



Market Survey for a procurement procedure on the EMIR Bridge Programme for Data Science (PRO-003620)

The European Central Bank (ECB), in collaboration with the European Systemic Risk Board (ESRB) is seeking interested leading policy experts and researchers in the fields of finance and data science through this market survey for the procurement procedure on the EMIR Bridge Programme for Data Science (PRO-003620).

1. Background

Ten years after the global financial crisis, granular big data are becoming increasingly available to policymakers in order to improve the transparency and understanding of financial markets.

In particular, the European Market Infrastructure Regulation¹ (EMIR) mandates the reporting of transaction-level data on derivatives contracts to trade repositories and grants the ESRB access to the EU-wide dataset. The collection of such data represents a milestone in the process of enhancing transparency to policymakers and market participants. This a key element of the reforms to make derivatives markets safer as proposed by the G20 leaders in the aftermath of the global financial crisis.

The full dataset consists of approximately one hundred million observations per day. Each observation has around two hundred and fifty attributes as specified in the RTS/ITS of the Regulation.²

Within the scope of the EMIR Bridge Programme for Data Science, we are seeking applications for projects with the aim to develop novel analytical methods exploiting the wealth of information provided by this newly available dataset. Each project will be allocated a grant to cover expenses which will be determined according to the duration and deliverables of each project. The aim of this survey is to explore and initiate collaboration opportunities with

¹ Regulation No 648/2012 on OTC derivatives, central counterparties and trade repositories. The full text of the regulation is available at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0648&from=EN>

² The Regulatory and Implementing Technical Standards (RTS and ITS) detail the data reported to trade repositories. Please see the Commission Delegated Regulation No 2017/104 and the Commission Implementing Regulation No 2017/105: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0104&from=EN>
<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0105&from=EN>

potentially interested parties and inform the subsequent Request for Proposals, which will be launched as procurement procedure PRO-003620.

1.1 Scope of the EMIR Bridge Programme for Data Science

The EMIR Bridge Programme for Data Science will support analytical policy and research projects with the following aims:

- a. improve the understanding of derivatives markets, their systemic risk implications and inform the development of macroprudential policies,
- b. develop innovative analytical methods, in order to enhance the understanding of this novel and rich dataset.

Candidates are expected to have experience in data analysis either from a policy or research perspective. Candidates will carry out their projects at the ECB premises in Frankfurt am Main and will interact on a regular basis with ESRB and ECB staff from the different business areas involved in the EMIR Bridge Programme for Data Science.

Projects shall be based on the following broad topics:

- a. Structural determinants of derivatives markets and their implications for systemic risk assessment.
- b. Cyclical features of derivatives markets and implications for financial stability.
- c. The use of granular big data to inform the discussion on the post-crisis regulatory reform.
- d. The role of big data in informing macroprudential policies and risk management practice.

1.2 Duration of the project

Candidates are expected to complete a methodological or policy-oriented note on their projects and deliver a presentation at ESRB or ECB seminars. All supporting materials and methodologies, including code, shall be submitted together with the note. The project may also result in a publication in the ESRB Working Paper Series or the ECB Working Paper Series. The project duration is estimated to be between three and six months. The final deliverables and project duration will be determined in the Request for Proposals.

2. Results of the market survey and next steps

An Evaluation Committee has been set up to evaluate the responses received according to the criteria indicated in Section 6 below. The result of the evaluation will be a shortlist of up to five candidates per topic (see above list of topics). Thereafter, shortlisted candidates will be invited to submit a proposal in response to a Request for Proposals sent to them. The final step will be the award of contracts according to the process and criteria that will be specified in the Request for Proposals.

