

DS3 System Services Volume Uncapped Gate 7 Bidders' Information Session

Wednesday 29th June 2022

10:00 – 11:30

Please keep mic muted

Please keep video off

***6 on conference line is to mute / unmute**

Raise queries during webinar to DS3@EirGrid.com



Agenda

Topic	Speaker
Introduction	Anna Pocock
Procurement Process Overview	Anna Pocock
Q&A	Attendees
Tender Pack and Technical Questionnaire	Paul Stanley
Q&A	Attendees
Testing and Signalling Requirements	Eduardo Galeazzo
Q&A	Attendees
Closing Comments	Anna Pocock
Webinar Ended	-

Introduction

- Post webinar, queries can be emailed in the clarification template to Anna.Pocock@Eirgrid.com and tenders@eirgrid.com:
 - Closing date for receipt of queries is **12 noon on 1st July 2022**.
- The presentation slides will be made available on eTenders and on the EirGrid and SONI websites.



Future Gates

Gate No	Indicative Contract Execution Date
7	October 2022
8	April 2023
9	October 2023

Procurement Process Overview

Anna Pocock



Qualification System

- **Qualification System** – refers to the system that is in place to enable interested parties to submit a Response and subsequently qualify for award of Contract for provision of DS3 System Services (under Volume Uncapped Arrangements).
- Qualification System will last until April 2024, with the option to extend at the Contracting Entities' discretion and subject to Regulatory Authority approval (1 extension of up to 18 months). This is pursuant to SEM Committee decision paper (SEM 21-021).
- 14 System Services in total are being procured as part of the Qualification System, over 28 lots (14 for EirGrid and 14 for SONI). The remaining 2 services, DRR and FPFAPR, may be added at a future procurement gate of the Qualification System.
- 12 services have been procured to date in accordance with Phase 1 and Phase 2 in 2018, Gate 1 in September 2019, Gate 2 in April 2020 , Gate 3 in October 2020, Gate 4 in April 2021, Gate 4B in July 2021, Gate 5 in October 2021 and Gate 6 April 2022.



Gate Process

- **Gate Process** – refers to the period after the initial procurement Phases 1 and 2 whereby Tenderers may apply for a place on the Qualification System at any time.
- New applicants may submit a completed Response for a place on the Qualification System at any time.
- It is intended that specific contracts will be awarded every six months – these periods are referred to as Gate Dates. EirGrid will issue periodic notices on the OJEU / EirGrid websites outlining the requirements and timeframes involved. Indicative dates are contained in the briefing document.
- Exception to the 6-month process is Gate 4-B.



DS3 System Services Agreement

- This procurement is being run by EirGrid on behalf of both EirGrid and SONI for their respective DS3 System Services Agreement.
- A separate DS3 System Services Agreement is in place for:
 - EirGrid (as contracting entity for the DS3 System Services Agreement applicable to Ireland) and
 - SONI (as contracting entity for the DS3 System Services Agreement applicable to Northern Ireland).
- Existing holders of an agreement will receive an amended Schedule 9; new parties to the Qualification System will receive an agreement dated 1st October 2022.



Gate 7

- OJEU Notice (2022/S 118-333983) published on 16th June 2022
 - ENQEIR800 - DS3 System Services - Volume Uncapped – Gate 7
- Two stages in this procurement process (submitted together):
 - Pre-Qualification; and
 - Tender
- Lots
 - Lots 1-12 IE
 - Lots 1-12 NI
- Documents available on eTenders www.etenders.gov.ie



Gate 7

➤ Gate 7 applies to 3 scenarios:

1) Providing Unit that is not currently contracted for the provision of any System Service and wishes to tender for one, some or all services;

Tenderer will receive a new agreement

2) Providing Unit intends to amend its contracted values for a service that it currently provides (this may be enhancing or reducing its capability);

3) Providing Unit that is contracted for the provision of one or more services and wishes to tender for additional services.

Tenderer will receive an amended Schedule 9

➤ Providing Units that do not wish to amend their existing provision of a particular service must not submit a tender for the respective Lot.



Gate 7 Lot Numbers – EirGrid

Existing Services			
POR L1IE	Primary Operating Reserve	SSRP L7IE	Steady State Reactive Power
SOR L2IE	Secondary Operating Reserve	SIR L8IE	Synchronous Inertial Response
TOR1 L3IE	Tertiary 1 Operating Reserve	RM1 L9IE	Ramping Margin 1 Hour
TOR2 L4IE	Tertiary 2 Operating Reserve	RM3 L10IE	Ramping Margin 3 Hour
RRD L5IE	Replacement Reserve (De-Synchronised)	RM8 L11IE	Ramping Margin 8 Hour
RRS L6IE	Replacement Reserve (Synchronised)	FFR L12IE	Fast Frequency Response

Gate 7 Lot Numbers – SONI

Existing Services			
POR L1NI	Primary Operating Reserve	SSRP L7NI	Steady State Reactive Power
SOR L2NI	Secondary Operating Reserve	SIR L8NI	Synchronous Inertial Response
TOR1 L3NI	Tertiary 1 Operating Reserve	RM1 L9NI	Ramping Margin 1 Hour
TOR2 L4NI	Tertiary 2 Operating Reserve	RM3 L10NI	Ramping Margin 3 Hour
RRD L5NI	Replacement Reserve (De-Synchronised)	RM8 L11NI	Ramping Margin 8 Hour
RRS L6NI	Replacement Reserve (Synchronised)	FFR L12NI	Fast Frequency Response

Tender Response

- Tenderers must submit a separate standalone tender for each and every Providing Unit.
- Note: A Tenderer may have more than one Providing Unit.
- Tenders should be split into two constituent parts (submitted at the same time):
 - A pre-qualification section; and
 - A tender section.
- Tenderers' response for each Providing Unit should consist of:
 - Part 2 of the **Qualification System Briefing Document**, including Forms 1, 2 and 3; and
 - A Completed **Technical Questionnaire** sheet for each Lot they are submitting for (must be completed in Excel).



