

## GEO BON WG 5 ( Marine Ecosystem Change) Progress report.

### Membership (nominal and active):

Antoine Gremare (a.gremare@epoc.u-bordeaux1.fr), Barbara Block (bblock@stanford.edu), Carlo Heip (**Vice-chair**, Carlo.Heip@nioz.nl), Charles Griffith (charles.griffiths@uct.ac.za), Diego Rodriguez (dhrودي@bart.mdp.edu.ar), David Billett (dsmb@noc.soton.ac.uk), Eamonn O Tuama (eotuama@gbif.org), Edward vanden Berghe (evberghe@iobis.org), Fred Grassle (grassle@marine.rutgers.edu), Graham Hosie (graham.hosie@aad.gov.au), Isabel Sousa Pinto (ispinto@climar.up.pt), Jan de Leeuw (**Vice-chair**, Jan.de.Leeuw@nioz.nl), John Gunn (John.Gunn@aad.gov.au), Randy Kochevar (kochevar@stanford.edu), Louisa Wood (louisajwood@gmail.com), Massa Nakaoka (massanakaoka@gmail.com, nakaoka@fsc.hokudai.ac.jp), Mike Gill (Mike.Gill@ec.gc.ca), Mohideen Wafar (mwafar@gmail.com), Patricia Miloslavich (pmilos@aslo.ve), Pedro Martinez Arbizu (Pedro.Martinez@senckenberg.de), Peter Burkill (phb@sahfos.ac.uk), Phil Weaver (ppew@noc.soton.ac.uk), Philippe Lebaron (philippe.lebaron@obs-banyuls.fr), Paul Somerfield (pjs0@pml.ac.uk), Roland Pitcher (roland.pitcher@csiro.au), Stephen Hawkins (s.hawkins@bangor.ac.uk), Sun Song (sunsong@ms.qdio.ac.cn, sunsong.cn@gmail.com), Tiago Egger Moellwald Duque Estrada (tiago.duqueestrada@gmail.com), Yoshihisa Shirayama (meibenthos2007@yahoo.co.jp, [yshira@bigfoot.com](mailto:yshira@bigfoot.com)).

### Current Activities & Deliverables:

Activity/Deliverable 5.4.1. Pilot study to further detail marine ecosystem classification with associated biological data series.

*Progress:*

- Pilot study to fine tune ecosystem classification. This study is in progress for the Wadden Sea through the ZKO(NWO) program (NIOZ) and possibly through a new proposal.
- Improving Marine Ecosystem classifications on a global scale will be done in very close cooperation with UNEP-WCNC

Activity/Deliverable 5.4.2. Inventory of past and present sustained observation programs and associated data series.

*Progress (incl. Coordination):*

- POGO and GEOBON (WG5) are making a comprehensive database on sustained marine observations
- Carlo had a meeting at IOC/Unesco where the creation of a World Association of Marine Stations was in principle accepted. Although this has to go through a long procedure (probably to go before the General Assembly of IOC in 2013), the signs are that this will be welcomed by IOC as a major step towards supporting marine biodiversity observation. The meeting in Paris was attended by the relevant European (MARS), US (NAML), Japanese (JAMSTEC) and Australian networks and mention was made of several more (including Canada's CHONE).
- US GEO BON meeting. Linda Amaral (ICoMM exec. secretary) has participated for the marine issues. Minutes will be available soon.
- Contact with NRIC's and CoML to explore future relationships between GEOBON and Future CoML activities.
- Contact with Marine Board. Marine Board Position paper on microbial marine biodiversity in progress.

Activity/Deliverable 5.4.3. Inventory of historical, anecdotal, archaeological and fossil biological data series.

*Progress:*

- IODP-GEOBON connection regarding deep biosphere diversity in the sub surface through Deep Carbon Observatory Program to be funded by Sloan; White paper on deep life has been accomplished.

Activity/Deliverable 5.4.4. List of data providers regarding invasive species.

*Progress:* None

Activity/Deliverable 5.4.5. Review of modelling needs for marine biodiversity.

*Progress:* None

Activity/Deliverable 5.4.6. Report on strengthening capacity building and taxonomy training

*Progress:*

-Discussions with POGO, SCOR, SAHFOS and IOC to explore common future calls for fellowships, workshops, etc.

### Funding:

- The EC has issued a call in FP7 on Marine and Freshwater Biodiversity Observatories that will develop an Infrastructure Network in the coming years. The call will be supported by MarBEF, Life Watch, PESI, 4D4 and a freshwater biodiversity network, probably BIOFRESH, but we will certainly consider partnership of our GEO-BON freshwater working group. GEO-BON is also explicitly mentioned in the call which closes in November.
- Recently the legal association MarBEF+, which is the continuation of MarBEF (EU Network of excellence on Marine Biodiversity and Ecosystem Functioning) was signed. The seat is at NIOZ. MarBEF+ is already involved in three other EU projects, among which EuroMarine which will be a joint project of the three NoE's and MarCOM+ that involves organizations such as ICES, CIESM, MARS etc.

### Barriers:

-Time and money. To be solved by successful proposals (see above).

### Partnerships:

-POGO, CoML, MARS, NAML, IOC, DCO, SAHFOS, GOOS, MARBEF+ (and other European networks), ICES, UNEP-WCMC, GBIF, Life Watch, EoL, BoL, EDIT.