Welcome to our Vault Optimisation & Capping Delivery (VOCD) Market Engagement Event

- If you have not already done so upon entering the meeting, please can we ask all attendees to **mute your microphones** and **switch off the camera** functionality.
- A copy of the presentations will be available on-line following today's event.
- If you have any questions throughout the presentations, please ask these within the chat and we will pick these up during the Q&A session as the final agenda item.
- We will be recording the engagement event for further distribution to those unable to attend.

We will commence the presentation at 13:05pm

Nuclear Waste Services

Nuclear Waste Services

Vault Optimisation & Capping Delivery (VOCD)

Framework Virtual Supplier Event

Scott Sowerby - Sourcing Officer

Owen David - Project Manager

Andrea Borwick - Senior Lead Engineering

Richard Blackwell - Senior CS&A Project Responsible Engineer

Andy Clark - Senior Business Manager, NTS

Date: 28 July 2026

LWR-NWS-VOCD-AXX-CC-CS-000031

Agenda, Safety Share and Housekeeping

Owen David
Senior Project Manager

Housekeeping

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- We will be keeping a record during the engagement event for further distribution to those unable to attend of any questions asked..
- Any questions not addressed during the webinar will be added to a FAQ and published in the NWS VOCD webpage.

Agenda for the Day

Topic	Speaker	Duration
Introductions, Agenda and Safety Share	Owen David	5 min
VOCD Overview	Chloe Gamble/Owen David	15 min
Technical Scope	Andrea Borwick	10 min
Technical Overview	Richard Blackwell	20 min
Nuclear Transport Solutions (NTS)	Andy Clark	10 min
Procurement Matters	Scott Sowerby	15 min
Q&A Session	All	20 min

Aims and Objectives for the Day

For clarity, this market engagement does not constitute the commencement of the procurement.

All of today's participants will be informed through the ATAMIS eSourcing system and CDP tender notice, along with all registered organisations, when the procurement begins.

Today we are here to:

1. Thank those who participated in the initial Market Engagement (RFI) and address some of the queries and observation raised.
2. Meet you and help you decide if you wish to bid.
3. Provide advance notice of the procurement and associated indicative timeline.
4. Provide high level details of the process and outcome sought.
5. Provide next steps for the Market Engagement.
6. Get feedback to shape our approach.

Safety Share Topic

	OFFICIAL	UK Ministry of Defence © Crown Copyright 2026/AWE
AWE/MAN.SYS/6978 **Date: June 2026** **Issue: 1.4**	Company Management System Form **Amber Alert Template**	Primary Contact: lfe@awe.co.uk

Title – Overheating vehicles and potential fire risks
Security classification: Official
LFE Reference Number – AA 003 2026
Date Issued – 08/07/2026

Summary – At AWE there have been several ITRACs raised in the last 3 weeks over battery items and aerosols left in hot cars, exploding and causing damage to the interior.

As the UK experiences unusually high temperatures through one of its hottest spells of the year, fire safety officials are warning drivers to think twice before leaving tech gadgets in parked cars. During periods of hot weather, items in cars can overheat, especially if exposed to direct sunlight through the windows (whether open or shut).

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Supporting Information –
EVE00036685- Phone left in car overheating during hot weather
EVE00036393- Lithium batteries have reacted in the hot weather.
EVE00036283- Aerosol can blown out front window of van.
Improper Battery Disposal Sparks Waste Facility Fire, Underscores Rising Lithium-Ion Risk - Environment+Energy Leader

Why did it happen? During periods of hot weather, items in cars can overheat, especially if exposed to direct sunlight through the windows (whether open or shut). Pressurised items such as aerosols and items containing Lithium batteries (phones, dash cams, vapes, devices, laptops) are especially vulnerable- if exposed to high temperatures, they can go into thermal runaway, which is where they become volatile and can explode and start a fire.

Root Cause Analysis Code/s Identified –
S1906- Ambient temperature high/low and 0201- Self checking not used/ inefficiently applied

Key Lessons Learned –
Remember a lesson is not learned until something changes as a result.
We would always recommend taking any devices that you need with you and not leaving them in a vehicle. If you do need to, think about where you park and try and find shaded areas. You can also think about where you leave the devices, for instance in the cooler parts of a car like the boot, which is completely out of direct sunlight, so will not get as hot as the passenger compartment, where sunlight through the windows exacerbates it, much like a greenhouse.

