implementation / Compliance	Subject to approval by the European Parliament and Council, publication in the Official Journal of the European Union (OJEU). Entry into Force being 20 days following this publication.	Comitology
GB Stakeholder Issues		Captured in August 2014: <ul style="list-style-type: none"> <li>Governance – decision-making, consultation, approval and review processes around methodologies, amendments (across all market codes).</li> <li>Clarity of drafting, roles and responsibilities, etc. (across all market codes).</li> <li>NEMO designation and competition.</li> <li>Bidding Zone reviews.</li> <li>Capacity calculation methodology.</li> <li>Cost-sharing arrangements (across all market codes).</li> </ul>	Captured in October 2015 <ul style="list-style-type: none"> <li>Firmness regime.</li> <li>Operation of Physical Transmission Rights (PTRs) and Financial Transmission Rights.</li> <li>Implementation timescales.</li> <li>Harmonised Allocation Rules (in development as a pilot project).</li> <li>Single Allocation Platform (in development as a pilot project).</li> <li>Nomination rules</li> <li>Splitting of capacity between different timeframes</li> </ul>	Captured in January 2015 <ul style="list-style-type: none"> <li>Proposed change to existing settlement period</li> <li>Nature of GB implementation</li> <li>Role of TSO as facilitator in TSO-TSO model</li> </ul> Captured in January 2014 <ul style="list-style-type: none"> <li>Delegation of balancing functions.</li> <li>Fit with the BSC panel function.</li> <li>Cost neutrality.</li> <li>Impact within GB and particularly on DSOs.</li> <li>Arrangement of CoBAs – particularly with regard to ICs.</li> <li>Relationship with DSR.</li> <li>Emergency arrangements.</li> <li>Development of standard products and other changes to GB practice.</li> </ul>
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Next Stakeholder Engagement Opportunity		Monthly <a href="#">JESG Subgroup for CACM &amp; FCA implementation</a>	Monthly <a href="#">JESG Subgroup for CACM &amp; FCA implementation</a>	GB Balancing Stakeholder Focus Group (BSFG) which meets quarterly. Please email <a href="mailto:europencodes.electricity@nationalgrid.com">europencodes.electricity@nationalgrid.com</a> for further information.

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## System Operation Codes

Transmission System Operation Guideline (TSOG) (Previously Operational Security-OS, Operational Planning and Scheduling-OPS and Load Frequency Control & Reserves-LFCR)		Emergency & Restoration (ER)
<b>What does it cover?</b>	The purpose of the regulation will be to; <ul style="list-style-type: none"> <li>Retain (or return to) a normal grid state.</li> <li>Set common rules for ensuring the operational security of the pan-European power system.</li> <li>Focus on the planning phase ahead of real time.</li> <li>Set requirements for assessing the adequacy and operational security of the interconnected power system and for planning outages required by TSO's and grid users when they have cross borders impacts on power flows.</li> <li>Force on frequency quality criteria.</li> <li>Provide for the coordination and technical specification of load frequency control processes and specifies the levels of reserves (backup) which TSOs need to hold and specifies where they need to be held.</li> </ul>	The regulation will deal with the procedures and remedial actions to be applied in the Emergency, Blackout and Restoration states.
<b>Who may be impact by it?</b>	<ul style="list-style-type: none"> <li>All generators &gt; 1MW</li> <li>Transmission Connected Demand Facilitates</li> <li>Significant Demand Facilities, Closed Distribution Networks and Aggregators if they provide Demand Side Response Services to the TSO according to the DCC</li> <li>Redispatching Aggregators and Providers of Active Power Reserves according to LFCR</li> <li>TSOs, Reserve Connecting DSOs and Reserve Providers</li> </ul>	All generators > 1MW <ul style="list-style-type: none"> <li>Transmission Connected Demand Facilitates</li> <li>Significant Demand Facilities, Closed Distribution Networks and Aggregators if they provide Demand Side Response Services to the TSO according to the DCC</li> <li>Redispatching Aggregators and Providers of Active Power Reserves according to LFCR</li> <li>HVDC Systems and DC-connected Power Park Modules</li> <li>Type A (800W-1MW) Power Generating Modules if they qualify as a Defence Provider and/or Restoration Provider</li> </ul>
<b>Potential GB Framework Impact<sup>1</sup></b>	Potential impact on the Grid Code and SQSS	Potential impact on the Grid Code
<b>Latest Text</b>	Latest version of the Transmission System Operator Guideline was released to Member States on 4 June 2016. See <a href="#">JESG website</a>	Latest version of the network code was released to Member States on 8 June 2016. See <a href="#">JESG website</a>
<b>Network Code or Guideline</b>	Guideline	Being drafted as a European Network Code, but potential to become a Guideline
<b>Phase of development</b>	European Parliament and Council	Comitology
<b>Status Update</b>	Adopted by Member States awaiting final approval of the European Parliament and Council	Discussions at the Cross Border Committee Meeting have commenced
<b>Next Milestone</b>	Subject to approval by the European Parliament and Council, publication in the Official Journal of the European Union (OJEU). Entry into Force being 20 days following this publication.	Subject to Member States Voting for approval.
<b>GB Stakeholder Issues</b>	Captured in July 2012: <ul style="list-style-type: none"> <li>National Regulatory Authority oversight.</li> <li>Retrospective application.</li> <li>Imbalance netting.</li> </ul> Frequency containment reserve sharing. Captured in April 2013: <ul style="list-style-type: none"> <li>Consistency and clarity of definitions.</li> <li>Resynchronisation.</li> <li>Data provision.</li> <li>National Regulatory Authority oversight.</li> <li>Performance indicators.</li> <li>Outage plans and consistency of reporting requirements with REMIT and Transparency Regulation.</li> <li>Definition, roles and responsibilities of TSOs.</li> <li>Definition of 'relevant user.' (NB – latest draft no longer uses term).</li> </ul>	Captured in April 2015: <ul style="list-style-type: none"> <li>NRA Role</li> <li>Comms Resilience</li> <li>Lack of time obligations</li> <li>Scope – EU Dimension</li> </ul> A full list of the issues captured can be found on the <a href="#">JESG website</a>
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<b>Next Stakeholder Engagement Opportunity</b>	Stakeholder sessions are ongoing and will be released through the JESG Weekly updates	Stakeholder sessions are ongoing and will be released through the JESG Weekly updates

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