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SCIENTIFIC LECTURES: *SOCIO-ECONOMIC BENEFITS OF MET-OCEAN INFORMATION AND SERVICES*

ABSTRACTS OF SCIENTIFIC LECTURES

SUMMARY

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ABSTRACTS OF SCIENTIFIC LECTURES

SOCIO-ECONOMIC BENEFITS OF MET-OCEAN INFORMATION AND SERVICES

Professor John Zillman

The foundations of international cooperation in meteorology and oceanography owe much to the need for, and benefits from, marine meteorological and oceanographic services that had already become evident from the pioneering work of Humboldt, Maury, von Neumayer and others in the mid nineteenth century and which were subsequently codified and institutionalized through the International Convention on Safety of Life at Sea (SOLAS). The past 150 years have demonstrated the enormous existing, and even greater potential, social, economic and environmental benefits from the effective application of marine services to the safety and efficiency of marine transport and off-shore operations, disaster risk reduction and mitigation, marine resource development, environmental stewardship, coastal zone management, tourism, marine sports and recreation and a wide range of other human priorities and pursuits. Met-ocean services provide a particularly powerful demonstration of the benefits of widespread availability and use of economic public goods with the theory of global public goods providing compelling guidance as to the optimum national funding and internationally cooperative institutional arrangements for their provision and application. The WMO-IOC partnership under JCOMM, through which a wide range of marine research and operational agencies of individual nations work together to support the agreed international ocean observation, data management and service provision arrangements provides the essential global framework for future delivery of even greater socio-economic benefits, shared widely across nations and across the increasingly broad range of users of marine meteorological and oceanographic information, products and services. This lecture will provide a broad overview of the history, rationale, theory, practice, achievements and still unrealized opportunities for national and international benefit from recent advances in meteorological and oceanographic science, technology and policy for the provision of met-ocean information and services.

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SOCIO-ECONOMIC BENEFITS OF MET-OCEAN INFORMATION AND SERVICES IN AFRICA

Dr Malika Bel Hassen-Abid

Africa, like other parts of the world, is subjected to marine related hazards. Several events might frequently occur like inundations, coastal flooding and storm surge. The coastal zones are the most affected by these disasters and constitute therefore the most vulnerable areas. Africa is also experiencing a steady migration of population to the coastal areas in search of improved livelihoods and economic opportunities. Integrated management of marine and coastal resources, as well as reduction of the risks of ocean related hazards, based on sound scientific knowledge, are essential and contribute to poverty alleviation and sustainable development in Africa. Access to reliable and up-to-date Met-ocean data is crucial for this process.

The shortage of oceanographic and meteorological data and information has been, and continues to be, a major constraint to sustainable development in coastal and marine areas in Africa in recent years. An increasing number of initiatives, supported by national governments and international partners, to address coastal and marine management in an integrated manner has been launched in recent years to fill information gaps needed to improve management decision making and prevent against natural hazards. Most of these initiatives were conducted in the framework of Large Marine Ecosystems programmes (LMEs).

The accessibility to Met-ocean data has been another constraint to the use of data by a wider community. This is due to the combined effect of several factors, such as the scattering of data in various institutions, the wide variety of data formats and metadata formats that are prevalent and the limited information and communication technology infrastructure in the African countries. To overcome this problem the UNESCO/IOC-IODE programme has launched an innovative strategic approach called the ODIN (Ocean Data and Information Network) which was used in Africa from 1997. This strategy aims at strengthening a pan African network of National Oceanographic Data Centres (NODCs), as a sustained mechanism for the implementation of best practices in managing marine data and information for the benefit of the marine and coastal management.

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OCCASION OF THE 50th ANNIVERSARY OF UNESCO/IOC

Dr Geoffrey L. Holland

In 2010, the Intergovernmental Oceanographic Commission (IOC) of UNESCO will be celebrating its fiftieth anniversary as a UN Specialized Agency dealing with Ocean Science and Services. This presentation is a personal look at the evolution of that organization from its original mandate, to provide intergovernmental support and direction to multinational ocean research expeditions, into a broader and more proactive role in the provision of operational ocean information and products. In particular, the development of the interagency cooperation between the UNESCO/IOC and the WMO is explored. Although the obvious relationship and mutual dependence of meteorological and oceanographic sciences in the understanding of ocean/atmospheric processes has dictated close involvement between the UNESCO/IOC and the WMO from the beginning, the path from the early years to the establishment of the Joint Technical Commission for Oceanography and Marine Meteorology has not always been smooth.

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MARINE METEOROLOGICAL ACTIVITIES AT THE DIRECTION OF NATIONAL METEOROLOGY

Mr Hassan Bouksim

Morocco, with its 3 500 km of coastline and its access to both the Atlantic and the Mediterranean, is a maritime country. Many economic activities are carried out at sea and in coastal regions and are closely linked to meteorological conditions and the marine environment. Thus, the maritime navigation, fishing, port operations and shoreline management sectors need specialized meteorological assistance for the planning and management of their operations.

The talk will be an opportunity to take stock of the maritime meteorology activities at the National Meteorological Administration of Morocco (NMA). There will be a discussion on the organization of these activities, the resources available and activities related to forecasting and meteorological assistance intended for users in the maritime sector. An emphasis will also be placed on efforts being undertaken by the NMA to improve the quality of this assistance, to strengthen the observation network and to develop forecasting models. Finally, the talk will touch on cooperation and partnership aspects involving organizations at both the national and international levels.

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