

# SOGL A119(c) GCDF Update Nov 2021

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# Purpose of session

Update since the last meeting

Complex problem to solve

Review feedback from the last meeting

Seek views of next steps from stakeholders

# Drivers



## GB Compliance driver

### Compliance

Ofgem's decision letter regarding the Intermediate Methodologies requires the ESO to achieve alignment with the GB frameworks by incorporation relevant provisions into the appropriate sections of the Grid Code and the NETS SQSS

Such provisions include ramping arrangements as set out in article 3 of the LFC Block Operational Agreement

Ramping for BMUs is included in the Grid Code- this does not cover interconnectors

SOGL Art 119c requires ramping restrictions to be determined for power generating modules in accordance with Art 137.3 and interconnectors in accordance with 137.4



## Operational drivers

### Operational

Increasing levels of interconnection- concern if all interconnectors react to the same coupled market signal

The current interconnector ramping approach and rates are not feasible for the future- this could significantly increase the amount of reserve required

Current arrangements are in bespoke agreements and new connections are based upon a precedence that was set whilst enduring solutions were considered- not considering system capabilities

VikingLink (Denmark) is under construction now

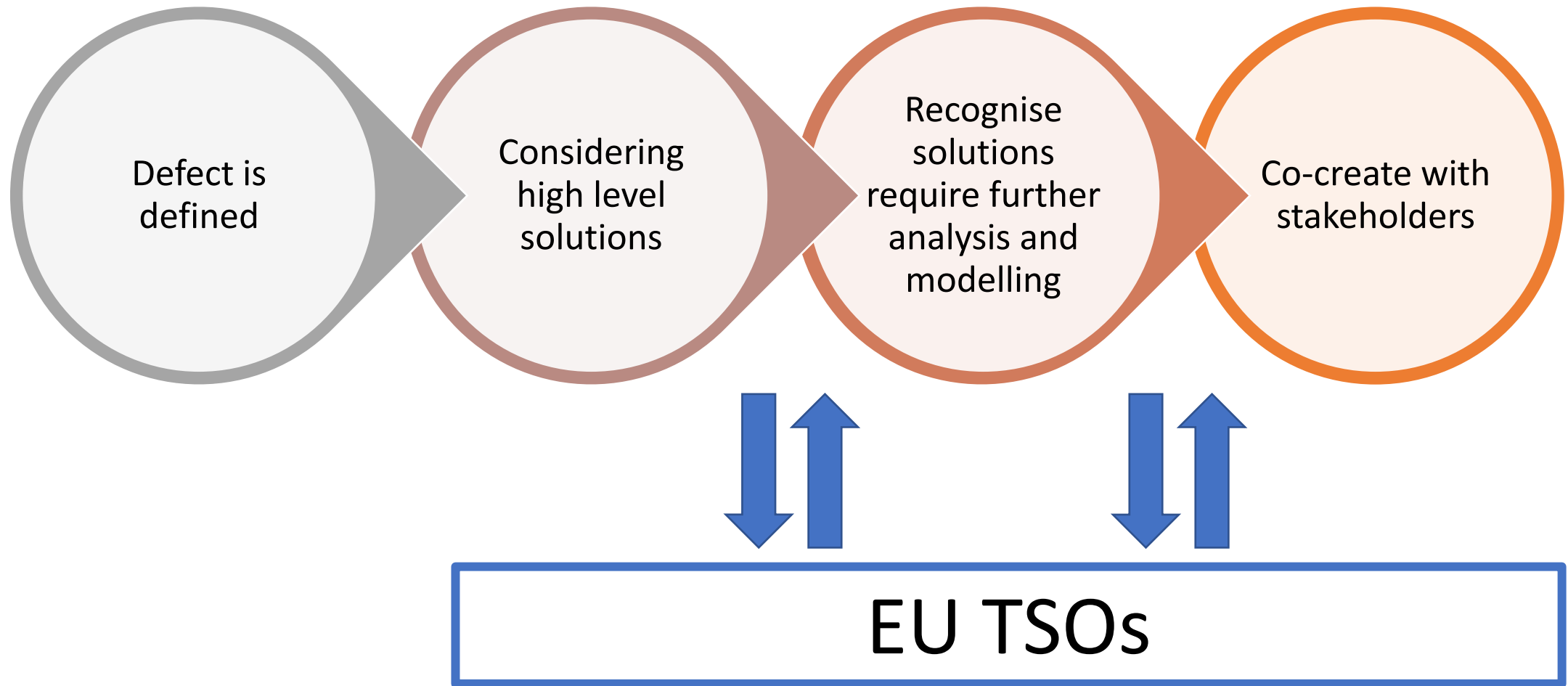
# Assumptions

Cross border ramping is the consideration in this work. This is based on the requirements placed upon us in the letter from Ofgem. Ramping for BMUs will be considered outside this modification

Cross –border ramping is a shared decision with the remote end EU System Operator; Therefore their involvement and coordination with this process is key to ensure a mutually acceptable solution.

ESO want to work collaboratively to achieve the right solution with the industry

# Where are we



# You said

Concerns from interconnectors	Suggestions from interconnectors
<p>Deviations</p> <p>Who to pay costs for imbalances?</p> <p>This appears to be an issue at specific times of the day</p> <p>Could this be disproportionately costly?</p> <p>ESO causes imbalances on the continental side</p> <p>Will there be reviews into the compensation on imbalance as the long and short is assumed to 'even out'?</p> <p>All focus is on ramp rate restrictions</p> <p>Removal of flexibility of IC seems blunt</p> <p>Only sharing 3 examples over 4 months does not indicate a big issue</p> <p>Restrictions on ramping moves the problem to the IC operator due to imbalances</p> <p>IC are flexible <u>plant</u> and this could prevent us responding positively in the market</p> <p>Will reduced ramping have a cost to consumers?