



Sellafield Ltd

Legacy Ponds Operating Unit – Diving Capability

MARKET ENGAGEMENT

Technical Dialogue

PROJECT: - Legacy Ponds Operating Unit Diving Capability

Technical Dialogue– Briefing Paper and Lines of Enquiry

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Definitions/Glossary

Acronym	Definition
ALARP	As Low As Reasonably Practicable
AS	Acquisition Strategy
CSF	Critical Success Factors
CTM	Complete Tender Management
DS	Diving Services
EA	Environment Agency
HSE	Health and Safety Executive
LoE	Lines of Enquiry
LPOU	Legacy Ponds Operating Unit
MSE	Market Sounding Event
ONR	Office for Nuclear Regulation
PFSP	Pile Fuel Storage Pond
PIN	Prior Information Notice
PME	Pre-Market Engagement
RFI	Request for Information
SL	Sellafield Ltd.
TD	Technical Dialogue
UCC	Underwater Construction Company

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1. Objective of this Pre-Market Engagement - Technical Dialogue

Sellafield Limited (SL) is developing its Acquisition Strategy (AS) for the Provision of Diving Services (DS) in support of, initially, the Legacy Ponds Operating Unit (LPOU) and in particular the Pile Fuel Storage Pond (PFSP).

The current assessment, aligned to the LPOU Tactical Plan, is that the LPOU will require the procurement of DS in delivering the following capabilities:

1. Safety Case development and permissions
2. Trialling and Tooling
3. Radiological Surveys (Underwater)
4. Mobilisation and Demobilisation activities to support diving operations
5. Diving Resource Capability and Capacity

SL is currently undertaking a diving pilot in the PFSP, to develop and support the proof of concept, and as such has previously undertaken Market Sounding exercises where this involved multiple suppliers, prior to awarding this work to Underwater Construction Company (UCC), where the key criteria for the award was that this organisation had evidenced previous experience associated with diving in a nuclear environment.

Following this initial supply chain engagement SL has matured its Acquisition Strategy (AS) and has subsequently undertaken a Market Sounding Event (MSE)¹ where the strategy was shared with the supply chain, this MSE was advertised by Prior Information Notice (PIN) via the SL Complete Tender Management System (CTM). This market engagement exercise has provided SL with an initial view of the capability and capacity of the supply chain to support the PFSP diving requirements.

Our next step is the engagement of interested and experienced organisations through Technical Dialogue (TD), intended to test the current strategic direction of the AS where SL will seek to develop its understanding and confidence of the proposed technical and commercial strategies prior to potentially undertaking a formal procurement process in accordance with the Public Contract Regulations. As such the outcome of this phase may support the further development, and refinement, of the proposed procurement, technical and commercial arrangements.

The Technical Dialogue will allow SL to engage across a number of project functional areas including:

1. Nuclear and Conventional Safety
2. Design and Engineering to Support Diving Works
3. Site Diving Works
4. Plant Modification & Construction Works
5. Schedule and Workpack Delivery
6. Contract Models

¹ Online Market Sounding Event - 12th October 2022

It is noted that all recipients of this briefing paper should recognise that information presented may be subject to change and remains under consideration by SL, and that nothing referenced therein may be taken as firm or binding, in that SL is not bound by anything that is discussed during the market engagement process associated with the provision of diving services.

SL is absolutely committed to open, fair, and transparent procurement processes and following completion of the early market engagement process it currently anticipates that it will be conducting a fully regulated process through the placement of a Contract Notice on the Find a Tender Service and in accordance with Public Contracts Regulations.

This TD is not part of the formal procurement process which will only begin after the publication of the Contract Notice. Involvement in the TD does not prejudice or preclude other organisations from taking part in any subsequent procurement process. Any decision by a potential participant to respond or not respond to the early market engagement will have no impact on or reflect in any manner on any future procurement process.

For those organisations participating in the event further information is included in Appendix 1.

2. Summary of the Diving Requirement

The PFSP programme is aligned to the LPOU and ultimately the wider Sellafield Enterprise goals and as such is required to demonstrate fit-for-purpose decommissioning progress alongside value for money for the UK taxpayer. Currently the programme is progressing a pilot project deploying divers in a nuclear environment to expedite tasks that have proven time, cost, and dose intensive, when undertaken using traditional methodologies. At a programme level the use of diving capability will support: As Low as Reasonably Practicable (ALARP) methodology, help de-risk key milestones, and have the potential to significantly accelerate PFSP clearance and de-sludging activities.