Tender Evaluation

- All Responses will be evaluated, on a lot by lot basis and Providing Unit by Providing Unit basis, against the qualification and award criteria outlined in the tender pack.
- Tender evaluation:
 - against the **Pass / Fail pre-qualification** minimum requirements for the lot concerned; and
 - against the **award criteria for compliance** in line **with the technical requirements** for the lot concerned.
- As the payment rate (tariff) for each System Service will be fixed, Responses will be assessed under the award criteria based upon quality (technical compliance) only.



Tender Queries

➤ Queries Arising from this Webinar

- We will verbally answer some queries received via Q&A today.
- Formal response will issue to all Tenderers which may supersede information provided today.
- We request Tenderers to formally submit queries via email.

➤ General Queries

- Submit by email.
- In Clarification Template.
- Not later than **12:00 noon Irish Time on 1st July 2022.**
- Addressed to: Anna Pocock at anna.pocock@eirgrid.com and tenders@eirgrid.com
- EirGrid will respond to all queries by **8th July 2022.**



Submission of Tenders

- Interested Tenderers must submit a tender response **through the eTenders portal** in respect of the relevant Lot.
- Tender box close time **12 noon**, Irish Time, on **Wednesday 20th July 2022** – **eTenders will not allow upload after this time.**
- **The Tenderer is fully responsible for the timely delivery of the tender.**



Tender Timetable

Event	Date
Deadline for Submission of Queries	No later than 12:00 hrs (Irish Time) on 1st July 2022
EirGrid and SONI to Respond to Queries	By close of business on (Irish Time) on 8th July 2022
Deadline for Submission of Tenders	No later than 12:00 hrs (Irish Time) on 20th July 2022
Notification of Successful Tenderers	5th September 2022 (Indicative)
Standstill Period	14 days from Notification Date
Contract Commencement	1st October 2022



Procurement Process Overview

Q & A

TSOs will provide a verbal response to queries received during the webinar.

All queries will receive a written response following the webinar.



Tender Pack and Technical Questionnaire

Paul Stanley



Contractual Arrangements

Scenario 1 –
agreement is dated
1 October 2022

Scenario 2 & 3 –
amended Schedule
9 via Side Letter

DS3 System Services Agreement

- Standard contractual provisions
- Term
- Schedules for 14 DS3 System Services
- Scaling Factor details
 - Product Scalars
 - Locational Scalar

Clause 15.1 –
Changed from
Counterparts to
Electronic Signature
clause

Protocol Document

- Operational Requirements
- Performance Scalar Details
- Performance Monitoring Methods and infrastructure requirements
- Temporal Scarcity Scalar values
- Governance

Version 3 – Effective
1 October 2020

Statement of Payments

- DS3 System Service Payment rates

DS3 System Services Tariffs

Per SEM Committee decision (21-089) tariffs for FFR-TOR2 reduced by 10% from 1st January 2022

Service	Service Name	Unit	Payment Rate (€)
SIR	Synchronous Inertial Response	MWs ² h	0.0050
FFR	Fast Frequency Response	MWh	1.94
POR	Primary Operating Reserve	MWh	2.92
SOR	Secondary Operating Reserve	MWh	1.76
TOR1	Tertiary 1 Operating Reserve	MWh	1.40
TOR2	Tertiary 2 Operating Reserve	MWh	1.12
RRD	Replacement Reserve (De-Synchronised)	MWh	0.56
RRS	Replacement Reserve (Synchronised)	MWh	0.25
RM1	Ramping Margin 1 Hour	MWh	0.12
RM3	Ramping Margin 3 Hour	MWh	0.18
RM8	Ramping Margin 8 Hour	MWh	0.16
SSRP	Steady State Reactive Power	MVarh	0.23
DRR	Dynamic Reactive Response	MWh	0.04
FPFAPR	Fast Post Fault Active Power Recovery	MWh	0.15

Service Maximum Capability Volumes

Briefing Document Section 1.6.4 – maximum capability volumes to apply per service.

Service	Max Volume - Normal Operation	Max Volume - Requested by TSO
FFR	75 MW	100 MW
POR	75 MW	100 MW
SOR	75 MW	100 MW
TOR1	75 MW	100 MW
TOR2	75 MW	100 MW
RRD	300 MW	N/A
RRS	300 MW	N/A
RM1	450 MW	N/A
RM3	500 MW	N/A
RM8	500 MW	N/A
SSRP	400 Mvar	N/A
SIR	120,000 MWs ²	N/A

Technical Questionnaire

- Excel document that is used to determine a unit's technical capability to provide a service
- Technical Questionnaire contains:
 - General Guidance sheet
 - Reserve Characteristic and PQ Capability sheets
 - System Services Site Info sheet for aggregated Providing Units
 - Individual sheets for each Lot (24 in total)



Technical Q - Guidance Sheet

GENERAL INFORMATION	
<ul style="list-style-type: none"> The following information is to assist Tenderers in completing the questionnaire appropriately. Tenderers must complete the relevant questionnaires for each lot being tendered for as outlined below. Where additional information is required please input a cross reference number from the tender submission document. 	<p>Section A is Pass/Fail for all Providing Units.</p>
<ul style="list-style-type: none"> SECTION A in each lot must be completed by a Tenderer that wishes to contract for that lot. This is a PASS/FAIL questionnaire. It will be at EirGrid's sole discretion to request clarification on any technical information provided and subsequently decide whether the technical response is sufficient to achieve a Pass for that requirement. A Tenderer that fails on any one question will be disqualified. SECTION B (Applicable for Distribution Connected Providing Units only) in each lot must be completed by a Tenderer that wishes to contract for that lot. This is a PASS/FAIL questionnaire on any technical information provided and subsequently decide whether the technical response is sufficient to achieve a Pass for that requirement. A Tenderer who fails on any one question will be disqualified. SECTION C in each lot is for information purposes. However, unless otherwise stated in Section A, it must be completed in its totality. The Section C questionnaire is to facilitate the completion of the SEM. Where relevant, a Tenderer should provide details of the Providing Unit as it is registered in the SEM e.g. in the case of a three shaft CCGT that is registered in the SEM as two units, each unit should be completed. Tenderers should complete all orange cells. If not applicable please indicate N/A. In some instances this is part of a drop down menu. 	<p>Section B is Pass/Fail for Distribution Connected Providing Units.</p>

Section A is Pass/Fail for all Providing Units.