VOCD Overview

Chloe Gamble – VOCD Programme Manager
Owen David - Senior Project Manager

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NWS Overview

Using our facilities and expertise, NWS will continue to safely manage radioactive waste already created over the past 70 years – and will support the UK Government's net zero ambition by preparing to safely manage future radioactive waste.

NWS brings together the best of the UK's expertise in radioactive waste management. We have an expert team whose skills cover nuclear science, technology, engineering, safety, security, programme management, communications and engagement and environmental protection.

The creation of NWS in January 2022 brought together the expertise of LLW Repository Ltd and Radioactive Waste Management Ltd.

NWS is part of the NDA group, which has a collective long-term mission to clean up nuclear sites safely, securely, and cost-effectively. Our activities provide the end point in the nuclear journey and are critical to the NDA's mission.

NWS was created with the vision to make nuclear waste permanently safe, sooner.

Our mission is to safely manage and dispose of radioactive waste. We provide sustainable solutions that protect people and the environment now and for the future.

LLW Repository site

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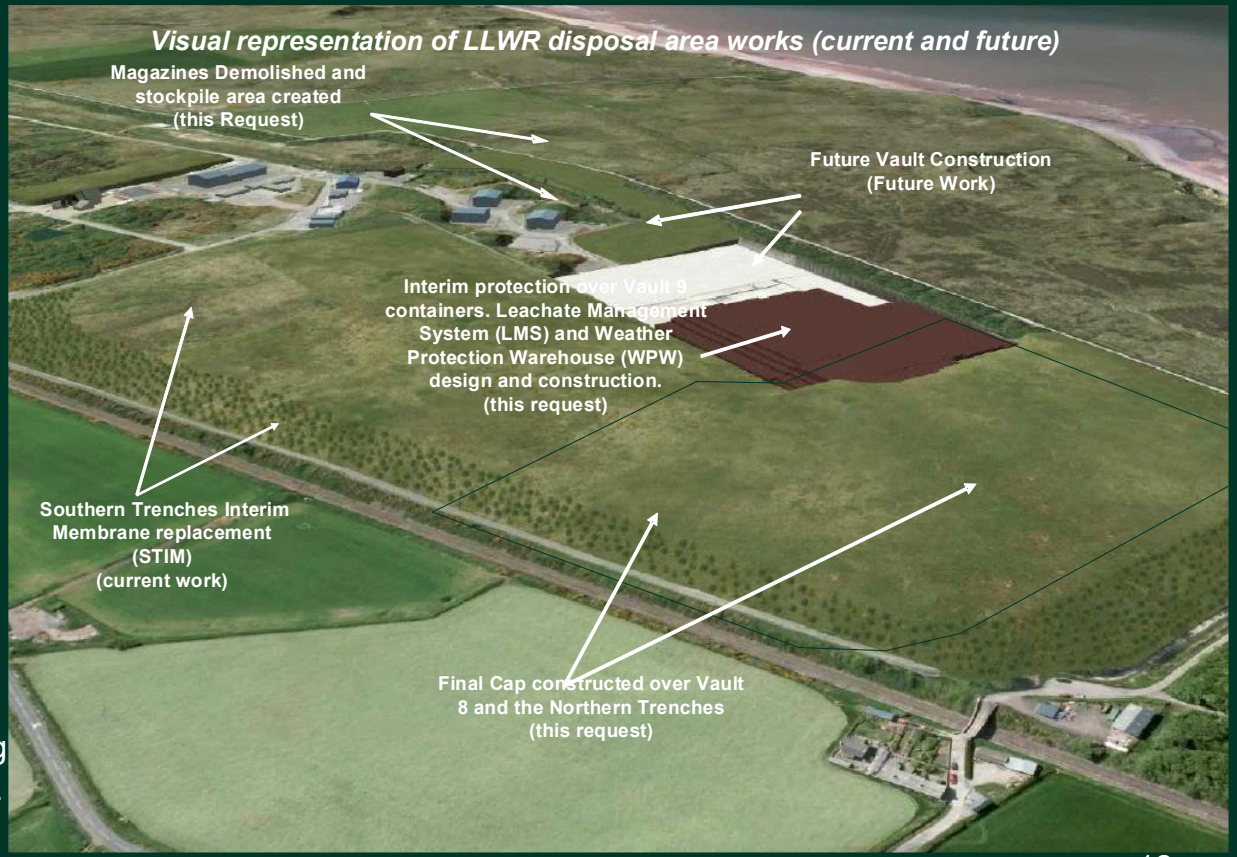
Vault Optimisation and Capping Delivery Project

