

Tender:

Hydrometry Framework

Coal Authority reference (CA18/2/1)

Invitation to Tender

Procurement Guidance, Scope &

Supporting Information

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Overview

Contractual References

The conditions of contract for this framework are contained within the NEC4 PSSC.

Background

The Coal Authority (TCA) was established by Parliament to undertake specific statutory duties, set out in the Coal Industry Act 1994, associated with licensing coal mining operations; managing property and the historic legacy arising from the ownership of the coal reserves and underground workings; settling subsidence damage claims and providing access to coal mining information. It employs 200 staff, based mainly at the head office in Mansfield with some field staff remotely based in order to enable a fast response to incidents in the coal mining areas. The Authority is funded by Grant-in-Aid from the Department of Business, Energy and Industrial Strategy (BEIS). The Authority takes pride in its achievements, quality and motivation of staff, and is focused on delivering its high level objectives sustainably.

The work that we do is summarised by some of the key statistics below:



Our mission:

Making a better future for people and the environment in mining areas

Our purpose:

- we keep people safe and provide peace of mind
- we protect and enhance the environment
- we use our information and expertise to help people make informed decisions
- we create value and minimise cost to the taxpayer

Our Values are:

TRUSTED

- we act with integrity
- we're open and transparent
- we deliver on our commitments

INCLUSIVE

- we promote a culture of mutual respect
- we recognise that our differences make us stronger
- we work with others to achieve our mission

PROGRESSIVE

- we're open minded and innovative
- we recognise that the past can help us shape the future
- we listen and learn

Our approach to sustainability:

Our sustainable procurement vision is to use our purchasing decisions and supply chain partnerships to empower positive social, environmental, economic and ethical change; continuously reducing any negative impacts we may have, both intended and unintended.

We expect our suppliers to work collaboratively with us, so together we can drive forward sustainable change. You will be required to actively support our approach through the selection of sustainable products and solutions, innovative thinking and adopting best practice to enable us to meet our objectives and targets. We recognise that sustainable change is not easy, and we will support suppliers in developing skills and capacity as long as they are open to development and learning together.

Overview of Requirement

We have a remit to protect the environment by remediating pollution from abandoned coal and metal mines throughout the UK, in partnership with BEIS, the Environment Agency (EA), Natural Resources Wales (NRW) and the Department for the Environment, Food & Rural Affairs (DEFRA). We run three core programmes of work, as follows:

1. Coal
2. Non-Coal (Metal mines)
 - a. DEFRA/ EA (North Pennines and South-West)
 - b. NRW (Wales)

Our programmes include the following:

- Coal:
 - Over 70 Mine Water Treatment Schemes (MWTS)
 - Forward programme for refurbishment & new schemes
 - 2000 Monitoring points, of which:
 - 200+ flow monitoring sites (40 Loggers)
 - 400+ water level monitoring sites (150 Loggers)
 - Data collection and maintenance of our MWTS is undertaken by Severn Trent Services
- Non-Coal:
 - 3 MWTS
 - 1 under construction
 - 25+ at monitoring/ feasibility stage
 - 50+ flow monitoring sites (all have loggers)
 - Monitoring being installed across NRW programme

We require Hydrometric data for the following purposes:

- Compliance – Abstraction and Discharge Consents
- Treatment scheme performance
- Treatment scheme design
- Loading Calculations
- Blow-out warning
- Background monitoring

The areas that we cover are shown in the map (Figure 1) below:

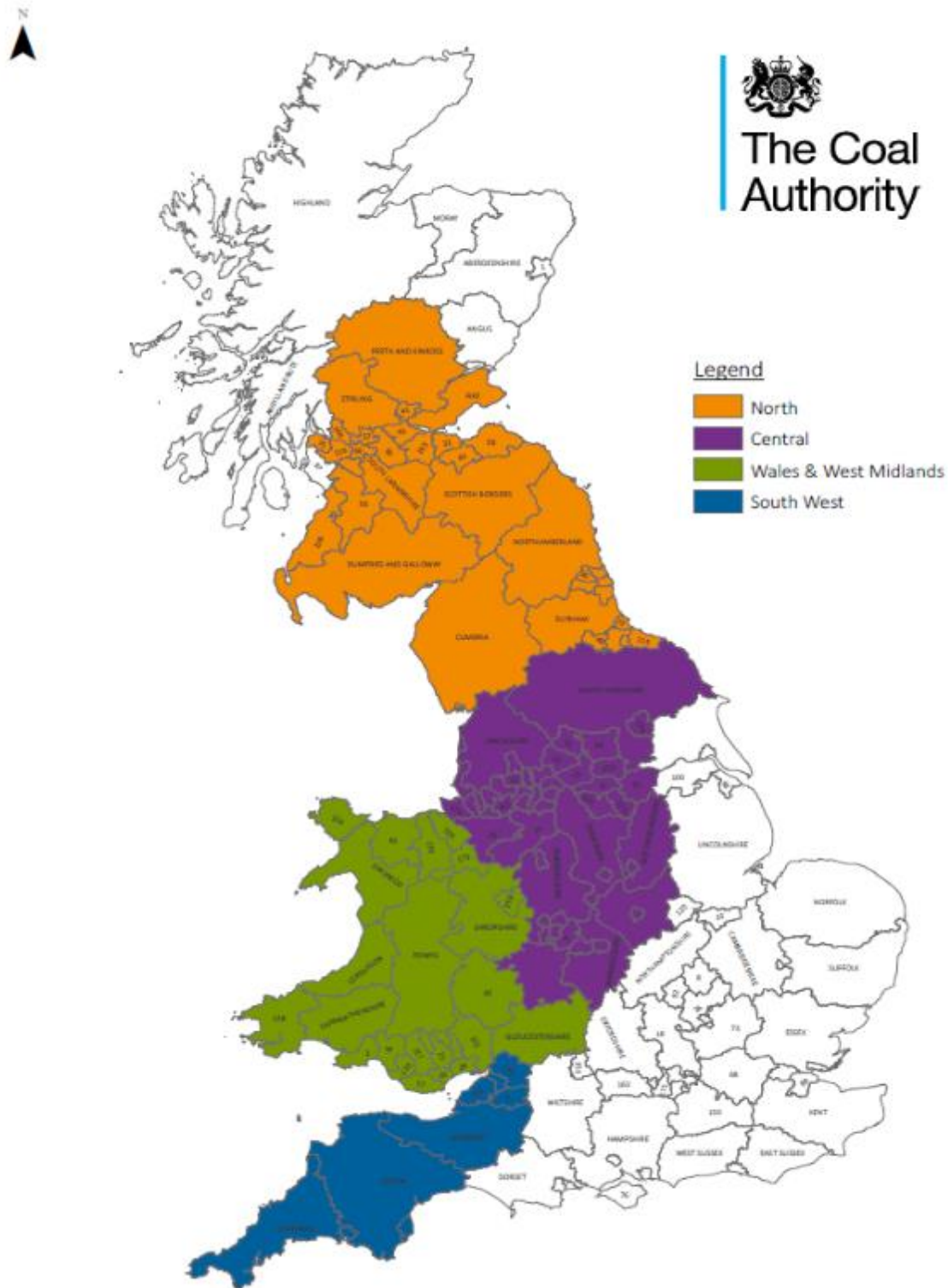


Figure 1 Map showing key Coal Authority regions

As part of our work, we require the provision of Hydrometric monitoring services, and are thus seeking to appoint suppliers to a framework which will run for 4 years from January 2022.

Suppliers delivering these works are required to consider, and demonstrate how sustainable principles and practice are included across their operations and business management, relating to both the specific deliverable as well as how the business as a whole operates in a transparent and socially responsible manner. Detailing, but not limited to, areas such as:

- Responsible business practices for staff and supply chain
- Responsible sourcing of materials
- Resilience and longevity of equipment
- Your social value offer
- Minimisation of materials and energy used
- Environmental impact: specifically, GHG emissions, pollution prevention and mitigation, management, mitigation and regeneration relating to any disturbance to the natural environment due to site activities

All proposals provided will also need to detail and account for the impacts of climate change related extreme weather events and the implications, (from flooding and freezing conditions to drought and extreme heat), on flows and resilience of equipment to safety of staff and scheduling.

These sustainability elements should be included not only in the specific sustainability questions in each lot but taken into account in the overall approach to the technical questions.

Framework Scope

The framework is split into 7 Lots, which are detailed in Table 1. There is no limit (or minimum requirement) to the number of lots that one organisation can be awarded.

We intend to appoint up to 5 suppliers per lot, as a maximum. This will depend upon the geographical coverage provided, by the submissions received. It is our intention to appoint the minimum number of suppliers that provide the geographical coverage necessary and to provide the capacity required.

Further detail of the scope of each Lot is given in the following sections.

Table 1: Summary of Framework Lots




Lot No	Name	Description/ Scope
1	Options Assessment	Site survey, options report and detailed design drawings to determine the best flow measurement solution for a site.
2	Weirs and Flumes	Installation, maintenance and decommissioning of weirs and flumes in accordance with ISO standards.
3	Loggers, Water Level Sensors, Rain Gauges and Water Quality Sensors	Installation, calibration, maintenance and decommissioning of loggers, water level sensors, water quality sensors and rain gauges.
4	Velocity Meters	Installation, calibration, maintenance and decommissioning of velocity meters to ISO standard. This work is likely to include confined space entry.
5	Spot Flow Gauging and Water Quality Sampling	Spot flow gauging (salt dilution gauging, current meter gauging and ADCP) and water quality sampling programmes, in accordance with ISO standard.
6	MCERTS	MCERTS inspection, flow meter calibration, QMS Audit.
7	Hydrometric Monitoring (General Lot)	For Projects which include aspects of more than 1 of the above Lots




It is proposed that work under each Lot will be let at follows:

1. **Direct Award** – TCA may choose to issue a work package as a direct award up to the value of £25k.
2. **Mini-Competition** – When the value of a work package is expected to exceed the maximum value for direct award, then TCA will conduct a mini-competition. However, TCA may choose to carry out a mini-competition at any time, regardless of the expected value of the work package.

