Prior Information Notice
This notice is for prior information only

1 Section I: Contracting authority

1.1 Name and addresses

Radioactive Waste Management
Building 329
Thomson Avenue
Harwell Campus
Didcot
Oxfordshire
OX11 0GD
United Kingdom

E-mail: gdfenquiries@nda.gov.uk

NUTS: UK UNITED KINGDOM

Internet address(es)
Main address: https://www.gov.uk/government/organisations/radioactive-waste-management

1.2 Information about joint procurement

The contract is awarded by a central purchasing body

1.3 Communication

This Prior Information Notice contains all essential information relating to the supplier event, and can be viewed on the Sellafield Ltd (eu-supply.com) site (if you have an account),

or at UK Governments Find-A-Tender service, which can be viewed through the following link Find a Tender (find-tender.service.gov.uk)

RWM will hold the initial supply chain event on the 7th October 2021, the event will be 'in person' at the VOX venue, in Birmingham. Registration for the event opens on the 8th September and will close either when all the tickets are reserved (of which there are 200) or by the Friday 24th September (whichever is soonest)

Delegates will be limited to two from each company, although there is tick box on the registration site to request up to two additional spaces if the company can demonstrate capability aligned to the full scope under discussion during the event. RWM reserve the right to allocate spaces appropriate to the company capabilities and alignment to the supplier day scope.

You MUST register your interest using the URL (here), and it is also contained in section 4 of this notice.

www.GDFsupplychainpartnerships.rwmevents.co.uk

1.4 Type of the contracting authority

Ministry or any other national or federal authority, including their regional or local subdivisions

1.5 Main activity

Public Procurement

2 Section II: Object

2.1 Scope of the procurement

Title

Integration & Design Delivery Partners (inc. Major Permissions & Site Characterisation scope)

Scope of the procurement

The scope of the requirement is for the formation of:

i. Integration, Design & Development Partners (IDDP),
ii. Major Permissions Delivery Partner (MPDP),
iii. Site Characterisation Delivery Partners (SCDP),

for the delivery of the Geological Disposal Facility (GDF) programme of work from 2025 to 2033

Note: The civil engineering and construction works supporting the boreholes is likely to be tendered separately commencing on site approximately [date] and the main GDF facilities will not commence construction until at least 2040.

Note: The future regulated entity for DCO and other licence applications for the GDF programme will be RWM (or another subsidiary of NDA).

The IDDP Contract(s) will likely consist of partners with a global and national reach, forming alliancing type arrangements to deliver an integrated organisation and programme, design development and project management / project controls scope during the identified contract period.

The MPDP Contract will likely consist of a partner with a local and national reach to deliver the RWM key permissions and consents relating to commencing site characterisation and borehole drilling activity.

The SCDP Contracts will likely consist of partners with a local and national reach to deliver the full scope surrounding the site characterisation projects across the various communities engaged on the GDF programme.

The specific details of these works summarised above are detailed below.

SCDP and IDDP share an alignment in scope, and therefore RWM wish to engage the market to understand how the interested parties can deliver these works with the most effective supply chain strategy.

Main CPV codes

IDDP - 71320000: Engineering design services
MPDP - 71313000: Environmental engineering consultancy services
SCDP - 71351000: Geological, Geophysical and other prospecting services

Type of contract

Services, Equipment supply, Site works

Short description

A GDF is a highly engineered facility constructed deep underground and will consist of a series of vaults and tunnels where radioactive waste can be disposed of safely, securely and permanently.

RWM will deliver this vital programme through a community consent-based process, working in close partnership with communities, building trust for the long-term and ensuring a GDF supports local interests and priorities (for more on GDF: https://www.gov.uk/guidance/why-underground).

