**Clarification Questions & Answers**

**Dated: 4 August 2021**

**Contract Reference: C21-0262-1579**

**Title: Marine Recorder Redevelopment**

**Q22)** Can you advise the frequency of new user and survey submissions?

**A22)** A very rough estimate of new submissions was produced through the scoping work at 120 new surveys per year across the tenancies (i.e. the system as a whole), with around 16000 new samples and 140000 new species occurrences. This included some buffer for growth of the custodian organisations using the system and increased survey frequency into the future.

The frequency of new data input is likely to be highly stochastic, especially regarding cross custodians, as there are no consistent survey schedules across years.
New users for organisations are likely to be in the low tens maximum per organisation per year.

**Q23)** What is the frequency of image uploads and max size of each image?

**A23)** The system will not hold imagery itself. The data model will have a field to record the URL of an image in an (external) online image catalogue or other accessible location. As a number of specialist image storage and cataloguing solutions already exist in use within the MR community, including the functionality within the Marine Recorder replacement was deemed out of scope.

**Q24)** How many external users will need access to the new application/data and expected frequency of access?

**A24)** Quantities of individual external users is currently uncertain, in the initial MVP build it is envisioned that public access to the data would be outwith the system (such as but not limited to through external dissemination methods through MEDIN, or as a static extract hosted elsewhere) to reduce the scope. Access from non-custodian users that remain part of an “accepted” organisation (e.g. another government body) are of unknown quantity, as the current database is generally downloaded once per organisation and shared internally. Implications of external users on system build or cost, should be highlighted (and if possible quantified) in the bid as a project risk.

**Q25)** In the Annex document at the bottom of page 20, it says:

*"Each organisation can then merge in their own private data on top of these UK level snapshots. In the new system, it would be preferable for each organisation to have access to analytical data based on the combination of the rules above. Per-organisation level access would be a low-priority “could have” under the initial build, but if the proposed solution could account for this, it should be highlighted in your bid."*

What is meant by a "combination of the rules" and what is meant by "per-organisation level access". Could you elaborate?

**A25**) In first case “Combination of the rules” above, these refers to the government and public survey-level access classes and “sensitive” records, and follows the current use cases of the data in the current system.

As an example, within the published/released data area (i.e. not for management, see Q27), i.e. for the purposes of data access/use and analysis, a custodian organisation that is flagged as a government agency (for example, JNCC) would have access to:

* All of their own released data, regardless of access level and sensitivity; AND
* All released data from other custodian organisations contained within Surveys marked for access either as “public“ or “government only”.
	+ Including any records marked as containing sensitive species or biotopes/habitats

A custodian organisation that is not a government agency (for example, Seasearch) would have access to:

* All of their own released data, regardless of access level and sensitivity; AND
* All released data from other custodian organisations contained within Surveys marked for access as “public“.
	+ However, from these “external” datasets, sensitive species and biotopes would be redacted

If implemented, the general public would only have access to:

* All released data from custodian organisations contained within Surveys marked for access as “public“.
	+ However, from these “external” datasets, sensitive species and biotopes would be redacted

Per-organisation level access, could, for example, enable “Seasearch” to grant access to a particular survey to both government organisations, but also another specific custodian organisation (e.g. “Porcupine Natural History Society”), rather than the generalised rules / custodian groups above, allowing a more granular but complex access system.

**Q26)** In the marking scheme how are points for costs calculated? For example, most expensive = 0 points, lowest cost = full marks?

**A26)** Not necessarily relative to other bids, but correct, a bid seen as expensive would receive lower marks. Note that this criteria only comprises 10 out of 100 points.

**Q27)** We'd like to understand to what extent data needs to be kept separate between the custodian organisations and also JNCC.

Is it ok for JNCC to be able to (theoretically) access custodian data before it is published, or do we need to securely isolate that data prior to publishing so that only the custodian has access? Ie. does the custodian need a private area that not even JNCC can access?

From a GDPR perspective, is it ok for one custodian to see personal data of another custodian, eg. names of people in surveys from another custodian. Note that any public API or snapshot would of course have this data redacted.

**A27)** Custodian’s data should be securely isolated from access prior to publication. The method of siloing/tenanting the data is open. i.e in the provided example, JNCC should not have access to another custodian’s data before it is published.

The administrator of the system is likely (and envisioned in the gathered user stories from the steering group, though as with all ‘specifications’ here, is open for challenge by the bidder) to require full access to all custodian’s data, for use in administrative functions on request by the custodians only. Whilst in actuality the system administrator is likely to be one of the custodian organisations, the roles should not be conflated, any required administration “organisation” should be kept distinct within the system.

Within the management environment, the current risk appetite is that personal data should be silod/isolated to the custodian organisation only. This is a base-level low-risk approach. For more information on GDPR, please see “20200203\_MR\_GDPR\_proposal\_v1” in the Data Protection folder on sharepoint. As above, the administrator will likely require access to all personal data for use only in agreed administration functions.