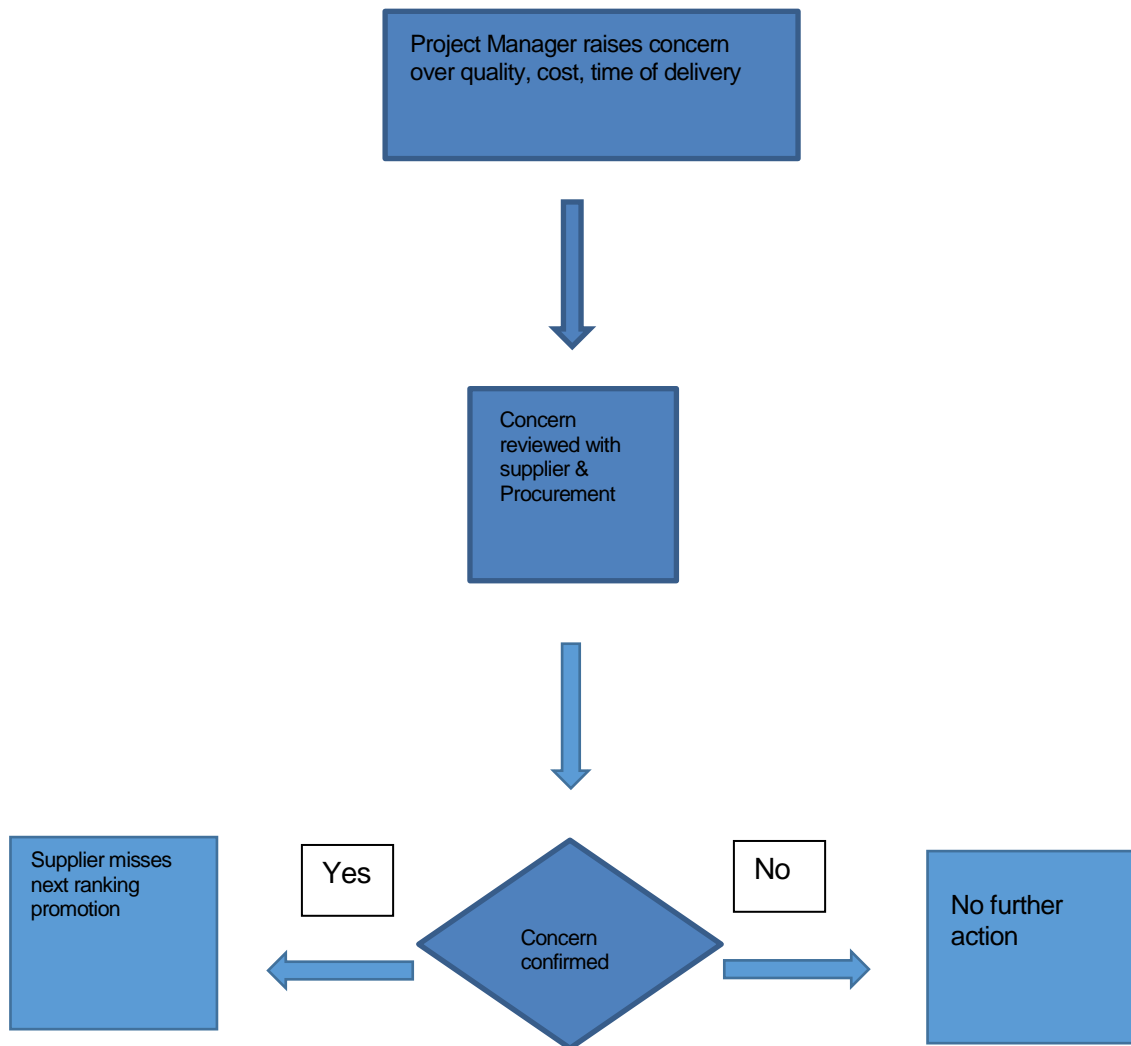
Directly awarded work will be issued on the following basis:

- The direct awards will operate based on a rotational ranking system
 - Upon the completion of the tender process and decision as to the optimal number of suppliers to appoint to any given lot the **initial rankings within each lot are proposed to change with each new direct awarding of work.**
 - It is proposed that the **recipient of any direct award of work will move from their starting ranking to the end of the ranking list.** Each other supplier will **then move up in the rankings**
- **Worked example 1;**

• Supplier A ranked 1 receives direct award		Becomes 3rd ranked supplier
• Supplier B ranked 2		Becomes 1st ranked supplier
• Supplier C ranked 3		Becomes 2nd ranked supplier
 - **Worked example 2**

• Supplier A ranked 1 declines direct award		Remains 1st ranked supplier
• Supplier B ranked 2 receives direct award		Becomes 3rd ranked supplier
• Supplier C ranked 3		Becomes 2nd ranked supplier
 - The successful delivery of this process will require the maintenance of a simple log of direct awards and rotational changes to ensure accuracy and fair treatment.
 - It is proposed that to ensure the appropriate quality of work is delivered that a simple **“yellow card”** process is undertaken to enable stakeholders to record unsatisfactory work received and that this may, upon completion of the process, lead to a **supplier being demoted in the rotational process.**

- **Worked example of yellow card process**



- This process is designed and intended to be light on administration and not requiring of stakeholder's limited time
- The initial and changing rankings of suppliers within lots **will have no bearing** on the conduct of **mini competitions**

Tender Return, Assessment & Criteria

The ITT Bid evaluation will be based on the technical and financial proposals within the bids and the information set out in each compliant bid

The Coal Authority will reject any Bid which is not a Compliant Bid.

A Bid shall only be a compliant bid if the required documents have been completed and submitted.

The tendering Consultants are to ensure that the registered contact details on the eTendering portal are correct for this process.

The tender will be awarded on the basis of the most economically advantageous tender and will be assessed based upon a **70% Quality and 30% Price split**, with the quality assessment being completed prior to the financial assessment.

The documentation to be submitted is summarised below:

- **Quality (Non-Price)** – A submission is required on the eTendering portal in the format specified in the Questionnaire.
- **Price** - A submission for the project is to be submitted on the eTendering portal in the format specified within the Questionnaire

The Authority reserves the right to exclude any bid that does not meet the minimum requirements for these elements

Bids meeting requirements will then be evaluated on the basis of the most economically advantageous tender.

Your tender should remain open for acceptance for a period of 120 days from the closing date for the receipt of tenders.

Tenders received after the tender closing date will not be considered. Failure to comply with the provisions of these Instructions or to complete the tender document in full and without alteration may also result in the disqualification of your tender.

Your submitted tender rates and prices must be exclusive of Value Added Tax.

TCA reserves the right not to proceed with either individual Lots or the whole tender award. Time and expenses costs associated with bidding are at the suppliers own risk, and will not be reimbursed.

Non-Price (Quality) Scoring Assessment Methodology:

Score Categories	Meaning	Scores
Adds Value	The evaluators believe that as well as meeting requirements in all respects, the response has additional features that benefit and adds value for the Authority	5
Fully Acceptable	The evaluators are fully satisfied that the proposal meets the requirement in all aspects	4
Minor Reservations	The evaluators are confident that the supplier has the ability to meet the requirement but have some minor reservations	3
Significant Reservations	The evaluators believe the supplier has the ability to partially meet the requirement, but has some major reservations about the approach or solution proposed. The supplier has not met the minimum requirements as specified.	2
Requirement Not Met	The evaluators believe that the evidence fails to show that the contractor is capable in the requirements area	0

The Coal Authority reserves the right to deem any submission scoring a 0 or 2 for any scored question as non – compliant and as such may be excluded from consideration

Non-Price (Quality) Assessment – Details (70%)

The quality questions to be submitted are outlined under each of the Lots below.

Price Assessment – Details (30%)

The price element for this tender will be evaluated using the least cost differential method.

The pricing element will be split between priced scenarios and a rate card, with 50% of the available marks allocated to each element.

The rate card for staff time will include the grades outlined in Table 2. Some Lots will also include rates for equipment, mileage, subsistence and other items, as required.

Table 2: Rates card for Staff

Role	Typical number of years' experience	Notes
Project Director	>15	
Project Manager	> 5	
Technical Specialist	>10 - 15	
Hydrometric Engineer	>5	
Hydrometric Technician	0 - 5	
CDM Co-ordinator/ H&S Advisor	>5	
AutoCAD Design Engineer	0 - 5	Lots 1, 2 and 7 only
Supervisor (Construction)	>10	Lots 1, 2 and 7 only
Craftsperson (Construction)	>5	Lots 1, 2 and 7 only
Labourer	0 - 5	Lots 1, 2 and 7 only
MCERTS Inspector	>5 - 10	Lot 6 and 7 only
Assistant MCERTS Inspector	0 - 5	Lot 6 and 7 only
QMS Auditor	>5	Lot 6 and 7 only
QMS Advisor	>5	Lot 6 and 7 only

Rates supplied should be **fixed for 2 years**. We propose a rates change in accordance with the change in the Consumer Price Index (CPI) at the date of the 2nd year anniversary of the framework.

For the Priced scenarios, the supplier must indicate which regions they wish to apply for on the attached Price return spreadsheet. The evaluation of the Priced scenarios will be based upon the average cost for all regions applied for. For costing purposes only, the locations of each scenario can be assumed to be as per Table 3 (note: these are not the real location of the examples used in the scenarios).

Table 3 Site locations for Priced Scenarios

Region	Easting	Northing
North	299420	663042
Central	393490	401870
Wales and West Midlands	283650	203100
South-West	178334	039572

Lot 1: Options Assessment

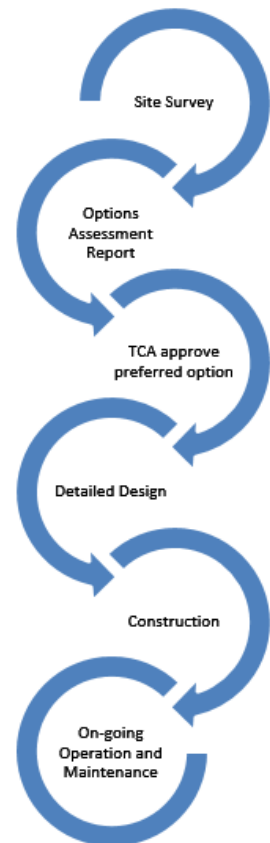
Outline of the Requirement

At locations where we don't currently have any existing flow monitoring, we will often conduct an options assessment. This involves a site survey and, options assessment report as a minimum, and in many cases then detailed design drawings of the preferred option. In some cases, the supplier who undertakes the options assessment will then be appointed to install the preferred solution and then to operate and maintain it (see right).

Suppliers will need to be able to demonstrate independence and a comprehensive understanding of flow measurement techniques, measurement uncertainty, requirements of the relevant ISO standards, the pros and cons of each option and have demonstrable experience of designing and managing a contractor to install flow measurement solutions, often at remote sites.

Flow measurement solutions may include, but not be limited to: weirs and flumes, velocity meters, pipe flow meters, Stage-Discharge sites etc.

All installation work will be carried out under CDM.



Non-scoring questions

Question Reference & Weighting	Question	High Scoring Indicators	Response
1 – Geographical Coverage	Please indicate which of the 4 regions (see Figure 1) you are able to support. This must be completed on the Price Return spreadsheet.	Depending upon the number of supplier responses, we will then decide on how many suppliers are appointed.	

Questions for non-price (Quality) assessment

Question Reference & Weighting	Question	High Scoring Response Indicators
1 – Programme for delivery (20%)	<p>By way of an attachment, provide a Gantt chart programme of how you would approach the works in the priced scenario and deliver the scope; showing key delivery for all key tasks and review periods.</p> <p>Include detailed supporting information to this with each role rate and time allocation against each activity to support your price as part of the submitted programme.</p> <p>Maximum 1 page for programme.</p> <p>Maximum 1 page for supporting information.</p>	<p>Provides a highly detailed and realistic programme showing key dates and tasks highlighted within the scope.</p> <p>Role allocation demonstrates potential to add significant value to the project.</p> <p>Commentary demonstrates how the supplier will pro-actively manage the work programme to ensure that each element is delivered on time.</p>
2 – Method (25%)	<p>By way of a short commentary, please detail the method and approach which will be taken to deliver the tasks described in the priced scenario.</p> <p>Provide an insight into the main challenges envisaged and how these will be managed.</p> <p><i>Maximum 2 pages.</i></p>	<p>Demonstrates independence, such that the recommended solution is the best available for the site, and a comprehensive understanding of flow measurement techniques, measurement uncertainty and requirements of the relevant ISO standards is displayed. Includes details of how the pros and cons of each option will be assessed.</p> <p>Also provide a detailed understanding of potential challenges and ways to overcome these, including during both the design and installation phases (e.g. management of a civils contractor), along with a realistic and practical approach to project delivery.</p>
3 – Experience (25%)	<p>Please provide evidence of 3 different types of flow measurement structures/ solutions that you have designed, and</p>	<p>Case studies that show relevant experience and insight into flow monitoring at sites that have clear</p>