Section B is Pass/Fail for
Distribution Connected
Providing Units.

Section C is for information but must be completed as specified.

For Distribution Connected Providing Units, TSO will share relevant information with the DSO/DNO if tenderer permits.

All Providing Units must complete this sheet, including the Lots being tendered for.

FOR COMPLETION BY TENDERER	
Service Provider	
Providing Unit	
ID in SEM (if applicable)	
If the Providing Unit is connected to the Ireland/NI Grid	
Does the TSO wish to share information relevant to DSO/DNO approvals with the DSO/DNO, Tenderer must respond NO. If Tenderer agrees for relevant information to be shared with the DNO/DSO, Tenderer must respond YES.	<p>If the Tenderer replies NO (i.e. does not give permission for the TSO to share this information) the Tenderer must complete Section(s) A of the Procurement Questionnaire for the lot(s) for which it is applying and must submit it to the DSO/DNO (as applicable) by 20th July 2022. This information may be submitted either in written or electronic format to the following address (as applicable):</p> <p>FirGrid Contracts (DSO-connected Tenderers) submissions to: Killian Morgan ESB Networks Leopardstown Leopardstown Rd Foxrock Dublin D18 XN80</p> <p>Electronic submission: Submission via email is also acceptable. A signed copy should be sent to Killian.Morgan@esb.ie no later than 20th July 2022.</p> <p>SONI Contracts (DNO-connected Tenderers) submissions to: David Hill NIE Networks Ltd Carr Industrial Estate Portadown Co. Armagh BT63 5QJ</p> <p>Electronic submission: Submission via email is also acceptable. A signed copy should be sent to David.Hill@nie.co.uk no later than 20th July 2022.</p>

PLEASE COMPLETE THE FOLLOWING GUIDANCE TABLE AS APPROPRIATE: THIS IS TO ASSIST THE TENDERER TO COMPLETE A SUCCESSFUL TENDER AND TO ALLOW THE TSO TO ASSESS THE INFORMATION FOR COMPLIANCE

IRELAND				NORTHERN IRELAND			
LOT(I/E)	POR	ARE YOU APPLYING FOR THIS LOT?	CONFIRMATION	LOT(I/N)	POR	ARE YOU APPLYING FOR THIS LOT?	CONFIRMATION



Technical Q – Reserve Characteristic

INSTRUCTIONS FOR COMPLETING THIS SHEET.

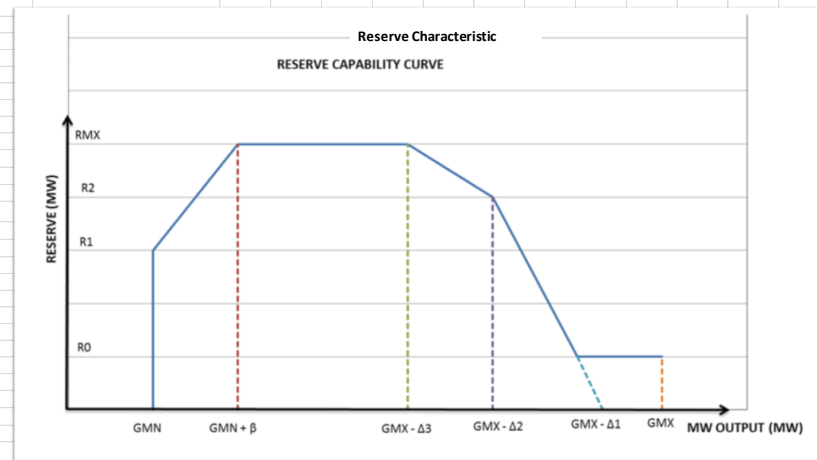
- : If the Providing Unit can operate on only one fuel, please complete TABLE 1.
- : If the Providing Unit can operate on two fuels, please complete TABLE 1 and TABLE 2.
- : If the Providing Unit can operate on three fuels, please complete TABLE 1, TABLE 2 and TABLE 3.
- : If the Providing Unit is a CCGT and can operate in Open Cycle Mode, in addition please complete TABLE 4.
- : If the Providing Unit is a CCGT and can operate on two fuels in Open Cycle Mode, in addition please complete TABLE 5.
- : If the Providing Unit is a WFPS and can provide FFR through emulated inertia please complete TABLE 2.

TABLE 1 - RESERVE CHARACTERISTIC PARAMETERS ON PRIMARY FUEL / FUEL 1						
	D53 System Services Reserve Characteristic parameters					
	FFR	POR	SOR	TOR1	TOR2	RR
RMX						
GMN						
R0						
R1						
R2						
DELTA1						
DELTA2						
DELTA3						
BETA						
PRIMARY FUEL / FUEL 1						

TABLE 2 - RESERVE CHARACTERISTIC PARAMETERS ON SECONDARY FUEL / FUEL 2						
	D53 System Services Reserve Characteristic parameters					
	FFR	POR	SOR	TOR1	TOR2	RR
RMX						
GMN						
R0						
R1						
R2						
DELTA1						
DELTA2						
DELTA3						
BETA						
SECONDARY FUEL / FUEL 2						

TABLE 3 - RESERVE CHARACTERISTIC PARAMETERS ON TERTIARY FUEL / FUEL 3						
	D53 System Services Reserve Characteristic parameters					
	FFR	POR	SOR	TOR1	TOR2	RR
RMX						
GMN						
R0						
R1						
R2						
DELTA1						
DELTA2						
DELTA3						
BETA						
TERTIARY FUEL / FUEL 3						

FOR INFORMATION: RESERVE FUEL GENERATION MODEL



Technical Q – PQ Capability

INSTRUCTIONS FOR COMPLETING THIS SHEET.

