Agreement for the European Consortium for Ocean Research Drilling (ECORD)

And its participation in the International Ocean Drilling Programme (IODP³)

Preambule

Section 1: The legacy of the four scientific ocean drilling programmes since 1968 to September 2024.

Scientific drill ships allow scientists to access some of Earth's most challenging environments, collecting data and samples of sediment, rock, fluids and living organisms from below the seafloor. Drilling expeditions during the past ocean drilling programmes - the Deep Sea Drilling Project (DSDP) 1968-1983, the Ocean Drilling Program (ODP) 1983-2003, the Integrated Ocean Drilling Program (IODP-1) 2003-2013, and the International Ocean Discovery Program (IODP-2) 2013-2024 have transformed the understanding of our planet by addressing some of the most fundamental questions about Earth's evolution closing knowledge gaps and generating new questions and challenges. The management of the scientific ocean drilling programmes and the related infrastructures has evolved through time. The first programme (DSDP) was initially US-led, involving a single operator and drillship, the Glomar Challenger before including an international partnership in its latest years. A fully international programme with a single operator and the riserless drilling vessel JOIDES Resolution was established with ODP in 1983. The next phase of scientific ocean drilling was developed during IODP-1 and IODP-2 with the use of multiple drilling facilities provided and managed by various platform providers and Implementing Organisations (IO) by coordination with the IODP Management International Inc. (IODP-MI):

The US National Science Foundation (NSF) has provided the multipurpose drilling vessel *JOIDES Resolution* operated by the JOIDES Resolution Science Operator.

The Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) has provided the riser drilling vessel *Chikyu* operated by the Japanese Agency for Marine-Earth Science and Technology (JAMSTEC).

The European Consortium for Ocean Research Drilling (ECORD) has provided the Mission Specific Platforms (MSP) chartered on a specific project basis for drilling in technically challenging conditions operated by the ECORD Science Operator (ESO). During IODP-2, each platform provider member established its own Facility Board to make or inform decisions on the effective use of the drilling platforms in fulfilling the objectives of the IODP Science Plan.

Since 2003, core repositories have been established by the three platform providers in College Station, Texas, USA (Gulf Coast repository - GCR), Bremen, Germany (Bremen Core Repository - BCR) and Kochi, Japan (Kochi Core Center - KCC).

Section 2: ECORD as part of international ocean drilling programmes

The European Consortium for Ocean Research Drilling (ECORD) was created in 2003 by 12 countries to join and coordinate European participation as Associate Member of the Integrated Ocean Drilling Program (IODP-1). A Memorandum of Understanding (MoU) was established with its members. ECORD became a Platform Provider at the start of the International Ocean Discovery Program (IODP-2). The ECORD architecture has been therefore reshaped in 2012 to face the new challenges offered by this programme. A MoU was established with its members in 2013 to define a new functioning for ECORD. Following a 5-year review of the effectiveness of ECORD membership in 2017, the ECORD members decided to review the initial ECORD MoU to update some aspects of ECORD structure and functioning based on the relevant recommendations and the practices during the IODP first phase (2013-2018). A second MoU was developed in 2019 and an addendum has extended it through 2024 following the decision of the IODP partners to end the International Ocean Discovery Program in September 2024 (MICIU joined ECORD via a separated agreement in 2022 and renewed in 2023).

ECORD has now 15 members from 14 European countries and Canada.

ECORD has played a major role in these two successive programmes, in which the scientific and operational accomplishments of ECORD have been prolific and of high quality. They have been recognised by its partners as a crucial contribution to the largest marine geosciences programme in the world.

Since 2003, ECORD has conceived, initiated, and implemented the concept of Mission Specific Platforms (MSPs) as its own operational contribution to the IODP programmes. MSPs consist of drilling and/or coring facilities chartered on a project basis, as determined by scientific priorities and operational efficiency.

ECORD has already implemented four (4) MSP expeditions in IODP-1 and six (6) expeditions in IODP-2.

Section 3: The 2050 Science Framework

Each of the scientific ocean drilling programmes has been scientifically inspired by science steering documents conceived by the international scientific community. The most recent one is entitled 'Exploring Earth by Scientific Drilling - 2050 Science Framework 'and was published in 2020. It was built on the legacy of previous programmes, including the following overarching Enduring Principles:

- Open access to samples and data.
- Standard measurements.
- Bottom-up proposal submissions and peer review.
- Transparent regional planning.
- Promoting safety and success through site characterisation.

- Regular framework assessments.
- Collaborative and inclusive international programmes.
- Enhancing diversity.
- Encourage early career students/scientists.

The Strategic Objectives set by the 2050 Science Framework are:

- 1. Habitability and Life on Earth.
- 2. The Oceanic Life Cycle of Tectonic Plates.
- 3. Earth's Climate System.
- 4. Feedback in the Earth System.
- 5. Tipping Points in Earth's History.
- 6. Global Cycles of Energy and Matter.
- 7. Natural Hazards Impacting Society.

The implementation of the 2050 Science Framework is envisioned through long-term, multidisciplinary research efforts that require multi-expeditions over ten- (10) to twenty (20) year time intervals each combining research goals from multiple strategic objectives, the Flagship Initiatives.

Section 4: The International Ocean Drilling Programme - IODP³

IODP-2 was intended to end at the end of September 2024. ECORD and JAMSTEC intend to continue providing scientific ocean drilling opportunities post-IODP-2 (after Sep. 2024) to the international scientific community, based on their well-established infrastructures, competitiveness in the international research landscape and maximum scientific return on investment.

Through a two-year long process of exchange of views and ambitions, ECORD and JAMSTEC agreed to build a joint scientific ocean drilling programme: the International Ocean Drilling Programme - IODP³.

IODP³ will consist of an international scientific collaboration addressing important questions in Earth, Ocean, Environmental and Life sciences based on the study of rock and/or sediment cores, borehole imaging, in-situ observatory data, and related geophysical imaging obtained from the subseafloor.