Various activities have been undertaken to understand the risk and opportunities of deploying divers, as a result of these activities the Critical Success Factors (CSF) have been informed and are generally aligned to the Programme CSF. They will be used to measure the success of the supply chain engagement and provide the context against which individual project delivery strategies are developed. Critical Success Factors for securing diving capability include:

Table 1: Critical Success Factors

Critical Success Factors	
Ref.	Description
CSF1	Reduction in radiological inventory hazard within the PFSP
CSF3	Reduced lifetime maintenance and operations costs through an accelerated Interim State
CSF4	Increased retrievals knowledge transferable to other facilities

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Critical Success Factors	
CSF6	The radiological impact on resources delivering the mission is reduced
CSF8	Securing expertise, both internal and external, to enable consideration of the full range of clean up options for future work

Acknowledging that if the diving pilot phase is successful the opportunity to deploy divers, through a series of campaigns, could commence late 2024 and if successful the requirement for diving capability could extend to 2028 where this requirement could involve works to clear the floors of the pond and bays of residual sludge/debris and to remove encast steel work from the walls of the bays. With the opportunity to develop further tasks in support of the maintenance and remediation of PFSP and into other facilities.

It is important to recognise and reiterate that no future works can currently be defined, recognising this the methodology utilised in developing any future workscope will be structured to support the requirement where it is foreseeable that the majority of works will be subject to key enablers where these will include:

a) Governance and Approvals

It is acknowledged that the governance and approvals process has the potential to be different for each package of work instructed where the process will consider the following:

i. ALARP Strategy

The ALARP arguments, and the assumptions they will be based on, will have to be reviewed as real time evidence is gathered.

ii. Assessment of Safe Operations

The Safety Case for the deployment of divers will vary dependent upon the specific tasks and environment, it will be based upon a hazard identification process where the key components and deliverables are:

a. Radiological Protection

A Dose Management Plan/ALARP paper will be produced by the Radiation Protection Team

b. Compliance with UK Diving Regulations

The company employed to undertake the diving operations will comply with The Diving at Work Regulations 1997 and be suitably qualified and experienced where they will be key stakeholders in producing method statements and risk assessments which comply with these regulations.

c. Conventional Safety

Aligned with the diving at work regulations, the arrangements will also need to show compliance with the Health and Safety at Work Act 1974 and the

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Construction (Design and Management) Regulations 2015 noting that diving is a Schedule 3 activity (Work involving particular risks).

- d. Nuclear Safety
A barrier analysis approach will be taken to show defence in depth and a qualitative assessment of the residual risk. The output of this assessment will be supported by Human Factors and Engineering substantiation.
- b) Permissions Strategy
A detailed permissions strategy was prepared for the diving pilot, it is envisaged that a similar strategy will be developed to support the delivery of other works. The SL nuclear oversight team will be engaged to agree the level of permissions internally and develop this strategy. Externally the Office for Nuclear Regulation (ONR), Health and Safety Executive (HSE) and Environment Agency (EA) will then be presented with this and agreement will be reached as to how engagement will be developed and the level of permission that will be required.
- c) Enabling Work
Prior to commencement of any diving works it is assumed that there will be a requirement to modify the plant and provide ancillary works to support the diving activities. Ideally, given the nature of the plant and the interaction and dependencies of the works, these works may be undertaken by a single contracting entity. Therefore, any capability to deliver the required enabling works in conjunction, and concurrently, whilst preparing the relevant diving plans and method statements etc. will provide single point accountability and support early commencement. It is expected that the requirements, design, and installation of any enabling works are supported by the specialist nuclear dive expertise.
- d) Integrated Team Development
The formation of an integrated delivery team with stakeholders such as plant-based resources, Health Physics team, Radiological Protection Advisors, and the supply chain, will be a key factor in the success of any deployment where the symbiotic relationship will provide an environment which enables plant knowledge and experience to be communicated, existing skills to be developed, and industry knowledge and experience shared where this will ensure that the opportunity for success is maximised.

