

EMBL-EBI



July 2024

EMBL-EBI Economic Impact Evaluation Tender

Volume 2 - Invitation to Tender (ITT)

Return date; 12:00pm, **Wednesday 7th August 2024**

1 Introduction

1.1 Background

The European Molecular Biology Laboratory (EMBL), is Europe's only intergovernmental laboratory for life science research. Established in 1974 to advance the study and understanding of molecular biology, nurture young talent, new ideas, and technologies, it now performs its activities across six sites in five host nations.

The European Bioinformatics Institute (EMBL-EBI), EMBL's site in the UK, is Europe's hub for biomolecular data, and an acknowledged world leader in the management and analysis of big data in biology. Founded in 1994 and located on the Wellcome Genome Campus near Cambridge, it provides freely available molecular databases and analysis tools spanning the full range of molecular biology, from nucleic acid (DNA) sequences to macromolecular structures through to systems biology and open publication platforms.

EMBL-EBI's data resources are the most comprehensive and widely used data resources in the life sciences worldwide. In 2022, we received over 100 million requests for data a day from 42 million IP addresses annually, across 194 countries encompassing both leaders in research-intensity (the US, China, UK) and Low and Middle-Income Countries (LMICs) with rapidly growing research sectors (such as India, Kenya, Vietnam).

EMBL-EBI data resources achieve global impact through a number of activities including:

- Hosting free-to-access, open data resources to the world
- Participating in major global collaborative projects developing and sharing the core data resources infrastructure to enable locally-led biodata infrastructure
- Promoting capacity building, standards and policies that create an enabling environment to maximise the impact of open life sciences data, globally.

Many of the major data resources hosted by the EMBL-EBI are delivered via international collaborations. For example, the Protein Data Bank in Europe (PDBe) is a part of the worldwide Protein Data Bank (wwPDB) that is delivered with partners in the USA and Japan and was recently extended to China.

In the future, open data resources will need to be built even more fairly and inclusively at a global level to maximise the impact of research. The multifaceted challenge of improving human health will need concurrence and collaboration among diverse stakeholders from diverse geographic regions, requiring a renewed approach to data resource development, capacity building and sustainable delivery distributed among global partners. Currently, partners in the LMICs are underrepresented. EMBL-EBI has received grant funding to help us explore data sharing in LMICs and identify pathways towards this long-term strategic goal.

2 Specification

2.1 Background

This section sets out the specification of services required for this ITT. Suppliers should use this section to fully understand EMBL-EBI's requirements and to inform their response. We are happy for more than one supplier to work in partnership. If this route is chosen, suppliers must carefully outline how they will work together to ensure the project is successful.

2.2 Objectives

The purpose of the ITT is to identify an organisation that will deliver an independent expert evaluation of the socioeconomic impacts arising from investment in EMBL-EBI data resources.

The evaluation should address the following questions;

1. To what extent do EMBL-EBI data resources support researchers to assimilate and reuse data/knowledge already created?
2. What impact does the assimilation and reuse of data/knowledge supported by EMBL-EBI data resources have on research productivity and efficiency?
3. To what extent do the effects of EMBL-EBI data resources on research productivity and efficiency contribute to wider socioeconomic impacts?

The evaluation will provide quantitative and qualitative evidence of the wider benefits arising from EMBL-EBI data resources. This evaluation should effectively complement two existing economic assessments published in 2016 and in 2021, which provide a historical benchmark.

It may be appropriate to extend, refine or otherwise vary the contingent valuation approaches previously used, in light of developments such as

- changes in how researchers use EMBL-EBI data resources and appreciation of the broader knock-on effects of 'data first' approaches in the research sector
- recent innovations in socioeconomic impact modelling methodologies
- the increasing importance of data for artificial intelligence applications
- the increasing recognition of sustainability and carbon intensity as important elements of socioeconomic impact.

The final output will contribute to the evidence base on the socioeconomic impacts and return on investment resulting from open research data infrastructure

2.3 Scope of Work

The EMBL-EBI data resources operate based on a mixed funding model consisting of EMBL member state core funding, competitive international grant funding from a variety of public and philanthropic sources, and capital funding from the UK Government. The evaluation focus is on the global impact of EMBL-EBI Data Resources, with the possibility of examining disaggregated impact for the UK as a host nation or EMBL Member States.

EMBL-EBI Data Resources are delivered in collaboration with many global partners and in a variety of models. Some adjustments to methodology and assessment will have to be considered to reflect these diverse inputs.

2.4 Approach & Deliverables

The approach will be finalised in collaboration with the delivery partner, and is likely to include many of the below:

- A communications and engagement plan to maximise reach to diverse global communities of users
- Desk research to inform choice of socioeconomic models
- Case studies of high impact driver use cases
- EMBL-EBI Data Resource user survey and/or interviews
- Quantification of socioeconomic benefits

We expect to work closely with the delivery partner via regular check points with EMBL-EBI staff over the duration of the commission.