- IODP³ investigations are based on research proposals that address the objectives of the 2050 Science Framework: Exploring Earth by Scientific Ocean Drilling, or other outstanding new research ideas.
- IODP³ will implement MSP offshore expeditions and Scientific Projects using Ocean Drilling Archives (SPARCs)
- o IODP³ offshore expeditions will be implemented by the Operators ESO and JAMSTEC-MarE3, following the MSP concept.

o IODP³ will develop an expanded MSPconcept by diversifying drilling and coring technologies and applying them to all drilling environments, as determined by scientific priorities, operational efficiency, and better value for money. D/V Chikyu and R/V Kaimei are identified as MSP facilities that are crucial facilities for the successful implementation of the 2050 Science Framework. IODP³ offshore expeditions are intended to have no significant environmental impact, and they are carried out in conformance with the highest accepted levels of environmental sensitivity as further explained in the Annex IODP3 Environmental Principles.

The following has been agreed:

Article 1: Purpose

This ECORD Agreement (hereinafter referred as the "Agreement") is established to define the organisation and the operation of ECORD and its contribution to the International Ocean Drilling Programme IODP³ during the 2025-2029 period. The purpose of the Agreement is therefore to set up the governance, membership, organization, management and funding of ECORD, in the frame of IODP³.

Article 2: ECORD Membership

- $_{\circ}$ The organisations signing this Agreement are members of ECORD ("Signatory Parties").
- o Other organisations from European or non-European countries may join ECORD upon request addressed to the Director of EMA and the Chair of the ECORD Council. Once approved by the ECORD Council, their ECORD membership will become effective upon signature of the membership form (see model in Annex 2) with the organisation mandated to represent EMA as defined in Article 8.2 (the "New Parties").
- The Signatory Parties and the New Parties are named hereafter the "ECORD Members".
- ECORD Members must contribute with a voluntary annual financial contribution according to their scientific interests and funding commitments. Each member can decide its annual financial contribution, as long as it meets or exceeds the minimum amount approved by the ECORD Council, following provisions of Article 8.1. This contribution must be a cash contribution. In-Kind Contribution (IKC) can be accepted in addition to the cash contribution. ECORD Council approves each year the annual membership contributions in accordance with provisions of Article 8.1.
- ECORD Members may increase their cash contribution on a project basis and/or provide an IKC to implement an MSP expedition.

The ECORD Council, after consultation with the ECORD Science Operator (ESO) and ECORD Financial Committee (EFC), shall decide on the suitability of the IKC offer and the level of financial contribution represented by the offer.

Article 3: Entry into force, Duration, Withdrawal, Termination and Amendments

- The Agreement is effective from 1st January 2025 to 31st December 2029, encompassing the first phase of IODP³. The Agreement will enter into force once five Parties, including the three major financial contributing Parties, as described in Annex 1, have signed it. The Agreement will apply only to the ECORD Members.
- In case IODP³ agreement is not signed or in case of termination of IODP³, the ECORD Council may decide on the course of action, including the amendment or termination of this Agreement under conditions for amendment and termination as set out in this article.
- At least two years before the term of the Agreement, the ECORD Council may decide to conduct a review to decide on the continuation of this Agreement and its terms. Each ECORD Member will be free to decide if continuing its participation in ECORD or not after the termination of the Agreement.
- An ECORD Member may withdraw from this Agreement giving written notice to be sent to the Director of EMA and the Chair of the ECORD Council at least one year in advance. That ECORD Member will have to accomplish all its obligations until the withdrawal is effective, including the payment of the annual financial contribution to ECORD. No refund of the membership contribution will be allowed to withdrawing members.
- This Agreement can be terminated after decision by the ECORD Council. Such termination shall be subject to a written amendment signed by all ECORD Members Should this Agreement be terminated before December 31st of the running year, the ECORD Members shall be reimbursed based on one-twelfth of their respective contribution for each month of curtailment, after due commitments made by ECORD have been settled.
- Any ECORD Member may propose amendments to the Agreement by giving written notice to the ECORD Council Chair and providing a copy to the EMA Director. The proposed amendment needs to be seconded by another ECORD Member from a different country. The EMA will inform all ECORD Members of any amendment so notified at least three months before it is discussed during an ECORD Council meeting.

 Any amendment must be approved by the ECORD Council and shall be subject to a written addendum signed by all ECORD Members.

Article 4: Responsibilities and rights of ECORD Members

- According to the rules of ordinary law, each ECORD Member is liable for direct, ascertained and actual damage and loss caused to other ECORD Member and third parties during the performance of the Agreement.
- Considering that ECORD will be a Core IODP³ member after the signature of the IODP³ Agreement by EMA on behalf of ECORD Members, ECORD members and the scientific community that they represent shall have the right to:
 - Actively participate in ECORD and IODP³.
 - Apply to represent ECORD on all IODP³ planning and advisory panels.
 - Have access to data, samples, scientific and technical results obtained by IODP³ expeditions following IODP³ expedition moratorium principles.
 - Submit proposals to the advisory structure for drilling or engineering developments in support of IODP³ science.
 - Access the ECORD and IODP³ educational activities regardless of their level of financial contribution.
- Participation of ECORD scientists in IODP³ expeditions shall be calculated in direct proportion to the financial contributions of ECORD members. ESSAC, in consultation with EMA, shall annually review the distribution and make recommendations in view of the above target ratio and of specific drilling interests. Any extra contribution (in cash or in-kind) from an ECORD member to an MSP expedition shall provide additional rights to the relevant ECORD Member. The ECORD Council will define the additional rights, after consultation with ESO.
- Participation of ECORD scientists on IODP³ advisory panels is calculated in direct proportion to the financial contributions (cash and in-kind) of ECORD Members. ECORD representatives will follow the IODP³ panel terms of reference.
- Benefits shall be allocated to give the best return for ECORD as such individual ECORD member benefits may not be directly proportional to contributions for an individual year. Increased participation on an expedition may be acceptable if this is balanced by reduced participation in other expeditions.