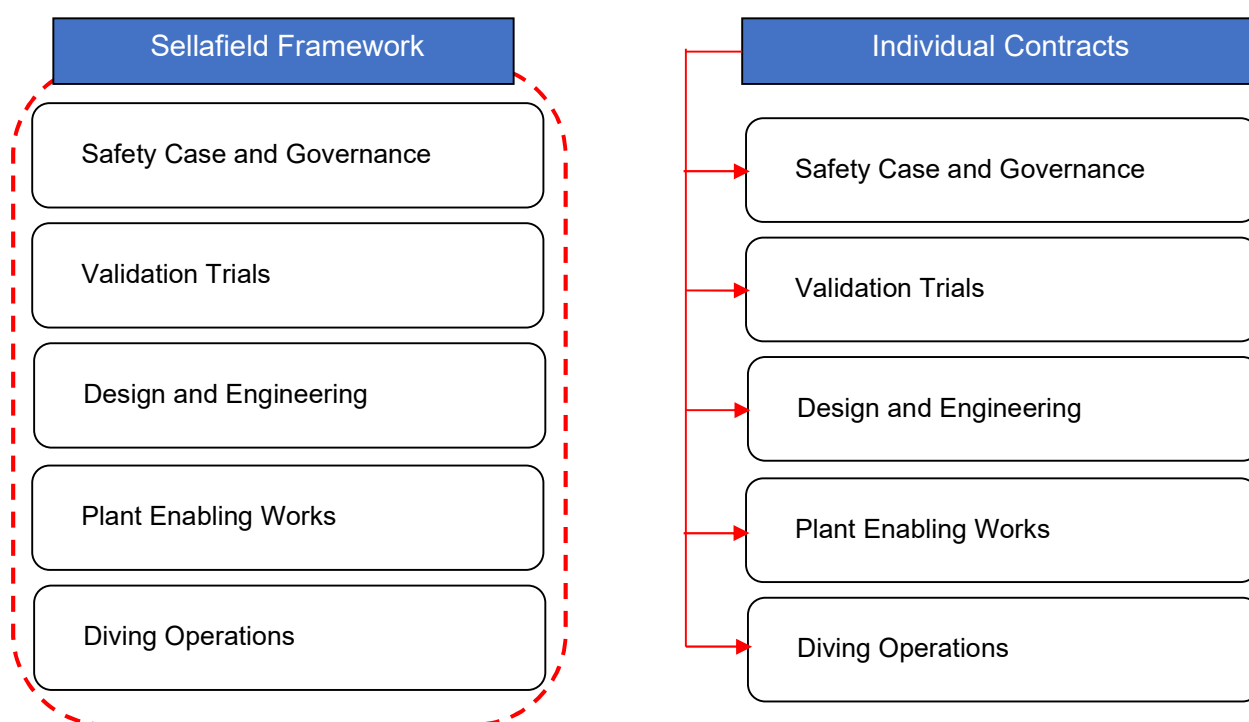
Notwithstanding the CSF and Key Enablers identified above a key contributor to the success of the project will be that all organisations adopt a collaborative approach to project delivery, where the sharing and management of information will be key to the success of the project e.g. the diving requirements, including enabling works, will require plant modifications which will update the design being undertaken by SL, where this will in-turn form the basis of the works to be done on site prior to and following diving operations. On this premise we would request that any observations on this element of the project be raised within the TD.

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3. Current Requirements

As previously stated, the requirement and definition of future diving works will be on a specific basis where each task will be individual, with bespoke requirements, where a basic work breakdown structure may involve: elements of plant design and configuration, undertaking enabling or trial works, development of diving methodologies including obtaining permissions, and finally the provision of a diving team and their ancillary support. A key deliverable of this TD is to assess the supply chain capability to deliver the works under individual contracts or through an SL existing framework where the works would be managed collectively (Fig.1).

Figure 1: Workpack and Procurement Structure



Meaningful engagement with the supply chain will enable SL to optimise its Acquisition and Sub-contracting strategies, aligning SL's expectations and requirements in this regard with those of the supply chain. Without this alignment, the competition would be at risk of failure, with inadequate market appetite and the concomitant impact of failing to secure the optimum delivery strategy.