3. Preparation and submission of the response to the market survey

- 3.1 Interested candidates shall submit their response electronically no later than Monday, 23 April 2018, 23:59 CET to the following e-mail address EMIR-BP@esrb.europa.eu indicating clearly in the subject the reference number and title of this survey.
- 3.2 On submission of the electronic documentation to the above e-mail address, candidates will receive an acknowledgement of receipt via e-mail from the ECB/ESRB. If you do not receive a reply, please first check your “Spam mailbox” and, if necessary, subsequently contact the following e-mail address EMIR-BP@esrb.europa.eu.
- 3.3 The ECB will not consider responses to the market survey which reach the ECB after the above-mentioned deadline.

4. Format of the response documents

Candidates shall submit the following documentation:

- A detailed Curriculum Vitae (preferably in Europass format), including a publication list (if available).
- A short description (maximum two pages) of the project explaining the relevance to the topics in Section 1.1 and highlighting how the project will develop innovative analytical methods by making use of EMIR data. Since candidates will carry out their projects at the ECB premises in Frankfurt am Main, it is also important to include an estimation of the time that will be spent on-site.

All documents shall be submitted in English.

5. Criteria to be shortlisted

The ECB may exclude responses to the market survey that

- (a) were submitted by e-mail after the expiry of the deadline; or
- (b) are substantially incomplete; or
- (c) were not submitted in English.

The ECB may, at its own discretion, exclude interested candidates that do not comply with other substantial formal requirements laid down in this market survey.

6. Selection criteria

- 6.1 The EMIR Bridge Programme for Data Science is addressed to experienced policy and academic experts who shall meet the following minimum requirements:
- a. Shall hold at least a master’s degree in a relevant discipline for the proposed project (economics, finance, mathematics, statistics, computer science, engineering, physics or equivalent).

- b. Shall confirm that they do not have any financial or commercial interest in the data and shall disclose any potential conflict of interest when analysing the data in the areas mentioned in Section 1.

Candidates are advised that participation in the research programme requires entry into Germany. Where a visa is required, this is to be arranged by the candidates at their own expense.

- 6.2 Among the applications submitted by interested candidates who meet the minimum requirements set out in Section 6.1, the ECB shall select those which shall best meet the following criteria:
 - a. Research and/or policy experience and expertise of the candidate in systemic risk, macroprudential policy, derivatives, data analysis, as documented in the CV (*weighting of this criterion: 50%*).
 - b. Relevance of the project to the topics in Section 1.1 and the innovative content of the analytical methods proposed (*weighting of this criterion: 50%*).
- 6.3 The ECB will communicate the outcome by e-mail to all candidates who submitted documentation in response to the market survey. Thereafter, the successful shortlisted candidates will be invited to participate in the Request for Proposals.
- 6.4 The ECB processes personal data for the purposes of this market survey in line with Regulation (EC) No 45/2001.³
- 6.5 Participation in this survey does not constitute any obligation on the part of the ECB to invite the participants to participate in any future ECB procurement procedure, to award them a contract, or to reimburse them for any expenses incurred in completing this market survey.

7. Other important information

- 7.1 Candidates will be subject to confidentiality duties and will be requested to sign confidentiality agreements.
- 7.2 All intellectual property rights resulting from the deliverables will belong to the ECB.

³ Regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of personal data by Community institutions and bodies and on the free movement of such data. The ECB shall process personal data received (such as names, contact details and other information provided in a curriculum vitae) in accordance with Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data as well as with Decision ECB/2007/1 of 17 April 2007 adopting implementing rules concerning data protection at the European Central Bank.

The ECB shall use such personal data solely for the purpose of evaluating the proposals received and maintaining a database of potential suppliers. Within these limits, the ECB may transfer the personal data to third parties supporting the ECB in the procurement process including external contractors, national central banks or other partner organisations. The data subjects concerned may request access to their personal data and request the rectification of any data that is inaccurate or incomplete. For all queries relating to such data, data subjects may address the data controller who is the Head of the ECB's Central Procurement Division (Sonnemannstrasse 22, 60314 Frankfurt am Main, Germany, procurement@ecb.europa.eu, Fax +49 69 1344 7110).

Data subjects shall have the right to have recourse to the European Data Protection Supervisor.