Article 5: ECORD budget

- The ECORD budget, as approved by the ECORD Council, shall be allocated as a priority for funding the operation and the activities of the ECORD entities EMA, ESSAC, ESO, including the Bremen Core Repository (BCR), and the ECORD Petrophysics Consortium (EPC). As specified in Article 8.2, EMA will manage all ECORD money flows (revenue and expenditure), including annual financial contributions from ECORD Members, the funding of ECORD entities and the funding of IODP³ expeditions and entities.
- As the organisation mandated to act as the EMA for the duration of this ECORD Agreement, the CNRS shall pool and manage ECORD money flows as described in Article 8.2.
- For all ECORD money flows, fiscal years will be aligned to calendar years.
- Additional funding sources such as in-kind contributions (IKC), project-based cash contributions, industrial partnerships, and European Commission Research Infrastructure resources, shall be considered in the ECORD overall programme finance plan.
- The annual financial contribution of ECORD Members shall be paid in one instalment and by bank transfer, upon receipt of a call for funds sent by the CNRS, and paid on the following bank account between January 1st and June 30th of the current year:

Account holder: Agent comptable du CNRS - Délégation Paris Normandie

Bank domiciliation: BNP Paribas

Account n° 00018503386

Swift-Code: 30004

Rib Key: 50

IBAN: FR76 3000 4 0 02 7 4 00 0185 0 338 650

Bank account and its currency can be changed by CNRS with the approval of the ECORD Council.

Article 6: Mission-Specific Platform (MSP) Expeditions

- ECORD funds and implements MSP expeditions as an IODP³ Core Member, following IODP³ regulations.
- MSPs might include specifically outfitted polar vessels, jack-up rigs, geotechnical vessels, seafloor drilling systems, long-piston coring, anchored barges, and others, as determined by scientific priorities and operational efficiency.

- ECORD will endeavour to ensure that an appropriate budget will be committed to Mission-Specific Platform operations for the period 2025-2029 (calendar years). In addition to its own funding, ECORD shall encourage and help the proponents to seek additional funding sources on a project basis, with the aim to offer more scientific, technological, or outreach opportunities.
- Possible additional funding may come, inter alia, from the European Commission, specific funding at the national level, and/or any other funding source. These additional fundings shall be approved by the ECORD Council.
- ECORD shall encourage IKCs for MSP expeditions that can be proposed by IODP³ members. IKCs might include drilling platforms, support vessels, essential scientific service that ESO would normally pay for, hazard site survey (if required), onshore facility near the drill site (if required), ice management, remote logistics and assistance.
- Offers of IKCs shall be evaluated by ESO on a case-by case basis. Propositions and options of IKCs and their proposed cash-value based on actual costs shall be presented to the ECORD Council for discussion, then to the MSP-FB and finally to the IODP³ Executive Board (ExB) for final approval.
- IKCs shall be rewarded by extra Science Party positions on the respective MSP expedition, or any other IODP³ expedition if appropriate. For ECORD members, IKCs extra Science Party positions may be used to solve and/or mitigate unbalanced situations in the quota system.

Article 7: ECORD entities

The ECORD entities will include a Managing Agency (EMA), an Implementing Organisation (ESO), a governing body (ECORD Council), a scientific committee (ESSAC).

These entities are detailed below.

- ECORD Council (see Article 8.1) will be the ECORD decision-making body by deciding on the ECORD strategy, activity plan and budget and its allocation providing oversight for all ECORD activities and co-ordinating a common ECORD approach to IODP³policy.
- EMA The ECORD Managing Agency (EMA) (see Article 8.2) will oversee the ECORD budget, contracts with partners, representation of scientific strategy, and serve as the link between IODP3 entities and ECORD members.
- EFC ECORD Financial Committee (see Article 8.3). The EFC shall be established by the ECORD Council to provide advice and guidance to the Council on the ECORD financial issues and budget follow up.

- ESSAC The ECORD Science Support & Advisory Committee (see Article 8.4) shall be the ECORD Science Committee and be responsible for the science planning and co-ordination. ESSAC will aim at maximising the scientific and technological contribution of ECORD to IODP³, as well as promoting appropriate representation of the ECORD scientific community in the IODP³ advisory committees. The ESSAC Office will be contracted by the host organisation of EMA.
- ESO The ECORD Science Operator (see Article 8.5) shall be the ECORD MSP Implementing Organisation for IODP³. ESO shall be in charge of contracting MSPs and related scientific and technological support and operate in the best interest of IODP³ and all its member organisations, without preference. ESO shall also include communication tasks.
- BCR The Bremen Core Repository (see Article 8.6) shall be the European core repository for IODP³. The BCR provides service to the international community through state-of-the-art curation and sampling techniques, database archiving (mobile Drilling Information System (mDIS), and participates in a wide range of education and outreach activities. The BCR is also responsible for organising and hosting the Onshore operations and providing core and sample curation services and appropriate analytical capabilities including mobile laboratories for MSP expeditions (see Article 6).
- In parallel, ECORD representatives will be members of IODP³ entities: the IODP³ Executive Board (ExB), the MSP Facility Board (MSP-FB), the Science Evaluation Panel (SEP), the Safety and Environment Advisory (SEA) Group, two task forces (the Vision Task Force VTF and the Communication Task Force CTF) and the Steering Committee of the Magellan³ Workshop Series Programme (MG³-SSC) as described in the IODP³ Agreement.

Article 8: ECORD Governance and organization

Article 8.1: ECORD Council

The main tasks of the ECORD Council will be to:

- Decide on effective planning, management, and operation of ECORD.
- Decide on ECORD strategy, budget, and activity plan as an integrated part of IODP³.
- Allocate the ECORD budget to ECORD entities and annually approve the ECORD budget (forecast for year n+1 and execution for year n-1) in consideration of the financial advice and guidance provided by EFC.
- Approve the admission of new ECORD Members.

- Approve the amount of the annual financial contributions of ECORD Members, as well as the minimum amount of the ECORD Members annual financial contributions as described in Article 2.
- Approve the nominations of ECORD Members serving on IODP³ panels.
- Approve the nomination of the Chair of ESSAC (see Article 8.4.3).
- Decide on the organisations that have to manage EMA, ESSAC and ESO.
- Provide guidance to EMA and ESO on their perimeter of action.
- Take measures to secure sufficient funding for ECORD entities.
- Decide to conduct independent reviews of ECORD activities and management. Oversee and approve a shared approach to IODP³ policy and have a common position for decisions within the IODP³ ExB.
- Ensure appropriate ECORD contribution to IODP³ activities and participation in relevant IODP³ entities.