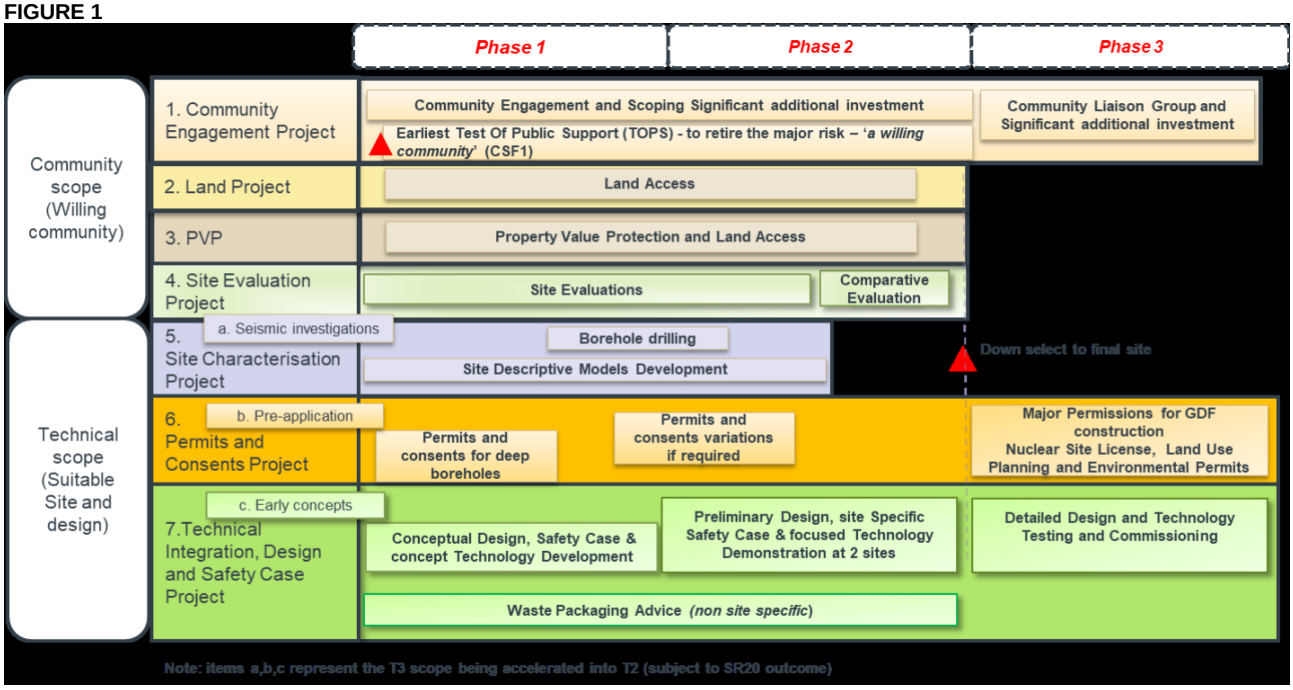
The GDF Programme is split into five Tranches:

- Tranche 1 Policy formation and launch of the siting process (complete)
- Tranche 2 Community engagement and site evaluation project (plus other critical activities to prepare for Tranche 3)
- ***Tranche 3*** ***The GDF Development Stage – the focus of this market engagement***
- Tranche 4 Surface and subsurface construction and commissioning of first waste emplacement
- Tranche 5 Operations and ongoing underground development / construction

This PIN notice aims to engage the market with respect to scope identified during Tranche 3 of the GDF programme. Tranche 3 is split into 3 phases and encapsulates 7 parallel projects, all of which interface with one another to a greater or lesser extent.

In essence Tranche 3 has 2 principle drivers, to find a willing community through the community scope projects, and to identify a suitable site and design through the technical scope projects. Please refer to the 7 projects below in FIGURE 1 for more information.

FIGURE 1



The GDF is a First of a Kind (FOAK) community consent based nuclear design and construction programme in the UK, and as such this presents a number of principle challenges. RWM intend for this programme to be delivered through an integrated collaborative model, where the capability, behaviours, technology and the supply chain value proposition will be principle drivers in RWM decision making on the choice of suppliers. Sustainability and social value are also important drivers for the IDDP partners.

RWM aim is create a programme focused on the demands of the client, adopting a suppler relationship alliance model that creates value oriented enterprising teams who are incentivised against outcome level deliverables, that meet the RWM economic, social and environmental needs.

RWM recognise the need to develop and promote the right working environment in order for this supply chain model to flourish, and RWM aim to move from conventional transactional contracting to integrated and collaborative enterprises which will promote the right environment, enabling RWM and the supply chain to promote positive value adding behaviours resulting in maximised value and performance.