</p>	<p>Could dynamic ramp rates help</p> <p>Solutions meets a need that cannot be reached with current EA ramp management programmes</p> <p>Only apply ramp rate restrictions when there is a system need</p> <p>IC are kept financially firm for imbalance</p> <p>Continental TSO are consulted with and in agreement</p> <p>More market-based solutions- not just a code change</p> <p>Flows are market driven - can this drive IC being part of these balancing services?</p> <p>Could the IC provide frequency response?</p>
Concerns from generators	Suggestions from generators
<p>Windfarms can also ramp quickly in both directions and with the increase in windfarms this is also going to cause system frequency issues</p> <p>Should the ramping rates for windfarms be in BC1.A.1.1</p>	<p>We should have a joined approach for all market participants</p> <p>Consistency with market participants</p> <p>Ensure that there is the lowest cost for consumers in a competitive market</p>

Windfarm comments are not in scope for this work- but will be shared to support future modifications

# High level solutions

A number of credible solutions\* have been identified that could solve the defect, in isolation or in combination, including:

- Include current bespoke IC ramping arrangements, as they are, into the Grid Code
- NGESO holds sufficient response and reserve to facilitate cross border ramping
- Develop additional tools with interconnector and EU TSOs to mitigate ramping (e.g. slow or delay)
- Changes to the GB wholesale market design to be more compatible with cross border markets
- Change cross border market designs
- Adjust interconnector ramp rate limits
- Dynamic ramping

\*Not an exhaustive list

# Draft co-creation plan

## Stage 1

### Engagement

- Facilitate industry meetings to share update on progress (GCDF, JSEG, EU & GB TSO's)
- Raise modification at GCRP
- Start the workgroup process

## Stage 2

### Develop solutions

- Test initial assumptions
- Understand potential accuracy for modelling/ forecasting of cross border ramping
- Develop and co create solutions with stakeholders
- Consider the TCA work

## Stage 3

### Review solutions

- CBA to complete
- Assess impacts to ENCC, remote and interconnector TSO's and consumers
- Consider TCA work

## Stage 4

### Implementation

- Conclude code modification working group and consult with industry
- Share outputs in Industry meetings
- Share report with the authority for decision

**Regular check points with remote end SOs will be scheduled in this process**



# Next Steps

- Attend GCRP to raise modification
- Seek workgroup nominations by Code Admin
- Continue internal analysis
- Prepare for the first working group meeting
- Prepare timeline for modification
- Complete engagement plan (including EU SO engagement)
- Hold workgroup meetings to develop the solution