Article 8.1.1: Composition

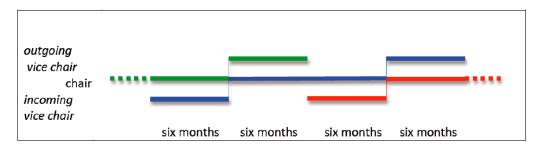
Each ECORD Member shall have one representative and, when appropriate, an alternate representative at the ECORD Council.

The alternate representative has the right to attend meetings of the ECORD Council but will have a voting right only in the absence of the representative.

All ECORD Council representatives will be members of the IODP³ ExB.

Article 8.1.2: Chair and Vice-Chair

The Chair will be appointed among representatives of ECORD Members at the ECORD Council for a period of one (1) year. After the end of his/her term, the Chair shall become the outgoing Vice-Chair for six (6) months. An incoming Vice-Chair shall be then appointed to become the Chair after six months. At any time, there will be a Chair and one Vice-Chair, as shown below.



The ECORD Council chairmanship will be based on a fixed rotation scheme (*see table below*) among the three major ECORD funders (DFG, CNRS and UKRI) and the other ECORD Members (referred to as 'Other ECORD Member' in the table below). This rotation scheme has been applied during the period 2019-2024 and shall be continued accordingly.

Years	Chair	Outgoing vice- Chair	Incoming vice- Chair
Year 1 (1st half)	UKRI	'Other ECORD Member'	
Year 1 (2 nd half)	UKRI		DFG
Year 2 (1st half)	DFG	UKRI	
Year 2 (2 nd half)	DFG		CNRS
Year 3 (1st half)	CNRS	DFG	
Year 3 (2 nd half)	CNRS		'Other ECORD Member'
Year 4 (1st half)	'Other ECORD Member'	CNRS	
Year 4 (2 nd half)	'Other ECORD Member'		UKRI
Year 5 (1st half)	UKRI	'Other ECORD Member'	
Year 5 (2 nd half)	UKRI		DFG

The Chair of the ECORD Council will call meetings, set agendas, chair meetings, in consultation with the EMA director.

The Chair of the ECORD Council will be responsible for conveying the ECORD position at the meetings of the IODP³ ExB, of the IODP³MSP-FB and of the Scientific Drilling Forum along with the Director of the EMA.

Article 8.1.3: Standing invitees

The meetings of the ECORD Council shall include the Director of the EMA, the Science Manager of the ESO, the ESSAC and EFC Chairs and the ECORD Co-Chair of the MSP-FB as standing invitees. They are invited in an *ex-officio* capacity and have no voting rights.

Article 8.1.4: Observers

Observers at the meetings of the ECORD Council may include on a case-by-case basis and if necessary:

- Members of the IODP³ Task Forces.
- Representatives from IODP³ entities (IODP³ Members, Scientific Drilling Forum, MSP-FB, IODP³ implementing organisations, Science Evaluation Panel, IODP³ Science Office).
- Representatives of organisations expressing an interest to join ECORD on a case-by-case basis.
- Representatives of European funding or research organisations.
- Representatives of IODP³ members.
- Representatives from science programmes collaborating with ECORD or expressing an interest to collaborate with ECORD.
- Observers who may contribute to the planning and implementation of ECORD and IODP³.

Observers shall not have voting rights at the ECORD Council. Non-disclosure agreement may be proposed to observers on a case-by-case basis and when necessary, depending on the subject on the agenda.

Article 8.1.5: ECORD Council Core Group

The ECORD Council Core Group is composed of the Chair, the Vice-Chair of the ECORD Council and three ECORD Council representatives appointed by the ECORD Council. The three major ECORD funders will belong automatically to the ECORD Core Group. The members of the ECORD Council Core Group will be part of the MSP-FB and the IODP³ Vision Task Force.

Article 8.1.6: Meetings frequency and format

The ECORD Council will normally meet twice a year, with a fall meeting organised in conjunction with ESSAC. Additional meetings may be held, when necessary, on the initiative either of the Chair of the ECORD Council and the Director of the EMA or of two members of the ECORD Council and the Director of the EMA.

The meetings of the ECORD Council shall be organised by the Director of EMA, assisted by the other EMA staff members. EMA shall prepare and send the relevant meeting documents.

The meetings of the ECORD Council will include sessions that are open to all meeting attendees (ECORD Council representatives, Standing Invitees, Observers and Guests). Closed sessions, whose attendance shall be restricted to ECORD Council members and, if appropriate, standing invitees, may be organised at the discretion of the Chair of the ECORD Council and the Director of the EMA or at least two members of the ECORD Council. Meetings can be held and/or attended physically or remotely by any means of telecommunications that are accessible for all Council members.

Article 8.1.7: Decisions

- Each ECORD Member shall have one vote on the ECORD Council.
- The decisions of the ECORD Council shall be taken according to the rules listed below:
 - The ECORD Council shall usually reach decision by consensus, i.e. when a motion is not likely to be opposed; reasonable effort will be made to attain a consensus.
 - At least a simple majority of the ECORD Members representatives shall be present to deliberate including the Council Core Group (quorum).
 - If a motion fails to be approved by consensus, the ECORD Council Chair can decide either to defer further action, or to ask for a vote at the majority of 75%, the number of votes per ECORD Member shall be weighted by its annual financial contribution from the start of the Agreement to the voting year.
 - However, an unanimous vote is requested for decisions concerning the amount of the annual financial contributions, amendments, termination of the Agreement and exclusion of an ECORD Member consequent to a breach procedure (as described in article 10).
 - Quorum requirements for weighted voting shall include (a) that representatives of the three ECORD major contributors must participate in the voting, (b) that three-quarters of the votes of ECORD Members representatives shall be present.
 - Voting shall be normally done by 'show of hands'.

