

Strategic Gas Emergency Reserve: Market Engagement Event



Gas
Networks
Ireland

Tuesday 27th August 2024

Confidential

Agenda

- Meeting Etiquette
- Who are GNI?
- Project Background
- Project Status
- Strategic Objectives
- Procurement Process Overview
- Work Packages Description
- Q&A/ Feedback

Meeting Etiquette

There are a couple of virtual meeting etiquette guidelines that we would like you to adhere to during this call:



Mute your microphone when not talking



Raise your hand if you have a question



Turn off your camera when not talking to limit distractions

Who are GNI

About Gas Networks Ireland



- Gas Networks Ireland operates and maintains Ireland's €2.8bn, 14,725km national gas network, which is considered one of the safest and most modern renewables-ready gas networks in the world.
- Over 720,000 customers trust Ireland's gas network to provide efficient and reliable energy to meet their heating, cooking, manufacturing and transport needs.
- The gas network is the cornerstone of Ireland's energy system, securely supplying more than 30% of Ireland's total energy and almost 50% of the country's electricity generation.
- By working to replace natural gas with renewable gases, such as biomethane and green hydrogen, and complementing intermittent renewable electricity, Gas Networks Ireland is supporting Ireland's journey to a cleaner energy future.

Project Background

Gas Security comparison of EU countries with similar dependency on gas for electricity generation

Ireland



FSRU



LNG Import Terminal



Geological Storage

1

Number of interconnector entry points

48%

Gas Power Gen (% of net electricity generation)

Italy



FSRU



LNG Import Terminal



Geological Storage

6

Number of interconnector entry points

52%

Gas Power Gen (% of net electricity generation)

Netherlands



FSRU



LNG Import Terminal



Geological Storage

6

Number of interconnector entry points

40%

Gas Power Gen (% of net electricity generation)

Greece



FSRU



LNG Import Terminal

2

Number of interconnector entry points

38%

Gas Power Gen (% of net electricity generation)

Portugal



LNG Import Terminal



Geological Storage

2

Number of interconnector entry points

34%

Gas Power Gen (% of net electricity generation)

Impact of “Do Nothing”

A loss of interconnection with no alternative supply could lead to damaging social and economic consequences, estimated by CEPA, on behalf of DECC, to be **€4.6 billion** for a 30-day loss of gas import from Great Britain. In the event of an outage to the largest piece of gas infrastructure, IC2, which GNI estimates would lead to a 6-month outage duration, the CRU has estimated that Ireland would be vulnerable to a gas supply deficit of up to **35% of peak gas demand** for the duration of the outage. This equates to **62% of total power generation in Ireland**.



**Failing to comply
with EU legislation**



**Reputational
damage**



Unserved demand



**Supply chain
impacts**



**Productivity
hits to Irish
businesses**



**Realisation of
the risks
previously
identified**



**Impact of outages
in homes of
vulnerable
populations**



**Potential
disruption to
schools and
hospitals**

Strategic Objectives

Strategic Gas Emergency Reserve Project - Vision & Strategic Objectives

Based on the Government's requirements, GNI has defined the Strategic Gas Emergency Reserve project's Vision:



Safeguarding our energy system today to enable our energy transition tomorrow

GNI has defined five strategic objectives

1

Deliver a solution as early as possible that will:

- Satisfy Ireland's compliance with the EU N-1 infrastructure standard
- Enable rapid recovery from a system disruption
- Provide sufficient resilience of gas supply to ensure future (2030) energy gas demand is reliably met

2

Achieve a cost-effective, affordable solution that optimises EU grant funding and cost recovery options

3

Design permanent or onshore enabling infrastructure in a manner that maximises potential future renewable gas uses to the extent possible, balancing cost and other efficiencies such as time to deployment

4

Achieve a solution that is, in so far as practicable, consistent with the Climate Action and Low Carbon Development Act 2015–2021

5

Meet or exceed industry best practice in relation to safety and the environment

Strategic Gas Emergency Reserve Project- Team Values

Agile

The team proactively addresses blockers by collaboratively devising innovative solutions, empowered to make decisions, encouraged to explore novel approaches and leveraging negotiating skills to overcome obstacles.

E.g., workshop session where all ideas are shared and optimal solution is agreed upon

Courageous

The team tackles obstacles to delivery through innovative solutions aligned with global best practice, welcoming constructive challenges and remaining open to defending, debating, and adapting decisions as needed.

E.g., disagreement on how to approach Steering paper is overcome by empowering team members to speak up

Outcome Focused

The team excels in pursuing ambitious goals and remain dedicated to realising the long-term project vision with each member taking on individual accountability for targets and timelines.

E.g., keeping the big picture in mind whilst preparing process documents, ensuring that it helps the team to achieve the overall goals of the project

Team success hinges on a dynamic, proactive, and innovative approach, cultivating a cohesive culture throughout the entire project team. Achieving success involves collaborative effort for “win-win” solutions, breaking down silos and providing support across the team.

