



Dr. Ed Urban
Executive Officer
Scientific Committee on Oceanic Research (SCOR)
College of Earth, Ocean, and Environment
Robinson Hall
University of Delaware
Newark, DE 19716 US

22 October 2013

Dear Ed:

RE: SCOR Working Group Proposal on Climate and tsunami science with green repeaters on submarine cable systems

I am writing on behalf of the WMO-ITU-UNESCO IOC Joint Task Force in support of the proposal submitted for review by SCOR next month on “Climate and tsunami science with green repeaters on submarine cable systems”.

The JTF was established jointly by three UN agencies in 2012, namely the International Telecommunications Union (ITU), UNESCO Intergovernmental Oceanographic Commission (UNESCO IOC) and the World Meteorological Organization (WMO). The JTF is tasked with developing a strategy and roadmap that could lead to enabling the availability of submarine cable repeaters equipped with scientific sensors for climate monitoring and disaster risk reduction (tsunamis, slope failures). Following a two-day workshop last month in Madrid as part of the ITU Green Week conference, the next stage will be to complete two studies: a) a technical Functional Requirements Study that will meet the detailed evaluation needs of the telecommunication industry, and b) a Business Model Study to establish the financial basis for the Wet Demonstrator Project and the Operational Phase. We anticipate funding these short-term (3-5 month) studies through contributions from the member supplier companies in the telecommunication sector in Q1-2 of 2014.

The three UN agencies are each under severe financial pressure these days and can only provide secretariat support, coordination and communications. The JTF has six standing committees: Executive, Science and Society, Engineering, Business Model, Legal, and Publicity, Outreach and Marketing. We would welcome most highly the establishment of a small number of science specialists as a SCOR Working Group to consider and provide scientific analysis, advice and publications on the wider scientific implications of this revolutionary concept for a global network of sensors integrated on trans-ocean and regional telecommunication cables.

The WG would connect the interests of the developed and less developed world and communicate on these issues with the wider scientific community. The requested four-year support would integrate perfectly with the anticipated development, testing and validation of the Wet Demonstrator by industry and academic researchers. The successful demonstration (proof of concept) would then be the basis for industry to deploy green cable systems on new networks and refurbished systems and for the consideration by government regulators. Dual connector systems have recently been commercialized by industry. The acquisition of such decadal real time data represents a profound contribution to understanding changes in deep ocean temperature and circulation as well as adding vast scope to the present tsunami networks for hazard mitigation.

Yours sincerely,

A handwritten signature in black ink that reads "Chris James". The signature is written in a cursive style with a long horizontal line underneath the name.

Christopher R. Barnes

Chair, Joint Task Force

Professor Emeritus

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