Article 8.2: ECORD Managing Agency (EMA)

Article 8.2.1: Mandate

- EMA shall act as the managing agency of ECORD duly mandated by ECORD Members.
- EMA shall manage the participation of ECORD Members in IODP³, represent the link between ECORD Members and the other IODP³ members, provide the ECORD entities for funds, and oversee the other ECORD entities.
- EMA shall ensure that the ECORD partners under contract with EMA on behalf of ECORD Members have the appropriate liability insurances in place.
- EMA interact with the IODP³ governing bodies, operators and IODP³ entities, as appropriate: the IODP³ Executive Board (ExB), the MSP-Facility Board (MSP-FB) the Science Evaluation Panel (SEP), the Safety and Environment Advisory (SEA) Group, the Vision Task Force (VTF) and the Communication Task Force (CTF).
- o EMA shall follow and implement the guidance from the ECORD Council.
- EMA shall prepare, negotiate, and manage the contracts with the ECORD Members, ECORD entities and partners funded from the ECORD budget upon prior approval of the ECORD Council.
- EMA will sign the ECORD membership form (see model in Annex 2) for the acceptance of a new member on behalf of ECORD Members, upon prior approval of ECORD Council.
- EMA will prepare, negotiate, and manage and sign the IODP³ agreement on behalf of ECORD Members upon prior approval of the ECORD Council.
- EMA shall collect the annual financial contribution of ECORD Members and manage the ECORD funds as agreed by the ECORD Council, including contributions related to the ECORD participation in IODP³, operation of ECORD entities and partners.
- EMA shall provide the ECORD Council with an ECORD Programme Plan for approval and a budget plan for each upcoming fiscal year, including the financial support of EMA, ESO, ESSAC, EFC and the BCR.
- In co-ordination with ESO, EMA will implement a funding model in which proponents of expeditions will be encouraged to seek co-funding from other sources and in-kind contributions.
- EMA shall report regularly, at least twice a year, to the ECORD Council on its actions and other issues as required.
- EMA will oversee ECORD Communication

- EMA will organise the meetings of the ECORD Council and the joint meetings of the ECORD Council and ESSAC.
- Upon mandate of the ECORD Council EMA shall seek to extend ECORD to non ECORD Member organisations.

Article 8.2.2: Management

- EMA shall be managed by the Centre National de la Recherche Scientifique (CNRS) for the calendar years 2025-2029.
- As responsible of the EMA management, the CNRS shall manage the ECORD funds in compliance with the French public accounting rules.
- o The CNRS shall assist the EMA staff regarding contractual and budgetary issues.
- The EMA shall be legally represented by the CNRS within the framework of ECORD contracts.

Article 8.2.3: Staff

- The EMA staff is composed of a Director, assisted by an Assistant Director if necessary, a Communication Officer and an administrator. The staffing of EMA may change or evolve with time. Any change must be approved by the ECORD Council and budgeted accordingly.
- The Director of EMA, in co-ordination with the ECORD Council Chair, shall be the official contact point for ECORD in all relationships with the Scientific Drilling Forum and the IODP³ entities: the IODP³ Executive Board (ExB), the IODP³ Science Office (IODP³-SO), the MSP-Facility Board (MSP-FB) and the Science Evaluation Panel (SEP).
- The Director of EMA, in co-ordination with the ECORD Council Chair, shall represent ECORD strategy, scientific position and vision in all relevant entities, international meetings, events in connection with ECORD activities, and shall report regularly to the ECORD Council on his/her actions and other issues as required.
- The Director of EMA will prepare and negotiate the contracts with the ECORD entities, with the assistance of the relevant directions and services of the CNRS.
- The Director will oversee the ECORD budget and the ECORD meeting planning and reports.
- The Communication Officer of EMA will oversee outreach activities (website, conferences, ECORD publications, etc.) in accordance with the Director.
- CNRS will oversee the EMA budget and administration.

Article 8.3: ECORD financial Committee (EFC)

EFC is established by the ECORD Council.

- The EFC is composed of 1 representative of each of the three (3) major contributing members and two (2) additional members of ECORD.
- o It will meet at least once a year, physically or remotely by any means of telecommunication accessible to all of its members.
- It will provide advice and guidance to the ECORD Council on all financial issues, budget forecast and execution control.
- ECORD Council can decide for a different composition of the EFC, if needed.

Article 8.4: ECORD Science Support and Advisory Committee (ESSAC)

Article 8.4.1: Mandate

ESSAC will be responsible for the scientific planning and coordination of ECORD contribution to and participation in IODP³. The main purpose of ESSAC will be to maximize ECORD scientific and technological contribution to IODP³ and the scientific return for the community.

ESSAC will be managed by an office that will rotate, on a three-year basis, with the Chair of ESSAC (subject to the renewal of the Agreement for the second mandate). The budget shall be sufficient to provide salary for a Science Coordinator, the full cost of maintaining the ESSAC Office and resources to compensate the Chair. The main tasks of ESSAC shall be to:

- Advise ECORD funding organisations and ECORD Council members on IODP³ issues.
- Coordinate applications to drilling expeditions and nominate offshore and onshore Science Party members.
- Coordinate applications to Scientific Projects using Ocean Drilling Archives" (SPARCs) and nominate SPARC Science Party member.
- Review quotas of shipboard scientists between participating countries.
- Report on ESSAC activities to the ECORD Council.
- Liaise with EMA and the ECORD Science Operator (ESO).
- Interact with the IODP³ operators and IODP³ entities, as appropriate: the IODP³ Executive Board (ExB), the MSP-Facility Board (MSP-FB) the Science Evaluation Panel (SEP), the Safety and Environment Advisory (SEA) Group, the Vision Task Force (VTF) and the Communication Task Force (CTF).
- Coordinate ECORD Training, Education and Outreach Programmes, through the evaluation of applications and the funding of ECORD Grants, ECORD Schools and Courses, ECORD Scholarships, Teachers/Educators at Sea, and the Distinguished Lecturer Programme.

- Evaluate applications and nominate ECORD scientists to participate in IODP³ panels: The Science Evaluation Panel (SEP), the Science Board of the MSP Facility Board (MSP-FB), the Safety and Environment Advisory (SEA) Group and the Magellan³ Science Steering Committee (MG³-SSC).
- Respond to the ECORD Council requests for evaluation of its activities and initiation of evaluations of the ECORD scientific input to IODP³.
- Assist and advise EMA on extending the scientific community of the consortium to non-member organisations.
- Initiate and monitor workshops on specific scientific themes and syntheses of European IODP³ activities.
- Assist and advise EMA on the formulation of proposals for funding Europeanrelated infrastructure.
- Provide stimulation and guidance for the writing of drilling proposals in accordance with the 2050 Science Framework and encourage IODP³-related activities.
- Encourage (a) innovative science and technology development, and (b) the formulation of long-term integrated IODP³ studies.
- Assist and advise EMA and ESO on ECORD public outreach, in cooperation with the IODP³ Communication Task Force (CTF).