: If the Providing Unit is a Generation Unit, but is not a dual-shaft or three-shaft which is part of a CCGT installation, please complete TABLE1

: If the Providing Unit is a dual-shaft or three-shaft which is part of a CCGT installation, please complete TABLE2, TABLE3

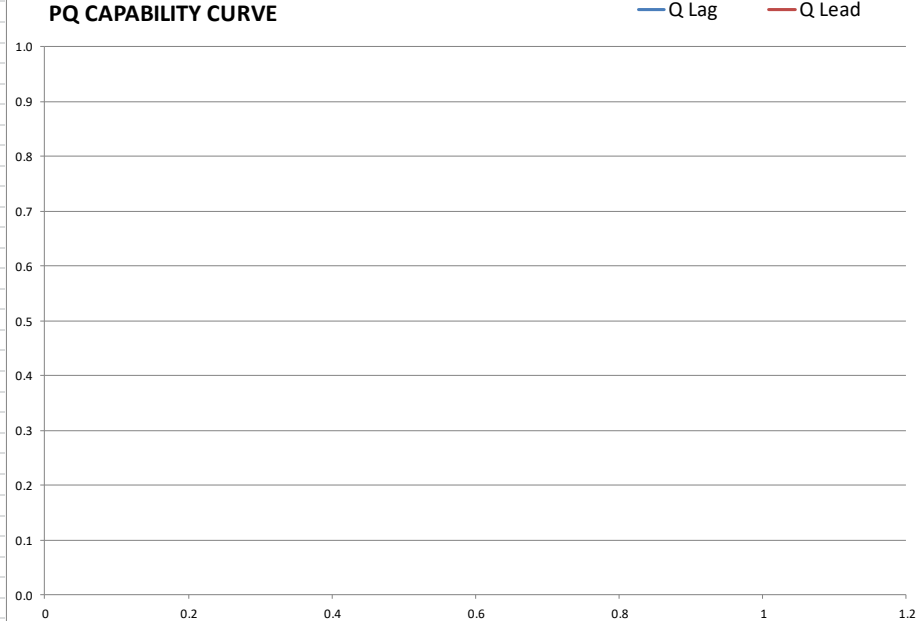
: If the Providing Unit is non-synchronous and has a negative Active Power range, please complete TABLE4

Generation Unit, but is not a dual-shaft or three-shaft which is part of a CCGT installation

TABLE 1 - PQ Capability

Registered Capacity			
% RCAP	P	Q Lead	Q Lag
0.00 of RCAP	0.0		
0.05 of RCAP	0.0		
0.10 of RCAP	0.0		
0.12 of RCAP	0.0		
0.15 of RCAP	0.0		
0.20 of RCAP	0.0		
0.25 of RCAP	0.0		
0.30 of RCAP	0.0		
0.35 of RCAP	0.0		
0.40 of RCAP	0.0		
0.45 of RCAP	0.0		
0.50 of RCAP	0.0		
0.55 of RCAP	0.0		
0.60 of RCAP	0.0		
0.65 of RCAP	0.0		
0.70 of RCAP	0.0		
0.75 of RCAP	0.0		
0.80 of RCAP	0.0		
0.85 of RCAP	0.0		
0.90 of RCAP	0.0		
0.95 of RCAP	0.0		
1.00 of RCAP	0.0		

PQ CAPABILITY CURVE



Sample Lot – Section A

Section A.1 is for Candidates that are applying to amend their existing contracted service values.

SECTION A.1 - EXISTING CONTRACTED ENTITIES ONLY			
1.1	Has the Providing Unit an existing DS3 System Services Agreement for Regulated Arrangements for POR for a non-zero value and is applying to change the Reserve Characteristic for POR relative to the values specified in its DS3 System Services Agreement or to change from Static to Dynamic service provision or vice versa??		<p>Tenderer must respond YES and must answer questions in Section B and all of Section C.</p> <p>If the Providing Unit is an Aggregator please provide MPRN meter numbers, and Individual Demand Site details, as outlined in the Grid Codes (SONI section AGU, SONI section PC.A3.4.3 for DSU, EirGrid section AGU, EirGrid section PC.A7 for DSU) by filling out the System Services Site Info tab. Aggregators must be able to provide all contracted capability by 1 October 2022 and that capability must be reflected on the Providing Unit's Operational Certificate on or before 1 October 2022.</p> <p>Where an Individual Demand Site or Generator Site is not currently contracted with the Aggregator, the Providing Unit must provide satisfactory evidence, for example a letter of intent, that such contracts will be in place by 1 October 2022. Where an Individual Demand Site or Generator Site is currently contracted to another Aggregator, in order to complete the transfer of an Individual Demand Site or Generator Site into the Operational Certificate of the tendering Providing Unit effective 1 October 2022, the TSO will require written confirmation from the Individual Demand Site or Generator Site stating that they are transferring to the Providing Unit.</p> <p>Tenderer must respond either YES or NO.</p> <p>If Tenderer responds YES, Tenderer must provide the TSO-approved System Services Test Report demonstrating the Providing Unit's capability.</p> <p>If Tenderer responds NO, Tenderer must respond to question 1.2C and provide the associated evidence.</p>
1.2A	Has the Providing Unit a TSO-approved System Services Test Report demonstrating the Providing Unit's capability to provide the POR service according to the applied for changes (i.e. changed Reserve Characteristic and/or Static/Dynamic classification)? (This question is only pass / fail in combination with 1.2B & 1.2C.)		<p>Note: Test Reports must be in the correct System Services Test Report template. System Services Test Report templates are available here: http://www.eirgridgroup.com/customer-and-industry/general-customer-information/grid-code-compliance-test/compliance-testing/system-services-testing/index.xml</p>
1.2B	<p>If the answer to question 1.2A above is NO, please confirm:</p> <p>Has the Providing Unit conducted testing with the TSO to demonstrate capability to provide the POR service and has not yet had a test report approved by the TSO?</p> <p>OR</p> <p>Has the Providing Unit submitted a Testing Request to the TSO and the TSO has agreed to a date, which must not be after 5 August 2022, for testing to take place?</p> <p>OR</p> <p>Has the Providing Unit submitted test data (witnessed as required by the TSO), or performance data, to the TSO and the TSO has agreed to evaluate the Providing Unit's capability to provide the POR service based on the data?</p> <p>Note 1: Tenderer must have engaged with the TSO regarding the Providing Unit's testing requirements in advance of tender submission.</p> <p>Note 2: If Tenderer is a DSU, Tenderer must submit a completed DSU application form when requesting a test date, which must include all Individual Demand Sites that are to be tested.</p> <p>Note 3: If Tenderer is a DSU or AGU and is intending to test an Individual Demand Site or Generator Site that is currently</p>		<p>Tenderer must respond YES.</p> <p>Tenderer must provide written confirmation from the TSO operator confirming that:</p> <p>Testing has taken place. Tenderer must state the test date.</p> <p>OR</p> <p>If a Testing Request has been submitted, that the TSO has agreed to a date, which must not be after 5 August 2022, for testing to take place.</p> <p>Tenderer must state the test date.</p> <p>OR</p> <p>If test / performance data has been submitted, that the TSO has agreed to evaluate the Providing Unit's capability to provide the POR service based on the data.</p>

