# SCOR (Scientific Committe on Oceanic Research) Activities' Report - Year 2017

#### **Annalisa Griffa**

#### 1. Introduction

SCOR (Scientific Committee for Oceanic Research) has been funded by ICSU (International Council for Science) with the aim to contribute to the advancement of scientific themes related to the Ocean. SCOR activities aim to identify the main scientific issues and the emerging challenges that are faced by oceanographic reasearch, encouraging international collaboration to address them. Special interest is given to activities that encourage scientific growth in developing countries.

My activity as Italian representative of SCOR started in 2015. Actions carried out during 2017 are reported in the following.

### 2. Main activities carried on by SCOR during 2017 relevant for Italy and for CNR

SCOR carried out several activities during 2017 that are potentially relevant for Italy and CNR. In particular, as every year, SCOR has issued calls for proposals as reported in the following.

Every year SCOR issues calls for applications for Working Groups (WGs) on main emerging themes to be approached at international level, in order to create the basis for common projects and activities. The WGs are first evaluated by SCOR National Commettees, and the evaluations are provided to the SCOR Secretary. They provide the basis for the final decision taken by SCOR members during the executive discussion at the SCOR Annual Meetings. Typically, every year SCOR funds 2-3 WGs. In 2017, SCOR identified 3 proposals to be funded. One of these is led by an Italian PI, as detailed in Sections 3 and 4.

SCOR has also issued calls for Capacity Building activities, including Visiting Scholars in Institutions in developing countries.

Finally, SCOR provided mechanisms and links to participate to international projects such as IMBER, GEOTRACES, SOLAS, IIOE-2.

### 3. Activities carried on by Annalisa Griffa within SCOR during 2017 and impact on the Italian scientific community

During 2017, the following activities have been carried out as Italian SCOR representative, in collaboration with the other Italian SCOR member, Leonardo Langone:

- Establishment of the SCOR Italian National Commette, first in an informal way including scientists involved in SCOR activities, and then formally in collaboration with the COI (Italian

- Oceanographic Commette). Further details are provided in Section 5
- Coordination of the National Commette to provide feedbacks to SCOR regarding vision and management changes suggested by the International Council for Science (ICSU), in order to update and improve SCOR role and visibility.
- Evaluation of WG proposals submitted to SCOR in 2017, in collaboration with the National Committee. In particular, the Commettee identified and supported for its scientific value the proposal FLOTSAM, led by the Italian PI Stefano Aliani (CNR).
- Participation to the Annual Meeting September 4-6 September in Cape Town (South Africa). During the meeting, three best WGs have been selected for support. One of them is FLOTSAM.
- Coordination of the National Commette to provide feedbacks to SCOR regarding improvements in the involvement of ECS (Early Carrier Scientists) in SCOR activities

#### 4. Evaluation of the participation in terms of benefits and membership cost

The main advantages of participating to SCOR are the provided links and information regarding the global scientific challengs and the related Ocean projects at international level. Thanks to the increased exposure of the Italian community and the growing interest toward the WG mechanism, in 2017 the Italian community has been more present in WG applications and one of the best approved WGs, FLOTSAM, is led by an Italian PI, Stefano Aliani (CNR).

The FLOTSAM (Floating Litter and its Oceanic TranSport Analysis and Modelling) project is focused on one of the main ecological challenges of the moment, i.e. the marine pollution due to microplastics in the sea. The aim of the WG is to create a scientific network to investigate the still unknown problem of how plastic is transported in the ocean surface layer and how plastic distribution can be observed, modelled and predicted. The WG includes 12 countries in addition to Italy, such as US, France, Germany, UK, Japan, Russia and Korea.

In addition to this, it is important to remark that SCOR has provided IOC with studies for the development of international standards (e.g. TEOS10), and that the WG results provide benchmarks for marine research. In this sense, SCOR provides relvant tools to the community in terms of "best practice" awareness and implementation, in synergy with the OBP (Ocean Best Practices) action by IODE.

#### 5. Evaluation of Italians' attendance and how to improve interest and involvement

During the last two years, we have created some mechanisms to increase involvement of the national community and related benefits from the SCOR activities.

First of all, we continued and improved the collaboration with COI, which is hosted at CNR and provides an institutional channel for collaboration between all the Italian institutions involved in marine science reasearch. COI has formed a support group for SCOR within its members, including R. Delfanti (ENEA), P. Povero (CONISMA), P.Picco (IIM), P. Del Negro (OGS), M. Ribera d'Alcala' (SZN), A. Orasi (ISPRA).

Thanks to the COI support, a formal SCOR National Committee has been established, building on activities started during the previous year. During 2016, an informal group was formed with scientists involved in various international bodies and contributing to SCOR activities, such as S. Sparnocchia and L. Cavaleri (CNR), N. Pinardi (Bologna University), S. Masina and A. Cherchi (INGV/CMCC) and G. Manzella (ETT). In 2017 this group has been unified with the COI nominated group, creating a true Italian National Commette for SCOR, including 13 scientists from 9 different institutions.

The Commette has been very active, providing support for WG evaluation and in answering two important SCOR consulations as reperted in Section 3. Also, the Commettee will provide increased coverage and visibility for SCOR activities within the various institutions.

The Commettee has recently started to discuss activities to improve the involvement of young researchers (ECS, Early Career Scientst). We expect that these initiatives will lead to interesting results in the next few years.

### 6. Italian experts with important roles within the Union or within related Commissions and Programs (if known)

S. Sparnocchia (CNR) is Secretary General of the related IAPSO program.

## 7. If Union with CNR Commission, short summary about the 2017 CNR Commission activities See Section 5

#### 8. Conclusions

In conclusion, SCOR activities provide important opportunities for the Italian community and the work of the representatives aim at increasing such opportunities opening more direct channels between SCOR and the scientific world. In this direction, a Natonal Commettee has been established and is presently active. Further connections with representatives of other programs in the framework of COI are desirable, in order to better coordinate and increase national benefits.