The IODP³ assigned quota of expedition and SPARCs participants granted to ECORD shall reflect the financial contributions of each member and specific interests of each participating country. ESSAC, in consultation with EMA, shall annually review the distribution effective as of October 1st and make recommendations in view of the target ratio and specific drilling interests.

o Staffing of the IODP³ advisory panels

The scientific delegates and alternate delegates on IODP³ advisory Panels shall be designated by ESSAC after an open call and recommendations from national offices and shall be approved by the ECORD Council and the MSP Facility Board (MSP-FB). IODP³ panel membership shall reflect the financial contribution of each participating country/organisations over a rolling three- (3) year period. In the normal case, all scientific ECORD representatives on the IODP³ advisory panels shall serve for a three-(3) year period and may not be re-appointed for a second consecutive term.

Article 8.4.2: ESSAC Composition

- ESSAC is composed of one (1) delegate and an alternate delegate from each ECORD Member to be appointed by the respective ECORD Council member. Terms of office of committee members will be reviewed every three years. A three-year rotation is recommended where possible and the total term of office of ESSAC Members should not exceed six (6) years (subject to the renewal of the Agreement). No more than one-third of the members should be replaced in a given year. Terms of office will normally begin in January. If the delegate and his/her alternate cannot attend an ESSAC meeting, the ESSAC Chair shall be informed and, if possible, a substitute shall be nominated.
- ESSAC Members should actively participate in the evaluation process of applications and selection of candidates for IODP expeditions, ECORD Scholarships, ECORD Grants, Distinguished Lecture Programme – DLP and members of IODP³ advisory panels.
- ESSAC Members should ensure that the minutes of the ESSAC meetings are distributed to their alternates and their respective ECORD Council representatives.
- ESSAC Members should attend ECORD workshops and to report to ESSAC when requested.
- ESSAC Members should provide information to interested parties within the national scientific communities of each ECORD Member and to advise on national regulations and policies.

Article 8.4.3: ESSAC Chair and Vice-Chair

A Chair shall be appointed by the ECORD Council following an open call for applications and the review of applications.

The incoming Chair is nominated Vice-Chair (replacing the previous Vice-Chair) 18 months before the start of the Term of Office to facilitate the transition.

The outgoing Chair is nominated Vice-Chair to facilitate the transition and will maintain the position until the following incoming Chair will begin the 18 month-term as Vice-Chair.

The open call for the ESSAC Chair is published by ESSAC, with mandate of the ECORD Council, six (6) months before the start of the term of office of the incoming Vice-Chair.

Consecutive terms of Chairs from the same ECORD Member country should be avoided.

The ESSAC Chair acts as membership delegate in ESSAC.

The ESSAC Chair shall represent and support ESSAC in all ECORD and IODP³ activities.

The ESSAC Chair shall select an ESSAC Science Coordinator following an open call for applications.

The main tasks of the ESSAC Chair and the Science Coordinator shall be the following:

- To manage the ESSAC Office.
- To fulfil all tasks of the ESSAC Mandate.
- To oversee and coordinate educational activities and participation in defining strategies for ECORD science, funding, and technology.
- To communicate with and advise IODP³ entities, including the IODP³ Science Office (IODP³-SO) regarding nomination of expedition science party members, SPARCs members and coordination of education and outreach activities.
- To liaise with the ECORD Council, EMA and ESO.
- To liaise, in co-ordination with the EMA, with other internationally operating drilling programmes, such as ICDP or others.
- To report on ESSAC activities to the ECORD Council.
- To organise and chair the ESSAC meetings.
- To attend meetings of the ECORD Council and the MSP-FB and provide advice on ECORD science priorities and long-term scientific planning in accordance with the 2050 Science Framework.
- To represent ESSAC at other IODP³ advisory panels meetings, and other meetings, such as the Scientific Drilling Forum meetings, or arrange for an appropriate alternate.
- To inform ESSAC delegates on ECORD and IODP³ activities and decisions.
- To provide contributions to ECORD Newsletters and ECORD Annual Reports.
- To ensure that an IODP³-ECORD/ICDP session is organised annually at the EGU General Assembly meetings.

Article 8.4.4: Meetings

ESSAC shall meet twice a year, or at the request of one-fourth of the members, the ECORD Council, or the ESSAC Chair. Fall meetings shall usually be joint meetings

with the ECORD Council and spring meetings shall be dedicated to planning and discussion of ESSAC activities.

Alternate delegates can attend the ESSAC meetings, as non-voting members when in addition to delegates.

Additional non-voting representation may be invited on an ad hoc basis.

Liaisons from EMA and ESO are invited to attend the ESSAC meetings.

ESSAC can implement working groups and will define their terms of reference.

Article 8.4.5: Decisions

A simple majority of the members present shall be required before decisions can be taken. There shall not be any power of attorney for absent members.

Each delegate present has one vote and the Chair has a casting vote as national delegate.

Where possible ESSAC shall proceed by consensus. If this is impossible, there shall be a majority vote of 75%, the number of votes per ESSAC representative shall be weighted considering the annual financial contribution of the Member they represent. If no decision is reached, the issue shall be passed to the ECORD Council.

Article 8.5: ECORD Science Operator (ESO)

Article 8.5.1: Description and Organisation

The British Geological Service (BGS) shall be responsible for the overall ESO management under a contract with the EMA as designated by the ECORD Council. BGS shall carry out best practice in project management, including budgetary control and financial probity. The BGS will design, build, manage the offshore operations, and will offer coring expertise and operational oversight. Additionally, the BGS shall provide procurement services, coordinate permitting and scoping efforts, manage the science party and science outputs, and contribute to MSP expedition outreach activities. The BGS shall provide the ESO Science Manager as the main contact with both EMA and the ECORD Council. The BGS shall sub-contract EPC, MARUM, University of Bremen and other organisations on behalf of ESO as required by the program of work required to deliver MSP expeditions and as mentioned in Article 8.5.2. ESO shall work closely with science parties and contractors to seek optimal performance, using new and innovative techniques and operational procedures where applicable. BGS shall manage the budget allocated by the ECORD Council to the ESO and subsequently disburse these as appropriate both within ESO and to contractors, sub-contractors in accordance with the decisions of the ECORD Council and the approved public financial management practice.