Question Reference & Weighting	Question	High Scoring Response Indicators
	<p>have been subsequently installed, which are relevant to the scope of this Lot.</p> <p>Include information on the site, access, installation type, size (flow rates) and provide client contact details for references.</p> <p>Maximum 2 pages per case study.</p>	<p>similarities with this scope (e.g. upland flashy catchments), and installation in remote locations, and shows added value to the case studies initial scope.</p> <p>Examples which involve managing the existing flow during the installation, and pollution protection measures from the installation work.</p>
4 – Experience (25%)	<p>Please provide details of the qualifications, experience and number of team members that would be delivering the work under this Lot, if your bid is successful.</p> <p><i>Maximum 3 pages.</i></p>	<p>Given the nature of this Lot, we have particular interest in the experience and capacity of the senior members of your team (Project Directors, Project Managers, and Technical Specialists). The location of these staff is also important with regard to the regions within which you wish to work.</p>
5 – Sustainability (5%)	<p>With reference to the type of work on this lot and the Coal Authority's sustainability aspirations mentioned in the Overview, how will you ensure the final product and/or service:-</p> <ul style="list-style-type: none"> Minimises resource usage and optimises those that are needed, including energy (including travel), carbon and materials whilst providing robust solutions with longevity, low maintenance and re-use at end of life Is resilient to extreme weather resulting from climate change Minimises environmental and social impact Uses ethical working and sourcing practices Maximises local added value through social value opportunities <p><i>Maximum 2 pages.</i></p>	<p>Specific details of how a circular approach and sustainability will be applied to design, install and staff involved with the works. Examples of sustainable practice used on other similar projects. Discuss product specification and supply chain sustainability and ethics.</p> <p>Details of how the works will take into account extreme weather to protect people and equipment.</p> <p>Details of staff engagement and training around sustainability to support sustainable practice on site.</p> <p>Details of the companies approach to social value, with examples of current practice and discussion of specific opportunities/actions that would be taken if working on the lot.</p>

Priced Scenario

TCA wish to undertake an Options Assessment for flow monitoring at a metal mine site. Measurement is required of the flow from the adit. The mine adit is a Scheduled Ancient Monument. Previous spot flow gauging data at the site, undertaken on a monthly basis for a 12 month period, provided the results shown in Table 4. The purpose of the monitoring is to enable generation of a flow duration curve for the site, which can then be used in the feasibility and design of a mine water treatment scheme. In addition, the monitoring will be used to assess and mitigate the blow-out risk¹ from the mine.

Table 4: Minimum, Mean and Maximum Flow

Spot Flow Measurements (l/s)	
Minimum	19
Mean	38
Maximum	62

The tasks required are outlined below:

Task 1. Site visit accompanied by Coal Authority representative(s). You can assume that TCA staff will assist with undertaking any survey work that you wish to carry out as part of this visit. A representative from a civils contractor should attend this visit to ensure accurate pricing and any issues with construction are fully considered at the Options Assessment stage.

Task 2. Options Reports to include the following:

- Introduction summarising requirements of the monitoring and anticipated flow range.
- Survey findings, including annotated photographs, GPRS signal measurement, survey data (e.g. channel dimensions etc), flow data obtained during the site visit and a site sketch to show the existing layout.
- Suggested flow monitoring options (see Performance Specification section below) including proposed sensors and data loggers, and the feasibility of installing reliable GPRS telemetry.
- Option appraisal presenting the pros and cons of each option, in a summary table, including items such as access, visual impact, ease of maintenance, calibration requirements, power, estimated flow measurement uncertainty (uncertainty curves for the expected flow range to be provided), construction costs (high level estimates) and flow measurement ranges.
- Outline design for the preferred option, including: sketch layouts (plan and cross section).
- Indicative budget costs for construction, operation and maintenance; to support selection of the chosen option. Costs should include allowance for as-built survey of reference water level to Ordnance datum at each flow monitoring site to an accuracy of +/- 5mm.

¹ "blow-out" has the meaning of a sudden release of water, together with any associated material (including contaminative minerals and poor quality mine waters), and is synonymous with the terms "outbreak" or "outburst".

Task 3. Design of the selected option:

- a) Provide a short design report providing full detail of the selected option, design criteria, comparison/ compliance with relevant ISO standards/ MCERTS, tasks required to take the site forward to installation and updated costs.
- b) Provide Design Drawings and Design Documentation in a format fit for detailed pricing, planning applications and construction at an appropriate scale. Drawings to include:
 - 'Location Plan' with the proposed monitoring location and access track back to the adopted highway identified. This plan needs to be on a clear OS base with road names identified and the direction north shown.
 - 'Existing Layout Plan' for each location.
 - 'Proposed Layout Plan' for each location – to show what is proposed in a plan view including, structures, equipment, kiosks, gate, fencing, access alterations, landscaping etc.
 - 'Proposed Elevations'.
 - Existing and proposed site sections and finished site levels.
 - Design documentation and designers risk assessment.

Some photographs of the site are shown in Figure 2 to Figure 6 below:



Figure 2 Overview of site



Figure 3 View looking upstream from bridge



Figure 4 Channel downstream of the adit



Figure 5 Channel from the adit looking downstream (left) and upstream (right)



Figure 6 Adit entrance (left) and view inside adit (right)

Performance Specification

The monitoring structures must be:

- Safe to construct, access and maintain;
- As far as practicable, easy to monitor, maintain, download data, and collect water quality samples from;
- Suitable for gauging through the anticipated range of flows, and adaptable should flows differ in future;
- Sympathetic to site specific heritage and visual impact issues;
- Robust enough to cope with people walking over or through them, for example walkers;
- Designed not to cause significant increase in flood risk within receiving watercourse or elevation of water level upstream (i.e. within the drainage adit or mine workings).
- Located and designed with consideration of erosion and scour risks during flood events; and
- Designed to capture all flow at each site i.e. not be susceptible to leakage or flow bypassing the structure.

The flow monitoring instrumentation must be capable of:

- Continuous flow measurement (15 min intervals)
- Data logging with capacity to store at least 12 months data between downloads
- Long battery life, of at least 2 years
- GPRS Telemetry
- Flow measurement uncertainty of $\leq 8-15\%$ (In combination with the proposed structure);
- Suitable for use in potentially ochreous water
- Outputting data in MS Excel compatible format (.csv or similar)
- Outputting data in standard units (e.g. l/s averaged over measurement period, or instantaneous values) to allow easy interpretation.

Costs

Please complete the costs table for the priced scenario, and also complete the rate card, and upload to the tender portal. This is in the attached spreadsheet.

Lot 2: Weirs and Flumes

Outline of the Requirement

This lot involves the supply and installation of weirs and flumes, either based upon design drawings from an options assessment (see Lot 1), to replace an existing weir or flume or to design and install within an existing channel. Design and installation work should be undertaken in accordance with the relevant ISO standard, and be compliant with MCERTS requirements. All installation work will be carried out under CDM.

Non-scoring questions

Question Reference & Weighting	Question	High Scoring Indicators	Response
1 – Geographical Coverage	Please indicate which of the 4 regions (see Figure 1) you are able to support. This must be completed on the Price Return spreadsheet.	Depending upon the number of supplier responses, we will then decide on how many suppliers are appointed.	

Questions for non-price (Quality) assessment

Question Reference & Weighting	Question	High Scoring Indicators	Response
1 – Programme for delivery (20%)	By way of an attachment, provide a Gantt chart programme of how you would approach the works in the priced scenario and deliver the scope; showing key delivery for all key tasks and review periods. Include detailed supporting information to this with each role rate and time allocation against each activity to	Provides a highly detailed and realistic programme showing key dates and tasks highlighted within the scope document. Role allocation demonstrates potential to add significant value to the project. Commentary demonstrates how the supplier will pro-actively manage the work programme to ensure that each element is delivered on time.	

Question Reference & Weighting	Question	High Scoring Response Indicators
	<p>support your price as part of the submitted programme.</p> <p>Maximum 1 page for programme.</p> <p>Maximum 1 pages for supporting information.</p>	
2 – Method (25%)	<p>By way of a short commentary, please detail the method and approach which will be taken to delivering the tasks described in the priced scenario.</p> <p>Provide an insight into the main challenges envisaged and how these will be managed.</p> <p><i>Maximum 2 pages.</i></p>	<p>Demonstrates the key criteria which are taken into account when designing a flow measurement structure, and how installation of the weir and gaugeboard are undertaken to achieve MCERTS tolerances.</p> <p>Also provide a detailed understanding of potential challenges and ways to overcome these, including during both the design and installation phases, along with a realistic and practical approach to project delivery.</p>
3 – Experience (25%)	<p>Please provide evidence of 3 different types of flow measurement structures that you have designed and installed, that are relevant to the scope of this Lot.</p> <p>Include information on the site, access, installation type, size (flow rates) and provide client contact details for references.</p> <p>Maximum 2 pages per case study.</p>	<p>Case studies that show relevant experience and insight into flow monitoring at sites that have clear similarities with this scope (e.g. installation within existing channel).</p> <p>Examples which include both weirs and flumes.</p> <p>Examples which involve managing the existing flow during the installation, and pollution protection measures from the installation work.</p>
4 – Experience (25%)	<p>Please provide details of the qualifications, experience and number of team members that would be delivering the work under this Lot, if your bid is successful.</p> <p><i>Maximum 3 pages.</i></p>	<p>Given the nature of this Lot, we are interested in the experience and capacity of the whole of your proposed team from senior staff through to Engineers and Technicians. The location of these staff is also important with regard to the regions within which you wish to work.</p>

Question Reference & Weighting	Question	High Scoring Response Indicators
		Please also detail the H&S training and qualifications received to undertake such work (e.g. working in water etc).
5 – Sustainability (5%)	<p>With reference to the type of work on this lot and the Coal Authority's sustainability aspirations mentioned in the Overview, how will you ensure the final product and/or service:-</p> <ul style="list-style-type: none"> • Minimises resource usage and optimises those that are needed, including energy (including travel), carbon and materials whilst providing robust solutions with longevity, low maintenance and re-use at end of life • Is resilient to extreme weather resulting from climate change • Minimises environmental and social impact • Uses ethical working and sourcing practices • Maximises local added value through social value opportunities <p><i>Maximum 2 pages.</i></p>	<p>Specific details of how a circular approach and sustainability will be applied to design, install and staff involved with the works. Examples of sustainable practice used on other similar projects. Discuss product specification and supply chain sustainability and ethics.</p> <p>Details of how the works will take into account extreme weather to protect people and equipment.</p> <p>Details of staff engagement and training around sustainability to support sustainable practice on site.</p> <p>Details of the companies approach to social value, with examples of current practice and discussion of specific opportunities/actions that would be taken if working on the lot.</p>

Priced Scenario

TCA wish to upgrade an existing discharge consent weir for one of our gravity fed MWTS. Since the scheme is gravity fed, it is not possible to stop the flow to the scheme. The scheme does not have a by-pass, and thus will take all of the mine water from the mine discharge, which may increase or decrease over time, due to factors such as climate change or other impacts such as changes in the mine workings. The tasks required are outlined below:

Task 1. Site visit accompanied by Coal Authority representative(s). You can assume that TCA staff will assist with undertaking any survey work that you wish to carry out as part of this visit.

Task 2. Design of the selected option:

- a) Provide a short design report comprising of the following:
 - i. Design calculations and basis for the design e.g. flow data for the site and consent limits, available head, afflux etc.
 - ii. Design Sketches (Note: AutoCAD is not required) of the proposed weir, baffle plate and gaugeboard location.
 - iii. Comparison of design with published standards (MCERTS/ ISO)
 - iv. Uncertainty curve with MCERTS allowable uncertainty of +/- 8% marked on it, such that the consented and mean flow is less than +/- 8%.
 - v. Design documentation and designers risk assessment.
 - vi. Construction Phase Plan, Risk Assessments and Method Statement for Task 3.