E.g., noticing that workstreams are working on similar tasks and coming together to achieve a cohesive approach

Collaborative

Team members build strong relationships through cooperation, responsiveness & commitment, fostering loyalty and trust. Ensuring the team is supported and addressing conflict constructively.

E.g., recognising that a team member needs support

Supportive

The team is driven by an inspiring vision, fostering motivation and shared ownership. Committed to delivering results, consistency, reliability, and attention to detail, measuring success through dependable delivery

E.g., coming together as a team to get an important DECC submission over the line

Dedicated

Current Project Status

Energy Security in Ireland to 2030



While there is a short-term need to improve security of supply as a transitional measure, the Energy Security in Ireland to 2030 report provides an overview of Ireland's long-term plan for the gas sector, to ensure that measures taken in the transitional term should be compatible with future needs.

In the Energy Security review, four aims are identified for the long-term plan:

- **Decrease demand for natural gas, both average and peak**
- **Increase the production of renewable gas**
- **Develop long-term gas storage solutions capable of storing renewable gas, particularly hydrogen**
- **Ensure a fit-for-purpose gas grid that supports Ireland's energy and climate ambitions**

- Recommendation that Ireland needs to implement a **Strategic Gas Emergency Reserve**.
- To protect Ireland in the event of a gas supply disruption as Ireland makes a secure transition to majority renewable energy.
- DECC states that *"Ireland's energy security will be significantly improved, and risks greatly reduced, if Ireland implements measures to meet the EU N-1 standard"*.
- DECC analysis concludes that Ireland needs to enhance its resilience in the event of a disruption to the country's natural gas supplies, noting that:
 - A disruption to Ireland's supplies of gas is an unlikely but high impact event.
 - Without implementing new additional resilience measures a disruption would lead to unacceptably high economic and social costs.
- State-led i.e. commissioned by the State via GNI within a regulatory framework overseen by CRU.

Energy Security Package Action 17 (Task)

- The Department of the Environment, Climate and Communications (DECC) will *“engage with GNI, as the independent Gas Transmission System Operator (TSO), to prepare a detailed proposal to introduce a reserve in line with criteria and requirements determined by DECC”* which will include that the proposal:
 - can be implemented quickly
 - does not inadvertently increase gas demand by increasing the supply available on the market
 - is cost-effective at the appropriate scale which provides sufficient resilience if a disruption to gas supply occurs
 - is compatible with the Climate Action and Low Carbon Development Act 2015-2021
- Based on preliminary analysis by DECC, *“it is anticipated that...a storage and importation facility – an FSRU – is the most appropriate approach”*.



Preliminary analysis by the Department anticipates that a floating reserve (FSRU) will best meet the criteria.

Where We Are

- Where the Strategic Gas Emergency Reserve Project is currently:



Preliminary Business Case – Submitted



Site Selection – At Advanced Stage

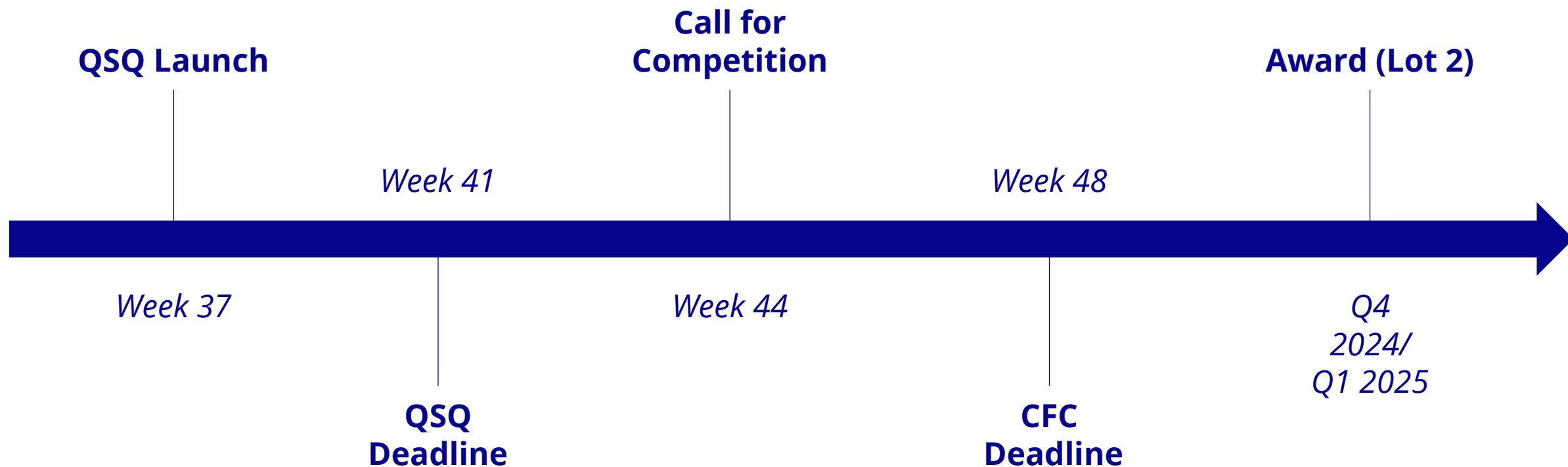


Ecology surveys – Underway



Vessel Procurement – Initial engagement

Envisaged Procurement Schedule for the remainder of 2024



Qualification Process

- A Qualification System (QS) is a system for pre-qualifying candidates- effectively creating a list of pre-qualified suppliers which may be used to source suppliers for the award of contracts.
- Suppliers have the ability to come together and apply for admission to the QS as a consortium. Suppliers may decide to form a consortium where they would not satisfy a requirement if they applied as a single entity.

Key points

- It an open system and suppliers may apply at any time to request qualification. The QS will remain open for 10 years (unless GNI elects to close the QS earlier).
- Applicants will be informed of the decision on qualification within 6 months. Applicants who are not admitted to the QS will be told of the reasons for refusal as soon as possible and within 15 days of the refusal decision.
- The QS will be operated on the basis of objective criteria and qualification rules.
- No contract award notice will be published when the QS is established but contract notices will be published for the contracts awarded to the Successful Applicants (where they are above OJEU threshold)

Qualification System Questionnaire

The Qualification System Questionnaire (QSQ) will be published on eTenders and the OJEU. Applications will be reviewed and successful applicants for each lot will be admitted to the QS.

Further Shortlisting

GNI may elect to do a further round of shortlisting of Qualified Applicants. All Qualified Applicants admitted to the QS will be invited to participate.

Call for Competition (CFC)

During the term of the QS, GNI may commence competitions for contracts by inviting all of the Qualified Applicants for the lot to participate in the relevant competition. CFC's can only be issued and awarded to approved suppliers registered in the QS.

Work Packages Overview

Work Packages Overview

- At present there are 3 primary work lots envisaged under this project:
 1. LOT 1: FEED (Front-End Engineering Design)
 2. LOT 2: Client's Engineer
 3. LOT 3: Peer Review

LOT 1 FEED – Scope Overview

- FEED for FSRU based strategic gas emergency reserve project
- FEED will incorporate a 10wk/12wk concept definition phase at the outset.
- Project will be relatively standard for this type of facility and will consist of:
 - FSRU Berth
 - Unloading platform with MLAs and all required process equipment
 - Marine access trestle with HP gas pipeline to shore
 - Onshore receiving facility and control rooms
 - Onshore pipeline connecting to national grid
 - Grid tie-in station
- Future proofing of permanent infrastructure will be an important consideration

LOT 1 FEED – Scope Overview

- Applicant capabilities will need to cover from where pilots board inbound LNG carriers to the onshore grid tie-in
- Applicants will be assessed primarily on proven track record / experience
- Full suite of technical safety studies will be included in FEED scope
- Phase 1 Site investigations will be undertaken by GNI in Q3 2024

Lot 2 Client's Engineer – Scope Overview

- Fully integrated project management team approach foreseen
- Co-location with GNI would be seen as highly desirable
- Long term partnership with intent that scope will extend from design through to successful start up and operation of PLANT
- Responsible for management of all interfaces/systems integration strategy
- Scope will be all inclusive. Technical Assurance, Procurement, Site Supervision, Programme Management , Stakeholder Engagement/Management and Contract Administration
- FSRU Delivery Assurance is potential inclusion in the scope, up to and including yard supervision, cool down and commissioning

Lot 2 Client's Engineer – Scope Overview

- Client's Engineer will assume role of Project Supervisor Design Process (PSDP) under Irish Health & Safety legislation
- Support in development of business case submissions
- Support in development and submission of regulatory and governmental submissions as required
- Experience of the Applicant on delivery of large-scale capital projects in Ireland is desirable.
- Capabilities will be assessed on both a personnel and proven project experience

Lot 3 Peer Review

- Aim is to assemble a panel of specialist consultants who can support the project with peer review or specialist input
- Open to broad range of consultants in terms of scale. Key requirement is significant specialist experience in one or more applicable disciplines for this project
- Will most likely involve scopes such as technical reviews or support on key activities (e.g. vessel procurement, technical safety studies etc.)
- These scopes will be tendered on an “as required” basis throughout the lifetime of the framework

Q&A / Feedback

Will the procurement process follow a national or EU process?

Can a supplier apply for multiple lots/ combined lots?

Feedback Topics

Contract T&Cs
Limitation of Liability

Schedule
QSC & Tender Periods

Scope of Work
Pre-FEED, FEED
Structure

Schedule
FEED Execution

Incentives
Design and Quantum

Design Data
Survey Inputs