The European Petrophysics Consortium (EPC) shall be managed by the University of Leicester, UK (School of Geography, Geology and the Environment). In addition to the University of Leicester, the EPC shall include the University of Montpellier, France (Géosciences Montpellier, CNRS) and the National Institute of Oceanography and Applied Geophysics, OGS (Geophysics Research Section), Italy. EPC will provide high-level scientific and technical support and be responsible for the acquisition and interpretation of downhole logging data, borehole seismic imaging, core physical properties, data calibration and quality control, assist science parties with petrophysical modelling and data analysis, and will manage sub-contracts and permitting associated with those activities.

The Bremen Core Repository (BCR), shall be responsible for the continuous curation, databasing, and archiving of collected cores and samples. MARUM will provide offshore and onshore laboratory facilities and experienced staff and highly proficient support for core sampling, data management, and the acquisition of the programme's standard measurements. In addition, MARUM will contribute to expedition outreach efforts. Additionally, MARUM will organise and host the onshore operations and coordinate OSP media events.

Article 8.5.2 Mandate for Mission-Specific Platform Expeditions

- ESO shall undertake activities as required to successfully implement all aspects of MSP operations for IODP³ in accordance with agreed procedures. ESO will liaise with EMA should the formulation of any new procedures be required. MSP implementation activities shall include operational and scientific planning; engineering development; platform and equipment procurement; contracting; essential training of personnel; safety surveys; data management; curation; shorebased sampling parties; publications; outreach; and other related pre-, syn- and post-expedition activities.
- ESO shall undertake the staffing of MSP scientific parties in consultation with the IODP³ Program Member Offices (PMO).
- ESO shall, where required and appropriate, align its procedures with those of IODP³, notably in data management, standard measurements, and publications.
- ESO shall, in common with other IODP³ platform providers, observe best practice in health, safety and environmental issues.
- ESO shall observe and adhere to appropriate international standards, regulations and obligations.

Article 8.5.3: Logging and Petrophysics

- ESO shall provide appropriate staff and facilities to enable and integrate all aspects of the acquisition, management, and distribution of core physical properties measurements and *in situ* downhole measurements during ship- and shore-based IODP³ MSP operations.
- ESO shall be responsible for maintaining and developing petrophysical shorebased support facilities and training as required by the scientific community and in line with IODP³ principles.
- ESO shall sub-contract logging services as required.

Article 8.5.4: Curation, Scientific Expertise and Facilities, and Data Management

- ESO shall provide curatorial services and appropriately staffed ship- and shorebased laboratory facilities as required by each MSP expedition.
- ESO shall contribute to a core repository for geographically selected IODP³ cores and provide appropriate facilities in line with IODP³ principles.
- ESO shall also contribute to data management services using the PANGAEA® (https://wiki.pangaea.de/wiki/Data-policy) Data Publisher for Earth & Environmental Science.
- ESO will follow IODP³ data management principles that are detailed in Annex of the IODP³ agreement and on relevant webpages of Marum, Bremen University (https://www.marum.de)
- ESO shall sub-contract other scientific services as required.

Article 8.5.5: Interactions with other ECORD entities

- Communication between ESO and EMA shall be frequent. ESO shall formally report to EMA on a quarterly basis and on request, as needed. As shall be defined in the contract between EMA and ESO, EMA, on behalf of the ECORD Council, is the only body authorised to direct ESO.
- ESO shall submit an annual work plan to EMA, including an estimated budget, to be approved by the ECORD Council. This work plan will be prepared in consultation with the MSP-FB, EMA and other relevant IODP³ bodies. Once agreed, the annual work plan is the definitive statement of work and can only be changed through a formally agreed written contract amendment.
- ESO shall report to the ECORD Council and communicate on a regular basis with EMA.
- ESO shall report to the MSP-FB on at least an annual basis and more frequently if requested.
- ESO shall participate in the activities of the IODP³ VTF and CTF.

- ESO shall provide an observer at all ESSAC meetings and will advise ESSAC on ESO actions and plans.
- ESO shall provide guidance to all prospective IODP³ drilling proponents who require MSPs to carry out their proposals.

Article 8.5.6: Interactions with IODP³ entities

- ESO shall implement MSP operations as prioritised by the MSP-FB and carry out all logistics as required by the IODP³ agreement and in line with IODP³ principles.
- ESO shall communicate regularly with other IODP³ operators.
- ESO shall act as an observer on relevant IODP³ panels and report to these panels or committees as requested.
- On a project-specific basis, ESO shall coordinate expert groups to support and advise any technological developments required for a particular MSP project.

Section 8.5.7: Communication

- ESO shall communicate regularly and as required with the IODP³ scientific community, including through ESSAC, EMA, and the ECORD Council sponsored events.
- ESO shall co-operate fully with ECORD and IODP³ entities to support outreach and education programmes.

Article 8.5.8: Annual Workplan

ESO shall provide facilities and staff to ensure the maintenance of capability in science operations for ECORD on a year-by-year basis, irrespective of whether an IODP³ MSP expedition is scheduled in that year. This capability will include:

- Consultation with ECORD and IODP³ panels and committees.
- Co-operation with other platform providers.
- Preparation of annual plans for ECORD.
- Communication with EMA and demonstrating accountability to ECORD Council.
- Provision of advice to current and potential proponent groups.
- Scoping of potential future expeditions.
- Planning of scheduled expeditions.
- Managing and monitoring post-expedition activities.

Article 8.6: Bremen Core Repository (BCR)

Article 8.6.1: Description and organisation

The Bremen Core Repository (BCR) is the European IODP³ core repository and one of the three previous IODP core repositories, which also include the Gulf Coast Core Repository (GCR) in College Station, Texas, and the Kochi Core Center (KCC) in Kochi, Japan.