Core Scope:

- Final capping of legacy wastes in the Northern Trenches and Vault 8 to reduce environmental discharges and comply with the Repository's Environmental Permit.
- Sealing in and interim protection of waste containers in Vault 9 to reduce degradation and corrosion until future final capping.
- Leachate management system changes to establish passive drainage from Vault 8.
- Weather protection for future waste receipts to enable continued disposals in Vault 9 before final capping.
- Enabling trial cap, land remediation, building demolition and stockpile construction works.



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Purpose of VOCD

The VOCD Framework builds upon the existing body of work undertaken by NWS to achieve closure and capping of legacy waste trenches and vaults at the repository site.

It provides a single, integrated delivery structure for current and future repository closure activities, including design, enabling works, aggregate placement, capping, leachate management, and construction of future operational infrastructure.

Goals of VOCD

The goals of the Vault Optimisation & Capping Delivery Framework are to:

1. Deliver the engineered capping and closure systems for Vault 8 and the northern trenches in accordance with the approved design and the Environmental Permit .
2. The sourcing and Procurement of circa 800,000 tonnes aggregate, to relevant specifications including loading to our transport provider at quarry, receiving aggregate at our rail sidings, off-loading and distributing to the works site or approved stockpiling areas.
3. Develop, design, and construct future disposal infrastructure Leachate Management Systems (LMS), Vault 9 interim seal and cap and environmental protection for future waste disposals.
4. Provide long-term optimisation of the LLWR disposal model, including design evolution, regulatory compliance, and best available techniques (BAT) implementation.
5. Integrate enabling works such as demolition, remediation, stockpile creation, and site infrastructure improvements.
6. Maintain continuous compliance with safety, environmental, and quality management standards throughout all Framework activities.
7. Deliver the above activities within an optimised time-frame to meet Environment Agency imposed improvement conditions associated with the timely implementation of vault closure and container protection.

Indicative Key Procurement Dates

- **Conditions of Participation (CoP)** – September 2026
- **CoP Down Select** – Late Autumn 2026
- **Publish Draft ITT pack** – late Autumn 2026
- **Presentation and Dialogue** – Early 2027
- **Issue ITT** – Early 2027
- **Receive bids and evaluate** – Spring 2027
- **Framework Commencement** – Early 2028

Technical Scope

Andrea Borwick
Senior Lead – Engineering

Richard Blackwell
Senior CS&A Responsible Engineer

Framework wide requirements and considerations

- The VOCD Framework provides an integrated mechanism for delivering all design, construction, optimisation, and closure activities at the LLWR. The Framework encompasses near-term activities, notably the final capping of Vault 8 to ensure Environmental Permit compliance, alongside longer-term development phases including subsequent vaults, and associated enabling and environmental infrastructure.
- The Framework scope is structured across four Work Orders, awarded progressively as individual scope elements mature.

Work Orders

Work Order 1 - Vault 8 and Northern Trenches major civils and associated enablers

This is the primary construction package under the VOCD Framework and covers delivery of the Vault 8 Capping works as a single, integrated scope.

Work Order 2 – Early Contractor Involvement in Optimised Disposal Model Design

At commencement of the VOCD Framework, certain elements of the Optimised Disposal Model Design developed under IDEF shall remain in progress. These activities shall continue into the early stages of VOCD, with design outputs transitioned in a controlled, phased manner in line with their respective maturity levels.

Work Orders - contd

Work Order 3 – Optimised Disposal Model Design for Vault 9 interim seal and cap, interim protection of future disposals and leachate management

The VOCD Framework shall take forward the outputs from the concept and early design phases and mature them into detailed design packages ready for construction.

Work Order 4 – Optimised Disposal Model Construction

This Work Order covers delivery of the optimised disposal model, including the interface works between Vaults 8 and 9, relevant changes to the Leachate Management System, relocation and sealing of existing waste containers in Vault 9 [ML16.1][CG16.2]ahead of interim cap construction, and installation of a storage facility to provide cover for future waste receipts prior to disposal and capping. (As per the design developed in Work Order 3).