Task 3. Supply and Installation of a new weir. Install a replacement weir at the site including:

- a) Replacement weir plate
- b) Baffle plate
- c) Gaugeboard
- d) Signage

Please include the cost for provision of a welfare van.

Task 4. Completion Report

- a) Provide a short completion report comprising of the following:
 - i. As-built dimensions of the new weir
 - ii. Sketches of the new monitoring arrangement
 - iii. Details of the Gaugeboard offset and how this was determined
 - iv. Photographs of the new installation, including the weir, any baffle plates installed and Gaugeboard.
 - v. Comparison of the new weir with published standards (MCERTS/ ISO) and confirmation of compliance with these, such that the site would subsequently pass a MCERTS inspection.
 - vi. Uncertainty curve for the installation.

The existing weir is a rectangular thin plate weir, located within a small channel, at the end of one of the reed beds, at the outlet of the scheme. The existing weir plate is not compliant with the ISO standard, as the crest is too thick and the plate is slightly bowed. The approach conditions are slightly turbulent, with more of the flow coming down the right hand side of the channel.

The existing channel is 1m wide and 1.8m long. The existing weir crest is 0.285m wide and is approximately 0.3m above the channel bed.

The maximum consented flow for the site is 2160 m³/day (25 l/s). Existing monitoring data for the site, consisting of manual readings of the water level, taken at the weir crest with a steel rule, on a routine (often monthly) basis for the period 2015 to present were collected. These weir readings

have been converted to flow, using the theoretical rating based upon the dimensions for the weir, and are given in Table 5.

Table 5: Minimum, Mean and Maximum Flow

Min	Max	Mean
4.9	32.8	13.8

Photographs of the site are included in Figure 7 to Figure 10 below.



Figure 7 Overview – Weir is located just downstream of the footbridge



Figure 8 Existing weir



Figure 9 Existing weir showing aerated nappe



Figure 10 Downstream channel

Performance Specification

The weirs/ flumes should be installed to be compliant with the following standards:

- [MCERTS – Minimum Requirements for the Self-Monitoring of Flow, v4.0 \(August 2014\)](#)
- ISO1438 (2017) – Hydrometry – Open channel flow measurement using Thin Plate Weirs.
- ISO4359 (2013) – Hydrometry - Liquid flow measurement in open channels – Rectangular, Trapezoidal and U-Shaped flumes.

Other elements of the specification include:

- **Weir Plates** – The weir plates should comprise of a 2mm thick stainless steel plate, fixed to a GRP backing board (20-30mm thick), so that the plate can easily be changed in future if needed. They should be suitably braced to withstand the expected flow. The weir plate should have the flow marked at intervals on them. In addition to this, the maximum consented flow should be marked.

It is important that the new weir plates do not impact on the water level in the reed beds etc upstream of them. It is also important that the approach velocity into the sampling chamber is not too high. These factors should be considered in the design of the weirs.

- **Baffle Plate(s)** – These should be included in the design, as required, to reduce turbulence in the approach channel such that the approach conditions to the weir are compliant with MCERTS and the ISO standard.
- **Gaugeboard** - A Gaugeboard should be installed upstream of each weir. The gaugeboard zero should be set to the zero of the weir plate. The gaugeboard must be installed in such a way as to ensure that it can be accurately zeroed to the weir crest, and adjusted as necessary. The marking on the gaugeboard must be sufficiently robust that they are resistant to regular scrubbing.
- **Signage** - Signage should be included at the Discharge Consent Weir, stating that this is the discharge consent weir and that it is compliant with MCERTS requirements. It should also state the sub-site number, maximum consented discharge in l/s and what that equates to on the gaugeboard.

Costs

Please complete the costs table for the priced scenario, and also complete the rate card, and upload to the tender portal. This is in the attached spreadsheet.

Lot 3: Loggers and Sensors

Outline of the Requirement

This lot involves the supply and installation of data loggers, water level sensors, rain gauges and water quality sensors. Wherever possible, the data loggers should be installed on telemetry, and be battery powered without solar panels. We currently use Hydro-Logic Flexi-Loggers, OTT EcoLog and NetDL loggers, and our preference is to appoint suppliers who can supply and install, maintain, calibrate and decommission these logger types. All installation work will be carried out under CDM.

Applications include:

- Water level sensors for flow monitoring at weirs and flumes – either pressure transmitters or non-contact sensors such as radar sensors.
- Groundwater monitoring in boreholes
- Rainfall monitoring
- Water Quality monitoring

Many of our sites are at remote locations, which are in open access areas. As such, the installations need to be low key and robust.

Non-scoring questions

Question Reference & Weighting	Question	Notes
1 – Geographical Coverage	Please indicate which of the 4 regions (see Figure 1) you are able to support. This must be completed on the Price Return spreadsheet.	Depending upon the number of supplier responses, we will then decide on how many suppliers are appointed.
2 – OTT Loggers	Are you prepared to supply and install the OTT Loggers as part of the work undertaken under this lot?	This must be completed on the Price Return spreadsheet.
3 – Hydro-Logic Loggers	Are you prepared to supply and install the Hydro-Logic Loggers as part of the work undertaken under this lot?	This must be completed on the Price Return spreadsheet.

Questions for non-price (Quality) assessment

Question Reference & Weighting	Question	High Scoring Response Indicators
1 – Method (25%)	<p>By way of a short commentary, please detail the method and approach which will be taken to deliver the tasks described in the priced scenario.</p> <p>Provide an insight into the main challenges envisaged and how these will be managed.</p> <p><i>Maximum 2 pages.</i></p>	<p>Demonstrates the key criteria which are taken into account when designing and installing a water level measurement installation at a weir/ flume, and how installation of the water level sensor and gaugeboard are undertaken to achieve MCERTS tolerances.</p> <p>Also provide a detailed understanding of potential challenges and ways to overcome, including both the design and installation phases, to ensure that the installation is robust and will last the test of time, given regular maintenance.</p>
2 – Experience (25%)	<p>How many data loggers has your organisation installed over the past 12 months, for each of the applications listed? Please summarise the total by geographic spread (i.e. the regions that you wish to apply for), and provide examples of site installations.</p> <p><i>Maximum 2 pages.</i></p>	<p>Examples which show a high level of familiarity with each of the application areas outlined in the requirements, a good geographical spread (within the regions that you have applied for) and a high number of installations such that logger installation is a routine part of your service offering.</p> <p>Examples do not have to include installation of OTT/ Hydro-Logic logger</p>
3 – Experience (25%)	<p>Please provide details of the qualifications, experience and number of team members that would be delivering the work under this Lot, if your bid is successful.</p> <p><i>Maximum 3 pages.</i></p>	<p>Given the nature of this Lot, we are particularly interested in the experience and capacity of your proposed installation team (Engineers and Technicians). The location of these staff is also important with regard to the regions within which you wish to work.</p> <p>Please also detail the H&S training and qualifications received to undertake such work (e.g. working in water etc).</p>

Question Reference & Weighting	Question	High Scoring Response Indicators
4 – Experience (Telemetry) (20%)	<p>By way of a short commentary, please detail your approach and track record with providing reliable GPRS telemetry at remote sites.</p> <p><i>Maximum 2 pages</i></p>	<p>Examples of similar work undertaken, which provided a demonstrable track record of providing reliable GPRS telemetry, and of the approach taken from site survey through to installation and issue resolution.</p> <p>Evidence that the organisation has experience with installing sites which then operate reliably in remote locations with limited GPRS signal.</p> <p><i>Examples do not have to include installation of OTT/ Hydro-Logic logger</i></p>
5 – Sustainability (5%)	<p>With reference to the type of work on this lot and the Coal Authority's sustainability aspirations mentioned in the Overview, how will you ensure the final product and/or service:-</p> <ul style="list-style-type: none"> • Minimises resource usage and optimises those that are needed, including energy (including travel), carbon and materials whilst providing robust solutions with longevity, low maintenance and re-use at end of life • Is resilient to extreme weather resulting from climate change • Minimises environmental and social impact • Uses ethical working and sourcing practices • Maximises local added value through social value opportunities <p><i>Maximum 2 pages.</i></p>	<p>Specific details of how a circular approach and sustainability will be applied to design, install and staff involved with the works. Examples of sustainable practice used on other similar projects. Discuss product specification and supply chain sustainability and ethics.</p> <p>Details of how the works will take into account extreme weather to protect people and equipment.</p> <p>Details of staff engagement and training around sustainability to support sustainable practice on site.</p> <p>Details of the companies approach to social value, with examples of current practice and discussion of specific opportunities/actions that would be taken if working on the lot.</p>

Priced Scenario

TCA wish to install a water level sensor at an existing discharge consent weir for one of our gravity fed MWTS. Since the scheme is gravity fed, it is not possible to stop the flow to the scheme. The scheme does not have a by-pass, and thus will take all of the mine water from the mine discharge, which may increase or decrease over time, due to factors such as climate change or other impacts such as changes in the mine workings. The tasks required are outlined below:

Task 1. Site visit accompanied by Coal Authority representative(s). You can assume that TCA staff will assist with undertaking any survey work that you wish to carry out as part of this visit.

Task 2. Site Survey Report:

- a) Provide a short site survey report including:
 - i. Site Name and location details
 - ii. Photographs of the site, with overlay of proposed installation arrangement
 - iii. Proposed equipment to be installed.
 - iv. GPRS Signal Survey results
 - v. Construction Phase Plan, Risk Assessments and Method Statement for Task 3.

Task 3. Supply and Installation of a water level sensor and telemetry logger. This can either be an OTT Ecolog 1000 connected to a pressure transmitter (mounted within a stilling well), or a Flexi Logger 105 connected to VEGA C21, mounted on a bracket above the water. Installation should include a gaugeboard, with the logger configured to either transmit data back to our telemetry system or to a suitable cloud based system. TCA would provide the address for configuration to our telemetry system. Also, signage should be installed (see performance specification).

Task 4. Completion Report

- b) Provide a short completion report comprising of the following:
 - i. Details of the gaugeboard offset and how this was determined
 - ii. Details of the water level sensor and logger installed, including the serial number, sensor range, cable length, brackets etc.
 - iii. Telemetry performance of the site (initial signal strength, call stats, type of antenna installed etc)
 - iv. Photographs of the new installation, including the new water level sensor, logger and gaugeboard (and location relative to the weir).
 - v. Details of how the flow is calculated in the logger (e.g. look up table and how this was derived).

The existing weir is a rectangular thin plate weir, located within a small channel, at the end of one of the reed beds, at the outlet of the scheme.

The existing channel is 1m wide, 1.8m long and 1m tall. There is a wooden footbridge over the top of the channel, as shown in the photos below. The existing weir crest is 0.285m wide and is approximately 0.3m above the channel bed.

The maximum consented flow for the site is 2160 m³/day (25 l/s). Existing monitoring data for the site, consisting of manual readings of the water level, taken at the weir crest with a steel rule, on a routine (often monthly) basis for the period 2015 to present has been collected. These weir readings have been converted to flow, using the theoretical rating based upon the dimensions for the weir, and are given in Table 6.

Table 6: Minimum, Mean and Maximum Flow

Min	Max	Mean
4.9	32.8	13.8

Photographs of the site are included in Figure 11 to Figure 13 below.