RWM approach to risk management is to collaboratively identify the project risks and jointly allocate accordingly to the party(ies) who are best placed to manage the risk and this will be encapsulated in a robust governance model to monitor and track risk mitigation over time.

RWM have also developed a set of key principles for our entire supply chain model for the GDF programme, which are outlined in FIGURE 2 below:

FIGURE 2

Key principles for our future supply chain delivery model
Recognition of RWM's strategic intent and enduring capability aspirations – future waste facility owner (i.e. strategic designer not builder)
Athletic, not thin – with muscle to control the supply chain, ongoing / future risks and oversee work, with intelligence to protect security, safety & env. impact of the GDF programme – guiding & controlling mind
Aligned to "red lines" – the GDF organisation must: • Own the safety cases and designs, be able to explain and secure regulator approval • Maintain strong Intelligent Customer and Client capability (especially in relation to Community and Engagement activities) • Adherence to the relevant laws, regulations and policies and strong HSSE culture
Scalable and adaptive - as the GDF programme evolves - able manage unforeseen demands and risks, not held to single supplier
Working as one GDF project - a single coordinated organisation procuring large packages / business objectives (incl. associated risks), not individual, bespoke projects
Not one size fits all - accommodating of **different business objectives & risks requiring differing supply chain approaches / contracting** (i.e. deliver the community vs deliver the suitable site and infrastructure)
Recognition of GDF core requirements (specify, oversee & assure) vs supply chain's experience and ability to deliver (incl. complex work) – avoid conflicts of interest
Requirement for a integrated programme, design & technical integration layer - "integrator" and "architect" across design, programme and technical elements
Demonstrate VFM, cost transparency & social value - putting risk / contingency where it is best managed

RWM, as a subsidiary of the NDA, support the Project 13 Commercial Handbook and the main five features, which are identified in FIGURE 3 (below):

- **Governance**

Infrastructure owners must define rules, processes and practices to guide their interactions with suppliers and their decision making

- **Organisation**

Owners must engage the right suppliers at right time and integrate them into the client team

- **Integration**

Owners must develop culture, practices and systems appropriate to the programme being delivered