Model narrative

R Blackwell to outline the design with model

NTS
Nuclear Transport Solutions

NTS - NWS STIM

July 2026

Andy Clark

Understanding us

47 A fleet of 47 locomotives

2 million

Over 2 million miles of rail transports in the UK

4 Equipped maintenance facilities

National engineering coverage through field support maintenance services

10 Traincrew depots across the UK

£100m Annual turnover

100% Nuclear safety record

480+ A 480+ strong team

DRS → NTS Nuclear Transport Solutions → NDA → Department for Energy Security & Net Zero

Nuclear

Aggregates

Infrastructure Support

Intermodal

NTS

The background

- There was approximately 18 months in the planning prior to starting the STIM Project
- NWS contracted directly with NTS for the rail transport.
- Not knowing the source of the aggregates caused major issues.
- 4 days a week unloading at Drigg
- Timing was the biggest constraint.
- Need to top and tail at Drigg for shunting purposes with one long train due to track layout.
- NTS have secure rail paths both North and South from Drigg.

Timing / constraints

- Based on 1 train with 20 box wagons
- Unloading at Drigg – circa 4 hours
- Shunting at Drigg – circa 1 hour
- Loading at Shap Quarry – Circa 4 hours
- Shunting at Shap Quarry – circa 1 hour
- Travel time – 6.5 hours
- = 16.5 hours
- Line closed (signal box) – 20:00 to 05:00
- = 15 hours open

- **= Minus 1.5 hours**

2 train solution

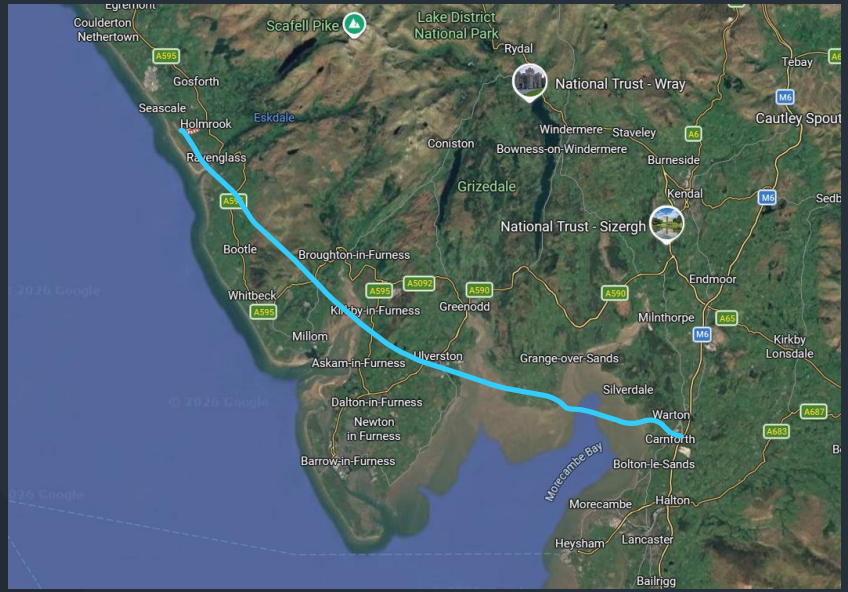
- Same rail assets – 24 wagons / 2 locos
- Slightly more fuel and train crew hours
- Reduced 2 hours of shunting per day
- Trains followed each other
- Could swap to run North or South – **This became crucial**
- 1 train goes for maintenance at weekends (12 wagons)

