



ECORD statement on the outcome of IODP agreement negotiations with the NSF and MEXT/JAMSTEC

Mike Webb, Chair of the ECORD Council

Gilbert Camoin, Director of the ECORD Managing Agency (EMA)

Carlota Escutia, Chair of the ECORD Science Support and Advisory Committee (ESSAC)

Robert Gatliff, Chair of the ECORD Science Operator (ESO)

This statement provides the ECORD science community with a brief summary of the main outcomes of the ECORD negotiations with NSF¹ and MEXT/JAMSTEC² and on the agreements that will apply from the start of the International Ocean Discovery Program (IODP) on the 1st October 2013.

Under the current Integrated Ocean Drilling Program, ECORD has grown from 12 to 18 partners with annual subscriptions rising to around \$21.5m in recent years. Over the 10-years of the programme, ECORD will have had total subscriptions of around \$175m and these funds have provided ECORD scientists with access to 373 scientific berths (incl. Co-Chiefs) - this is made up of 236 berths on *JOIDES Resolution*, 82 on *Chikyu*, and 55 on Mission-Specific Platforms. The terms of the current agreement requires ECORD, along with all other IODP Partners (incl. NSF and MEXT), to pay annual 'commingled funds', which have largely been used to contribute to the costs of the three platform operators (USIO, CDEX, ESO)³ and to pay the costs of the IODP's central management organisation (IODP-MI). The attached graph (provided by IODP-MI) illustrates how commingled funding, of typically around \$22m per annum, has been distributed over the lifetime of the current programme - with the USIO and ESO typical receiving annual funds of around \$3-4m in recent years and CDEX around \$10m.

Under the new IODP programme, it has been agreed by all the lead funding agencies that there will be a simplified funding model with lighter management that will provide better value for money. The architecture of the IODP will maintain an overarching international umbrella and an international scientific evaluation system, but will allocate more independence to the platform providers of the three IODP drilling platforms. As a consequence of this, there will be no commingled funds and so ECORD has therefore had negotiate with the NSF and MEXT/JAMSTEC on the agreements that will provide IODP scientists with access to berths on all three platforms.

At the start of negotiations, it was the view of ECORD Council that the case for the renewal of IODP subscriptions by its national funding agencies would be significantly enhanced if ECORD retained the financial flexibility from the start of the new programme to deliver an average of one Mission-Specific

¹ US National Science Foundation

² Japanese Ministry of Education, Culture, Sports, Science & Technology (MEXT), Japanese Agency for Marine-Earth Science & Technology (JAMSTEC)

³ USIO (US Implementing Organization) operates *JOIDES Resolution*, CDEX (Centre for Deep Earth Exploration) operates *Chikyu*, and ESO (ECORD Science Operator) operates Mission-Specific Platforms.

Platform expedition a year. Over the course of the negotiations, however, it became apparent that combination of significant co-funding along with berth exchanges was required by ECORD in order to reach agreement with both the NSF and MEXT/JAMSTEC. ECORD has therefore adjusted its business plan for Mission Specific Platform operations by considering the numbers of low, medium, and high-cost expeditions (e.g. in the Arctic) and building in new assumptions about securing external funding (from business/industry, the EU and new ECORD partners, e.g. Russia) and in-kind contributions (i.e. ship-time on research vessels/ice breakers provided by existing ECORD partners).

It is now clear that NSF funding for *JOIDES Resolution* operations will need to significantly reduce in the new programme because of increasing financial pressure on the NSF Geosciences budget that pays for its three large infrastructures (i.e. *JOIDES Resolution*, the UNOLS research fleet, and the Ocean Observatories Initiative). Given this, substantial co-funding for *JOIDES Resolution* operations is required in the new IODP programme if the platform is to remain available.

ECORD Council and the ECORD Managing Agency (EMA), recognising that the renewal of ECORD subscriptions to IODP was critically dependent on having a strong programme of both *JOIDES Resolution* and Mission-Specific Platform expeditions, started negotiations with NSF on annual funding, which started with an initial request from the NSF for \$6m per year. Following numerous meetings, ECORD and NSF have now agreed that on an annual basis the NSF receives \$7m from ECORD along with 13 berths⁴ on each Mission-Specific Platform expedition, in exchange for which ECORD receives 8 berths on all *JOIDES Resolution* expeditions⁵. In reaching this agreement, ECORD Council and EMA recognise the importance of working with NSF and its partners to build a sustainable business plan for *JOIDES Resolution* and so, in addition to annual funding, ECORD will also consider providing additional funds on a project basis when funding allows - the first example of which may be the Bengal Fan expedition in 2014.

Based on current projections of the substantial co-funding that NSF will receive from its partners (currently \$14.5m per annum from ECORD, Brazil, India, China, South Korea, ANZIC), additional co-funding on a project basis (e.g. via Complementary Project Proposals and ECORD), and funding from non-IODP work, it is now anticipated that *JOIDES Resolution* will be available for an average of 5 expeditions a year. This being the case, this agreement will provide ECORD scientists with access to up to 400 *JOIDES Resolution* berths over the lifetime of the new 10-year programme - which is a substantial increase on the berths that were available in the current programme.