Aggregators take note of Q1.1 – specifically relating to individual sites that are not currently contracted with the Providing Unit.

Aggregator Site Switching

- A service provider managing an aggregated DSU / AGU may submit a tender in respect of a Providing Unit comprising a list of constituent sites where for such sites there is either:
 - an active contract in place between the service provider and the site; or
 - where a site is not currently contracted with the Aggregator, satisfactory evidence, for example a letter of intent, that such contracts will be in place by 1st October 2022.
- All necessary testing as specified under the procurement rules must be completed by the deadlines specified within the procurement.



System Services Site Info

	Site No.	Tenderer should align the Site no. with site numbers listed in the DSU Application form / AGU Application form / DSU Ops Cert / GASOA Schedule	1	2	3	4	5	6	7
1	Is this site providing DS3 System Services?	Yes / No	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List
2	Name of Individual Demand Site		<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
3	MPRN		<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
4	Irish Grid Co-ordinates of the Connection Point		<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
5	Maximum Export Capacity	(MW)	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
6	Maximum Import Capacity	(MW)	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
7	Performance Measurement Device Standards for Fast Acting Services installed in agreement with TSO.	Yes / No	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List	Please Select from Drop Down List
8	The Trigger Point that the IDS is expected to start responding at (F Trigger On).	(Hz)	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
9	The frequency range over which the IDS will go from minimum to maximum declared response (F Trigger Range).	(Min Hz - Max Hz)	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
10	The frequency at which the IDS will begin to cease responding at (F Trigger Off).	(Hz)	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
11	Time delay to the F Trigger Off characteristic that the IDS will continue to respond for thereafter (T Trigger).	(sec)	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>
		(sec)	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>	<Insert Here>

This must be completed for all aggregators sites and not just additional volumes being tendered for

Sample Lot – Section A – Testing

1.2A	Has the Providing Unit a TSO-approved System Services Test Report demonstrating the Providing Unit's capability to provide the POR service according to the applied for changes (i.e. changed Reserve Characteristic and/or Static/Dynamic classification)? (This question is only pass / fail in combination with 1.2B & 1.2C.) Note: Templates are available at: http://www.eirgridgroup.com/customer-and-industry-compliance-test/compliance-testing/system-services-testing/index.xml			Tenderer must respond either YES or NO. If Tenderer responds YES, Tenderer must provide the TSO-approved System Services Test Report demonstrating the Providing Unit's capability. If Tenderer responds NO, Tenderer must respond to questions 1.2B – 1.2C and provide the associated evidence.
1.2B	If the answer to question 1.2A above is NO, please confirm: Has the Providing Unit conducted testing with the TSO to demonstrate capability to provide the POR service and has not yet had a test report approved by the TSO? OR Has the Providing Unit submitted a Testing Request to the TSO and the TSO has agreed to a date, which must not be after 5 August 2022 , for testing to take place? OR Has the TSO agreed to a date, which must not be after 5 August 2022 , for testing to take place? Note 1: If not, tenderer must satisfy one of 3 conditions: Note 2: - Have already tested, or Note 3: - Have an agreed test date before 05/08/2022, or - Have agreed with the TSO to use test data Note 4: If tenderer is currently contracted to another Aggregator, tenderer must provide signed correspondence (or e-mail approval) from the Individual Demand Site or Generator Site confirming that the Individual Demand Site or Generator Site will ensure to declare down availability with the other Aggregator during any associated testing period. Note 5: Tenderer must submit a System Services Testing Scope Document within 2 working days of confirmation of a test date. Note 6: Following testing, Tenderer must submit a completed System Services Test Report and Checklist to the TSO within 10 working days of the testing date as per the Testing process. This deadline will be strictly enforced by the TSO. Where the Tenderer has outsourced testing to a third party, it is the Tenderer's responsibility to ensure that testing requirements and Test Report deadlines are met. Test Reports must be in the correct System Services Test Report template. Note 7: The TSO's testing procedures and requirements apply to this procurement process. DS3 System Services Testing Scope Document, Test Report and Checklist templates are available here: http://www.eirgridgroup.com/customer-and-industry-compliance-test/compliance-testing/system-services-testing/index.xml			Tenderer must respond YES. Tenderer must provide written confirmation from the relevant system operator confirming that: Testing has taken place. Tenderer must state the test date. OR If a Testing Request has been submitted, that the TSO has agreed a date, which must not be after 5 August 2022, for testing to take place. Tenderer must state the test date. OR If test / performance agreed to evaluate service based on test results.
1.2C	If the answer to question 1.2B above is YES, please confirm: Has the Providing Unit's capability to provide the POR service must be approved by the TSO by 15 August 2022 , unless otherwise agreed with the TSO?			Tenderer must respond YES or NO.

Does the tenderer have an approved test report?