Key deliverables will include:

1) Inception report, to include (depending on proposal scope):

- Review of possible impact assessment methodologies and the key research questions and sub-questions in scope
- the methodologies/sources of evidence proposed to answer the above
- Approach for collecting, managing, analysing and reporting data and relevant quality standards for agreed impact assessment methodologies
- Roles and responsibilities for all required data sources and project products
- A communications and engagement plan to maximise reach to diverse global communities of users
- Interview topic guides and other instruments as needed
- Limitations and areas out of scope
- Client communications plan for project duration
- Timeline for key milestones

2) Case Studies

- In depth impact case studies in a handful of areas of special significance. These act as qualitative evidence of impact and provide an opportunity for the supplier to become more familiar with EMBL-EBI data resources before they deliver the quantitative phase of the evaluation.

3) Full report to be delivered in two stages.

- Draft report shared in advance of the end date to allow EMBL-EBI time to discuss feedback, raise questions, and make recommendations for further improvement.
- Final report once all feedback points are resolved.

4) Slide deck summary

5) Any quantitative data generated during the process of delivery (survey responses, data analysed).

6) Summary reports of everyone that was engaged as part of the work, for example interview transcripts or summaries (if applicable).

2.5 Governance & use of the Deliverables

The key audiences for the evaluation activities are EMBL Member States UKRI, DSIT, EMBL-EBI international partners and funders.

The evaluation output should be suitable to inform government and global partner/funder policy and practice (e.g. benefits of open access, effective delivery of publicly funded data infrastructure) as well as clearly showing any contribution to national / regional priorities (such as in strategies for digital research infrastructure, high performance computing, AI, Net Zero and others as appropriate) as well as assessment of value for money of the investment.

The final Evaluation Report will be published on the EMBL-EBI website. In addition, outreach and wider communications activities by EMBL-EBI and UKRI will enable the high-level benefits of the investment to be shared with the academic and business research communities and the public. The previous economic impact analysis of EMBL-EBI activities (Data Driven Discovery: The value and impact of EMBL-EBI managed data resources), Beagrie 2021 generated national and international interest when published.

The selected supplier will report to the EMBL-EBI Associate Director for Services, Johanna McEntyre.

3 Award Criteria

EMBL-EBI will evaluate all valid submissions on the strength of information provided by the bidder in the form of its response to this tender invitation and any clarification strictly in accordance with the criteria defined in this tender invitation.

1	QUALITATIVE SCORED REQUIREMENTS	Weighting 80%
Please Note: The following topics and themes will be applied during the formal evaluation of the suppliers tender submission;		
1.1	<u>Quality of previous work</u> Is the output of previous work rigorous and carried out to a high standard? Do references and other known previous clients give a positive impression of working with the supplier?	20%

1.2	<u>Context-specific expertise</u> Skills and Experience: Does the supplier have the relevant skills, experience, and contextual understanding of biodata resources to deliver this work? (including approach to quality assurance, data protection and risk management)	20%
1.3	<u>Delivery plan</u> Strength of approach: Will the proposed methodology provide robust evidence to address the questions outlined in the Specification section? Communication: Is there an effective engagement and communication plan with the EMBL-EBI team? Delivery plan: Is the proposed delivery plan appropriate and achievable? Are there significant risks associated with the proposed timelines, and how well are they mitigated?	40%

2	PRICE SUBMISSION	Weighting 20%
Please Note: The following questions need to be answered with an explanation on how each of the requirements will be accomplished or not (Responses max 500 words)		
1.1	Value for Money	20%

Responses to the requirements should be written in terms of statements that make a clear commitment to deliver the requirement or precise details of how the Bidder will add value. Bidders should note that any statements made in vague or unclear terms, such as “We will endeavour to ...” will be disregarded for evaluation purposes. The Bidder should ensure that their responses are clear, specific and detailed.

Where a Bidder is a consortium or is proposing the use of sub-contractors, the answer to each question should relate to the organisation that will perform the particular element of the Service.

Upon conclusion of the procurement EMBL-EBI will review the Quality Submission of the successful Bidder and extract all statements of commitment. As set out, these statements will be incorporated within the Agreement by way of bespoke amendments to the Agreement, at EMBL-EBI’s discretion. The successful Bidder will then be contractually bound to deliver the commitments they have set out in their Quality Submission.

4 Tender Submission

Tender Submissions shall comprise of three elements, addressing the following:

- 1) Response to the Specification and Award Criteria;
 - a. Approach to deliver the ITT objectives
 - b. A detailed methodology
 - c. Timetable including for key milestones and deliverables

- d. Deliverables - outline of what the anticipated deliverables, including interim and future deliverables and in what format you'll present these findings
- e. Evidence of previous relevant supplier experience
- f. Quality assurance, data protection and management of risk
- g. 2 references (inclusive of contact name, organisation, brief overview of work provided, email & telephone) who can be contacted as part of the ITT evaluation

2) Price Submission

- a. Detailed breakdown of costs including details of the hourly rate and number of hours to be contributed by each member of the research team

3) Acceptance (or comments/proposed amendments) of EMBL legal requirements document

6 Tender Evaluation

This section sets out how EMBL-EBI will evaluate Bidders' Tender Submissions.