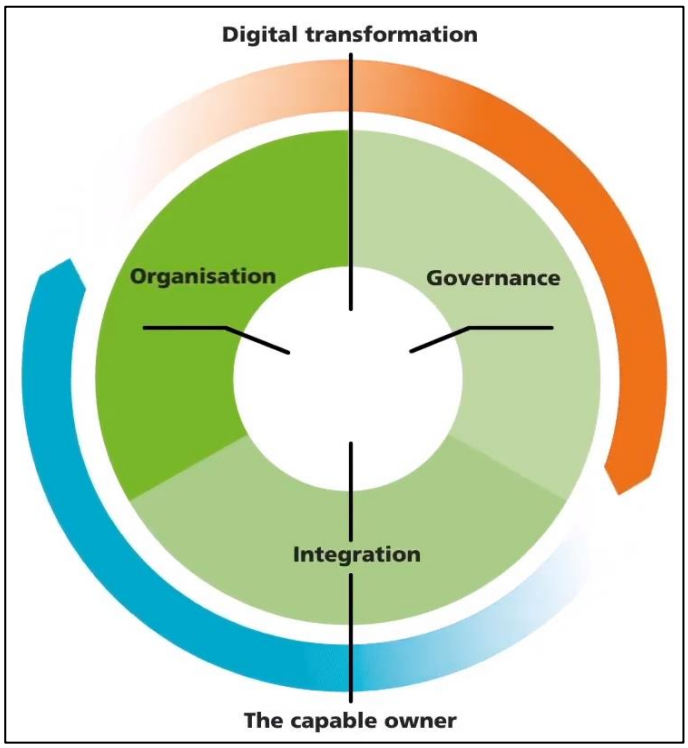
- **Capable owner**

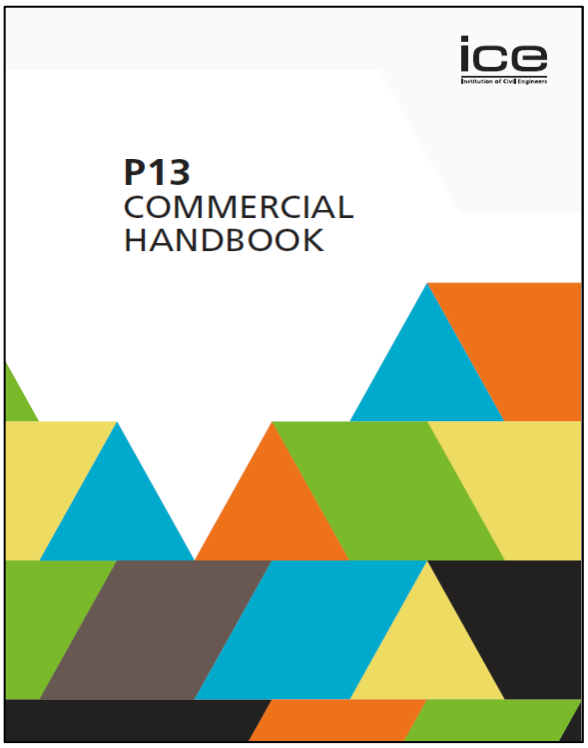
Owners must have capability to define outcomes, articulate tech requirements and manage stakeholders, put infrastructure into operation and work collaboratively with the whole team

- **Digital transformation**

Owners need to do more than just embrace new technologies; they must devise new business models that change the way they operate

FIGURE 3





Integration and Design Development Partners (IDDP)

The Integration and Design Development Partners (IDDP) is an alliancing type supply chain arrangement, working alongside RWM to integrate, design, develop and coordinate the GDF programme requirements, milestones and outcomes across the GDF programme.

The programme of work for the IDDP will span across Tranche 3 phases 1 and 2 (current plan) which gives a nine year window for the services (2025 to 2033), with an estimated budget value of up to £1bn for the period.

RWM are looking for supply partners who are willing and capable of working in an alliancing type culture with an 'open book' philosophy framework with other supply organisations for the good of the GDF programme.

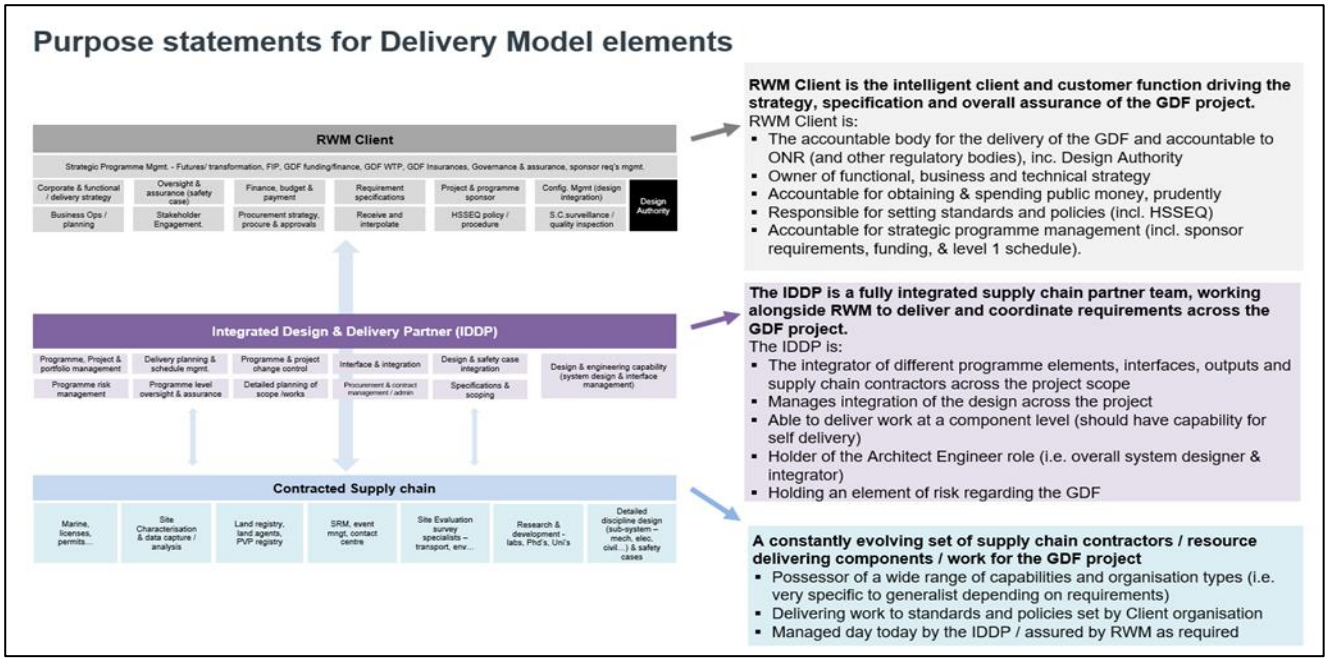
RWM will retain overall control, governance and assurance of the Level 1 programme schedule and milestones and will deploy the "Intelligent Client" role to oversee and manage the GDF programme.