The negotiations with MEXT/JAMSTEC have also now been completed and it has been agreed in principle that there will be a flexible agreement that will provide access to both *Chikyu* and Mission-Specific Platforms for Japanese and ECORD scientists. The specific terms of this agreement will be decided annually by ECORD and MEXT/JAMSTEC. It is anticipated that ECORD will provide a minimum of \$1m annually to MEXT/JAMSTEC, plus 4 berths on each Mission-Specific Platform expedition for Japanese scientists, in exchange for berths on *Chikyu*. In 2014, it is likely that this agreement would provide for 6 berths for ECORD scientists if ECORD pays \$1m⁶, along with an additional berth for any ECORD Co-Chiefs. In the future, the annual ECORD contribution will be adapted to the level of involvement of ECORD scientists in riser drilling proposals and *Chikyu* expeditions. In addition, ECORD will consider contributing additional funding on a project basis. In reaching this agreement with MEXT/JAMSTEC, ECORD Council and EMA have had to balance the critical need to deliver a strong programme of *JOIDES Resolution* and Mission-Specific Platform expeditions with the recognised need for MEXT/JAMSTEC to secure co-funding to support *Chikyu* operations. Because of the flexible nature of the agreement with MEXT/JAMSTEC, it isn't as easy to forecast what the likely number

⁴ This amounts to an additional in-kind contribution of ca. \$4m.

⁵ 5 of the 13 berths will go to NSF Associate Partners who will provide ca. \$7.5m per year of co-funding for *JOIDES Resolution* at the start of the new IODP.

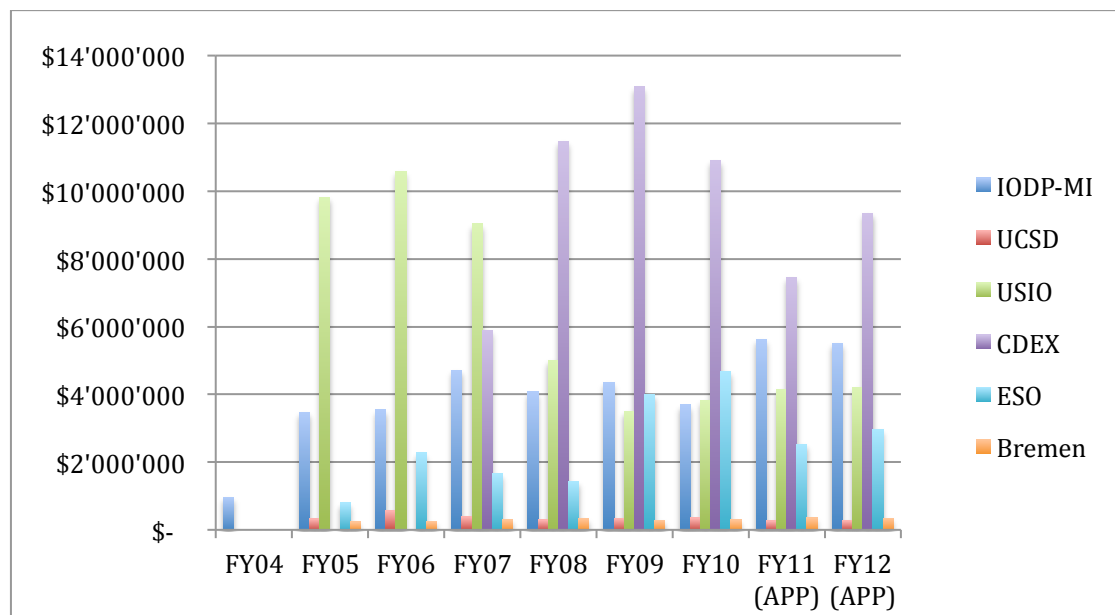
⁶ The terms of the agreement would provide ECORD with an extra 2 berths for every additional \$1m that ECORD pays.

of ECORD berths will be on *Chikyu* in future years of the new programme, but it seems likely that there will be significantly fewer berths annually than ECORD has had previously. It is, however, noteworthy that proposal pressure at the ECORD Science Support and Advisory Committee for access to ECORD berths on *Chikyu* is substantially lower than for berths of *JOIDES Resolution* and Mission-Specific Platforms.

Following the completion of the negotiations with the NSF and MEXT/JAMSTEC, ECORD is planning to deliver 10 Mission-Specific Platform expeditions⁷ in the new programme, each of which will have a minimum of 10 berths for ECORD scientists (*i.e.* a minimum of 100 berths for the duration of the programme).

In addition, ECORD, NSF and MEXT/JAMSTEC have agreed that Co-Chiefs will not count in the berth quotas, which should provide ECORD scientists with a significant number of additional berths⁸. These berths, along with projected *JOIDES Resolution*, Mission-Specific Platform and *Chikyu* berths, will mean that there should be a significant increase in the overall numbers of ECORD berths in the new programme to somewhere between 500 and 600 berths (*i.e.* a 25 - 50% increase on the current programme). At this time, based on the outcome of the negotiations, ECORD anticipates that all 18 of its existing members will renew their subscriptions to IODP, maybe with a modest overall reduction in the total annual ECORD budget. If this budget is realised, it would, in these fiscally challenging times, be a strong endorsement of world-class research that is being delivered by ECORD scientists.

How commingled funds have been distributed



⁷ This is subject both to suitable proposals coming through the international scientific evaluation system and to affordability (see earlier point about securing external funding).

⁸ In the current programme there have been 19 ECORD Co-Chiefs on *JOIDES Resolution* expeditions, 6 on *Chikyu*, and 5 on Mission-Specific Platforms.