

GCRMN 2020 – a proposed workplan for 2017-2020

for discussion during ICRI General Meeting 31, 2-4 November 2016

3 November 2016 10:45-12:00; Theme 4: "Monitoring the status of reefs in order to better manage them"

SUMMARY OUTLINE

This workplan operationalizes the concept note "GCRMN 2020 – coral reef observing and reporting, a workplan for 2017-2020". At the 29th and 30th ICRI General Meetings, side workshops and minutes of the General Meetings re-affirmed a core function of the GCRMN being "... the preparation of regional periodic assessments ... working through a global network to strengthen the provision of best available scientific information ..."¹. This workplan has emerged from consultations during 2015-16 including ICRI GM 30 and at global conferences and meetings. This summary outline is a short form of the overall workplan, which will be developed further if given a go-ahead at ICRI GM31 in Paris, 2-4 November 2016.

Goal: to build a monitoring and reporting system that supports preserving and growing the health and societal benefits provided by coral reefs.

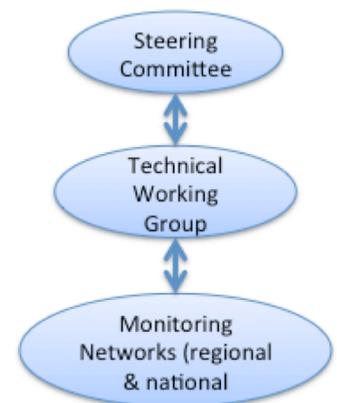
Objective: to strengthen the Global Coral Reef Monitoring Network (GCRMN) as the delivery mechanism for coral reef monitoring data from local to regional and global scales, to meet the information needs of countries and resource managers to protect them and sustain the flow of benefits they provide to coastal communities and economies.

The following are the lead institutions in developing the GCRMN 2017-2020 workplan:

Global Coral Reef Monitoring Network (GCRMN)/ International Coral Reef Initiative (ICRI) – for 20 years the primary mechanism for regional to global coral reef reporting, regionally and globally.	Global Ocean Observation System (GOOS) BioECO Panel – tasked with developing global observing systems covering the ocean domain, including coral reefs (a GEO network).
Group on Earth Observations Biodiversity Observation Network (GEO BON) Global Marine BON – tasked with developing global observing systems covering biodiversity in marine systems, including coral reefs (a GEO network).	Ocean Biogeographic Information System (OBIS), UNESCO-IOC – the primary host for open access ocean data, now expanding to include ecological and biogeographic variables.
United Nations Environment Programme (UNEP) – tasked with keeping the world's environment under review and strengthening the science-policy interface; and requested by the UN Environment Assembly (resolution 2/12) to support development of GCRMN.	International Union for the Conservation of Nature (IUCN) – through a Members motion and the 2017-2020 workplan adopted at its Congress in 2016, supports regional and global reporting on reefs, and use of the information in planning, management and policy.

The workplan outlines how GCRMN will operate from 2017-2020:

1. **Introduction** – relates the workplan to broader GCRMN/ICRI documentation and a framework that helps to assess and manage the pressures affecting reef biodiversity and ecosystems.
2. **Requirements/inputs** – relates the workplan to societal goals expressed in the main global conventions – the Convention on Biological Diversity, Sustainable Development Goals and ICRI Action statements.
3. **Institutional framework** – applies guidance established from 20 years of experience in other global marine observation networks (GOOS), to establish the institutions and mechanisms that facilitate network function. These include overall governance and direction through a Steering Committee, day to day monitoring and coordination facilitated through national and regional networks, and a standards and technical guidance working group that works with and through both of these.
4. **Observations and monitoring** – based on recent experience in global marine and biodiversity networks (GOOS & GEOBON), monitoring systems are best organized around "essential variables". For coral reefs, live hard coral



Institutional framework

¹ Minutes of the GCRMN Working Group; ICRI GM 29, Okinawa, Japan, October 2014. Sunday 19 October; 17:00-19:00 and Monday 20 October; 18:00-19:00

cover, macro-algal cover, and fish abundance and biomass are identified as potential essential variables; GOOS guidance gives criteria and concrete steps for maturing these through three levels - concept (ideas are articulated and peer-reviewed), pilot (aspects of the system are tested and made ready), and mature (the system is scaled and reliable, is a sustained part of the global ocean observing system). A principal objective of the GCRMN in this workplan, coordinated through the technical working group and implemented in the regional networks, will be to raise the essential variables and regional networks to a mature level.

5. **Data and products** – to maximize the use and value of GCRMN data, the Ocean Biogeographic Information System (OBIS) will support entry and reporting of essential variables at the site level from all contributing programmes and networks. With online analytical tools, this will provide an automatic and user-driven reporting capability to provide outputs for needs at two key levels: a) from local to national levels, such as for management processes, and for the conservation planning tools developed through the IUCN – the Red List of Species and Ecosystems, and using these to identify Key Biodiversity Areas (KBAs); and b) for national to global levels, reporting in relation to global targets (Aichi Target 10 and Sustainable Development Goal 14). An open programming community will be encouraged to develop analytical tools to further meet a wide range of user needs.

6. **Capacity building** – is an ongoing need for the GCRMN, and will be coordinated and mentored through the regional networks and committees, and supported through provision of tools (manuals, videos, identification guides, etc.) on an online resource. This will cover data management and use of the new OBIS system, as well as in-water monitoring protocols. OBIS will run a first training course focused on a coral database theme in 2017. The UNESCO Ocean Teacher Global Academy resources (online and regional training centres) will provide a backbone for training, along with partner resources.

7. **Fundraising** for this GCRMN workplan will occur through multiple GCRMN partners, in separated but coordinated efforts: a) central coordination of this workplan, b) regional network support including communications, training and periodic reporting, and c) *in situ* monitoring.

8. **The workplan** is being prepared in two parts - 1 year (2017, inception) and 3 years (2018-2020, operationalization), with specific targets for 2020 culminating in reporting on Aichi Target 10.

Key references and support documents for this workplan include:

- UNESCO (2012) A Framework for Ocean Observing. By the Task Team for an Integrated Framework for Sustained Ocean Observing, UNESCO 2012, IOC/INF-1284, doi: 10.5270/OceanObs09-FOO
- Essential (Ocean) Variable Specification sheets - http://goosocean.org/index.php?option=com_content&view=article&id=14&Itemid=114

Key institutions consulted in the process and reviewing the workplan and this outline

- Global Coral Reef Monitoring Network (GCRMN), International Coral Reef Initiative (ICRI)
- GOOS BioECO Panel;
- GEO BON Marine BON
- UNESCO-IOC, OBIS
- United Nations Environment Programme (UNEP, through its Coral Reef Unit)
- IUCN – Members, Commissions, and Secretariat
- International Society for Reef Studies (ISRS, and International Coral Reef Symposium, ICRS)
- Future Earth, bioDISCOVERY
- Multilateral and major national and international agencies
- Conventions (technical groups and secretariats?)
- Others ...

Next step: presentation of the workplan/outline at the *ICRI 31st General Meeting in Paris, 2-4 November 2016*, for endorsement by ICRI members, and in the GCRMN workshop in the same meeting, for technical discussions and inputs. Based on the feedback, the workplan will be updated then a process undertaken with the ICRI Secretariat and key partners to adopt it, and promote fundraising to start implementation.

A fuller draft/concept is available on request, write to dobura@cordioea.net