The key capability areas where RWM require support from an IDDP are as follows

- Project Engineering
- Design Development
- Systems and software
- Data management
- Contracts and commercial
- Programme and project management
- Project controls
- Health, Safety, Security, Environment and Quality (for self-delivered works)
- Communities engagement support (led by RWM) (where works interface with the communities)
- Communications support (led by RWM)
- Assurance

The IDDP will work alongside RWM to deliver and co-ordinate requirements across the GDF programme. Please reference Figure 4 for more information:

FIGURE 4



The key capabilities and roles of the IDDP alliance partners:

- Are the integrator of different GDF programme elements, interfaces, outputs and supply chain contractors across the programme scope
- Manages development of, and integration of the GDF system (and sub-system) design
- Integration of technical dependencies across the whole programme
- Development of system performance design requirements (controlled and final sign-off by RWM)
- Is able to deliver work at a component level (should have capability for self-delivery)
- Programme and project management (inc. project controls) decision maker for the L2 programme and below
- Cross projects schedule integration, planning, risk management, project controls
- Process integration across the GDF programme
- Specifies and scopes work for the sub-supply chains
- Supports RWM in the procurement of major works
- Executes procurement of agreed packages of works
- Managing and owning contracts (with final approval sitting with RWM)
- Day to Day contract management of the RWM “Design and Site Suitability” supply chain (RWM acting as the Intelligent Client (IC))
- Software and system design, provision and management of (industry leading systems)
- Design and Development of the Common Data Environment (CDE)
- Designs common information architecture for the GDF programme
- Holds an element of programme risk, as jointly agreed between the IDDP Alliance and RWM
- Elements of quality assurance and quality control responsibilities, particularly with respect to management of the Design and Site Suitability supply chain
- Management and reporting of the site characterisation scope of works, conducted by the Site Characterisation Delivery Partner (SCDP).
- Management and reporting of the Major Permissions Delivery Partner (MPDP) scope of works
- Data capture, aggregation, interpretation and detailed analysis
- External stakeholder messaging (in conjunction with RWM)
- Principle contractor responsibilities for on-site works
- Provision of equipment and resources to meet the needs of the programme

Major Permissions Delivery Partner (MPDP)

A programme of non-intrusive and intrusive ground investigations is required to establish the geological conditions of the perspective sites, and to input accordingly into the GDF site evaluation and solution development.

The proposed procurement packages will obtain all critical planning consents and environmental permits required to deliver the programme of intrusive ground investigation.

There are two proposed procurement packages in this area, namely

- The Major Permissions Delivery Partner (MPDP) and,
- The Client Technical Support (CTS)

The Major Permissions Delivery Partner will have primary responsibility for consents preparation, submission and attainment, and the Client Technical Support will support the Client team directly in the support and assurance of the Major Permissions Delivery Partner.

The contracting period for both contracts is within the years 2023 through 2029. The estimated budget value for MPDP is up to £125m and the budget value for CTS is up to £15m.

