

NOA Stability Pathfinder Phase 3

Tender Overview Document



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Version control

Version	Date published	Owner	Comments
1.0	10 September 2021	NGESO	

Introduction

In preparation for the NOA Pathfinder Stability Phase 3 tender, NGESO wanted to provide the market with advanced information about how the tender process for Stability Phase 3 will be run.

NOA Pathfinder Stability Pathfinder Phase 3 is looking for options to support locational stability requirements in England and Wales from 2025.

This document provides an overview of the tender process that will source the provision of stability services for the NOA Pathfinder Stability Phase 3, a high-level description of the Stability Phase 3 requirement, where NGESO are in the tender timeline, and what the next steps are in preparation for the launch of the tender.

The pack is split into the following sections

1. Technical Requirement Summary	Outlines the technical requirement for Stability Phase 3
2. Tender Process and Timeline	Outlines how the Stability Phase 3 tender will be run, and initial requirements of market participants
3. Key Tender Dates	Outlines key dates for the diary in relation to the Stability Phase 3 tender
4. Technical Specification Consultation	Outlines how the consultation period for the technical specification will be facilitated
5. Standard Contract Terms	Outlines how the contract terms for the provision of Stability Phase 3 will be developed
6. How will Phase 3 be different?	Outlines how Stability Phase 3 will be different to previous Pathfinders

Note: This document is not the invitation to tender. The invitation to tender will be issued in ~November 2021 at the launch of the tender. This document launches the pre-tender consultation periods and invites market participants to register their interest in the Stability Pathfinder Phase 3 tender.

Technical Requirement Summary

Topic	Stability Phase 3
Requirement procured	<p>NGESO are looking to procure inertia and short circuit level (SCL). The requirement is for 15GW.s of inertia and 7.5GVA of SCL. NGESO may seek resilience and procure above these numbers if it is economic to do so.</p> <p>Full detail of how the requirement will be assessed will be published with the invitation to tender.</p>
Region	<p>Locational-specific within England and Wales (North-East of England, East of England, South-West of England, South Coast of England, South Wales). NGESO intends to share a full list of substations and their effectiveness with the invitation to tender.</p>
Service delivery period	<p>Services are required by 1st April 2025. Services may start earlier than this (at NGESO's discretion), for example April 2024. Where this occurs, the service will be paid for at the same contract rate from April 2024. Solutions that start after 1st April 2025 will be considered. Full detail of the assessment methodology will be published with the invitation to tender in November 2021.</p>
At what voltage levels can solutions be offered?	<p>Solutions can be offered at 275kV and above</p>
Technology	<p>Stability Phase 3 is seeking technologies that provide a combined solution for SCL and inertia. Inertia-only and SCL-only solutions are not being sought. Any type of solution can participate but they must meet the requirements set out in the technical specification.</p>
Non-zero MW providers	<p>Non-zero MW providers can participate but must provide additional capability in accordance with the Additionality Criteria (p.7). The assessment methodology will only value the additional stability being offered beyond what NGESO expect to be inherently provided. Furthermore, the assessment will incorporate the cost of displacing in-merit generation on the system.</p>
Can services be stacked?	<p>Some services can be stacked with the Stability Phase 3 service provision, subject to the terms and conditions related to Permitted Service in the General Terms. Refer to Appendix A for an indicative list of services that may be stacked.</p>
Can existing connections participate?	<p>Participants with existing connections can participate such that the Additionality Criteria (p.7) is satisfied.</p>
Can TOs participate?	<p>Yes. NGESO will accept tendered solutions from transmission network owners, as well as market participants, and assess all tendered solutions during the tender assessment. The current expectation is that should network owner solutions be successful, network owners will perform the service under regulated activities through the price control rather than receiving a commercial contract.</p> <p>Transmission network owners have license obligations to ensure safe, economic and reliable operation of their networks and to facilitate connections. In an absence of market solutions, TOs would invest in the network as needed to ensure an operable network.</p>
Can DNOs participate?	<p>No. NGESO are only seeking transmission-connected solutions (275kV and above)</p>

Note: Timelines are indicative and subject to change in accordance with page 2.

Technical Requirement Summary

The size and locations of the requirement by region are shown in the table below. NGENSO intends to share a full list of substations and their effectiveness against this with the invitation to tender.

For security purposes, NGENSO needs to ensure that the SCL need can be met in each region even when a solution becomes unavailable. Generally, this would mean that the unavailability of the largest provider in each region would need to be secured against. To cater for this requirement, NGENSO may procure more SCL than what is presented in the table above if it is economic to do so.

The SCL size of solutions procured will depend on the number of connection points available. At the invitation to tender later this year NGENSO will confirm the final number of connection points that have been reserved in each region and reflect the impact on the SCL size.