Evaluation methodology

The evaluation methodology for this procurement is based weighted criteria to determine the most economically advantageous tender (MEAT).

Evaluation process

Upon receipt of Tender Submissions EMBL-EBI will check each for completeness and compliance with the requirements set out in this Volume 2. EMBL-EBI reserves the right to reject Tender Submissions that are incomplete or non-compliant.

Bidder's responses will be evaluated against the technical, administrative and strategic requirements and associated weighted criteria in this ITT.

Tender Submission scoring

The weightings applicable to the Quality and Price Submission requirements which will be applied in the evaluation of the Bidders' Tender Submissions are as set out in the table above.

Scoring of Quality Submission questions

EMBL-EBI's evaluation team will evaluate the Quality submission element of each Bidder's Tender Submission against the relevant requirement and the scoring matrix set out in the table below. Each score category reflects the extent to which the Bidder's response to the question meets or exceeds EMBL-EBI's requirements.

Bidders' responses should cover all aspects of the requirement. EMBL-EBI will assign a score based on which score category the Bidder's response to that particular requirement best aligns to. For the avoidance of doubt, where the question requires a response to a number of points or elements, the responses to individual points will not be evaluated separately but will be considered as a whole and an overall score awarded for each question based on the overall response provided.

Score	Score Category	Explanation
0	Unacceptable	The answer provided is entirely unacceptable and does not meet EMBL-EBI's requirements at all.
1	Unsatisfactory	The answer provided is unsatisfactory and does not meet EMBL-EBI's requirements.
2	Very Weak	The answer provided is very weak, falling significantly short of meeting EMBL-EBI's requirements.
3	Weak	The answer provided is weak, falling moderately short of meeting EMBL-EBI's requirements.
4	Poor	The answer provided is poor, falling slightly short of meeting EMBL-EBI's requirements.
5	Acceptable	The answer provided is acceptable, probably meeting EMBL-EBI's requirements although some minor points have not been fully evidenced.
6	Satisfactory	The answer provided satisfactorily meets EMBL-EBI's requirements and is supported by clear evidence.
7	Good	The answer provided slightly exceeds EMBL-EBI's requirements and is supported by clear evidence.
8	Very Good	The answer provided noticeably exceeds EMBL-EBI's requirements and is supported by clear evidence.
9	Outstanding	The answer provided considerably exceeds EMBL-EBI's requirements in one or more respects and is supported by clear evidence.
10	Exceptional	The answer provided significantly exceeds EMBL-EBI's requirements in all respects and is supported by clear evidence.

Scoring process

Each question will be evaluated by a minimum of two evaluators who evaluate Bidders' Quality Submission independently, in accordance with the scoring approaches detailed in section 9 above.

Where the evaluators deem additional clarification is required in order to evaluate a response this may be sought. For the avoidance of doubt, EMBL-EBI will not be obliged to seek clarification and reserves the right to reject a response which is incomplete, ambiguous or which is not capable of evaluation. Bidders should therefore take care to ensure that their responses are complete, unambiguous and capable of evaluation without further clarification.

Evaluation Panel

The Evaluation Panel will consist of senior members of EMBL-EBI and its key stakeholders. The Evaluation Panel will be responsible for the following activities:

- Awarding a score for an individual question when requested to do so by the evaluation lead
- Receiving details from the Evaluation Lead on the evaluation of Bidders' Tender Submissions, including: the process undertaken by individual evaluators and Evaluation Lead, individual evaluators' scores and Consensus Scores awarded. The Evaluation Lead will be responsible for verifying that the evaluation has been conducted in accordance with the methodology set out in this section 6 and validating the scores awarded.
- Verifying the consistency and integrity of the evaluation process as a whole and investigating and addressing any apparent errors or anomalies.

Quality Submission score

Upon conclusion of the evaluation of the Quality Submission element of Tender Submissions and validation of the scores awarded by the Evaluation Panel, EMBL-EBI will multiply each question score by its weighting (applying the applicable weighting set out above). The cumulative total of these 'weighted-scores' is the overall Quality Score for a Tender Submission. The overall Quality Score for each Tender Submission will be verified and validated by the Evaluation Lead.

Overall moderation

Once the evaluation process for the Quality Submission and Price Submission has been concluded the Evaluation Panel will be reconvened to verify and validate the Tender Scores calculated for each Tender Submission. This will be a final 'check-point' to validate that the evaluation of Price Submissions has been undertaken in accordance with the evaluation methodology set out in this section 6 and to approve the ranking of Bidders' Tender Submissions based on their respective Tender Scores.

Contract Award

Once all Tender Submissions have been evaluated and Tender Scores calculated, and the results have been verified and validated by the Evaluation Lead, EMBL-EBI shall notify all Bidders of its intention to award a contract to the Bidder with the highest Tender Score (and accordingly the MEAT).

After issuing notification of its intention to award a contract, EMBL-EBI will send notification to the successful Bidder of its intention. If a decision to award is made, EMBL-EBI will work with the Successful Bidder to implement a mutually agreeable Contract.