If not, tenderer must satisfy one of 3 conditions:

- Have already tested, or
- Have an agreed test date before 05/08/2022, or
- Have agreed with the TSO to use test data

Approved test report is required by 19/08/2022.

3 questions relate to Testing – apply to all Providing Units and taken together are Pass / Fail

All units must have engaged with the TSO in advance of tender submission and agreed a testing plan.

Testing deadlines will be enforced for the Gate.

It is the tenderer's responsibility to ensure that testing activities are conducted within the required timeframes.

We encourage units to test early!

Sample Lot – Section A – Signals

<p>1.12B) If the answer to question 1.12A above is NO, please confirm:</p> <p>Has the Providing Unit conducted testing with the TSO to demonstrate capability to provide the POR service and has not yet had a test report approved by the TSO?</p> <p>OR</p> <p>Has the Providing Unit submitted a Testing Request to the TSO and the TSO has agreed to a date, which must not be after 5 August 2022, for testing to take place?</p> <p>OR</p> <p>Has the Providing Unit submitted test data (witnessed as required by the TSO), or performance data, to the TSO and the TSO has agreed to evaluate the Providing Unit's capability to provide the POR service based on the data?</p> <p>Note 1: Tenderer must have engaged with the TSO regarding the Providing Unit's testing requirements in advance of tender submission.</p> <p>Note 2: If Tenderer is a DSU, Tenderer must submit a completed DSU application form when requesting a test date, which must include all Individual Demand Sites that are to be tested.</p> <p>Note 3: If Tenderer is a DSU or AGU and is intending to test an Individual Demand Site or Generator Site that is currently contracted to another Aggregator, Tenderer must provide signed correspondence (or e-mail approval) from the Individual Demand Site or Generator Site confirming that the Individual Demand Site or Generator Site will ensure to declare down availability with the other Aggregator during any associated testing period.</p> <p>Note 4: Tenderer must submit a System Services Testing Scope Document within 2 working days of confirmation of a test date.</p> <p>Note 5: Following testing, Tenderer must submit a completed System Services Test Report and Checklist to the TSO within 10 working days.</p> <p>Tenderer has submitted a Test Report to the TSO.</p> <p>Note 6: The System Services Testing Scope Document must be submitted to the TSO by 19 August 2022.</p>		<p>Tenderer must respond YES.</p> <p>Tenderer must provide written confirmation from the relevant system operator confirming that:</p> <p>Testing has taken place. Tenderer must state the test date.</p> <p>OR</p> <p>If a Testing Request has been submitted, that the TSO has agreed a date, which must not be after 5 August 2022, for testing to take place.</p> <p>Tenderer must state the test date.</p> <p>OR</p> <p>If test / performance data has been submitted, that the TSO has agreed to evaluate the Providing Unit's capability to provide the service based on the data.</p>
<p>1.12C) If the answer to question 1.12B above is YES, does the Providing Unit's capability to provide the POR service must be approved by the TSO by 19 August 2022, unless otherwise agreed with the TSO?</p>		<p>Tenderer must respond YES.</p>
<p>1.13A) Does the Providing Unit comply with the signalling requirements for the provision of the POR service, as applicable to the Providing Unit's technology?</p> <p>Note 1: There are specific signalling requirements for the provision of the POR service from Aggregated Generator Units, Demand Side Units, Energy Storage Providing Units (including batteries), and Wind Farms providing the service through emulated inertia.</p> <p>Note 2: Signals lists that specify the signalling requirements for the provision of the POR service, applicable to the Providing Unit's technology, are available here: http://www.eirgridgroup.com/customer-and-industry/general-customer-information/grid-code-compliance-test/compliance-testing/system-services-testing/index.xml</p> <p>In addition, the following signals requirements apply to the POR service:</p> <p>Signals Requirements - v2.0 (por).</p>		<p>Tenderer must respond either YES or NO.</p> <p>If Tenderer responds YES, Tenderer must provide a site-specific Wiring Certificate confirming compliance with the signalling requirements for the POR service.</p> <p>If Tenderer responds NO, Tenderer must respond to question 1.13B.</p>
<p>1.13B) If the answer to question 1.13A above is NO, do you understand that where applicable the signalling requirements for the POR service must be met by the Providing Unit and that a site-specific Wiring Certificate must be provided to the TSO by 19 August 2022?</p>		<p>Tenderer must respond YES.</p>

Does the unit comply with the Signalling requirements for the service? Specific Signalling requirements are noted per Lot.

Site specific wiring cert is required by 19/08/2022.

Questions relate to Signalling – apply to Providing Units depending on the technology and the service being tendered for.