Figure 11 Overview – Weir is located just downstream of the footbridge



Figure 12 Existing weir and approach channel



Figure 13 Approach channel with bridge over the top

Performance Specification

The Loggers that we currently use are:

- [OTT Ecolog 500](#) and [OTT Ecolog 1000](#) (note: since the EcoLog 500 has been discontinued, it is not included in the pricing for this tender)
- [Hydro-Logic Flexilogger 105](#)

These data loggers have the following key capability;

- Continuous flow measurement (15 min intervals)
- Data logging with capacity to store at least 6 months data between downloads
- Long battery life, of at least 2 years, without the need for external power (e.g. solar panels etc).
- GPRS Telemetry
- Suitable for use in potentially ochreous water
- Can be connected to a MCERTS compliant sensor, where required.
- Outputting data in MS Excel compatible format (.csv or similar)
- Outputting data in standard units (e.g. l/s averaged over measurement period, or instantaneous values) to allow easy interpretation.

We also have some [OTT Net DL](#) loggers installed, but since these don't meet the above criteria, we would only expect to install these under exceptional circumstances, going forwards.


The way in which we currently deploy the OTT and Hydro-Logic data loggers is detailed in Table 7.

Table 7: Applications and which logger type is compatible with each

	OTT Ecolog 1000	Hydro-Logic Flexilogger 105	Notes
Water level sensors for flow monitoring at Weirs and Flumes (MCERTS)	No	Yes	FL105 has a battery life of >2 years when deployed with a VEGA Radar C21 or C22 for this application. The VEGA Radar is MCERTS approved. VEGA produce a digital version of this sensor, which connects to the FL105 via SDI-12.
Water level sensors for flow monitoring at Weirs and	Yes	Yes	OTT Ecolog and FL105 are both suitable for this application. The Ecolog only connects to a pressure transmitter, so where a non-contact sensor is needed (due to Ochre etc) then the FL105 and VEGA Radar is preferred.

	OTT EcoLog 1000	Hydro-Logic Flexilogger 105	Notes
Flumes (Non - MCERTS)			
Groundwater monitoring	Yes	Yes	EcoLog 1000 is specifically designed for this purpose and have a battery life of >10 years
Rainfall Monitoring	No	Yes	FL105 has a battery life of >5 years when deployed with a Tipping Bucket Rain gauge
Velocity Sensors	No	Yes	Velocity sensors tend to have a separate power supply to the logger (see Lot 4). The FL105 is currently deployed with these, since it accepts 4-20mA, SDI-12 and pulse inputs. It is also possible to include a signal converter which converts the output from a velocity meter into one of the inputs listed (e.g. a 0-10v signal could be converted to a 4-20mA signal etc).
Water Quality Monitoring	No	Yes	The FL105 connects to multi-parameter water quality meters by SDI-12, and can record up to 8 channels of data (i.e. 8 different parameters).

During the supplier engagement sessions, there was a query raised regarding ownership of issues following installation of equipment under this lot. In response to that query, we have produced a typical project timeline (Figure 14) which outlines our expectations of the stages that a typical logger installation project will go through, the roles of TCA and the supplier at each stage and who has ownership of issues with the installation and equipment. This results in the supplier having ownership for installation and equipment issues between installation and sign-off by ourselves (approximately a 6 week period). However, issues due to equipment failure during this time will have been mitigated by the pre-installation testing and the GPRS signal survey undertaken during the site survey. The later will set expectations as to how reliable the telemetry is expected to be at each site.

Typical Timeline (week No)	Project Stage	Role		Ownership of issues with installation & equipment	
		TCA	Supplier		
	1	Specification	Write specification for work, including installation requirements. Likely to specify equipment that needs to be supplied and installed, but in some cases may leave to supplier to specify.	None	N/A
	6	Proposal/ Procurement	TCA to evaluate bids and award work based upon the evaluation criteria set out in the tender specification for the work.	Supplier to either include equipment that meets TCA specification in their proposal, or to specify equipment which they reasonably expect will meet the requirements as described in the specification document for the work.	N/A
	8	Site Survey	Normally a TCA representative will attend	Supplier to attend site, measure up and determine design for equipment installation. Supplier to undertake GPRS signal survey and advise on likely reliability of GPRS signal and thus telemetry at the site.	N/A
	10	Site Survey Report	TCA to approve proposed installation configuration and equipment	Supplier prepares survey report which includes proposed design layout, methodology and equipment to be installed.	N/A
	14	Pre-install Equipment Testing	None	Supplier fully tests the equipment in their workshop, including the telemetry, before they go to site to install it, thus confirming that all equipment is operating as it should.	Supplier
	16	Installation	None	Supplier installs equipment as per agreed installation configuration	Supplier
	18	Installation Report		Supplier submits installation report to TCA	Supplier
	22	Sign-off of Installation	TCA to sign-off to confirm that the installation is to the required standard, as set out in the specification, and as per the design in the site survey report. Also confirm that telemetry is working as expected, taking into account the available GPRS signal at the site. TCA will normally require that the site provides reliable and accurate data for a minimum of 1 month following installation, before the installation is signed-off.	Supplier to make any changes required to bring installation up to expected standard (as per original specification and site survey report)	Supplier until TCA sign-off the work
	Unknown	Equipment failure after installation has received TCA sign-off	TCA will liaise with equipment manufacturer and seek replacement under product warranty	None	TCA
	Unknown	Issue with Installation of equipment after TCA sign-off	TCA will seek to appoint either the original supplier or another supplier to re-install the equipment (e.g. following vandalism or deterioration due to lack of maintenance)	None	TCA

Notes:

- The supplier is not responsible for vandalism of the site prior to the installation being signed off, provided that the logger and sensor were installed as agreed in the approved site survey report.
- It is assumed that the supplier will not have done anything to void the equipment warranty whilst installing it.

Figure 14 Ownership of installation and equipment issues during a typical installation project

For the Priced Scenario:

- The logger should be set to record data at 15 minute intervals, with data recorded to 3 decimal places.
- Loggers should be configured to record data at 15 minute intervals, with measurements taken at 0, 15, 30 and 45 minutes past the hour.

- The cable between the logger and sensor should be ducted along its entire length.
- **Pressure transmitter** – These must be vented to atmosphere, and with an accuracy of +/- 0.1% of full-scale or better.
- **Gaugeboard** - A Gaugeboard should be installed with each water level sensor. The gaugeboard zero should be set to the zero of the weir plate. The gaugeboard must be installed in such a way as to ensure that it can be accurately zeroed to the weir crest, and adjusted as necessary. The marking on the gaugeboard must be sufficiently robust that they are resistant to regular scrubbing.
- **Signage** - Signage should be included at the Discharge Consent Weir, stating that this is the discharge consent weir and that it is compliant with MCERTS requirements. It should also state the sub-site number, maximum consented discharge in l/s and what that equates to on the gaugeboard.

Costs

Please complete the costs table for the priced scenario, and also complete the rate card, and upload to the tender portal. This is in the attached spreadsheet.

Note: The Hydro-Logic and OTT Logger costs (and accessories), will not be included in the scoring. You will note that the Logger and sensor costs are included in the non-scoring element of the rate card. Your scenario costs for Task 3 should therefore include the installation costs, but not the logger or sensors.

It is our intention that suppliers appointed to this Lot should supply and install the equipment (including the Hydro-Logic and OTT Loggers), but we may also decide to free issue the loggers.

Lot 4: Velocity Meters

Outline of the Requirement

This lot will involve the supply and installation, calibration, maintenance and decommissioning of velocity meters (either contact or non-contact). Some of the installations will be in pipes requiring access to confined spaces, whilst others will be in open channels or pipes that are accessible from the surface. The velocity meters should be compatible with one of the telemetry loggers listed under Lot 3, and in most cases will need to be battery powered, without the need for solar panels. All installation work will be carried out under CDM.

The following application types are anticipated under this lot:

- Velocity meters in or over pipes located within confined spaces
- Velocity meters in or over pipes not located within confined spaces
- Velocity meters in natural open channels (e.g. in a small river)
- Velocity meters in man-made open channels (e.g. at the inlet to a treatment works)

Some installations will require MCERTS product approved sensors (e.g. at our consented abstractions and discharges for Mine water Treatment Schemes), but some will not (e.g. installations to measure flow within rivers or from mine adit discharges).

Non-scoring questions

Question Reference & Weighting	Question	Notes
1 – Geographical Coverage	Please indicate which of the 4 regions (see Figure 1) you are able to support. This must be completed on the Price Return spreadsheet.	Depending upon the number of supplier responses, we will then decide on how many suppliers are appointed.
2 – MCERTS Certification	Are you able to supply an MCERTS certified velocity meter? This must be completed on the Price Return spreadsheet.	Installations at our consented abstractions or discharges will require MCERTS approved sensors. However, installations at other locations (e.g. river or mine adit discharges) will not require MCERTS. If a supplier is unable to supply a MCERTS approved velocity sensor, then this would not preclude them applying for this Lot provided we have other suppliers who can supply MCERTS product approved sensors.

Question Reference & Weighting	Question	Notes
3 – Hydro-Logic Loggers	<p>Are you prepared to supply and install the Hydro-Logic Loggers as part of the work undertaken under this lot?</p> <p>This must be completed on the Price Return spreadsheet.</p>	The proposed velocity sensor must be compatible with the FL105, as this is our preferred logger for this application due to battery life considerations.

Questions for non-price (Quality) assessment

Question Reference & Weighting	Question	High Scoring Response Indicators
1 – Method (25%)	<p>By way of a short commentary, please detail the method and approach which will be taken to deliver the tasks described in the priced scenario.</p> <p>Provide an insight into the main challenges envisaged and how these will be managed.</p> <p><i>Maximum 2 pages.</i></p>	<p>Demonstrates the key criteria which are taken into account when designing and installing a velocity measurement installation, and how installation and calibration of the velocity sensor are undertaken.</p> <p>Also provide a detailed understanding of potential challenges and ways to overcome, including both the design and installation phases, to ensure that the installation is robust and will last the test of time.</p> <p>Demonstrate an excellent understanding of the requirements of Velocity-Index rating development, and the associated accuracies.</p>
2 – Experience (25%)	<p>How many velocity sensors has your organisation installed over the past 12 months? Please summarise the total by geographic spread (for the regions that you wish to apply for), and provide examples of site installations and calibration of the equipment (e.g. development of V-I rating etc).</p>	<p>Examples which show a high level of familiarity with each of the application areas outlined in the requirements, a good geographical spread (within the regions that you have applied for) and a high number of installations such that velocity sensor installation and calibration is a routine part of your service offering.</p>

Question Reference & Weighting	Question	High Scoring Response Indicators
	Maximum 2 pages.	<p>Your proposed velocity meter(s) also demonstrate a high level of compliance with the velocity meter specification provided below.</p> <p><i>Examples do not have to include installation of OTT/ Hydro-Logic loggers</i></p>
3 – Experience (25%)	<p>Please provide details of the qualifications, experience and number of team members that would be delivering the work under this Lot, if your bid is successful.</p> <p><i>Maximum 3 pages.</i></p>	<p>Given the nature of this Lot, we are particularly interested in the experience and capacity of your proposed installation team (Engineers and Technicians), and staff who will undertake reporting/ rating development work. The location of the staff who will undertake site based work is also important with regard to the regions within which you wish to work. Please also detail the H&S training and qualifications received to undertake such work (e.g. confined space, working in water etc).</p>
4 – Experience (Telemetry) (20%)	<p>By way of a short commentary, please detail your approach and track record with providing reliable GPRS telemetry at remote sites.</p> <p>Maximum 2 pages</p>	<p>Examples of similar work undertaken, which provides a demonstrable track record of providing reliable GPRS telemetry, and of the approach taken from site survey through to installation and issue resolution.</p> <p>Evidence that the organisation has experience with installing sites which then operate reliably in remote locations with limited GPRS signal.</p> <p><i>Examples do not have to include installation of OTT/ Hydro-Logic loggers</i></p>
5 – Sustainability (5%)	<p>With reference to the type of work on this lot and the Coal Authority's sustainability aspirations mentioned in the Overview, how will you ensure the final product and/or service:-</p> <ul style="list-style-type: none"> Minimises resource usage and optimises those that are needed, including energy 	<p>Specific details of how a circular approach and sustainability will be applied to design, install and staff involved with the works. Examples of sustainable practice used on other similar projects. Discuss product specification and supply chain sustainability and ethics.</p>

