**Clarification Questions & Answers**

**Dated: 6 August 2021**

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

**Title: Marine Recorder Redevelopment**

**Q36)** There’s a requirement for OGC services – is this completely new for the current system?

**A36)** The current marine recorder is a MS Access based application, there is nothing inherent within the system itself to provide OGC services. Some of the data are exposed via OGC services, but through external projects and after external data flows and transformations (For example EMODnet Seabed Habitats [<https://www.emodnet-seabedhabitats.eu/access-data/launch-map-viewer/>], OBIS [<https://obis.org/>], NMPI [<https://marinescotland.atkinsgeospatial.com/nmpi/>].

The requirement here is for the system as a whole to produce OGC services, whether as part of the core codebase or through additional frameworks and solutions that access the same data (with privileges) is up to the supplier and can be discussed with the user group as part of the development process.

JNCC ourselves have expertise in managing OGC services (e.g. Geoserver) and could work with the developer to work out best methods to expose the data in OGC-friendly manners.

**Q37)** What is EDMO? How will it be used? Is a tight API integration with EDMO (e.g. for organisation searching and validation) a requirement?

**A37)** EDMO stands for the European Directory of Marine Organisations, a standardised and validated list of Marine-relevant organisations with relevant information against an identification code. Available from <https://edmo.seadatanet.org/>

The main use of EDMO will be in the onwards (especially international) dissemination of data from Marine Recorder, for example for use in OBIS.

Internally within the developed application itself, whether it is used itself as the internal reference list, or there is an internal organisation reference list that refers to EDMO identifiers where suitable, will be a point of discussion with the technical working group.

A tight integration with EDMO is something that may have to come out with discussion. Whether a tight Integration, or simply held and managed within system, detail would have to come from discussion with the technical working group, but either suggested are viable options, as long as the internal vocabulary can be managed through the administration role rather than being a developer task.

**Q38)** In the site map there is an element of domain administrator managing some of the lookup lists, referencing their own lists but also shared lists. Do you intend custodial administrators to be able to manage the shared lists?

**A38)** Using locations as an example of a reference/vocabulary list that is tenanted. In the case of locations, as it is currently described, each organisation should be able to manage their own locations (e.g add their own organisations).

**Q38.1)** Should Locations then be made available to other organisations?

**A38.1)** This is currently a grey area, where the correct balance must be found through discussion with the technical working group. Certainly for location, it could be nice to share locations between organisations, but close attention must be paid to the governance behind this, which is a point of discussion for the user group. For example if Organisation B uses Organisation A’s location, and Organisation A changes it’s name or geographic information, there is an impact on Organisation B’s data. The only current instance where self-administered reference lists are currently not envisioned to be shared is in regards to names, due to GDPR (outlined in the GDPR documents available on the sharepoint).

This is a good example of edge cases that may arise due to the movement from a federated desktop system to a centralised system, and we expect (and welcome) further such discussions through the development process.

**Q39)** Regarding Taxonomy lookups. Is there an API interface to MSBIAS?

**A39)** Not currently. MSBIAS is currently used in the current semi-automated update process for the taxonomy dictionary of the current Marine Recorder. This is achieved by the Marine Biological Association (who manages the list) providing a static dataset download of the current MSBIAS state (not accessible outside of JNCC). The information is available therefore but not by direct API, the manner of access to the information is therefore likely to be something that continues to be developed as the system itself iterates, working closely with the Marine Biological Association.

There as several possibilities for interim access levels, e.g. using the WoRMS API filtering UK relevant records. The development of this link and best methods will require close working of the successful developer with the Marine Biological Association (MBA), who are a Marine Recorder

custodian organisation in their own right, and are part of the steering and technical working group and therefore well invested in the system and its integration.

**Q39.1)** Would import from a static dataset be acceptable for MVP? Or are the MBA flexible enough to develop an API alongside our system.

**A39.1)** Whilst the MBA are a very accommodating organisation with requests for technical assistance and development, JNCC cannot guarantee the development of an API. They may well be open to access to direct marine recorder integration through APIs, but there would be queries of timing and resourcing. Therefore there could be made the case of a stop-gap interim solution using a static dataset, though this should be built in mind that the onward QC, transformation and logic processes could be reused to a degree if moved across to API access.

The current process work additively from MSBIAS which is provided as a complete dataset each time (i.e. no records are deleted within Marine Recorder, if they are [rarely] deleted from MSBIAS, only added and updated), and is written in the R language. The code would be presented to the successful developer to understand and re-use the underlying logic.

**Q40)** Would batch imports from spreadsheets always be at a survey level or could it be at a lower level, for example adding multiple survey events to an existing survey?

**A40)** As currently scoped, at all levels. For example appending new samples to a survey event.

**Q41)** How should failed imports be handled, how atomic should the process be? Should one failed record fail the entire import, or should partial imports and quarantines be allowed?

**A41)** The approach taken on the new system is up for discussion with the technical working group and external partners. There are pros and cons either way. An effort was made to not be prescriptive, as either are viable options and may be more or less suitable to existing systems.

**Q42)** Regarding multiple taxonomic determinations, do these differ to other edits of the system, where the historical determinations are maintained and published alongside current data?

**A42)** Yes, these are indeed maintained and published in their own right. (A determination is an entity in its own right) This is not necessarily the case for other fields or measurements in the system.

**Q43)** Is there a preferred or existing mapping solution that we would like to work with to generate maps?

**A43)** This is up to the bidder. Each custodian organisation in the partnership has their own systems, so the framework behind Marine Recorder can be independent and as proposed by the developer.

JNCC is going through a process with another project on base-mapping use, there is currentl resistance against using Google base-mapping, due to tracking concerns. For base-mapping, as long as the source of the maptiles can be configured within the system (whether Bing, bathymetry etc), this should be sufficient. The internal system mapping functionality of the system is mainly for mapping the entities of the system itself against **a** basemap.

**Q44)** There is a requirement to search and query data using the API. Is the flexibility of searching data within the UI also expected within the API?

**A44)** This level of detail (exactly how much granularity the users expect out of the API) is a discussion that will have to occur within development, through the technical working group.

**Q45)** Is a non-UK host, in a country with data-adequacy agreements with the UK acceptable?

**A45)** Due to external interests in this, JNCC cannot say for certain whether this is suitable for all partners. The bidder should therefore propose non-UK as an option alongside UK options to mitigate this risk.

**Q46)** What are the links between this project and GDS processes?

**A46)** If the bidder has experience with GDS processes, then this should be indicated in the document.

**Q47)** There are two start dates indicated in the AnnexA. 6th of September and 13th September. Which start date should be assumed?

**A47)** If there are concerns regarding time and resourcing, we would suggest basing project plans off of the 13th of September. It should also be noted that even this date may change due to unforeseen events such as prolonged contract negotiations.

**Q48)** Is there an expected structure for the returned bid (for example for the approach and functionality)?

**A48)** There is no expected structure for the bid. As long as the evidence is in the bid that allows for scoring against the evaluation criteria.

**Q49)** Should user story numbers be referenced across the bid to show that user stories have been satisfied?

**A49)** Whilst the format of the bid is up to the bidder, increased level of detail such as explicit indication of satisfaction of user stories may well be helpful and of value.