The following text outlines the separate work packages (WP), and associated capabilities and roles required to be performed by the MPDP

WP1 - Land Use Planning

- Consideration of Alternatives and Site Evaluation - Ensure that the final DCO submission provides a robust and detailed site selection justification
- Planning Assessment and Policy Compliance - Ensure the final DCO submission provides a robust detailed justification in planning policy terms why DCO approval should be granted
- DCO Consultation - Conduct and demonstrate that prior to submission extensive and effective consultation has been undertaken with relevant parties and stakeholders
- DCO Technical Engagement - Engagement with stakeholders and regulators will be essential throughout the DCO pre-application, pre-examination, and examination phases
- Environmental Assessment (EIA) - Proposals for the purposes of consultation and technical engagement, including the final DCO proposals will need to have been sufficiently assessed in accordance with the statutory requirements of the EIA regulations
- Habitat Regulations (HRA) - HRA is a key consenting risk for GDF and so the consenting strategy and approach will need to be supported by a robust HRA evidence base, technical engagement with key stakeholders on HRA matters and environmental assessment work
- DCO Land - Land inputs are required throughout the DCO process focused on identification of land interested parties via land referencing and the acquisition of land (where required)
- DCO Application Preparation and Submission – The scope of this package relates to all activities associated with the preparation and formal submission of the DCO applications
- DCO Pre-examination, Examination & Discharge of Requirements – All aspects of examination including preparation and discharge of requirements

WP2 Environmental Permitting

- Optimisation – The scope will cover the whole of the RWM future programme in terms of identifying where optimisation will be required at each stage of the staged permitting process
- Management Arrangements – The aim of this work package is to ensure that the business has all the Management Arrangements necessary to be a permit holder.
- Permit Holder Preparation – The scope of this sub-work package is to prepare RWM to be a permit holder
- Development of Initial Site Evaluation (ISE) – Working with internal technical teams to coordinate and align inputs to meet the expectations of regulators

- Permit Application Preparation – The scope of this sub-work package is to start developing and producing permit applications

WP3 Capability Building

- Major Permissions readiness and capacity – Support internally to facilitate recruitment alongside inputs and direction to define and implement appropriate governance and management arrangements

WP5 Communications and Engagement

- Community Engagement – Ensure that all the activities in the major permissions project are informed and aligned with the community engagement project (203)
- System and Materials - Support consultation and engagement requirements of the project with the provision of digital and physical methods using appropriate systems and materials

WP6 Regulatory Engagement

- Implementation of regulatory engagement strategy – Progress implementation of the strategy agreed between RWM, Environment Agency, ONR and NRW

WP7 Nuclear Site Licensing

- Support preparations for nuclear siting licensing to be delivered in the Tranche 3 programme.

Major Permissions Client Technical Support (CTS)

The scope of the client technical support team will sit across all of the above scope being delivered by the delivery partner, focused on providing an Intelligent Customer (IC) role alongside the internal RWM Major Permissions team to ensure that all works being delivered by the delivery partner are delivered on time and to the required quality.

In targeted areas members of the client technical support team will also conduct supplementary technical work to support and enhance scope delivery and robustness. They will also act as substitutes for the RWM internal team where required.

The contracting period is likely within the years 2023 through 2029 and the total value of the future contract(s) are likely to be in the range of £75m to £125m.

Site Characterisation Delivery Partnerships (SCDP)

Note:
RWM are open to the concept that the IDDP and SCDP could be part of the same overall IDDP Alliance model, and hence the strategies of these two areas of scope could have very close alignment, and this is one of the areas of discussion that RWM would wish to pursue during the early engagement with the supply chain on this scope.

Site Characterisation is the process by which RWM will assess the geoscientific suitability of a site to host a GDF. It comprises a series of investigations which will aim to build a comprehensive understanding of a site or sites to inform the decision on whether to proceed to underground investigations and construction. In the earliest stages of the site characterisation process this will include non-intrusive geophysical investigations such as seismic surveys the first of which is planned during Tranche 2.

Providing the site has good prospects in terms of geology, and there is a willing host community, further geophysical investigation and the drilling and testing of deep boreholes will begin in Tranche 3 Phase 1 in order to further characterise the site.

Tranche 3 begins following a Government decision on sites to take forward into site characterisation. Phase 1 of Tranche 3, from a Site Characterisation perspective, broadly involves:

- Working with the Permitting and Consents team to develop Environmental Permit and DCO applications for deep boreholes at 2 sites (close working needed between SCDP, IDDP and MPDP on this scope)
- Undertaking the data acquisition, interpretation and modelling activities at those sites
- Developing the Site Descriptive Models (SDM) which presents the data and geoscientific understanding in a form which meets the requirements of the end users including the engineering and safety case teams.

The end of Tranche 3 is to be ‘construction ready’ for a GDF with all the appropriate consents in place.