Question Reference & Weighting	Question	High Scoring Response Indicators
	<p>(including travel), carbon and materials whilst providing robust solutions with longevity, low maintenance and re-use at end of life</p> <ul style="list-style-type: none"> • Is resilient to extreme weather resulting from climate change • Minimises environmental and social impact • Uses ethical working and sourcing practices • Maximises local added value through social value opportunities <p><i>Maximum 2 pages.</i></p>	<p>Details of how the works will take into account extreme weather to protect people and equipment.</p> <p>Details of staff engagement and training around sustainability to support sustainable practice on site.</p> <p>Details of the companies approach to social value, with examples of current practice and discussion of specific opportunities/actions that would be taken if working on the lot.</p>

Priced Scenario

TCA wish to install a velocity sensor within an existing outlet pipe from a gravity fed mine water discharge. Since the discharge is gravity fed, it is not possible to stop the flow. The scheme does not have a by-pass, and thus will take all of the mine water from the mine discharge, which may increase or decrease over time, due to factors such as climate change or other impacts such as changes in the mine workings. The tasks required are outlined below:

Task 1. Site visit accompanied by Coal Authority representative(s). You can assume that TCA staff will assist with undertaking any survey work (other than that requiring confined space entry) that you wish to undertake as part of this visit.

Task 2. Site Survey Report:

- b) Provide a short site survey report including:
 - i. Site name and location details
 - ii. Photographs of the site, with overlay of proposed installation arrangement
 - iii. Proposed equipment to be installed.
 - iv. GPRS Signal Survey results
 - v. Construction Phase Plan, Risk Assessments and Method Statement for Task 3.

Task 3. Supply and Installation of a velocity sensor and telemetry logger. The requirements are as follows:

- The telemetry logger should be a Flexi Logger 105.
- The logger should be configured to either transmit data back to our telemetry system or to a suitable cloud based system. TCA would provide the address for configuration to our telemetry system.
- The logger should be installed on the surface, next to the existing manhole cover.
- Signage should be installed (see Performance Specification).
- A Installation Report should be provided, including the following:
 - i. Details of the site water level datum and offset, including how this was determined
 - ii. Details of the velocity sensor and logger installed, including the serial number, sensor range, cable length, brackets etc.
 - iii. Telemetry performance of the site (initial signal strength, call stats, type of antenna installed etc)
 - iv. Photographs of the new installation, including the new water level sensor, logger and Gaugeboard (and location relative to the weir).
 - v. Set-up parameters for the velocity sensor, to enable it to calculate flow.
 - vi. Spot gauging undertaken during installation

Task 4. Calibration Gauging – Undertake 4 further spot flow gaugings at the site, over a 12 month period, to confirm the calibration for the site.

- c) Provide a short completion report comprising of the following:
 - i. Results of the spot flow gauging undertaken
 - ii. Velocity-Index rating developed
 - iii. Comments upon the accuracy and limitations of the Velocity-Index rating.
 - iv. Corrected data set for first 12 months operation, with velocity-index rating applied.

The mine water discharge comes from an existing mine shaft and is piped a short distance until it reaches a chamber which is 2.9m deep, and which is the only opportunity for installing flow measurement. TCA wish to install a velocity sensor to measure the flow at this location, in order to provide data for the consented discharge for the site. The pipe inside the chamber is 0.75m diameter, and the recorded flow range to date from the mine is in the range 10 l/s to 70 l/s. The maximum consented discharge is 110 l/s. The depth varies from 0.1 – 0.25m. From this chamber, the water flows a further 200m and discharges to the main river.

Photographs of the site are included in Figure 15 to Figure 18 below.



Figure 15 Top of Manhole chamber (left), view of pipe inside manhole chamber (right)



Figure 16 View of pipe within manhole chamber under high (left) and low (right) flow conditions.

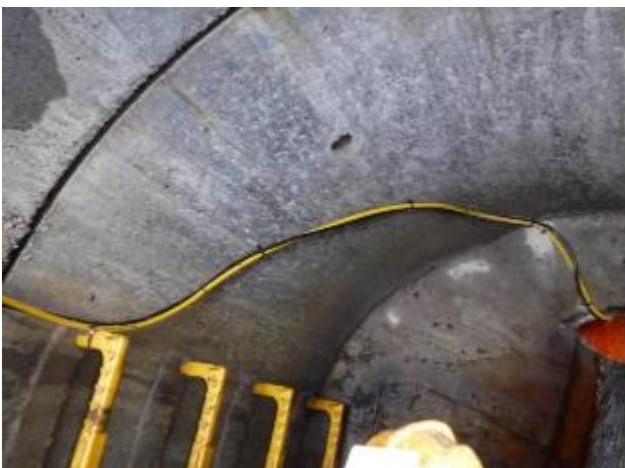


Figure 17 View of chamber from top showing step irons for access



Figure 18 View of chamber from top (left) and discharge to river from top (right)

Performance Specification

The work on this lot must be undertaken in accordance with the following standard:

- ISO15769 (2010): *Hydrometry – Guidelines for the application of acoustic velocity meters using the Doppler and echo correlation methods.*

The velocity meter specification should be:

- Either a contact or non-contact sensor
- Preferably range gated (i.e. takes multiple measurements in the water column), with the ability to export such data
- Compatibility with the Hydro-Logic Flexilogger 105 – See Table 7 (Lot 3) for the inputs accepted by the FL105 and a link to the data sheet for the logger. *As stated in the table, if your proposed velocity meter does not have a compatible output for this logger, you could include a signal converter in your proposed solution. A line has been provided for this cost in the price return sheet for this Lot.*
- For consented discharge applications, be MCERTS product approved or use a MCERTS product approved velocity sensor with a not approved portable unit, in order to meet the battery life power requirements stated below, since we don't have mains power available at any of our sites.

- Ideally robust and capable of withstanding the impacts of ochre accretion on the sensor head without the need for very regular cleaning.
- Able to measure velocity at depths between 0.04 – 2.0 m (contact sensor).
- Measurement range to surface between 0.1m – 10m (non-contact sensor)
- For the non-contact sensor, the following minimum accuracies are required:
 - Velocity measurement uncertainty at least +/- 1% of raw measured value and +/- 0.01 m/s relative to surface velocity.
 - Level measurement uncertainty +/- 0.25%, with 2mm resolution.
- For the contract sensor, the following minimum accuracies are required:
 - Velocity measurement uncertainty at least +/- 1% of raw measured value
 - Level measurement uncertainty +/- 0.25%, with 2mm resolution.
- Cable length range available: 10 – 100m
- Control/ Logger box suitable for installation in wet environments and being flooded (IP68)
- Long battery life, without the need of external power (e.g. solar panels), of > 6 months, at a 15 minute logging interval, and daily transmission of data via the FL105 (note: the velocity sensor must have its own power supply, and will not be powered by the FL105).
- Ability to connect velocity meter to external power supply (e.g. solar panels or trickle charge from mains supply).
- Data logging with capacity to store at least 12 months data between downloads
- Outputting data in MS Excel compatible format (.csv or similar)
- Outputting data in standard units (e.g. l/s averaged over measurement period, or instantaneous values) to allow easy interpretation.

For the Priced Scenario (in addition to the above):

- The logger should be set to record data at 15 minute intervals, with data recorded to 3 decimal places.
- Loggers should be configured to record data at 15 minute intervals, with measurements taken at 0, 15, 30 and 45 minutes past the hour.
- The cable between the logger and sensor should be ducted along its entire length.

During the supplier engagement sessions, there was a query raised regarding ownership of issues following installation of equipment under this lot. In response to that query, we have produced a typical project timeline (Figure 14) which outlines who has ownership for equipment and installation issues at each stage of a typical installation project. Please see the detail provided in Lot 3 on this, as we would also apply that approach to this Lot.

Costs

Please complete the costs table for the priced scenario, and also complete the rate card, and upload to the tender portal. This is in the attached spreadsheet.

Note: The Hydro-Logic and OTT Logger costs (and accessories), will not be included in the scoring. You will note that the Logger costs are included in the non-scoring element of the rate card. Your scenario

costs for Task 3 should therefore include the installation costs, velocity meter (either contact or non-contact) but not the logger.

It is our intention that suppliers appointed to this Lot should supply and install the equipment (including the Hydro-Logic and OTT Loggers), but we may also decide to free issue the loggers.

Lot 5: Spot Flow Gauging and Water Quality sampling

Outline of the Requirement

This lot involves spot flow gauging and water quality measurements, often taken at several locations within a particular catchment, or to validate existing flow measurement sites. Spot flow gauging techniques required will include Salt Dilution Gauging, Current Meter Gauging and ADCP Gauging, in accordance with the relevant ISO standard. Water quality sampling will include taking samples for laboratory analysis (in most cases sent to SOCOTEC laboratories), and manual measurements using a hand held water quality meter.

Non-scoring questions

Question Reference & Weighting	Question	Notes
1 – Geographical Coverage	<p>Please indicate which of the 4 regions (see Figure 1) you are able to support.</p> <p>This must be completed on the Price Return spreadsheet.</p>	Depending upon the number of supplier responses, we will then decide on how many suppliers are appointed.
2 – Flow Gauging Methods	<p>Please indicate whether you are able to undertake ADCP gauging.</p> <p>This must be completed on the Price Return spreadsheet.</p>	Our main requirement is for Salt Dilution gauging and current meter gauging. If a supplier is unable to undertake ADCP gauging, this would not preclude them from applying for this lot, provided we have at least 1 supplier who is able to do this.

