## 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 offshore 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.