In summary the TD will influence an appropriate contract and procurement route, where this may include: the use of existing SL Frameworks, engaging the supply chain in open competition for particular services, or directly awarding the works. This procurement will be determined by the capability established in the MEP including the TD and the capacity of the supply chain to respond to the programme requirements and the ALARP principles associated with deploying divers in a nuclear environment.

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4. Participation in the Technical Dialogue

A Request for Information (RFI) will be published on Atamis, and those organisations interested in engaging in the TD are invited to submit a response to the RFI, via the SL Atamis system, to the Lines of Enquiry (LoE) set out in Section 5 of this Technical Dialogue Paper. All responses should be submitted within [20] working days from the date of RFI.

Submissions should be structured to consist of:

1. A precis of the organisation (suggested 2-page limit).
2. A direct response to the LoE (suggested 1-page limit per LoE)
3. Other relevant information at the discretion of the participant e.g., project specific information

It is noted that SL have provided a basic structure for responses from the supply chain but that this should not limit the supply chain and they may submit any information they feel is of relevance to support the requirement to provide diving capability, and capacity, and the workpack/procurement strategy.

Following receipt of the response's SL will develop a greater awareness of market interest and capability regarding the workscope. This information will also enable SL to assess whether there will be amendments to any future engagement processes with suppliers.

To manage the TD process in an efficient and effective manner, any follow-on TD meetings will take the form of a structured meeting with a pre-determined agenda, a draft agenda has been included (Appendix 2). The meetings will take place on an individual basis with each of those organisations with whom SL have determined are appropriate to engage with this exercise.

It is proposed that at each of the TD meetings SL will have present:

1. SL Project Manager
2. SL Diving Team Manager
3. Supply Chain Manager

We would ask that a similar number of senior/technical attendees from the organisations to be in attendance, or alternatively individuals who have the relevant experience within your organisation across the functions detailed above.

Currently it is envisaged that any sessions will take place during the week commencing 5th June 2023 and are expected to last for approximately 1.5 hours. The events will take place either on MTeams or at SL premises in Warrington / Whitehaven. Details of the event will be confirmed at a later date.

Invited participants are requested to come prepared in advance to engage in discussions in response to SL Lines of Enquiry (LoE) within Section 5 of this document. Sellafield Ltd does not require formal presentations however if participants wish to do this, they may.

This pre-market process is intended to provide a safe environment for open and honest discussion. Those invited to be involved should be aware that information provided in response to this TD may

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be used to underpin or support the further development of the AS for the project. Such information may be shared as part of any subsequent procurement process. However, in such circumstances information will be unattributed and the source will be anonymous.

4.1. Market Engagement - Industry Event.

On the basis that it will not provide a platform for meaningful focused dialogue an Industry Event is currently not planned to take place.

5. Lines of Enquiry

Interested participants are asked to respond to the LoE listed in this Section 5.

The LoE are included below (Table 2) where these have been structured to provide a general enquiry/focus for which SL is seeking a response from the supply chain. To support this response SL have provided key features for consideration where these can be used to structure any response to inform SL of the capability and capacity of the supply chain and their experiences in delivering similar packages of work.

Table 2: Lines of Enquiry

Line of Enquiry		Key Features for Potential Consideration
1	Are there any barriers to meet SL's requirements and expectations for project delivery as set out in this paper, what would you consider to be the greatest challenge to the successful delivery of the project and why?	<ol style="list-style-type: none"> 1. Understanding the "nuclear" requirements where this may include working within a spent nuclear fuel pond and associated infrastructure 2. Establishing the competency of divers in a nuclear environment (ONR/HSE), i.e. highly regulated and complex environment 3. Carrying out plant modification and construction works on a nuclear/regulated site 4. Multiple workfaces and organisations delivering the Project 5. Compliance with relevant dive, construction, nuclear and radiological protection legislation
2	In your view what are the opportunities associated with the project delivery strategy. How may these be optimised and are there any key risks?	<ol style="list-style-type: none"> 1. The Permissions and Governance processes 2. No definition of work requirement (future workload) 3. Site modifications and construction work to support diving operations 4. Trial works and facility simulation strategies
3	Do you have any comments on indicative timescales for the procurement competition and project delivery e.g. Contract Award Mar.2024, Design and plant enabling works (+6mth) Diving works on-site (+6mth)	<ol style="list-style-type: none"> 1. Current supply chain capability 2. Resource availability 3. Current industry demands and challenges