Please let us know if this approach will have any adverse impact on the selection and sizing of your solutions and/or anything else we should be aware of e.g. if there are limitations to the sizes of the solutions you can provide.

Region	Short Circuit Level (SCL) and Inertia Need
North-East England	500 MVA
East of England	2000 MVA
South Coast	2000 MVA
South-West England	500 MVA
South Wales	2500 MVA
Total Inertia across these regions	15 GW.s

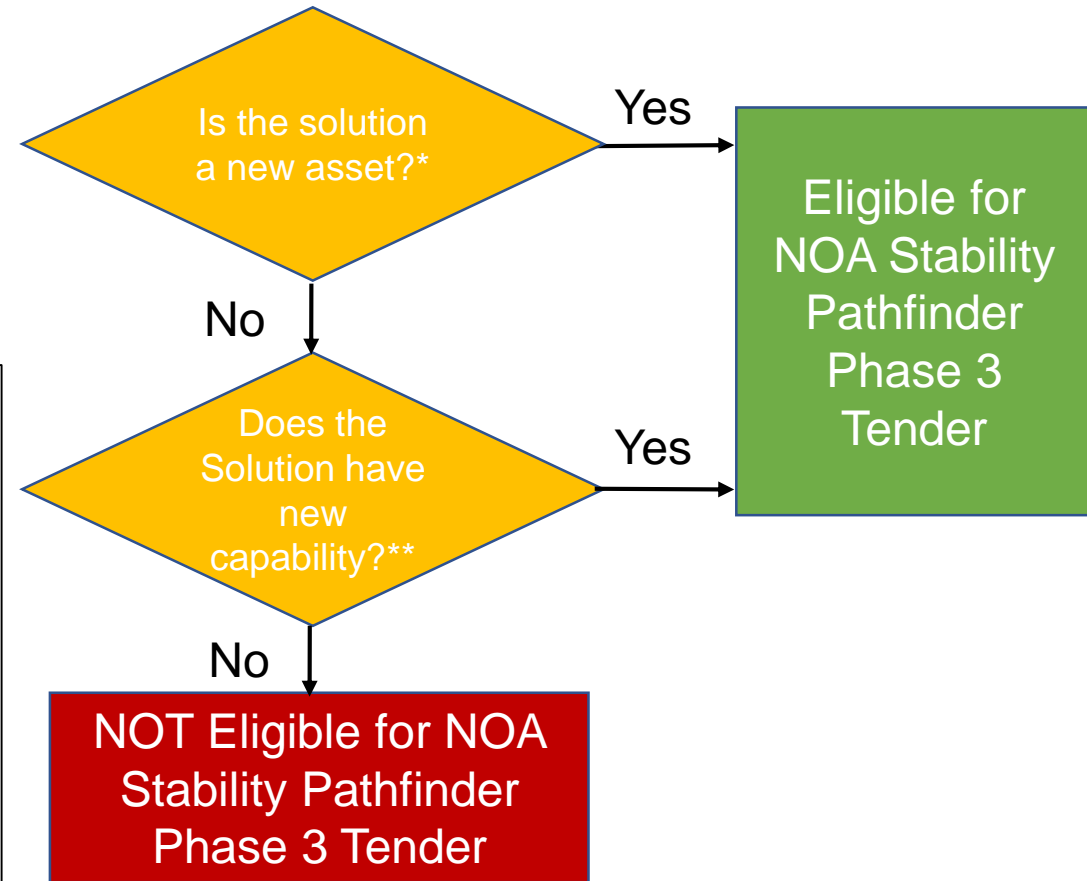
Additionality Criteria

As part of Stability Phase 3, NGENSO are looking to buy additional capability beyond that which is currently available either by being dispatched as part of the energy market or by being brought onto the system through the ESO control room actions in the Balancing Mechanism.

NGESO has therefore set up the following criteria to define additionality to allow a solution to bid into Stability Phase 3.

* The solution must be new build for the purpose of the stability pathfinder to be eligible to tender. Any providers that are in the TEC register^[1] or have a signed connection agreement ^[2] will be expected to be built and will **NOT** be considered to be new for this criteria.

** Existing assets must demonstrate that they are increasing their capability to provide SCL and/or inertia above what is currently provided or are implementing the new capability to operate at or below 0MW to be eligible to tender. Suitable options include (but not limited to) a converter retrofitting grid forming capability, an existing synchronous condenser increasing its SCL or inertia, or an existing generator converting to operate at 0MW.