Site Characterisation data acquisition, interpretation and modelling approaches are generally well established although the unique requirements of RWM and the combination of techniques for a particular site will require considerable technical innovation and integration drawing from expertise and knowledge from a range of industries

The high level scope of Site Characterisation is below. The Site Characterisation Delivery Partner (SCDP) will work alongside RWM to manage, instruct, and supervise the various Site Investigation Contractors. Amongst other things, the activities of the SCDP will comprise of the following:

- Development of a detailed site characterisation plan and other material to support the Environmental Permit and DCO applications for the 1st round of boreholes at 2 sites
- Finalise the development of enabling systems for intrusive investigations including health and safety, quality assurance and geoscientific data management arrangements and implement
- Undertake/finalise procurement of various Site Investigation Contractors for intrusive and non - intrusive investigations and support services (assuming this will have started during Tranche 2) including long lead items such as wellheads, well casings, long-term monitoring systems, etc
- Project, operational and technical management of intrusive investigations and non-intrusive studies further to those undertaken in Tranche 2 likely to include more focused seismic reflection surveys, airborne, mapping and non-seismic geophysical surveys
- Establish site presence including site offices, drilling compounds and monitoring networks (including surface water and meteorological)

- Drill, test and sample shallow boreholes to support surface facility design, safety case and environmental work
- Management and supervision of the detailed engineering and drilling deep boreholes
- Undertake in-situ testing in deep boreholes both during and after borehole construction
- Collect samples of both rock and groundwater and undertake laboratory testing
- Install long-term monitoring equipment such as multi-packer systems and start collecting data
- Interpret and model geoscientific data
- Integrate data and interpretations in a Site Descriptive Model for each site capturing the understanding of the current geoscientific conditions at the site and any key processes that led to these conditions.
- Undertake additional seismic geophysical work to support design of shaft and access ways (if necessary)

The following are excluded from the scope and envisaged to be procured separately:

- Analysis of rock or groundwater samples for the understanding of radionuclide or gas transport
- Modelling of the future natural or perturbed evolution of the geoscientific conditions at the sites
- Collection and interpretation of non-geoscientific data to support environmental baseline definition and EIAs for both the boreholes and the GDF

The contracting period is estimated to be between 2026 through 2033 and the total value of the future contract(s) are likely to be up to £150m. However, the period may change and is dependent on how many communities and engaged during Tranche 3 and the complexity of the geology.

Estimated Total Value and duration

IDDP (Up to £1bn) – 9 year window

MPDP (Up to £125m) – 6 year window

SCDP (Up to £150m) – 8 year window

Information about lots

This PIN has been designed for early market engagement with the intention of taking supply chain feedback into the formation of the RWM future strategy, and as such no determination on lots has been made at this time.

2.2 Description

Title

Integration & Design Delivery Partners (inc. Major Permissions & Site Characterisation scope)

Additional CPV Codes

45220000: Engineering Works and Construction Works
71220000: Architectural design services
71300000: Engineering services
71310000: Consultative engineering and construction services
71311000: Civil engineering consultancy services
71311200: Transport systems consultancy services
71311300: Infrastructure works consultancy services
71312000: Structural engineering consultancy services
71322000: Engineering design services for the construction of civil engineering works

71323000: Engineering design services for industrial process and production
71336000: Engineering Support Services
71340000: Integrated engineering services
71530000: Construction consultancy services
71541000: Construction project management services
71621000: Technical analysis or consultancy services
72224000: Project management consultancy services
79415200 8 – Design Consultancy Services
79421000 1 – Project management services other than construction work
79421100 2 – Project supervision services other than for construction work
79421200 3 – Project design services other than for construction work

ENVIRONMENTAL CPV CODES
71313400: Environmental Impact Assessment for Construction
71313420: Environmental standards for construction
71313430: Environmental indicators analysis for construction
71313440: Environmental Impact Assessment (EIA) services for construction
71313450: Environmental monitoring for construction
90700000: Environmental services
90710000: Environmental management
90711000: Environmental impact assessment other than for construction
90711200: Environmental standards other than for construction
90711300: Environmental indicators analysis other than for construction
90711400: Environmental Impact Assessment (EIA) services other than for construction
90711500: Environmental monitoring other than for construction
90712000: Environmental planning
90721000: Environmental protection
90721000: Environmental safety services