Sample Lot – Section A

1.5	Is the Providing Unit's technology designated as "Proven" for the PDR service on the DS3 System Services Proven Technologies List?		Tenderer must respond YES or NO. If Tenderer responds YES, Tenderer must provide a maximum of 100 words (maximum) on the Providing Unit's technology that the Providing Unit is capable of providing the PDR service.	Section A.2 is for Tenderers that do not currently provide the service in the Lot.
1.6A	Is the unit's technology on the proven list?		Tenderer must respond YES or NO. If Tenderer responds YES, Tenderer must provide a maximum of 100 words (maximum) on the Providing Unit's technology that the Providing Unit is capable of providing the PDR service.	
1.6B	Is the Providing Unit registered in SEM or will it be registered by 1 October 2022? Note: If the Providing Unit is a Demand Side Unit, it must be registered in SEM by 1 October 2022 in order to qualify to provide this service.		Tenderer must respond YES.	
1.7	Can the Providing Unit provide a Dynamic Response or a Static Response? Please detail in the Parameter cell if Dynamic Response or Static Response or both. (Explanatory note on Static/Dynamic given below for clarity).		Tenderer must respond YES and provide parameter, either 'Static', 'Dynamic' or 'Both' for the Providing Unit.	
1.8	Is the Reserve Trigger Capability greater than or equal to 49.3Hz?		Tenderer must respond YES.	
1.9	Can the Providing Unit provide a minimum of 1MW of PDR?		Tenderer must respond YES.	
1.10	Is the Providing Unit connected to the transmission or distribution system?		Tenderer must respond YES. If the Providing Unit is not an Aggregator, please provide details of the Connection Point. If the Providing Unit is an Aggregator, please provide details of the Connection Point. If not currently connected to the transmission or distribution system, please provide details of the Connection Point. If the Providing Unit is an Aggregator please provide all associated MPRN meter numbers, and Individual Demand Sites or Generator Sites details, as outlined in the Grid Codes (SONI section PC.A3.4.2 for AGU, SONI section PC.A3.4.3 for DSU, EirGrid section PC.A4.13 for AGU, EirGrid section PC.A7 for DSU) by filling out the System Services Site Info tab. Aggregators must be able to provide all contracted capability by 1 October 2022 and that capability must be reflected on the Providing Unit's Operational Certificate on or before 1 October 2022. Where an Individual Demand Site or Generator Site is not currently contracted with the Aggregator, please provide satisfactory evidence, for example, that the contracts will be in place by 1 October 2022.	Additional Pass / Fail questions apply to aspiring entrants, including:
1.11	Can the Providing Unit provide PDR by 1 October 2022 as per the technical description in the DS3 System Services Test Report?		Tenderer must respond YES.	
1.12A	Has the Providing Unit a TSO-approved System Services Test Report demonstrating the Providing Unit's capability to provide the PDR service according to the applied for changes (i.e. changed Reserve Characteristic and/or Static/Dynamic classification)? (This question is only pass / fail in combination with 1.12B & 1.12C.) Note: Test Reports must be in the correct System Services Test Report template. System Services Test Report templates are available here: http://www.eirgridgroup.com/customer-and-industry/general-customer-information/grid-code-compliance-test/compliance-testing/system-services-testing/index.xml		Tenderer must respond YES or NO. If Tenderer responds YES, Tenderer must provide a maximum of 100 words (maximum) on the Providing Unit's technology that the Providing Unit is capable of providing the PDR service. If Tenderer responds NO, Tenderer must provide a maximum of 100 words (maximum) on the Providing Unit's technology that the Providing Unit is not capable of providing the PDR service.	Pass / Fail Questions relating to Testing and Signalling (where applicable to the technology and service) are the same as Section A.1.

Sample Lot – Section B

Section B is for Distribution-Connected Candidates only.

PRIMARY OPERATING RESERVE (POR) SECTION B - PASS/FAIL TECHNICAL QUESTIONNAIRE FOR DISTRIBUTION CONNECTED PROVIDING UNITS ONLY				
Q No	Description	Response	Minimum Evidence Required to demonstrate compliance	Please provide document name, location and cross reference number in submission for explanation where required (e.g. pg.4 PDR Testing Report)
1.15	If the Providing Unit is connected to the Ireland/ Northern Ireland Distribution System or will be before 1 October 2022 , do you understand that formal notification must be provided from the relevant DSO/DNO confirming consent for the service to be provided by 19 August 2022 ?		Tenderer must respond YES. Formal notification from the relevant DSO/DNO confirming consent for the Providing Unit to provide the service must be provided by 19 August	

Sample Lot – Section C

Section C is for information purposes but must be completed as specified.

PRIMARY OPERATING RESERVE (POR) SECTION C - TECHNICAL (FOR INFORMATION PURPOSES ONLY) QUESTIONNAIRE				
Q No	Description	Response	Parameter (All orange fields must be completed, if not)	Notes
Operating Reserve Questions Relating to POR (DYNAMIC RESPONSE)				
2	If the Providing Unit can provide a Dynamic Response please confirm and complete questions 2.1 - 2.10.			
2.1	What is the Reserve Trigger Capability of the Providing Unit? (Definition of Reserve Trigger Capability given below).			
2.2	Is the Reserve Trigger adjustable? (Definition of Reserve Trigger given below).			
2.3	If the Reserve Trigger is adjustable what is the adjustable range? Please note that the lower limit of the range cannot be lower than 49.3 Hz and the upper limit of the range cannot be above 49.985 Hz.			
2.4	Is the Governor Droop adjustable?			
2.5	What is the Governor Droop adjustable range?			
2.6	What is the Governor Droop currently set at whether fixed or adjustable?			
2.7	At what capacity is the droop referenced? NOTE: Droop is normally referenced against Registered Capacity.			
2.8	If the Providing Unit is a part or whole of a CCGT Installation and can operate in Open Cycle Mode, what is the Governor Droop adjustable range when operating in Open Cycle Mode?			
2.9	If the Providing Unit is a part or whole of a CCGT Installation and can operate in Open Cycle Mode, what is the Governor Droop currently set at whether fixed or adjustable when operating in Open Cycle Mode?			
2.10	If the Providing Unit is a part or whole of a CCGT Installation and can operate in Open Cycle Mode, at what capacity is the droop referenced if not referenced against Registered Capacity when operating in Open Cycle Mode?			
Operating Reserve Questions Relating to POR (STATIC RESPONSE)				
3	If the Providing Unit can provide a Static Response please confirm and complete questions 3.1-3.7.			
3.1	What is the Reserve Trigger Capability of the Providing Unit? (Definition of Reserve Trigger Capability given below).			
3.2	If the Reserve Trigger is adjustable what is the adjustable range? Please note that the lower limit of the range cannot be lower than 49.3 Hz and the upper limit of the range cannot be above 49.985 Hz.(Definition of Reserve Trigger given below).			
3.3	What is the Reserve Trigger currently set at (where applicable)?			
3.4	Is the Reserve Trigger adjustable?			
3.5	What is maximum number of Reserve Step Triggers? (Definition of Reserve Step Triggers given below).			
3.6	Is each Reserve Step Size adjustable? (Definition of Reserve Step Size given below).			
3.7	If the answer to question 3.6 is YES, please specify the Reserve Step Sizes which are adjustable and provide the associated adjustable range in MW.			
General Primary Operating Reserve (POR) Technical Questions				
4.1	What is the maximum volume of POR that the Service Provider is seeking to contract for the Providing Unit under the Regulated Arrangements?			
4.2	Please provide POR Reserve Characteristics.			Please complete "Reserve Characteristic" sheet

Tenderers must specify the total contracted volume that is being applied for.