NWS DRIGG -SHAP -DRIGG

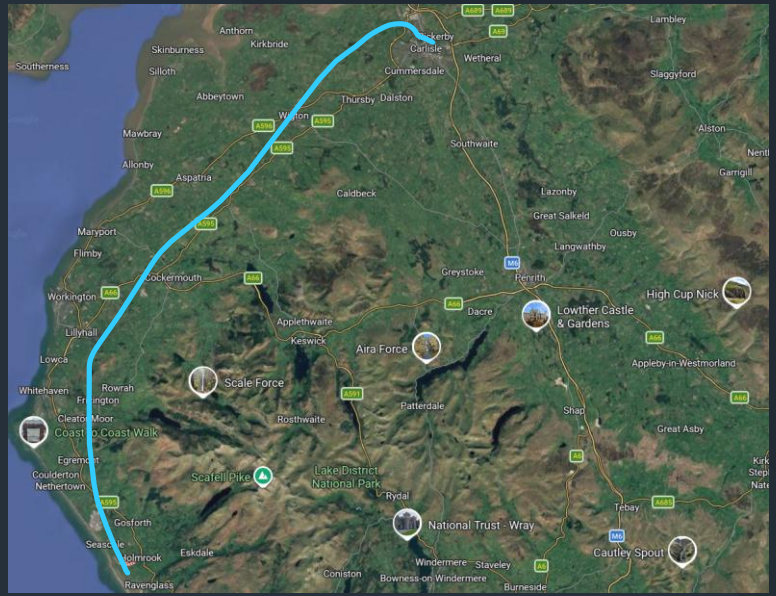
Train 1	Location	Arr	Dep
	Drigg	07:00	09:30
	Shap	13:00	15:30
	Sellafield Sidings	18:30	06:30

Train 2	Location	Arr	Dep
	Drigg	09:45	12:00
	Shap	16:00	18:30
	Sellafiled Sidings	21:26	09:00

From NWS by Rail



South via Carnforth to WCML



North via Carlisle to WCML

The result: STIM Campaigns 1 and 2

Successful delivery of 161 trains

ON TARGET

Successful delivery of 132,000 tonnes of aggregates

ABOVE TARGET

STIM Project on time

STIM 3 is on tract to deliver the required volume ON TIME.

The feedback

- “I’d like to pass on my sincere gratitude to each and every one of you who have been involved – *thank you all for your hard work, dedication and commitment*. This gives our Stakeholders the confidence that we are making nuclear waste, permanently safe, sooner”
- Christine Bradley, Project Manager NWS

- “thank-you for your *shared sense of pace and particularly your agility to navigate some challenges the route threw at us*, and importantly to have got this campaign over the line to give us the stocks we need for the winter, safely. No small task given the volumes we are handling are probably only second to HPC... Sincere thanks to each one of our teams”
- “**Together, we are safely delivering the NWS mission, making nuclear waste permanently safe. I’m incredibly grateful, and proud of the progress we are making**.”

- Mike Piggot, Director of Sites and Operations, NWS

Future Consideration

- Rail network constraints – The sooner NTS Rail know origin the more planning can be done
- NWS rail sidings is currently a limiting factor - 12 wagons can be unloaded at one time. Could this be extended?
- Bransty tunnel is currently limiting factor, now only one route in / out – ‘Should be open Jan 27’
- Frozen points, power lines down, trees on the line, working hours for drivers, availability of resources etc will all be dealt with by NTS Rail – This is route / one the day specific
- Current wagons are JNA-Z open top box wagons, 14m long and carry 77t per wagon. Is this the best solution?
- Note that sidings are NWS maintained and owned.
- Maintenance needed on the rail sidings and weekly inspections via NTS Rail contract through NWS.
- Signal box downtime for 9 hours is a Network Rail constraint which could be changed with sufficient planning / resourcing / cost?
- NWS could have a shunter permanently on site and use NWS sidings for overnight stabling?
- Could you increase number of loads per day if timing worked by having 3 sets of wagons or more locos in circulation?

- Is there something else?

Contact Procedure

- Via NWS Procurement only
- NTS will be working closely with NWS Procurement to answer any questions relating to rail delivery

Thank You

- Andy Clark – Senior Business Manager, Nuclear Transport Solutions

Procurement Matters

Scott Sowerby
Sourcing Officer

Nuclear Waste Services

Procurement Details

For clarity, this market engagement does not constitute the commencement of the procurement.

The value of the framework is up to £382m

The framework is formally a zero-value agreement, with no guaranteed spend or commitment.

Framework term: 10-year term without the possibility for extensions.

Framework type: NEC4 Engineering and Construction Contract (ECC) and Professional Services Contract (PSC) with Z-clauses (Work packages will use Options A, C or E as appropriate).

Framework structure: Single Supplier Framework

Contract Management: Will use CEMAR

Procurement Route: Competitive Flexible Procedure

Stage one: Conditions of Participation Stage

Suppliers must be registered on the Central Digital Platform/Find A Tender to provide information and declarations.

