

"Empowering the next generation of data in the Area" Call for project proposals under the ISA-China Joint Training and Research Centre

1. Context

Pursuant to the United Nations Convention on the Law of the Sea (UNCLOS) and the 1994 Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 (1994 Agreement), the International Seabed Authority (the Authority) is mandated to promote and encourage the conduct of marine scientific research in the Area and to coordinate and disseminate the results when available (UNCLOS, Article 143(2)). In addition, the Authority has the responsibility to encourage the development of appropriate programmes to strengthen the capacity of developing and technologically less-developed States.¹

In 2020, the Members of the Authority adopted an Action plan for marine scientific research in support of the UN Decade of Ocean Science for Sustainable Development (MSR Action plan). The MSR Action plan organizes activities across six strategic research priorities. Since its adoption, significant progress has been made across all six priorities, as reported annually by the Secretary-General of the Authority to the Assembly.²

To support the Authority in its MSR and capacity development responsibilities, Section 3 of UNCLOS provides for the establishment of "national and regional marine scientific and technological centres" (UNCLOS, Preamble). In this context, the International Seabed Authority - China Joint Training and Research Centre (ISA-China JTRC) was established in 2020 as the first-ever joint national training and research centre.³

ISA-China JTRC supports the Authority's responsibilities in capacity-building. Since its inception, over 70 participants from developing States have benefited from training workshops organized under the framework of the MSR Action plan. Another function of ISA-China JTRC consists of facilitating collaborative research programmes to further advance the MSR Action plan.

This first call for project proposals will bring together research teams from China and developing countries, especially least developed countries, landlocked developing countries and small island developing States, to carry out joint deep-sea research projects on two topics related to data analysis and management that advance key areas of the MSR Action plan.

2. Research topics, activities and outcomes

Project proposals are invited on the following two distinct topics:

Topic 1. Scientific biological data analysis and management in deep-sea habitats

Key activities envisioned under this topic include

• conducting a scientific review of biological data contained in <u>ISA's DeepData database</u>, as well as a compilation of biological data publicly available from global taxonomic databases and published peer-reviewed literature for the Northwest Pacific or the Indian Ocean⁴

¹ ISA. Capacity-development, training and technical assistance.

² ISBA/27/A/4, ISBA/28/A/8, ISBA/29/A/5.

³ ISA. ISA-China Joint Training and Research Centre.

⁴ ISA. <u>DeepData Database</u>.

- developing species identification tools, such as a regional species checklist and/or catalogues for the Northwest Pacific or the Indian Ocean
- assessing biodiversity metrics for the Northwest Pacific or the Indian Ocean and validating existing habitat suitability models using newly collected data.

The expected outcomes include

- technical and scientific knowledge products describing results of biological data analysis and synthesis, including bio-geographic distribution and biodiversity indices, and assessment of needs and priorities for taxonomic descriptions and data standardization in the study region(s)
- regional species checklists to aid in species identification and descriptions in selected regions in the Area and available for future taxonomic projects and collaborations.

Topic 2. Historical data scientific analysis, new data processing and machine learning techniques for DeepData

Key activities envisioned under this topic include

- cleaning and validation of historic data in the DeepData in collaboration with the data team of the Authority. A sample of the historical environmental data for the analysis is available here.
- developing statistical models or artificial intelligence approaches to analyse clean data sets of DeepData and extract meaningful insights
- digitization of <u>reporting templates</u> of DeepData: converting existing VBS scripting used in Excel macros into modern web-based JavaScript applications.

The expected outcomes include

- the best available data, including the historical data readily usable for scientific analysis
- improved data quality through comprehensive data cleaning, validation and statistical modelling
- new data mining and machine learning tools were designed, utilizing Excel macros with VBS scripting and other modern tools to digitize existing reporting templates into online-based web forms, integrating modern JavaScript technologies.

3. Guidelines for submission of project proposals

Research consortia

Research consortia applying should comprise at least two research teams, including one from developing countries and one from China, both with relevant background and expertise. The consortium may be self-organized. If necessary, ISA-China JTRC can assist in its formation. The consortium must designate a project leader responsible for coordinating the research programme's implementation, managing scientific progress, overseeing personnel and handling financial management.

Eligibility of the proponents

Proposals can be submitted by an organism on behalf of academic and scientific institutions, nongovernmental organizations whose purposes or activities are related to the work of the Authority and private foundations with a scientific mission and scientific team.

Instructions for submission:

- all applications must be submitted in English using the forms attached in Annex A and B to the present call
- proposal must be submitted no later than 31 March 2025 15 May 2025 at jtrc@isa.org.jm
- email subject should clearly indicate either "Topic 1" or "Topic 2"
- only complete proposals presented through the formats provided will be considered.

4. Selection process

The research proposals received by the Secretariat of the Authority will be reviewed for eligibility and admissibility in cooperation with the JTRC Secretariat. Eligible research proposals will then be jointly evaluated according to the following criteria: track record of publications in the field, scientific novelty, proposed methodology, knowledge outputs ambitioned and involvement of early-career scientists and gender balance. Previous collaboration among consortium partners will be considered an added value. A ranked list of proposals, based on these criteria will be provided to the ISA-China JTRC Steering Committee that approves the projects.

5. Fund allocation, duration and timeline

The maximum budget for each proposal is approximately RMB390,000. The actual amount in US dollars shall be subject to the exchange rate at the time of conversion. This amount will also include cross-border remittance fees, taxes and other related fees.

The funds for research programmes may be allocated for procuring experimental materials, acquiring scientific literature, publishing and printing, attending conferences, expert consultations and labour expenses. Additionally, the funds can cover travel expenses, accommodation, communications and living allowances necessary for international exchanges.

All funding for the research programmes is provided by the China Ocean Development Foundation. The research programmes are expected to span a maximum of 20 months. ISA-China JTRC will initiate the programmes and transfer 40 per cent of the research fund of each programme one month after the start of the project. By the end of June 2026, ISA-China JTRC will track the progress of joint research projects and transfer the remaining 60 per cent of the research fund. By the end of December 2026, at the latest, the research consortium is required to submit a project completion report. Following this, the JTRC will conduct the final project completion assessment to conclude the initiative.

6. Grant agreement and monitoring

The affiliated institutions of the ISA-China JTRC shall sign an agreement with the research consortium as per the decision of the Steering Committee and allocate research funds to the lead institution of the research consortium.

For further information, please visit the ISA-China JTRC website or contact jtrc@isa.org.jm.