Following convention and practice of previous ocean drilling programmes and IODP³, the Bremen Core Repository (BCR) maintains all cores obtained since the start of scientific ocean drilling from the Atlantic and Arctic Oceans, along with the Mediterranean, Baltic, and Black Seas. The BCR currently houses more than 185 km of cores from 104 expeditions. BCR has a long-term experience of by now almost 30 years of operation, almost 1.96 million of samples (representing almost 8.278 individual requests) have been taken by the visitors and BCR personnel and distributed worldwide.

The BCR provides service to the international community through state-of-the-art curation and sampling techniques, database archiving (mobile Drilling Information System, mDIS) and participates in a wide range of education and outreach activities.

Article 8.6.2: Mandate

- Manage a core repository for geographically selected IODP³ cores and provide appropriate facilities in line with IODP³ principles.
- Curate, archive, and sample the continuously expanding deep-sea core collection stored at the BCR.
- Document, preserve, and protect cores and other expedition material under appropriate conditions (refrigeration, freezing).
- Promote the responsible taking of samples from the cores for scientific purposes.
- Report to the MSP Facility Board (MSP-FB) and the ECORD Council.
- Liaise with EMA and the ECORD Science Operator (ESO).
- Liaise with the Gulf Coast Repository (GCR), College Station, Texas, USA, and the Kochi Core Center (KCC), Japan, and other core repositories, if appropriate.

Article 8.6.3: Deliverables

 Sample Requests: Respond to post-moratorium sample requests from the scientific community. Plan sampling and curation strategies for moratorium-

related requests in coordination with the other members of the Sample Allocation Committee (SAC) (Co-chief scientists, Expedition Project Manager, EPM) for each expedition.

- Packing and shipping of sample and core material as required. Handling of shipping logistics and custom procedures.
- Procurement and provision of sample and laboratory consumables, and maintenance of core sampling and laboratory equipment.
- Coordinate, standardize and document curatorial and sampling procedures for cores and samples.
- Utilize and maintain a curatorial database.
- Use of Core Collection: Promote the outreach use of the core collection by providing materials and professional advice for display at meetings or museums, as well as conducting public tours, and supporting other outreach activities.
- Host and/or participate in curatorial staff meetings as advised.

Article 9 : Confidentiality

10.1 General Principles

All information in whatever form or mode of communication, which is disclosed by an ECORD Member (the "Disclosing Party") to any other ECORD Member (the "Recipient") in connection with the activities under this Agreement and which has been explicitly marked as "confidential" at the time of disclosure, or when disclosed orally has been identified as confidential at the time of disclosure and has been confirmed and designated in writing within fifteen (15) calendar days from oral disclosure at the latest as confidential information by the Disclosing Party, is "Confidential Information".

9.2. Obligations

The Recipients hereby undertake for the duration of the Agreement and for a period of five (5) years after the termination of the Agreement:

- not to use Confidential Information otherwise than for the purpose for which it was disclosed;
- not to disclose Confidential Information to any third party without the prior written consent by the Disclosing Party;
- to ensure that internal distribution of Confidential Information by a Recipient shall take place on a strict need-to-know basis; and to return to the Disclosing Party on demand all Confidential Information which has been supplied to or

acquired by the Recipients including all copies thereof and to delete all information stored in a machine-readable form. The Recipients may keep a copy to the extent it is required to keep, archive or store such Confidential Information because of compliance with applicable laws and regulations or for the proof of on-going obligations.

9.3. Employees and Third Parties

The Recipients shall be responsible for the fulfilment of the above obligations on the part of their employees, students or third parties they involve and shall ensure that they remain so obliged, as far as legally possible, during and after the end of the Agreement and/or after the termination of the contractual relationship with the employee, student or third party.

9.4. Exceptions

Article 9.2 shall not apply for disclosure or use of Confidential Information, if and in so far as the Recipient can show that:

- the Confidential Information becomes publicly available by means other than a breach of the Recipient's confidentiality obligations;
- the Disclosing Party subsequently informs the Recipient that the Confidential Information is no longer confidential;
- the Confidential Information is communicated to the Recipient without any obligation of confidence by a third party who is to the best knowledge of the Recipient in lawful possession thereof and under no obligation of confidence to the Disclosing Party;
- the Confidential Information, at any time, was developed by the Recipient completely independently of any such disclosure by the Disclosing Party;
- the Confidential Information was already known to the Recipient prior to disclosure; or the Recipient is required to disclose the Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order.

Article 9.5. Notifications

Each ECORD Member shall promptly advise the other ECORD Member in writing of any unauthorised disclosure, misappropriation, or misuse of Confidential Information after it becomes aware of such unauthorised disclosure, misappropriation or misuse.

If any ECORD Member becomes aware that it will be required, or is likely to be required, to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure notify the Disclosing Party, and comply with the Disclosing Party's reasonable instructions to protect the confidentiality of the information.

Article 10: Breach

In case a breach by an ECORD Member under the Agreement is identified, the Director of EMA and the ECORD Council Chair shall be informed. They shall give a formal written notice to the representative of the defaulting member at the Council. In case breach is not remedied within 30 days, the issue is brought to the ECORD Council for decision following article 8.1.7. After this procedure the defaulting ECORD Member may be excluded, and the Council will statue on any mitigation actions.

Article 11: Applicable law, disputes and courts of law

The Agreement shall be construed in accordance with and governed by the laws of France. Disputes should be dealt with amicably, if an amicably solution cannot be found, the issue can be dealt with the court of the defendant.

The Agreement cannot be considered as an international treaty.

Article 12 Exceptional Circumstances

No ECORD Members shall be in breach of the Agreement if it is prevented from fulfilling its obligations under the Agreement by circumstances beyond its reasonable control. Each ECORD Member will notify to the other any such circumstance beyond its reasonable control without undue delay.

Article 13 Injury to the Personnel

Each ECORD Member is responsible for having the insurance coverage for its own staff in accordance with applicable legal requirements.

As a consequence, each ECORD Member must fulfil the required formalities and sustain all the costs, if any, involved in the insurance policies underwritten to cover its own staff against the risks.