There are mandatory and discretionary exclusion grounds (as set out in the Procurement Act 2023) which suppliers can be excluded for.

First stage: Conditions of Participation

These conditions should pertain to only:

1) Legal and financial capability; or
2) Technical ability

Progression requires a minimum *Acceptable* technical score and placement within the top suppliers.

If a supplier doesn't meet the conditions of participation they can be excluded from the next stage in the tender process. However, a supplier can pass the conditions through an 'associated person' (e.g. another supplier that the supplier is submitted the tender with, i.e. a consortium member or a first tier sub-contractor, that the supplier is relying on to satisfy the CoP).

Stage two: Tender Stage

Technical Capability

- A minimum Acceptable Technical Capability score is required where suppliers methodology, capability, and EHSS&Q requirements will be assessed.

Commercial

Commercial Evaluation to be in 4 parts:

- Tendered total of the prices (inc Fee) – 30%
- Fee percentage – 2%
- Fee at risk – 3%
- Rates (inc Fee) – 5%

Social Value & Sustainability

- Assessment against the suppliers proposed Social Value initiatives and collaboration with NWS on Carbon Management.

Tender Evaluation Criteria	Weighting
Technical Capability	50%
Commercial	40%
Social Value and Sustainability	10%

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Social Value and Sustainability

Social Value & Sustainability shall be incorporated into the tender and shall form part of the Tender Evaluation Criteria for the procurement with the weighting of 10% against this criteria.

NWS's Social Value Themes and Outcomes consider the Government Procurement Policy Notice (PPN) 002 and will recognise appropriate key Themes

The Contracting Authority has partnered with Thrive to improve how we collect, manage and report on social value data. Thrive provides us with a centralised platform that ensures consistency and transparency in our Social Value reporting.

Suppliers shall be required to record all their Social Value they generate in relation to this Contract in the Thrive platform on a quarterly basis.

NWS are looking for social value that shows a strong understanding of West Cumbria and meets the needs of the local area.

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Sub-Contractors

- There is a requirement to consider the supply chain when undertaking a public procurement, the permitted exclusions have been broadened and now applies to all first-tier sub-contractors and any sub-contractors that are key to delivering the contract.
- Suppliers will need to identify all sub-contractors as part of the tendering process and what parts of the contract they will be undertaking. If these subcontractors change during the tendering process, NWS will need to be notified of this. If a sub-contractor is unknown, this will need to be made clear in their tender response.
- Checks will be made on ‘Associated Persons'* of any sub-contractor that is being relied on to satisfy the conditions of participation (other than a guarantor).
- First tier subcontractors will be checked for ‘mandatory’ and ‘discretionary exclusions’, and if they are on the debarment list.
- For lower tiers of subcontractors, checks will be made for those on the debarment list.
- Sub-contractors must be registered on the Central Digital Platform/Find A Tender in order to provide information including about exclusion grounds and connected persons and self- declare whether any exclusions apply.

*An associated person is defined in Section 26(4) as a **person the supplier is relying on in order to satisfy the conditions of participation** (other than a guarantor)

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Contract Management

Good contract management is recognised as the leading way of controlling spend and driving value from government contracts. NWS recognises this and is applying contract management tools and processes to manage its contracts consistently.

- All commercial documentation shall be managed through the cloud-based contract management platform CEMAR
- Standardised Reporting Periods
    - Monthly Reporting
    - Quarterly Reporting
    - Annual Review
- The contract will be managed with performance against both delivery and behaviour based KPI's. These will be assessed at framework and work package level against contractually agreed objectives and milestones.

Incentivisation Mechanism

The VOCD Incentivisation Model operates through a Self-Funded Incentive (SFI) mechanism that places a defined proportion of the Contractor's costs fee at financial risk and releases that amount based on objectively measured performance (KPI's).

Contractors will commit a defined percentage of its fee to be placed at risk as part of their tender submission. The value of the SFI will be an at-risk fee which will be held in a rolling retention pot for the duration of the Framework or Work Order.

Under the model, for an Option C arrangement, the fee linked to KPI performance is calculated as a percentage of the contractor's defined cost. This amount (defined cost + KPI-linked fee) is then compared with the target cost to determine any over- or underspend, which in turn drives the pain/gain share. The contractor's total fees and incentives are significantly higher when the work is delivered below the target cost.

