

SOGL Prequalification processes



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Agenda

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- Proposed Grid Code modification
- Impacts and other considerations
- Implementation

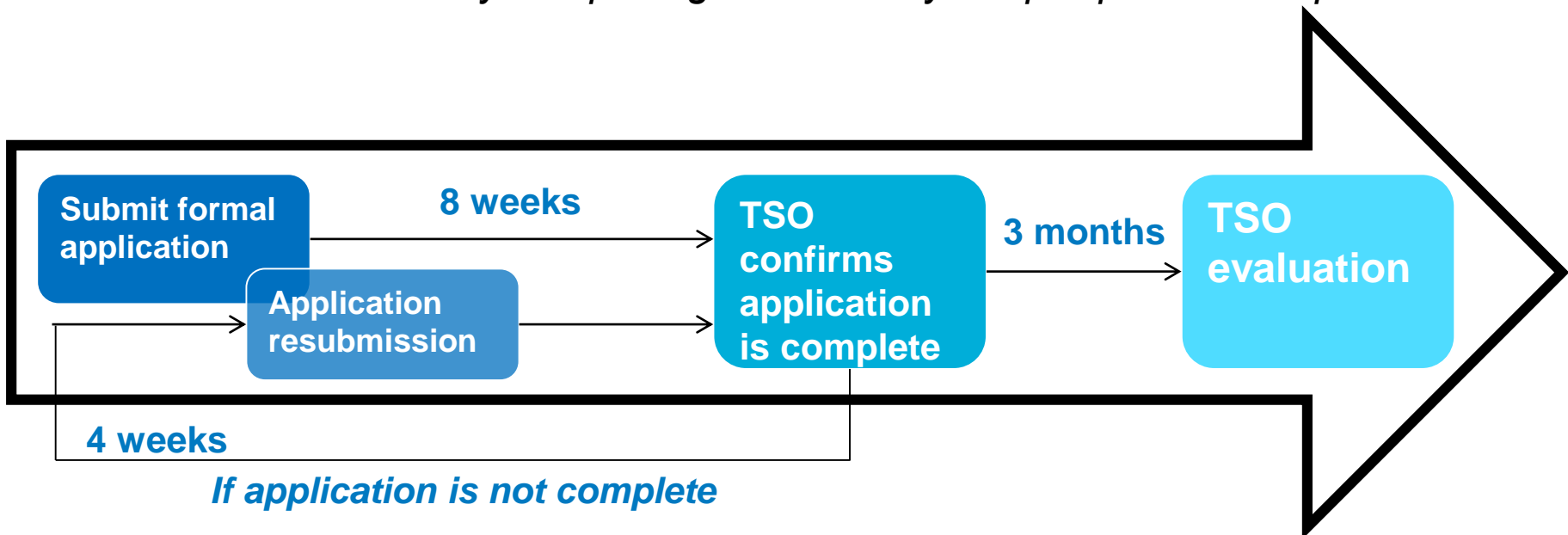
Background

- The EU System Operation Guideline (SOGGL) requires NGET to develop prequalification processes for Frequency Containment (FCR), Restoration (FRR) and Replacement Reserves (RR) by 18 September 2018.
- These prequalification processes are new processes in GB.
- In line with stakeholder feedback NGET proposes to develop these new processes under the established governance of the Grid Code.

SOGL prequalification requirements

“prequalification’ means the process to verify the compliance of a reserve providing unit or a reserve providing group with the requirements set by the TSO”

- SOGL requires *“each TSO shall develop an FCR prequalification process”* by September 2018.
- *“A potential FCR provider shall demonstrate to the reserve connecting TSO that it complies with the technical and the additional requirements set out in Article 154 by completing successfully the prequalification process”*



SOGL prequalification requirements

Each FCR providing unit and each FCR providing group shall;

- a) activate the agreed FCR by means of a proportional governor reacting to frequency deviations or alternatively based on a monotonic piecewise linear power-frequency characteristic in case of relay activated FCR.
- b) be capable of activating FCR within the frequency ranges specified in Article 13(1) of Regulation (EU) 2016/631.
- c) and comply with the following properties
 - i) Maximum combined effect of inherent frequency response insensitivity and possible intentional frequency response dead band of the governor of the FCR providing units or FCR providing groups of 15 mHz
 - ii) FCR full activation time of 10 s
 - iii) FCR full activation frequency deviation of ± 500 mHz
- d) specify the limitations of the energy reservoir of its FCR providing units or FCR providing groups

** Note I have focussed on FCR requirements here, but requirements also exist for FRR and RR.*

SOGL prequalification requirements

[Article 155 SOGL]

“6. The qualification of FCR providing units or FCR providing groups shall be re-assessed:

- (a) at least once every 5 years;*
- (b) in case the technical or availability requirements or the equipment have changed;
and*
- (c) in case of modernisation of the equipment related to FCR activation.”*

** Note I have focussed on FCR requirements here, but requirements also exist for FRR and RR.*

Is the Grid Code the right place?

- Prequalification processes must be developed by 18 September 2018, and SOGL specifies some minimum requirements. There is no governance requirement in SOGL for the process development, and no regulatory approval required.
- Joint work with the DCRP may be required as some balancing services are procured from distributed providers.

Proposed Grid Code Modification

- Modification proposes to introduce a new section to the Grid Code to describe the SOGL prequalification processes.
- NGET believes existing GB balancing services used to manage frequency can be maintained but must be mapped to one of the above categories. E.g. primary response maps to FCR, STOR to RR.
- The processes described in this modification will describe the necessary process in accordance with the EU requirements.

Mapping of Existing GB Response Services

	BM mandatory and Ancillary [MFR/FFR]			Ancillary
	Primary	Secondary	High	EFR
<i>SOGL class</i>				
FCR	Yes	No	Yes	Yes
FRR	No	Yes	No	No
RR	No	No	No	No

**illustrative mapping and not a comprehensive one (to be completed before Sept 2018)*

GB response services are generally comprised on three service technical components: Primary, Secondary & High. Additionally there is a Low Frequency triggered technical service component. Services in MFR, FFR, EFR

Comparing the GB services against the criteria for FCR from SOGL article 154 and the table in Annex V we can see that Primary, Secondary and High (from BM mandatory services) and the LF ancillary service, we see the results in the table above. Hence the FCR criteria covers P, H, L components of various GB services.

The principle is that GB services map to FCR, FRR, RR or another. The GB ‘Secondary’ service technical component that is part of Mandatory Frequency Response and a number of GB ancillary service products maps to FRR as it does not meet the time criteria for FCR and is used as part of the FRP.

The same mapping principle can be extended to services which map to FRR and RR.

Justification against Applicable Grid Code Objectives

Relevant Objective	Identified impact
To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity	Positive
To facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity)	Positive
Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole	Positive
To efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and	Positive
To promote efficiency in the implementation and administration of the Grid Code arrangements	Neutral

Impacts and other considerations

- Potential cross-code working with Dcode
- No identified consumer or environmental impacts
- Noted that GC0097 is also developing prequalification processes for TERRE.

Any other codes, processes or systems that are impacted?

Implementation

- Large degree of flexibility in SOGL on implementation options and timescales.

Options;

- Automatic prequalification for existing service providers with review in 5 years time
- Prequalification processes defined and implemented as and when with new service providers
- Any other options?