Tender Pack and Technical Questionnaire

Q & A

TSOs will provide a verbal response to select queries received during the webinar.

All queries will receive a written response following the webinar.



A photograph of three men standing in front of a white vehicle, possibly a truck or trailer. The man on the left, wearing a dark green jacket, is pointing at a clipboard held by the man in the middle, who is wearing a light blue shirt and has his arms crossed. The man on the right, wearing a red and blue plaid shirt, is looking at the clipboard. The background shows a field with cows and a power line tower. The text 'Information Centre' is visible on the left side of the vehicle, and 'Working w safe, secu supply of' is visible on the right side. The text 'S.W.L. 300 KG' is visible on the bottom right of the vehicle.

Testing and Signalling

Eduardo Galeazzo



DS3 System Services Compliance Webpage

- EirGrid website has a DS3 System Services compliance webpage at <http://www.eirgridgroup.com/customer-and-industry/general-customer-information/grid-code-compliance-test/compliance-testing/system-services-testing/index.xml>
- System Services test reports and procedures per technology type
- System Services signalling requirements / lists per technology type
- Any questions on testing / signals can be directed to the relevant testing team:
 - Generator_Testing@EirGrid.com
 - Generator_Testing@SONI.ltd.uk
 - DSU@eirgrid.com (*for DSU related queries*)



Tender Testing Requirements

- Tenderers **must** engage with our testing teams prior to tender submission
- Tender submissions **must** be accompanied by:
 - Approved recent DS3 System Services Test Report
 - Or
 - Evidence of recent testing, where a Test Report has not yet been approved
 - Or
 - Confirmed Testing Date
 - Or
 - Confirmation from TSOs that alternate test data can be used for the purpose of demonstrating capability

Testing Dates

- **Early engagement** please.
- Please contact us **now** to book testing slots if you intend to tender for services.
- Testing Dates (subject to availability) – Gate 7
 - First date: Now
 - Last date: **Friday 05th August 2022**
 - Test dates must be agreed: **Before the tender submission.**
 - **This applies to all testing whether witnessed or unwitnessed by TSOs**
- Testing deadlines will be enforced e.g. 10 working days to submit a report post test (note – TSOs may return reports that are incomplete)
- **Friday 19th August 2022** is the deadline for an approved test report.

Testing Documentation

- Scope – Document to be submitted 2 BD following confirmation of test date outlining the services the unit wishes to contract for including a detailed plan and timeline of how they will achieve these goals.
- Checklist – A checklist is to be completed with each report to ensure all required aspects of a complete report are met. This is to help mitigate delays at the report reviewing stage. Must be fully completed.
- Templates for the documents are available on the EirGrid website.

Testing Documentation

Good practices:

- File name ie. Reports, to be named contained the name of the unit, testing type and version. (*UnitName OR Test Report v2*)
- Version history on both file name and section history inside the document, any header and footer should match.
- Operating Reserve reports: Pre-event output as per tender document.
- Colour Code on the changes from existing contracts and new proposals.

Updated Testing Documentation

- Testing to reset performance scalar.
 - The existing report template was designed for contracting. It uses 'minimum sustained MW' to determine achieved volumes.
 - New report template will be published for units who carry out testing to reset performance scalar. The assessment methodology (and pass criteria) will be as per performance monitoring.

Technology	Report	Test Procedure
WFPS	Published	N/A
Conventional	Drafted	Drafted
Batteries	Drafted	Drafted
DSU	To be drafted	TBC

Testing of DSUs

- **Early engagement** please
- When requesting a Testing Date:
 - DSUs must submit a DSU application at the same time
 - Ramping or Capacity tests only witnessed as needed – new DSU or testing > 10 MW
 - Tests will still be scheduled via existing calendar process
- Individual Demand Site switching:
 - Please ensure that applications are supported by satisfactory evidence, for example a letter of intent, that contracts with the site will be in place by 1st October 2022, as well as consent from the sites to be tested
 - The Providing Unit must provide signed correspondence (or e-mail approval) from the site confirming that it will ensure to declare down availability with another Aggregator during any associated testing period

Reserve Testing Standards

- No change to the testing standards from Gate 6
- For reserve services, the following standards apply:
 - Conventional units – a frequency injection of 200 mHz to 500 mHz
 - Wind farms – a frequency injection of 200 mHz
 - Aggregators – based on the unit's reserve trigger(s)
 - Interconnectors – based on the unit's reserve trigger(s)
 - Batteries – based on the unit's reserve trigger(s)
- TOR2 assessment:
 - TOR2 may be assessed from a frequency injection
 - TOR2 may be assessed based on approved TOD and verify through real dispatch.

Signalling Requirements

- Certain DS3 System Services have specific signalling requirements:
 - Dependent on the Providing Unit's technology
 - Noted in the relevant Lot of the Technical Questionnaire
 - Published on the DS3 System Services Compliance webpage
 - Refer to 'DS3 System Services New Signaling Requirements for the Regulated Arrangements' document dated November 2019 (in tender pack)

- Signalling requirements obligations must be met by **Friday 19th August 2022**:
 - Providing Unit must request a site-specific Signal List
 - TSO issues site-specific signal list (based on TSO templates & site-specific info)
 - Providing Unit must make the signals available to the TSO (at interface)
 - Providing Unit must complete, sign and submit the site-specific Wiring Certificate

Testing and Signalling

Q & A

TSOs will provide a verbal response to select queries received during the webinar.

All queries will receive a written response following the webinar.



Webinar – Concluded

Queries on Volume Uncapped Gate:

- Send no later than 12:00 hrs Irish Time on **01st July 2022**.
- To: anna.pockock@eirgrid.com and tenders@eirgrid.com

EirGrid will respond to all queries by **08th July 2022**.

Webinar slide deck will be published shortly.