Questions for non-price (Quality) assessment

Question Reference & Weighting	Question	High Scoring Response Indicators
1 – Calibration (10%)	<p>Provide details of how you ensure that your flow gauging equipment and hand held water quality probes are adequately maintained and calibrated.</p> <p>Include detail and evidence of routine calibration, plus pre-deployment, on-site and post data collection checks.</p> <p>Maximum 2 pages.</p>	<p>Demonstrates that routine calibration of equipment is in place, which is undertaken in accordance with best practice and the level of accuracy that this ensures. Also demonstrates how checks are undertaken throughout the stages of a fieldwork exercise (pre, during, post), and what action is taken at each stage to pro-actively resolve issues such that data quality is not impacted.</p>
2 – Methodology – Spot Flow Gauging (25%)	<p>By way of an attachment, please provide the methodology undertaken for Spot Flow Gauging using Salt Dilution Gauging, Current Meter Gauging and ADCP.</p> <p><i>Maximum 1 page per method</i></p>	<p>Provides a detailed understanding of the flow gauging methodologies described in the requirements for this Lot, including the challenges of measuring both high and low flows in river channels.</p> <p>Provides an explanation of when the different gauging techniques should be utilised and the pros and cons of each.</p>
3 – Methodology – Water Quality Sampling (10%)	<p>By way of an attachment, please provide your proposed methodology for Water Quality Sampling.</p> <p>Maximum 1 page</p>	<p>Provides a detailed understanding of the proposed Water Quality Sampling methodology, including key considerations to ensure sample integrity.</p>
4 – Experience (25%)	<p>Please provide 3 examples of contracts where you have undertaken Spot Flow Gauging and/ or Water Quality Sampling in rivers, over the past 12 months.</p> <p>Please provide a reference for each.</p> <p><i>Maximum 1 page per example</i></p>	<p>Both Spot Flow and Water Quality sampling undertaken</p> <p>Demonstrable track record of delivering high quality services and of client satisfaction.</p>
5 – Experience (25%)	<p>Please provide details of the qualifications, experience and number of team members that would be delivering the work under this Lot, if your bid is successful.</p> <p>Maximum 3 pages.</p>	<p>Given the nature of this Lot, we are particularly interested in the experience and capacity of your proposed field team. The location of these staff is also important with regard to the regions within which you wish to work.</p>

Question Reference & Weighting	Question	High Scoring Response Indicators
		Please also detail the H&S training and qualifications received to undertake such work (e.g. working in water etc).
5 – Sustainability (5%)	<p>With reference to the type of work on this lot and the Coal Authority's sustainability aspirations mentioned in the Overview, how will you ensure the final product and/or service:-</p> <ul style="list-style-type: none"> Minimises resource usage and optimises those that are needed, including energy (including travel), carbon and materials whilst providing robust solutions with longevity, low maintenance and re-use at end of life Is resilient to extreme weather resulting from climate change Minimises environmental and social impact Uses ethical working and sourcing practices Maximises local added value through social value opportunities <p><i>Maximum 2 pages.</i></p>	<p>Specific details of how a circular approach and sustainability will be applied to design, install and staff involved with the works. Examples of sustainable practice used on other similar projects. Discuss product specification and supply chain sustainability and ethics.</p> <p>Details of how the works will take into account extreme weather to protect people and equipment.</p> <p>Details of staff engagement and training around sustainability to support sustainable practice on site.</p> <p>Details of the companies approach to social value, with examples of current practice and discussion of specific opportunities/actions that would be taken if working on the lot.</p>

Priced Scenario

TCA require a programme of water quality and spot flow gauging to be undertaken to determine the impact of a mine water discharge within a catchment. The monitoring requirement involves flow gauging and water quality sampling at 4 locations on each visit. The data is required in order to help us model the impact of the mine water discharge on the catchment and to undertake some basic dilution modelling to determine the impact of the discharge. The locations are:

1. Upstream of the Mine water discharge
2. The Mine water discharge itself
3. 100m Downstream of the Mine water discharge
4. Downstream of the next tributary inflow.

Task 1. Field survey: Spot Flow and Water Quality sampling at the 4 locations, on a monthly basis for 12 months.

For the 4 monitoring sites, 3 of them require spot flow gauging and 1 has a V-Notch weir installed.

Please provide costs for either current meter gauging or salt gauging each of the 3 spot flow gauging sites, and for reading the gaugeboard at the weir, and cleaning the weir plate and gaugeboard. The requirements at each site is summarised in Table 8.

The data from all sites should be collected on the same day, and lab samples should be dispatched to the lab within 24 hours of them being collected. All of the sites can be assumed to be within a 100m walk of vehicular (non-4x4) access. The Maximum water depth expected at these sites is 0.3m.

Table 8: Summary of monitoring requirements at each site

Ref	Spot Flow Gauging	Water Quality Sampling	Photographs	Read Gaugeboard	Clean Gaugeboard and weir	Observations of colour etc.
Site 1	Yes	Yes	Yes	-	-	Yes
Site 2		Yes	Yes	Yes	Yes	Yes
Site 3	Yes	Yes	Yes	-	-	Yes
Site 4	Yes	Yes	Yes	-	-	Yes

Task 2. Reporting: Reporting of data collected from the 4 locations, on a monthly basis, for 12 months.

The supplier should provide the following data reporting for each site, with the data provided within 10 days of completing Task 1:

- Spot Flow Gauging data:
 - o Summary of the measurements at each site, including Stage and Flow for each, in Excel format.
 - o Method of spot gauging used.
 - o Flow meter details: Make, model, serial no, date of last calibration etc.
 - o Details of how the flow for each site has been calculated.
- Water Quality data (on-site measurements):
 - o Summary of the measurements at each site, with data provided in Excel format.
 - o The following water quality parameters should be measured with a hand-held meter on site: Conductivity, pH, Dissolved Oxygen and Temperature.
 - o WQ meter details: Make, model, serial no, date of last calibration etc.
- Site 2:
 - o Gaugeboard reading

- Observations on condition/ performance of weir.
- Photographs – Suitably labelled for each site.
- Observations:
 - Colour of the water.
 - Weather during sampling and previous days.
 - Any other observations.

Photographs of the site are included in Figure 19 to Figure 22 below.



Figure 19 Site 1 – Upstream of mine water discharge (low flows left and high flows right)

Site 2 – Mine water Discharge

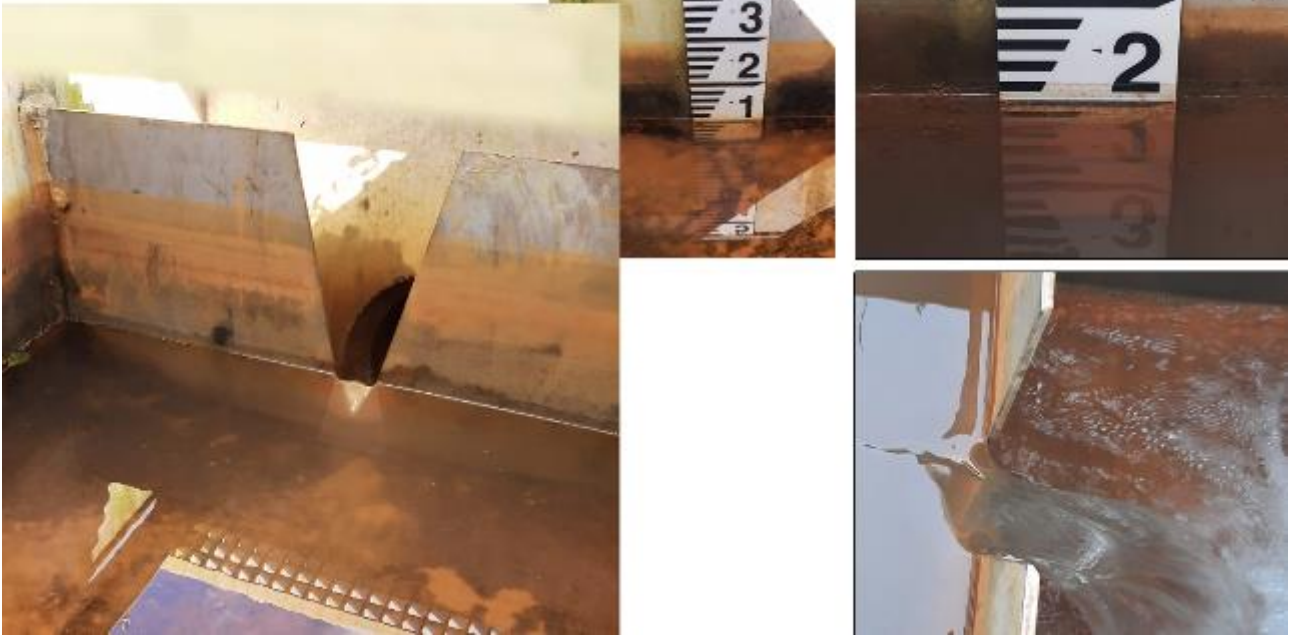


Figure 20 Site 2 – Mine water discharge (low flows left and high flows right)

Site 3 – 100m downstream of Mine water discharge



Figure 21 Site 3 – 100m downstream of discharge (low flows left, high flow right)

Site 4 – 100m downstream of Mine water discharge**Figure 22 Site 4 – downstream of confluence with tributary (low flows left, high flows right)**

Performance Specification

Flow Monitoring and Water Quality sampling must be undertaken in accordance with the following ISO standards:

- **ISO9555:** *Measurement of liquid flow in open channels – Tracer dilution methods for measurement of steady flow*
- **ISO748:** *Hydrometry – Measurement of liquid flow in open channels using current-meters or floats*
- **ISO24578:** *Hydrometry – Acoustic Doppler profiler – Method and application for measurement of flow in open channels*
- **ISO5667:** *Water Quality Sampling*

For the Water Quality monitoring, we normally provide the sample bottles, and arrange collection of the samples for analysis at the laboratory that we use. You therefore don't need to include lab analysis costs.

Costs

Please complete the costs table for the priced scenario, and also complete the rate card, and upload to the tender portal. This is in the attached spreadsheet.

Lot 6: MCERTS

Outline of the Requirement

This lot includes MCERTS inspections at our Mine Water Treatment Schemes, flow meter calibration and QMS advice and auditing services. TCA operate approximately 75 Mine Water Treatment Schemes (MWTs), most of which have discharge consents which require the monitoring of effluent flow discharged from them. Flow monitoring is either via electromagnetic pipe flow meters installed at the inlet to the scheme, or thin plate weirs installed at the outlet to the scheme. Since our schemes are non-consumptive, the flow monitoring can be undertaken at the inlet or outlet, to satisfy the requirements of our permits.

Of the 75 treatment schemes, 49 are pumped mine water abstractions, which have electromagnetic flow meters on the inlet. There are 73 flow meters at these schemes, since some schemes have more than one pump installed. The remaining MWTs are gravity fed, and have thin plate weirs installed at the outlet. The majority of these flow meters are installed at the surface, or in shallow chambers, but some will require confined space entry. We also require flow checks to be undertaken at our electromagnetic flow meters between inspections, to verify that they are still measuring correctly.

One of the challenges that we face, is that most of our MWTs don't have mains power available at the outlet to the scheme. This means that nearly all of the MCERTS Product approved sensors are not suitable for installation at our schemes without the need for solar panels, which pose a vandalism risk at some of our sites. Our preferred approach therefore is to install a VEGA C21 or C22, connected to a Hydro-Logic Flexilogger 105, as this incorporates a highly accurate MCERTS approved sensor and has a battery life of greater than 2 years without the need for solar panels.

In terms of our Quality Management System (QMS), we require advice on the contents of the QMS as well as auditing services to get it approved under MCERTS.

Non-scoring questions

Question Reference & Weighting	Question	Notes
1 – Geographical Coverage	Please indicate which of the 4 regions (see Figure 1) you are able to support. This must be completed on the Price Return spreadsheet.	Depending upon the number of supplier responses, we will then decide on how many suppliers are appointed.