[1] TEC register as per 10th September 2021

[2] Connection agreement signed on or before 10th September 2021

Tender Process

- The Stability Phase 3 tender will be run as a one-stage tender that will request both technical and commercial proposals from market participants at the same time, with one submission date. Please refer to page 9 for the tender timeline.
- The one-stage tender process has been identified as an efficiency opportunity following a review of lessons learned on previous Pathfinders.
- The tender will be launched in **November 2021** with submissions due in **March 2022**, using a tender platform called SAP Ariba Sourcing. This platform is accessible to all – please refer to the Ariba guidance document for information on how to register on SAP Ariba Sourcing.
- To provide the market with sufficient information to allow potential participants to decide if they would like to participate in advance of the tender, NGENSO have published the Stability Phase 3 Technical Requirement and Stability Phase 3 Draft Contract Terms on the NGENSO website. Both these documents will be open for consultation to receive feedback from the market. Please refer to pages 10 - 13 for more details.
- These consultations will include webinars for market participants to attend and ask questions, please refer to page 10 for more details.

Requirements to take part

- To participate in this tender, participants must send an email to: box.ESO.StabilityP3@nationalgrideso.com to register their interest, confirming the following information: Company Name, Nominated Contact, Email Address, Phone Number, and Postal Address. **Please send this email and register for the Stability Phase 3 tender by 22nd October 2021.**
- This registration enables NGENSO to allow participant access to the tender on SAP Ariba Sourcing.
- Market participants who register will be required to complete and return the tender submission documents to be considered.
- For Network Owners, a System Requirements Form (SRF) must be completed and submitted by the same tender deadline to be considered.

Note: Timelines are indicative and subject to change in accordance with page 2.

Key Tender Dates

Activity	Expected Date	Registration Link
Technical Specification & Connections Approach Webinar	17th September 2021	Eventbrite Registration Link
Contract Terms Webinar	17th September 2021	Eventbrite Registration Link
Technical Specification Consultation Closes	8 th October 2021	Not applicable.
Standard Contract Terms Consultation Closes	8 th October 2021	Not applicable.
Tender Launch on Ariba	November 2021	Not applicable. Participants who register interest in the tender by email (see page 8) will be invited to the tender on SAP Ariba.
Tender Deadline	March 2022	Not applicable.

Note: This timeline is indicative and subject to change in accordance with page 2.

Technical Specification Consultation

- NGESO have published the technical specification for Stability Phase 3, which is available on the NGESO website
- This triggers the start of the consultation period on the technical specification. This consultation asks for feedback on the technical specification and specific questions for response through the technical specification consultation form.
- To respond to the technical specification consultation, please complete the technical specification consultation form and return it to box.ESO.StabilityP3@nationalgrideso.com
- The consultation period ends on **8th October 2021**
- During this consultation period, a webinar will be held on **17th September 2021** to allow participants to ask questions. Please refer to page 10 to register for the technical specification webinar.
 - A copy of the webinar recording will be made available on the NGESO website.
- The final version of the technical specification will be published on the NGESO website and to tender participants. Amendments made to the technical specification as the result of the consultation period will be made explicit to participants.



Note: This timeline is indicative and subject to change in accordance with page 2.