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Line of Enquiry		Key Features for Potential Consideration
4	What are your views on potential Terms and Conditions, or Contract Models, which may be used for the delivery of the works?	<ol style="list-style-type: none">1. Incentivisation models2. Sharing “project” risk and reward3. Integrated team structures
5	Would your organisation be interested in bidding for the works where this may include providing diving services locally within the LPOU or across the SL site, where any projects will be based on the principles outlined in this paper and do you perceive any barriers to entry	<ol style="list-style-type: none">1. National and global influences2. Regulation (Procurement/Nuclear/Diving)3. Ability and appetite to integrate the works

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Appendix 1 Further Information

Sellafield reserves the right to disseminate information that is materially relevant to all participants, even if the information has only been requested by one participant and is subject to the duty to protect any participant's commercial confidence in its responses. Should participants wish to avoid such disclosure (for example, on the basis that the request or response contains commercially confidential information or may give another participant a commercial advantage) the request must be clearly marked:

"In confidence - not to be circulated to other participants"

and the participant must set out the reason(s) for the request for non-disclosure to other participants/tenderers. Sellafield will act reasonably as regards the protection of commercially sensitive information relating to the participant but as no formal procurement process is currently underway does not anticipate that any such request will be upheld.

Sellafield reserves the right to not start, cancel, clarify, or vary the Technical Dialogue and not to proceed with procurement exercise in respect of the procurement activities associated with the LPOU Diving requirement at any time.

All participants are solely responsible for their costs and expenses incurred in connection with the preparation and submission of their response to this Technical Dialogue. Under no circumstances will Sellafield, or any of their advisers, be liable for any costs or expenses borne by the participant or any of its supply chain members or advisers in this Technical Dialogue or any subsequent procurement.

Sellafield shall have no liability whatsoever to any participant in relation to the outcome of the Technical Dialogue and/or any subsequent procurement relating thereto. For the avoidance of doubt, Sellafield shall not be liable for any loss of profit, loss of opportunity, loss of revenue, indirect or consequential loss or other economic loss suffered by any participant.

This document, and any document located on the Atamis or Complete Tender Management (CTM) system, has been prepared by or on behalf of Sellafield Ltd for the sole purpose of enabling participants to submit comments and provide feedback in the context of Technical Dialogue. No guarantee can be given, however, and no representation is made, as to the accuracy of information contained within it and it is each participant's responsibility to obtain for itself at its own expense all information which it deems necessary or desirable for the preparation of its response. Neither Sellafield nor any of its professional advisors accepts any liability, which might result from any inaccuracy of or omission from any such information.

Whilst Sellafield would like to engage interested parties, participants in this Technical Dialogue should note that they will be required as part of any formal submissions for any subsequent tender to certify that they have not canvassed or solicited any officer or employee of Sellafield in connection with the proposed procurement and that no person employed by them or acting on their behalf will have done any such act.

Information you provide may be used to support further discussions and / or strategy development of the Diving Acquisition Strategy. Sellafield Ltd will maintain the commercial confidentiality of

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information received during discussions with participants in this Technical Dialogue process in line with applicable laws, such as the Freedom of Information Act.

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Appendix 2 Technical Dialogue Meeting Agenda (Draft)

LPOU Diving Technical Dialogue

Date: TBC

Duration: 1hr 30 mins

Location: (Venue or MSTeams to be confirmed)

10:00 – 10:10 **Welcome and Introductions**

10:10 – 10:20 **LPOU Diving Overview by SL**

Background
Critical Success Factors

10:20 – 10:25 **Introduction by Supply Chain Participant**

10:25 – 11:00 **Lines of Enquiry**

Participant Presentation / Response to the Lines of Enquiry

11:00 – 11:20 **Facilitated session to discuss responses / presentation**

Optioneering and Key Features
Risks and Opportunities

11:20 – 11:30 **Any Other Business**

11.30 **Close**

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