Question Reference & Weighting	Question	Notes
2 - MCERTS accreditation	<p>Are all of your MCERTS inspectors qualified to assess both closed pipe and open channel installations?</p> <p>This must be completed on the Price Return spreadsheet.</p>	<p>Since our sites involve a mixture of closed pipe and open channel installations, and we are likely to batch sites together for inspection, all inspectors must be able to certify both open channel and closed pipe installations.</p>

Questions for non-price (Quality) assessment

Question Reference & Weighting	Question	High Scoring Response Indicators
1 - Inspection Report (10%)	<p>Please provide your most recent audit report as undertaken by CSA to assess the quality of your inspection work.</p>	<p>Only minor issues raised.</p> <p><i>Note: if you have only recently been appointed as a MCERTS inspection company, please provide feedback from the audits related to that approval process.</i></p>
2 - Method (20%)	<p>By way of a short commentary, please detail the method and approach which will be taken to delivering the tasks described in the priced scenario.</p> <p>Provide an insight into the main challenges envisaged and how these will be managed.</p> <p><i>Maximum 2 pages.</i></p>	<p>Demonstrates the key criteria which are taken into account when assessing a flow measurement site.</p> <p>Also provide a detailed understanding of potential challenges of delivering an inspection programme and ways to overcome, including project management, planning, logistical and technical.</p>
3 - Professional Judgement (25%)	<p>Please provide 2 examples of where your MCERTS inspectors have provided appropriate professional judgement in order to certify sites which did not meet the full requirements as set out in the MCERTS standard.</p> <p>Maximum 2 pages per case study.</p>	<p>Examples which demonstrate a pragmatic approach to certification of sites, resulting in significant cost and environmental/sustainability savings. The approach taken is based upon a thorough understanding of hydrometric principles and the reasons behind the requirements in the standard, such that they are able to make a well-reasoned case for applying professional judgement in order to certify sites.</p>

Question Reference & Weighting	Question	High Scoring Response Indicators
		<p>Examples which also demonstrate certification of equipment which is not strictly compliant with the MCERTS product approved list (e.g. the VEGA C21 and FL105 or a MCERTS approved velocity sensor connected to a portable (battery powered) rather than fixed (mains powered) unit), but which were demonstrated to deliver the required accuracy, at sites without mains power (e.g. under the provisions of clause 3.1.2 of the MCERTS standard).</p>
4 – QMS (15%)	<p>Please provide an example of where your organisation has helped a consent holder to compile their Quality Management System so that it is compliant with MCERTS.</p> <p>Maximum 2 pages</p>	<p>Contains example of gap-analysis and review undertaken of the organisations existing QMS, leading to recommendations for improvement, pre-audit report and ultimately to the QMS being certified under MCERTS.</p>
5 – Experience (25%)	<p>Please provide details of the qualifications, experience and number of team members that would be delivering the work under this Lot, if your bid is successful.</p> <p>Please list all qualified MCERTS inspectors and assistants, how many inspections they have completed in the last 12 months and how long they have been a qualified inspector for.</p> <p><i>Maximum 3 pages.</i></p>	<p>Given the nature of this Lot, we are interested in the experience and capacity of your MCERTS inspectors and staff advising on QMS, plus staff undertaking flow checks.</p> <p>The location of these staff is also important with regard to the regions within which you wish to work.</p> <p>Please also detail the H&S training and qualifications received to undertake such work (e.g. confined space and working in water etc).</p>
6 – Sustainability (5%)	<p>With reference to the type of work on this lot and the Coal Authority's sustainability aspirations mentioned in the Overview, how will you ensure the final product and/or service:-</p> <ul style="list-style-type: none"> Minimises resource usage and optimises those that are needed, including energy (including travel), carbon and 	<p>Specific details of how a circular approach and sustainability will be applied to design, install and staff involved with the works. Examples of sustainable practice used on other similar projects. Discuss product specification and supply chain sustainability and ethics.</p>

Question Reference & Weighting	Question	High Scoring Response Indicators
	<p>materials whilst providing robust solutions with longevity, low maintenance and re-use at end of life</p> <ul style="list-style-type: none"> • Is resilient to extreme weather resulting from climate change • Minimises environmental and social impact • Uses ethical working and sourcing practices • Maximises local added value through social value opportunities <p><i>Maximum 2 pages.</i></p>	<p>Details of how the works will take into account extreme weather to protect people and equipment.</p> <p>Details of staff engagement and training around sustainability to support sustainable practice on site.</p> <p>Details of the companies approach to social value, with examples of current practice and discussion of specific opportunities/actions that would be taken if working on the lot.</p>

Priced Scenario

TCA require a site inspection at two MWTS, which are located 10 miles apart from each other. The first scheme is a pumped abstraction with two electromagnetic pipeflow meters installed at the inlet. The second is a gravity abstraction with a thin plate weir installed at the outlet. The tasks required are outlined below:

Task 1. Site inspection – Inspection of the 3 flow monitoring points at the 2 MWTS by a qualified MCERTS inspector. You should assume that one of the pipe flow meters is installed on the surface and the other within a chamber (see photos below). A TCA operator will be available to provide information about the layout of the treatment scheme.

Task 2. Inspection Report – The inspection from Task 1 should be written up by a qualified MCERTS inspector. The cost for this should include the site certificate fee.

Task 3. Flow meter verification – 12 month after the completion of the above inspection, the supplier should visit the MWTS with the 2 electromagnetic flow meters installed and conduct a flow check to verify that they are still performing in accordance with MCERTS. This visit does not need to be undertaken by a MCERTS inspector, and a short verification certificate should be supplied.

Task 4. Mock QMS Assessment – The supplier should undertake a Mock MCERTS audit of our Quality Management System, which covers all of the MWTS that we operate. You should assume that the audit is undertaken at our office in Mansfield, and provide a report detailing Major and Minor deficiencies and recommendations for improvement.

Photographs of the sites to be inspected are included in



to Figure 26 below.



Figure 23 Pipeflow meter 1 – Meter installation (left) and transmitter (right)



Figure 24 Pipeflow meter 2 - Meter installation (left) and transmitter (right)



Figure 25 Thin Plate weir installation (weir on left and chamber on right)



Figure 26 Approach condition to Thin Plate weir (left) and Gaugeboard and sensor (right)

Performance Specification

The site inspections and QMS should to be compliant with the following standards:

- [MCERTS – Minimum Requirements for the Self-Monitoring of Flow, v4.0 \(August 2014\)](#)
- [Management System Requirements – Guidance – July 2019 \(issue 17\)](#)

MCERTS Inspectors and Assistant Inspectors should be able to demonstrate that they are certified as competent with the following standards:

- [Competency Standard for MCERTS inspectors and Assistant inspectors – Flow Monitoring](#)

Costs

Please complete the costs table for the priced scenario, and also complete the rate card, and upload to the tender portal. This is in the attached spreadsheet.

Lot 7: Hydrometric Monitoring - General Lot

Outline of the Requirement

This will be a general lot, for projects which include aspects covered by more than 1 of the above.

To be considered for Lot 7 you must have bid for at least 1 of the other lots within this framework.

Suppliers who have bid for more than 1 of the other Lots can express interest in being awarded a slot on this Lot. Suppliers will be ranked based upon their average score for the other Lots that they have bid for. We will then seek to appoint the minimum number of suppliers which provides coverage of all of the Lots and geographical regions.

Indicative Timetable

Below is detailed the indicative timetable of the procurement process.

Phase	Process	Date*
Tender	Contract Notice published	10 th September 2021
	Deadline for queries	1 st October 2021
	Tender closing date	8 th October 2021
Assessment	Selection Criteria / Scoring	11 th October – 29 th October 2021
	Internal sign offs	1 st – 10 th November 2021
Award	Award notification	11 th or 12 th November 2021
	Standstill period	15 th November - 26 th November 2021
	Award	29 th November 2021
Contract	Framework Commencement	22 nd January 2022

Key Performance Indicators

It is intended to use Key Performance Indicators to monitor supplier performance under this Framework. For each package of work that is awarded to a supplier, TCA staff will score the supplier performance when the work has been completed. Suppliers will be scored 0 – 5 based on the following criteria:

1. Quality
2. Programme
3. Health and Safety

The scoring criteria are outlined below:

Score Categories	Meaning	Scores
Adds Value	The evaluators believe that as well as meeting requirements in the original scope, the supplier has gone beyond that which was required or described in their original proposal e.g. quality of work, speed of delivery and extemporary approach to H&S.	5
Fully Acceptable	The evaluators are fully satisfied that the work delivered met the requirement of the scope and was delivered as per the methodology and programme in the suppliers original proposal for the work.	4
Minor Reservations	The evaluators are satisfied that the work delivered met the requirements of the scope and was delivered as per the methodology and programme in the suppliers original proposal for the work, but there are some minor reservations around performance/ delivery.	3
Significant Reservations	The evaluators believe that the work delivered did not meet the requirements of the scope and/ or was not delivered as per the methodology and programme in the suppliers original proposal for the work, and has some major reservations about the approach taken or deliverables.	2
Requirement Not Met	The evaluators believe that the supplier has completely or substantially failed to deliver the services required in the original scope.	0

Suppliers who score 2 or less on any of the assessment criteria will follow the process for award of a yellow card, as described earlier in the document.

Guidelines

The questionnaire should be completed by a partner/director/senior manager.

Please answer each question fully. The Authority stresses the value and importance of substantiating answers with supporting documentation when requested.

The questionnaire should be completed accurately, if successful this document will form part of the contract.

The response and supporting documents must relate specifically to the organisations policy and arrangements.

Appendices in the form of attachments are either requested for the response to a specific question or can be included in the General Attachment area of this questionnaire but where included must be clearly labelled and cross referenced to ensure the information supplied can be assessed in full.

Assessment & Feedback

The tender submissions will be assessed in accordance with the Process within the Framework information document for this Framework.

Feedback will be provided at that time to bidders which are not successful through the issue of a letter providing debrief information as appropriate.

Acceptance Procedure

The Authority does not bind itself to accept your tender and will not be responsible for, nor pay for, any expenses or losses which may be incurred by you in the preparation of your tender.

It is intended that the procurement process will take place in accordance with the provisions of this ITT but The Coal Authority reserves the right to terminate, suspend, amend or vary this procurement process by notice to all potential bidders in writing.

The Coal Authority will have no liability for any losses, costs or expenses caused to bidders as a result of such termination, suspension, amendment or variation.

No tender shall be deemed to have been accepted unless such acceptance has been notified in writing to the tenderer.

Whether or not your tender is accepted, you must treat the details of all tender documents as private and confidential. If you decide not to submit a tender, you must reply that you wish to reject the tender and provide a comment why.

If you require clarification then a query through the online messaging facility should be submitted.

Declaration

We declare that this is a bona fide tender, intended to be competitive, and that we have not fixed or adjusted the amount of the tender by or under or in accordance with any agreement or arrangement with any other person.

We also declare that we have not done and we undertake that we will not do at any time before the returnable date for this tender any of the following acts:-

- (a) Communicate to a person other than the person calling for these tenders the amount or approximate amount of the proposed tender;
- (b) Enter into any agreement or arrangement with any other person that they shall refrain from tendering or as to the amount of any tender to be submitted;
- (c) Offer, pay or give or agree to pay or give any sum of money or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any other tender or proposed tender for the said work any act or thing of the sort described above.

In this declaration the word 'person' includes any persons and any body or association, corporate or unincorporated; and 'any agreement or arrangement' includes any such transaction, formal or informal, and whether legally binding or not.

Appendix A – Transparency Guidance

Transparency

Government has set out the need for greater transparency across its operations to enable the public to hold public bodies and politicians to account. This includes commitments relating to public expenditure, intended to help achieve better value for money.

As part of the transparency agenda, Government has made the following commitments with regard to procurement and contracting:

- All new tender documents for contracts over £25,000 to be published on a single website from September 2010, with this information to be made available to the public free of charge.
- New items of central government spending over £25,000 to published online from November 2010.

Suppliers and those organisations looking to bid for public sector contracts should be aware that if they are awarded a new Government contract, the resulting contract between the supplier and Government will be published. In some circumstances, limited redactions will be made to some contracts before they are published in order to comply with existing law and for the protection of national security.

The publication of information incorporates but is not limited to the following documentation/information. This will cover potential contract extensions and orders placed against a framework or term contract.

Contracts: contract, specification, terms and conditions, schedules and pricing – issued by both the tenderer and the Authority.

Tenders: invitation to tender, specification, terms and conditions, prequalification questionnaires, OJEU notices – issued by the Authority.

Spending: summary of invoice information in relation to payments made and includes invoice values – submitted by suppliers.