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Item 8.3 of the Provisional Agenda

**REPORT ON PROGRESS AND IMPLEMENTATION OF THE WORLD ASSOCIATION
OF MARINE STATIONS (WAMS)**

Summary. This document provides an overview on the current development of WAMS (World Association of Marine Stations) and describes its added value for marine science as a new global framework of cooperation. WAMS is built upon several existing marine associations and its mission and objectives match with IOC-UNESCO priorities. WAMS wants to collaborate and liaise with IOC-UNESCO for scientific guidance and logistic support and consider its suitability for adoption by the 26th Assembly.

The Assembly will be invited to adopt the work plan for implementing joint IOC activities with WAMS contained in the Report on progress of the WAMS, as amended at the present session.

Introduction

1. Carrying out excellent marine science in coastal areas and the open ocean implies the use of many different resources. These include marine stations and institutes, research vessels, highly sophisticated and expensive instruments (moored, autonomous, satellite stations, indoor facilities and state of the art analytical equipment, etc.) as well as a highly specialized and competitive staff. Bottlenecks often come however, not from the lack of resources, but from the lack of an integrated organization. Several initiatives to create networks of marine stations/laboratories have been tested and already function well in different regions of the world. It is now very timely to begin planning for a new forum that can unite marine research stations and institutes across the world. At no other time in our history has it been more crucial for marine stations to come together and speak with a united and common voice on marine research matters.

Launching of the World Association of Marine Stations (WAMS)

2. A recent initiative of the European Network of Marine Research Institutes and Stations (MARS) was to launch with other existing marine station networks a World Association of Marine Stations (WAMS). This world association has the potential to become a keystone in a global network of marine stations, uniting the existing marine stations and their regional networks, and create opportunities for expanded collaborations all over the world.

3. WAMS was first discussed during the 6th Okazaki Congress (Japan) in 2007 and the outline strategy drafted. Then in 2008, a small delegation from the MARS network met with representatives from UNESCO-IOC and then again in 2009 with Luis Valdes, the Head of Ocean Sciences at UNESCO-IOC who encouraged and facilitated the first full meeting of WAMS held in Paris, 13th-14th April 2010. Here, representatives from MARS, NAML, TMN and JAMBIO, as well as others from UNESCO-IOC, UNESCO-MAB, and POGO unanimously endorsed the creation of WAMS with this April 2010 session adopted as its inaugural meeting.

4. Many marine research stations are located adjacent to the transition zone between inshore and oceanic waters, and of some of them close to the deep-water horizon and abyss. All these features make them ideal centres for engaging with many of the basic problems in oceanography, marine ecology and fundamental biology that are now receiving more and more scientific attention. It is estimated that nearly a thousand coastal stations and institutes can be identified around the world's oceans, under Northern and Southern latitudes. Knowledge and databases accumulated for decades by these stations/laboratories are considerable but, until the present initiative, their potential has been far too little used and exploited. Marine stations and Institutes, because of their location around most of the world's seas, should be encouraged to play an important role as distributed observatories for the impact of climate change on biodiversity and ecosystem functioning. In addition, they can be central to the collection of data, crucial to the development of long-standing exploratory efforts and in depth advanced studies of coastal and deep water environments including: systematic, ecology and evolutionary biology from genes to ecosystems, and eco-genomics of stressed and extreme environments; biotechnology and DNA sequencing; biogeochemical cycles sensitive to anthropogenic change and so on. Finally, future in situ coastal and deep observatories could be wired directly to inland equipment located at these coastal marine stations. Many of these ideas are already under active discussion in Europe, particularly under the auspices of the ESF Marine Board (<http://www.esf.org/research-areas/marine-sciences/marine-board-policy-statements.html>) but are yet to be exploited at the Global level. WAMS delivers the opportunity to achieve this.

5. Marine stations are also of interest as land-based infrastructures for advanced studies in molecular biology, neuroscience, developmental and evolutionary biology, and genetics and for screening drug candidates of high medical interest. Here, the recently launched European Marine Biological Resource Centre (EMBRC: <http://www.embrc.eu/>) links 14 marine stations in 8 countries,