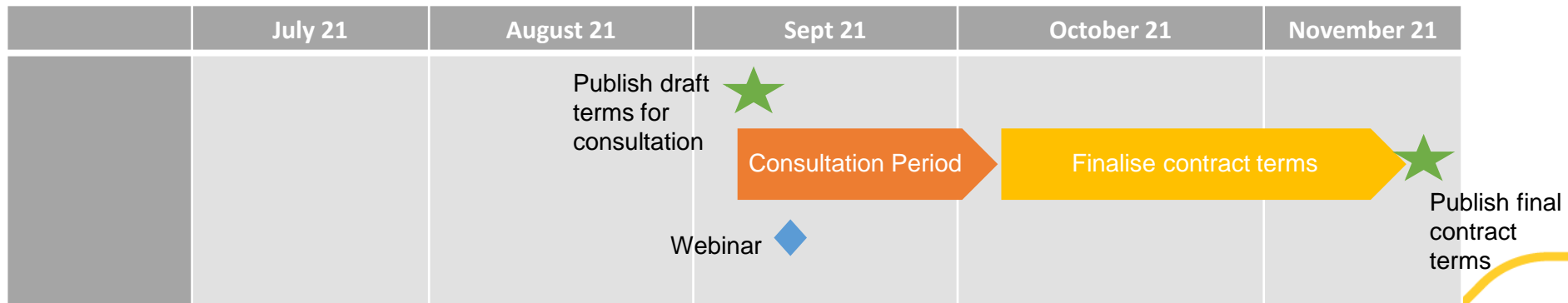
Technical Specification Consultation

- The Stability Phase 3 Technical Specification document presents the technical requirements that solutions seeking to participate in the tender would need to meet. The technical specification is based on the technical specification used in the NOA Pathfinder Stability Phase 2, with key changes made to:
 - align with most of the requirements from the latest update (August 2021) of the [GC0137 Grid Code Modification Proposal for Grid Forming Converters](#). The GC0137 Annexes and draft legal issued for consultation in March 2021 consultation text can be found [here](#).
 - address lessons learned from the NOA Stability Pathfinder Phase 2.
- The technical specification currently contains some requirements that are proposed under GC0137 and others which are specific to the requirements of the NOA Stability Pathfinder Phase 3 tender. **NGESO is seeking feedback on the entire technical specification which participants can submit through the consultation form.**
- GC0137 is currently progressing through the Grid Code Governance process. The workgroup consultation closed on 30th April 2021, following which, National Grid ESO have reviewed and responded to the comments received. The legal text has also been updated from the March 2021 version and is currently being reviewed by workgroup members ahead of proceeding to the Code Administrator Consultation. We expect that by the time of tender launch, the GC0137 requirements will be well advanced but not yet approved by Ofgem.
- Although NGESO does not expect any major changes to the GC0137 requirements, the Stability Phase 3 Technical Specification document may be updated, if required, to reflect the latest version of the GC0137 requirements available at tender launch and to address any feedback received as part of this consultation. Participants will be under no obligation to implement any subsequent changes to the GC0137 requirements that may occur post tender launch.

**Note: This timeline is indicative and subject to change in accordance with page 2*

Standard contract terms

- NGESO have issued the draft contract terms for Stability Phase 3 to give potential participants an indication of the service terms which they would be expected to deliver under to support their decision on whether to participate in the process.
- This publication triggers the start of the consultation period on the contract terms to receive feedback from the market on aspects of the terms. **This consultation requests market feedback on specific questions for response through the contract consultation form.**
- To respond to the contract terms consultation, please complete the consultation form and return it to box.ESO.StabilityP3@nationalgrideso.com with the subject heading “Stability Phase 3 SCT – [Company Name].”
- The consultation period ends on **8th October 2021**.
- During this consultation period, a webinar will be held on **17th September 2021** to allow participants to ask questions. Please refer to page 10 to register for the technical specification webinar.
 - A copy of the webinar recording will be made available on the NGESO website.
- The final version of the contract terms will be published on the NGESO website and to tender participants. Amendments made to the contract terms as the result of the consultation period will be made explicit to participants.



Note: This timeline is indicative and subject to change in accordance with page 2.

How will Stability Phase 3 be different?

- Stability Phase 3 will be run as a one-stage tender with technical and commercial submissions together, rather than a split two-stage approach which has been adopted on other Pathfinders.
 - Feedback received from the market in relation to the prior Pathfinder timelines was varied, stating the process could be quicker, and stating the process could be longer
 - NGENSO have reviewed this and identified the one-stage process as an opportunity to better meet time management needs for all market participants
- Stability Phase 3 is only seeking joint SCL and inertia solutions.
 - Market information received on prior Pathfinders evidenced that both SCL and inertia could be provided from one solution, for a relatively small additional cost.
 - NGENSO have reviewed this with further analysis reinforcing that the full SCL and inertia need could be met by joint SCL and inertia solutions more efficiently than a combination of SCL-only, inertia-only and joint SCL and inertia solutions.
- The connection approach being taken on Stability Phase 3 is different to the approach seen on previous Pathfinders. Please refer to the Connection Guidance Document for details on this approach.
 - This is as a result of feedback received from market participants and Transmission Owners in the experiences on prior Pathfinders. NGENSO has reviewed this feedback and identified an innovative approach to connections requirements, which is being trialed in Stability Phase 3.
 - NGENSO invites the market to provide feedback on this new approach by emailing box.ESO.StabilityP3@nationalgrideso.com
- Stability Phase 3 will be capping the number of proposals that can be submitted by tender participants.
 - This change has been made following feedback following lessons learned from prior Pathfinders and market feedback received at the June 2021 Markets Day run by NGENSO
 - This cap will be in accordance with the size and locations of the requirement, and the connections approach

Appendix A - Service Stacking

Service	Allowed for service stacking as a Permitted Service?	Pay for Availability?
Wholesale Market	Yes	Yes, provided additional Stability capability is available
BM from PN=0MW	Yes	Yes, as asset must have additional capability and/or be able to provide stability at 0MW
BOA from non-0MW PN	Yes	Yes, provided additional Stability capability is available
Response and Reserve	Yes	Yes, provided additional Stability capability is available
Constraint Management (Exclusive of Constraint Management Pathfinder Intertrip service)	Yes	Yes, as asset must have additional capability and/or be able to provide stability at 0MW
Enhanced Reactive	Yes	Yes
Capacity Market	Yes	Yes, as does not impact service delivery
Black Start	Yes	Yes, as does not impact service delivery

Note: the table above is indicative only and may be revised.
The Stability Phase 3 tender assessment will ask participants to declare if they intend to stack services.