GEOLOGICAL / GEOPHYSICAL CPV CODES
71332000: Geotechnical engineering services
71351100: Core preparation and analysis services
71351200: Geological and geophysical consultancy services
71351210: Geophysical consultancy services
71351220: Geological consultancy services
71351300: Micropaleontological analysis services
71351400: Petrophysical interpretation services
71351500: Ground investigation services
71351900: Geology, oceanography and hydrology services
71351910: Geology services
71351911: Photogeology services
71351912: Stratigraphic geology services
71351913: Geological exploration services

DRILLING CPV CODES
71331000: Drilling mud engineering services
76300000: Drilling services
76310000: Drilling services incidental to gas extraction
76320000: Offshore drilling services
76330000: Turbine drilling services
76331000: Coiled turbine drilling services
76340000: Core drilling
76430000: Well drilling and production services
76431000: Well drilling services
76431100: Well drilling control services
76431200: Well drilling pick-up services

76431300: Well drilling laydown services
76431400: Rathole well drilling services
76431500: Well drilling supervision services
76431600: Well drilling rig monitor services
45222110: Waste disposal site construction work
45120000: Test drilling and boring work

Place of performance

NUTS code: 00 Not Specified
Main site or place of performance: UK

Description of the procurement

As in section 2.1

Estimated date of publication of contract notice:

Estimated date of publication of tender: 01/11/22
Estimated date of publication of contract notice: 01/12/24

3 Section IV: Procedure

3.1 Description

Information about Government Procurement Agreement (GPA)
The procurement is covered by the Government Procurement Agreement: Yes

4 Section VI: Complementary information

4.1 Additional information

a. This Prior Information Notice is not a call for competition. It is to signal an intention to commence market engagement with interested organisations within the integration, design development, engineering and major projects delivery market, as well as those in the site characterisation and major permissions markets, and to alert the market to the potential forthcoming tender exercises. RWM intends to hold market engagement sessions throughout Q4 2021 with industry experts and suppliers interested in potentially bidding for the resulting commercial agreement(s).

b. RWM intends to utilise a two-stage engagement process
Stage 1 will be an initial supplier event to explain the GDF programme and the role of the Integration and Design Development Partners (IDDP), the Major Permissions Delivery Partner (MPDP), and the Site Characterisation Delivery Partner (SCDP), and RWM aim to receive feedback from the market on key topic areas that are identified within section (h) below during the event.
Stage 2 will be one-to-one engagements with the interested suppliers.

c. If you wish to participate in the Stage 1 event (to be held on the 7th October 2021), please register your interest via the URL here:

www.GDFsupplychainpartnerships.rwmevents.co.uk

d. Please note: “DO NOT” register interest in the **Stage 1** event through any other route.

e. The aim of the **Stage 1** event is to engage with the supply chain community to explain the following:
- Introduce RWM and the GDF programme,
- Provide an overview of the GDF programme (past and future)

- Explain our historical supply chain journey and the future path
- Portray our approach to the Major Permissions work during Tranche 3
- Articulate the Site Characterisation scope and requirements for Tranche 3
- Explain the supply chain requirements around working for RWM on this public sector programme
- Question and Answer sessions throughout the day from the supply chain to the RWM senior management team and executive

RWM will host breakout sessions to engage with the supply chain to debate and discuss topics relating to the integration, design development, permissions and site characterisation works plus future construction of the GDF programme. These breakout topics are outlined below:

- Work transition and integration of current contracted works into IDDP alliancing style framework
- IDDP roles & responsibilities, contract governance model, levels of delegation
- Organisational transition and cultural alignment challenges in moving to an alliancing arrangement
- Form of contract, incentivisation, pricing strategy concept discussion
- Major permissions risks, issues and challenges during Tranche 3
- Site characterisation risks, issues and challenges during Tranche 3
- GDF is a First of a Kind (FOAK) design programme challenges, risks and opportunities
- Design maturity (concept, preliminary and detailed) and its link to programme phasing

f. For more information on the GDF programme please visit “What is a GDF?” https://www.gov.uk/guidance/why-underground

4.2 Date of dispatch of this notice

07/09/2021