Dear colleagues,

This is the latest in a series of Special Bulletins designed to keep the IMOS community fully informed about the process to allocate ongoing and new funding. Our unifying goal is to successfully implement a sustained, extended and expanded IMOS program for the benefit of Australia’s society, economy and environment.

The IMOS Board met on 26th November to consider recommendations for 2018-22 funding, covering both continuation and growth of IMOS Facilities. In summary, the Board accepted all recommendations made. The Board drew heavily on advice from the Science and Technology Advisory Committee (STAC), as well as related inputs from user and stakeholder consultations facilitated by the IMOS Office.

Mr John Gunn, Independent Chair of the IMOS Board, had this to say about the process:

In reviewing the recommendations of the STAC and IMOS Office, the Board noted the significant challenge in making choices between high quality options/proposals for use of our increased funding – i.e. to balance allocations across the Broadscale, Backbone, Regional and Program components; to ensure we continue to invest appropriately in emerging science/observing technology areas and objectively evaluate the success and impact of existing programs; and to achieve our goals of integration and excellence. The detailed and comprehensive recommendations we reviewed were well founded and achieved this balance. Well done to all those involved in developing and reviewing the proposals!

A brief summary of approved recommendations by Facility is provided below. In total, 83% of available funding is being invested to continue the current IMOS program (as scoped in 2017-19), with 17% or $15M being invested in new activities. It is however important to remember that continuation budgets include indexation and capital replacement, and on average will be 15% per annum higher under the new funding arrangements.

- **Argo Australia** – The core Argo program will be continued and enhanced to include ice capable floats. A new Biogeochemical (BGC) Argo Sub-Facility will be established.
- **Ships of Opportunity** – All sub-facilities will be continued, with the Continuous Plankton Recorder (CPR) program enhanced to include Southern Ocean phytoplankton.
- **Deep Water Moorings** – The Southern Ocean Time Series observatory and East Australian Current transport array will be continued, noting our reliance on the Marine National Facility for vessel access to undertake this work. Support will be provided for a US-led proposal to redeploy the Indonesian Through Flow transport array (if the proposal is successful).
- **Ocean Gliders** – The current program will be continued with guidance from the glider user group. A new Event Based Sampling capability will be established, initially focused on deploying gliders in marine heatwaves.
- **Autonomous Underwater Vehicles (AUV)** – The AUV-based integrated benthic monitoring program will be significantly enhanced, with related investment in marine image handling and analysis. The exact program of work is not yet agreed as proposals received need further discussion and consultation to bring them in line with IMOS
expectations. There is however strong support for growing this Facility and the Board has approved an appropriate increase in funding to achieve this.

- **National Reef Monitoring Network** – Related to the above, new investment will be made in a reef monitoring data facility to handle all data obtained during shallow reef surveys, including those conducted by Reef Life Survey and State conservation management agencies. All data holdings will be discoverable and accessible through the Australian Ocean Data Network (AODN).

- **National Mooring Network (Shelf Arrays)** – The current shelf mooring program will be continued, with new sites added in the northern Great Barrier Reef and the Bonney Upwelling. Additional investment will also be provided to support a reconfiguration of mooring assets in North West Western Australia in response to user and stakeholder feedback.

- **National Mooring Network (Reference Stations)** – The current network of seven National Reference Stations will be maintained. Sampling will be enhanced to include larval fish monitoring (at five of seven sites).

- **Australian Microbiome Initiative** – A new Facility will be established to manage IMOS participation in the Australian Microbiome Initiative, a partnership with Bioplatforms Australia, CSIRO and Parks Australia. In addition to marine water sampling and analysis, IMOS is making new investments in DNA extraction and bioinformatics.

- **Coastal sampling network** – In support of the microbiome program and other priorities, development of a low-cost coastal sampling network will be piloted in the next stage. Priority locations will include the Great Barrier Reef, Botany Bay, Port Phillip Bay, and the South Australian Gulfs.

- **Ocean Acidification Moorings** – The current program will be continued.

- **Wave Buoys** – A new Wave Buoy Sub-Facility will be established to deploy directional wave buoys, addressing key gaps identified through a national prioritisation process for Australian wind-waves research. Priority areas identified are Eastern Tasmania and the Northern Territory.

- **Ocean Radar** - The current program will be continued and will take advantage of recent co-investment by NSW State Government, and by industry partners in Western Australia.

- **Acoustic Animal Tracking** – The current program will be continued with some additional investment to support reconfiguration of the network so as to provide better information on priority species identified through the National (Fishing and Aquaculture) Research Providers’ Network. The animal tracking database will also be redeveloped.

- **Satellite Animal Tracking** – The current program will be continued.

- **Wireless Sensor Network** – The current program will be continued.

- **Satellite Remote Sensing** – The current program will be continued, along with two new investments. The Satellite Altimetry calibration/validation Sub-Facility will be enhanced to fully exploit the Surface Water Ocean Topography (SWOT) mission set to launch in 2021. The Ocean Colour Radiometry (OCR) Sub-Facility will be enhanced in response to recommendations made by the OCR Task Team.

- **New Technology Proving** – As advised previously, the Board has approved establishment of a New Technology Proving capability to invest in bringing new technologies, methods, and approaches into the program.

The AODN, IMOS *OceanCurrent* and IMOS Office are also being funded to continue at current levels.

In total this provides a very exciting portfolio of marine research infrastructure. It will enable much greater value to be delivered from bigger datasets and longer time series, as well as taking IMOS in some exciting new directions.
The IMOS Office will now work with Facility/Sub-Facility Leaders and operating institutions to put the necessary agreements in place so as to enable our new program of work to proceed as soon as possible. If you have any questions about the detail, please do not hesitate to contact the IMOS Office.

A final Special Bulletin on the IMOS 2018-22 planning process will be provided in December/January, when we are ready to call for proposals under the New Technology Proving capability.

We remain tremendously grateful to the Australian Government Department of Education and Training for the support provided to IMOS as a national collaborative research infrastructure, and we will work hard to ensure it is well used in the national interest.

Regards, Tim Moltmann (on behalf of the IMOS Office and Board)