**Q30)** The AnnexA mentions the possibility of a basic crud API as part of the MVP. In our experiences, basic CRUD APIs are not valuable at the MVP phase, with predominantly import and export functionality instead being used initially, with API generation being subsequently developed out of user experience as the application is used. Furthermore, users often require a higher level of abstraction for application tasks. Is there scope to remove the crud API from the MVP build in order to focus on other more valuable areas of the application (including phase 2).

**A30)** We welcome challenges from bidders to the scope of the system as defined, and such challenges should be posed as suggestions (with suggested alternative priorities) within the submitted bids, including implications on project dimensions.

**Q31)** What type of contract would be signed, is there the ability to propose alternate contract styles (for example T&M contracts)? **A31)** JNCC would be open to proposals and changes in contracts in line with differing project management styles and expected deliverables, pending consideration at review and subsequent negotiation with the successful bidder to set appropriate milestones/checkpoints. It should be noted that whilst JNCC are leading the invitation to tender process, they are not the only organisation represented by the project steering group and the tenders will be reviewed by a panel including both JNCC and external partners.

**Q32)** How flexible is the project in regard to its dimensions (time, scope, budget)?
**A32)** JNCC would be open to updating the contract to be more receptive to not delivering all the features by the end of the financial year if the budget is tight and priorities change throughout the build. However, JNCC would seek to ensure that a realistic pace of development is maintained and that project alterations are appropriate. The budget within the financial year is fixed due to public funding procedures, but as outlined in the AnnexA, JNCC and the partners are seeking continued funding for future financial years. It should be noted that whilst JNCC are leading the project invitation to tender process, they are not the only organisation represented by the project steering group and the tenders will be reviewed by a panel including both JNCC and external partners, who may have differing appetites to flexibility of the project and from who JNCC would seek a consensus decision.

**Q33)** Would it be acceptable to provide source code of the solution to JNCC (to satisfy any concerns of the system becoming unsupported) with the proviso that it cannot be made available to 3rd parties. For instance, stipulating it is not made available as open-source, or used for, or otherwise repackaged / reverse engineered into another product (commercial or otherwise)?

**A33)** Please note that the whilst JNCC are leading the procurement, they cannot speak for all partners in this regard. However, as stated in the AnnexA, any efforts made to mitigate the relevant risk (i.e. of system defunctness or unsupported nature, for example should a company cease to trade), can be highlighted in the AnnexA. At review, should there be specific concerns with a specific aspect of a proposal, as standard in the procurement process, the bidder will be contacted for further clarification and discussion.

**Q34)** Some of the wireframe diagrams allude to some conversion of co-ordinates between co-ordinate geometry systems (e.g. Pop up 3 (example A) in ‘D - Survey sample.pdf’). Is there a set of standard mathematics [conversion functions] that JNCC expect to be used for this, and/or is there a set list of co-ordinate reference systems that the new system is expected to support. We’re conscious there are many different coordinate systems and managing conversions between them all is quite a specialist feature.

**A34)** As base, standard transformations based off, for example, the proj4 library could be used (if agreed with the project working groups) should this functionality be included. A restricted list of coordinate systems (agreed with the project working groups) would likely be acceptable.

**Q35)** There are references to requirements relating to JNCC being able to self-administer the solution including creation of new tenants/organisations. Additionally there are requirements relating to disaster recovery and the potential of restoring (from backup) on a per-tenant basis, as well as requirements for multi-tenant querying / sharing of data across tenancies. While reviewing various design approaches the per-tenant restore would benefit from a single database per tenant approach (multi-tenant capabilities are still available this way) but this would significantly complicate the creation of new tenants as a new database needs to be created each time.

Would it be acceptable to keep the creation of new tenants/organisations as a contractor-led activity? Or at least, keep it this way for the first phase of the project and treat JNCC-led creation of tenants as a non-MVP feature to look at in the 2nd year?

**A35)** It would be acceptable to propose such a decision for consideration by the review panel. At review, should there be specific concerns with a specific aspect of a proposal, as standard in the procurement process, the bidder will be contacted for further clarification and discussion.

**[Update to Answer] Q1))** Are there any requirements for the system to be bilingual (with the Welsh language)?

**[Update to Answer] A1)** (**included in the Q&A clarifications dated 29 July 2021)** Whilst this initially deprioritised by the project steering group for the redevelopment, and relevant colleagues have noted that there would likely not be need to build in Welsh Language support in the initial stages as the system won’t at least initially be public facing as a focus. If there was a desire to have a more open public access point/front end at some point in the future, then Welsh Language may have to be reconsidered.

Therefore, we would ask that if you believe that developing the ability for bilingual interface to the system would add a significant cost, you provide a cost for both a mono-lingual and bilingual system, or otherwise indicate specific costs associated with this, further noting whether retrospective development of the functionality in future phases would add significant extra cost as opposed to building from the start.