EUROPEAN SCIENTIFIC DIVING PANEL WORKSHOP
27-28 SEPTEMBER 2010

Strengthening synergy and excellence in diving supported science across Europe

COST Office, Avenue Louise 149 - 1050 Brussels, Belgium

Meeting Report

MONDAY 27 SEPTEMBER 2010

Workshop Session 1 – Introduction and general presentations

Jean Pierre Feral, current chair of the European Scientific Diving Panel (ESDP) of the Marine Board-ESF, welcomed the Workshop participants and briefly presented the key objectives of these two days meeting.

1) COST, MB-ESF, ESDP

Carine Petit presented the **COST system** (COST actions) and Aurelien Carbonniere informed about the role and activities in place at the **Marine Board-ESF**.

Philipp Fisher (AWI) then presented the mandate, activities and objectives of the **ESDP** and the role of Scientific Diving in performing marine research. He also called attention to key problems which still hinder the mobility of Scientific Diving (SD) experts in Europe.

2) **COST actions** (see PPTs)

Sea grass productivity by Rui Santos (University of Algarve, PT)

- *Sea grass productivity measurements are being performed; in order to be widely recognised, inter-calibration tools and methods are required to be broadly used by the European Scientific Diving Community.*

European Marine Biodiversity Observatory System (EMBOS) by Pim van Avesaath (KNAW, NL)

- *Scientific Diving is one tool to carry out observations.*

European Gliding Observatories Network (EGO Network) by Laurent Mortier (ENSTA, FR)

- *Gliders enable to assess specific oceanographic features (e.g. vertical structures of the ocean), in specific areas (Arctic), at different interfaces (coast/sea).*

Drowned Stone Age landscapes under the sea. An interdisciplinary project expanded between archaeology, geology & the environmental sciences (SPLASHCOS) by Ole Grøn (DK)

- *Use of SD to carry out interdisciplinary research.*

3) **National Scientific Diving updates** (see PPTs)

Workshop Session 2 – Scientific Diving, an operational tool in support of science

4) Science delivery by Scientific Diving – *Martin Sayer (*see PPT*)*

Some key recommendations:

There is a need to improve the recognition of SD from peers as a performing tool!

How to increase the impact?

- Encourage the involvement of non-diving experts;
- Promote specific techniques (e.g. measurement of ice scour; use of long live animals to study ocean circulation) and better explain their applicability;
- Better promote the production/generation of high quality indicators to be delivered by SD;
- We need to review the science which has been delivered by SD (SCUBA) and best reveal its impact;
- In coastal waters, an opportunity could be to develop a joint strategy combining AUVs/SD tools emphasising on the potential integration, complementarities and specificities.

5) The Value of Scuba as Research Methodology – *Michael Lang* (see PPT)
6) Biodiversity and Marine Protected Areas – *Jean Pierre Feral* (see PPT)
7) Polar research – *Philipp Fisher* (see PPT)
8) Scientific Diving integration with marine research infrastructures (research vessels) – *Andre Cattrijsse* (see PPT)

9) Discussion on SD Standards (in complement of the ESDP Consultation Document on ESD./AESD Standards)

Some recommendations:

Why do we need SD European Standards?

- To enable and enhance mobility of researchers (e.g. Short-term Scientific Missions);
- To facilitate the development of inter-calibration methods among institutes/organisations
- To improve comparability of the results and generate high-level scientific outputs on a pan-European and international levels.

How to reach this goal?

1- Act towards the coordination/harmonisation of SD efforts on a national basis;
2- Centralise SD national capacities into one single national SD committee;
3- Apply ESD/AESD standards in accordance with national rules and ESDP guidelines.

EU & US

- ESD/AESD standards recognised in the US;
- US authorities to assess European dives based on specific criteria;
- European Medical certification should be in compliance with US rules.

TUESDAY 28 SEPTEMBER 2010 – DAY 2

Workshop Session 3 – Towards a pan-European coordinated network of Scientific Diving activities

10) Best practices and lessons learned in the implementation of a national scientific diving committee – *Philipp Fisher & Jouni Leinikki* (see PPTs)

Lessons learned

Bottom-Up Approach – the Finnish case

Summary of sequential actions towards the implementation of the Finnish SD committee

1- Universities enquiries regarding diving activities of students;
2- Renewal of the legislation of professional diver's examination: scientists decided to be involved in the preparatory Working Group as to ensure the incorporation of SD into the new regulation (Scientific Diver now recognised as a professional SCUBA diver);
3- Professional Training program for SD was adjusted to meet requirements of AESD;
4- Finnish SD Steering Committee (FSDSC) was created to issue AESD cards;
5- FSDSC has become a NGO officially recognized by national authorities.