Factors to be measured under this incentivisation model include:

- EHSS&Q (10%) - Safety Statistic Reports & Submission of Learning Reports.
- Contract Delivery (40%) - Delivery of Quality Management, Wastage and Curfew Breaches
- Project Reporting (20%) - Delivery of Cost Reporting, Forecasting and schedule performance management.
- Commercial (15%) - Effective management of change and cost accuracy.
- Social Value (15%) - Delivery of Carbon Management and Social Value Plan delivery against commitments made.

Q&A Session

- Any outstanding webinar questions will be published on VOCD webpage
- No further fixed Market Engagement (ME) events are anticipated
- NWS is open to holding one-to-one meetings on an ad hoc basis following this webinar and up to two weeks prior to the publication of the Tender Notice
- To request a one-to-one meeting, please contact NWS via this email
- Additional documents including a Key Contracting Principles document, draft tender documents and regular updates will be shared via VOCD webpage

Q&A Session

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Q&A continued

In terms of the procurement event and specifically stage 2 (ITT), can NWS provide any clarity around what pricing submission will be required as part of the bid? Will this be for the Works Order 1 (Vault 8 and Northern Trenches) works? If so, under what basis will the Works Order 1 Call off contract be issued – we assume NEC4 option C?

- It is confirmed that Work Order 1 is intended to be target cost (NEC4 Option C)

In terms of the contract for VOCD, at which stage of procurement will the contract be issued for review? I.e. will a version be issued at PQQ stage or will this be at ITT stage?

- The terms will be shared at the first stage of the procurement, Conditions of Participation

Will a digital platform be used for sharing information? Is there a preferred platform?

- The procurement will be carried out through the Atamis eSourcing System where all tender documents will be shared - https://atamis-2464.my.site.com/s/Welcome

Q&A continued

As mentioned at the site visit, NWS will down select three Contractors to take through to ITT stage. As part of this stage, will contract term negotiations form part of the final ITT process? It is confirmed that Work Order 1 is intended to be target cost (NEC4 Option C)

- The contact terms are not expected to change substantially as part of the dialogue process, though some non-material amendments may be made. We have released a Contracting Principles document available on the supplier website which contains the key principles and would invite feedback at this stage.

With the 40% commercial score split into four parts, can you please provide more clarity on what we will be asked to price within the “tendered total of the prices” which comprises 30% of the score? Further to this, can you provide further details on the proposed procurement programme, and specifically the duration of the ITT phase. We are seeking comfort that the ITT period will afford prospective bidders reasonable time to undertake a thorough pricing exercise.

- The total tendered total of the prices relating to the 30% will be the target cost for Work Order1 - Vault 8 and Northern Trenches only. The response period for the draft ITT is expected to be circa 8 weeks, followed by the dialogue phase, with a further 4 weeks to respond to the final ITT post-dialogue.

Q&A continued

Can you confirm how conflicts of interest will be managed across the supply chain?

- Conflicts of interest are being managed robustly in line with NWS procedures. Any current suppliers to NWS will not have access to any of the pre-tender documentation (other than that published on our website), or be involved in the development or review of scope. Any pre-existing information previously produced by our suppliers on elements such as design, will be made available as part of the tender documentation where requested/necessary. Where we have commissioned work involved in review of existing scope, these suppliers will be excluded from bidding from the VOCD procurement.

Will NWS be contracting the Trains Direct from NTS (DRS) or will NTS be providing an identical price to all bidders to include in their respective Target Cost?

- NWS will contract directly with NTS/DRS for the rail moves. We will provide, as part of the tender documentation, price information for journeys of various distance ranges depending on the chosen quarry/quarries. This price will be added to the tenderers Target Cost to provide a representative total cost for use in the pricing model.

Q&A continued

Can you confirm what scope is included within Work orders 2-4?

- Work Order 2 – Early Contractor Involvement in Optimised Disposal Model Design
- Work Order 3 – Optimisation Disposal Model Design for Future Vaults and Vault 9 Closure
- Work Order 4 – Optimised Disposal Model Construction

Are work orders likely to be issued at the same time, or is there a staged approach?

- Work Orders are likely to be issued on a staged approach, with the intention for Work Order 1 to be issued as soon as practicable following award.

All outstanding and future Q&A's will be published on our VOCD webpage