Top-Down Approach – the German case

Summary of sequential actions towards the implementation of the German SD committee

1- Scientific Diving was established in 1972 by the initiative of the German Ministry for Education and Research in cooperation with the German Research Foundation (DFG).
2- Scientific diving was associated to the national board for professional diving (rules and procedures for professional diving were modified accordingly);
3- The academic course "certified research diver" was initiated;
4- Legal regulations for scientific diving in Germany has been released in 2006 by a consortium of 3 bodies:
   - the Ministry of Inner Affairs,
   - the Statutory Accident Insurance of Germany (legal body for SD) and
   - the German Kommission for Scientific Diving (scientific body for SD certifying the ESD/AESD standards)

11) Opportunities to strengthen cooperation – *Round Table discussions*

By the end of the Workshop, the participants agreed to pursue SD related networking activities.

- ***Two WGs***

To effectively network and exchange information on issues of common interest, it was decided to set-up and operate two separate Working Groups in order to sustain a dynamic flow of information between experts. The exchange of information will be done remotely, via emails.
In this view, two topical WGs have been created:

1- SD contribution to address "Grand Challenges" (see below)
2- SD management issues: trainings, standards, insurance etc. (see below)

- ***WGs outputs***

Experts will draft a joint "ESDP statement" to express the WG vision and objectives.
It will be maximum 2 pages long and could be structured as followed:

1- Rationale;
2- Problems, challenges; role of SD
3- Objectives;
4- Key actions & recommendations;

WG1 - SD contribution to address marine Grand Challenges
Coordinator: Dan Tchernov, Israel

The following issues will be addressed:

- Climate change issues (Dan Tchernov, IS)
- In situ assessments e.g. flux studies, experimental work underwater (Fleur Van Duyl/NL)
- Polar research (Martin Sayer/UK & Philip Fisher/GE)
- Biodiversity/ (Philipp Fisher/GE, Dragos Micu/RO, Nicos Nicolaou/CY, JP Féral/FR)
- Fisheries (Dragos Micu/RO)
- Invasive Aliens Species/restoration (Jorge Fontes/PT)
- Ocean acidification, monitoring (Giorgio Caramanna/IT)
- Archaeology (Ole Grøn/DK, C.Kelleher/IE)

Others: animal behavior, cave research, coring corals…

WG2 - SD management issues: trainings, standards, insurance etc.
Coordinator: Jouni Leinikki, Finland

The following issues will be addressed:

- Training (Jouni Leinikki/FI, Sarah Carlton/MT, Oivind Strand/NO, A.Norro/BE, Roger Lindblom/SE)
- Medical examination/certification (George Petithakis/GR, Roger Lindblom/SE)
- Insurance, safety procedures (= Safety performance %), standards (George Petithakis/GR; Luka Bekic; Nicos Nicolaou/CY, Volkan Demir/TK)

Workshop Session 4 – Future ESDP plans, communication & education

12) Presentation of the future COST proposal on Scientific Diving – *Philipp Fisher (*see PPT*)*

„**BioDive**“ - *towards a global network for scientific diving supported shallow water biodiversity research, from pole to pole*.

The aim of this COST Action is to catalyse international efforts in diving based assessments, to generate an intercalibration platform and to promote a forum for Scientific Diving activities in Europe.

Some clarification points on the COST proposal:

- Try to integrate in some extent other disciplines (e.g. archaeology) in the proposal so that the BioDive COST action could be used as a common operational platform/forum for other COST actions which focus on the marine domain;
- Propose Short-Term Missions or Trainings/Summer Schools in different coastal environments (e.g. Dutch Caribbean islands, Chile, US): “creating a continuum of training sites from pole to pole”
- USA, Chile are recognized as full COST members: experts can be invited for short term scientific missions in COST countries.
- COST actions don’t cover “field work” per say: it covers Travels and Accommodations costs but not the equipment used.
- A private company could be involved in the consortium;
- The COST action framework is flexible: the network is always opened for enlargement.

Timeline:

- Mid November 2010: pre-proposal eligibility check;
- 25 March 2011: next pre-proposal submission date.

EVENTS

- Next ISOSD3 in November 2011 (Italy)
- Technical SD training in Eilat, Israel (June 2012)
- Technical SD training in Finland (March 2011)