LETTER TO NC AND EC

From Lawrence Mysak, President of IAPSO

OPEN LETTER NO. 2 • November 2007

IAPSO Strategy Document

Dear IAPSO Colleagues:

Thank you very much for your responses to my first Open Letter to you, sent in October 2007. A number of you appreciated hearing about the work of SCOR, and also, I received some excellent suggestions for symposia topics for the 2009 Montreal Joint Assembly. Preparation for the latter is progressing well (there will be a meeting of the Scientific Program Coordinator and three association representatives in Montreal on Nov. 22–24, 2007 to plan the program), and we look forward to your participation in this assembly.

In the remainder of this letter, I will now discuss the following: IAPSO STRATEGY DOCUMENT – Download documents >

As you may know, a number of previous executive members of IAPSO (the TASK TEAM) met in Cape Town, in October 2002, for the purpose of (a) analyzing the results of a survey done with the then IAPSO NCs, and (b) producing a Strategic Plan to provide future IAPSO executives with some directions and ideas for the next decade of our activities. It is an inspiring and well written document, and I urge you all to read it (the document is on the website above). Its title is "Physical Sciences of the Oceans in the 21st Century – Science and enabling strategies for the International Association for the Physical Sciences of the Oceans (IAPSO)".

After an Introduction section (giving the history of IAPSO and a summary of the responses to the survey) and a Mission Statement, the document devotes several pages to STRATEGIC ISSUES AND FOCUS AREAS. "The main purpose of this letter is to briefly address these latter issues and areas." This will indicate how we are moving forward in a number of them. However, there is much more that we can do to implement the recommendations in the document, and at this stage I will merely suggest a few ideas for us to explore and, at the same time, invite your comments for further discussion and action.

IAPSO STRATEGIC ISSUES AND FOCUS AREAS:

Science Focus Areas: Here, three priority areas for IAPSO activities are given, namely, 1. Earth System Science, 2. Data assimilation: from the fundamentals to operational ocean forecasting, and 3. Deep ocean exchanges with the shelf (DOES).

As a proposed strategic action for area 1, the document recommends that IAPSO should participate in developing science and implementation plans for
Global Change and Earth System Science Programs.

RESPONSE: By participating in SCOR, both at their annual meetings and in their working groups, I would say we are involved in this type of activity. Since SCOR tends to be focused on the biogeochemical aspects of the oceans and its boundaries, we, as mainly physical scientists, can bring important mathematical, physical and chemical knowledge of the oceans and other fluid parts of the Earth to the discussion table. Thus together, we are able to introduce broad and holistic programs in climate and the Earth system, especially since IAMAS and IABO (International Association for Biological Oceanography) are represented on the SCOR executive committee. I would also like to say that by organizing several of our assembly symposia jointly with IAMAS or IABO (and with IACS in the future), we are showing our interest in the oceans as a fundamental component of the Earth system.

As a proposed strategic action for area 2, the document recommends that IAPSO promotes the creation of regional real-time forecasting systems in developing countries.

RESPONSE: According to the plan, a workshop on forecasting was held in Africa in 2004. I do not know the outcome of this workshop. However, at the 2007 Perugia general assembly, IAPSO sponsored an excellent symposium of ocean data assimilation. At the upcoming 2009 Montreal joint assembly, there will be an IAPSO session which will include papers on data assimilation and ocean forecasting.

As a proposed strategic action for area 3, the document recommends that a working group on DOES be formed.

RESPONSE: The SCOR/IAPSO WG 129 (DOES) was formed in 2006, and it held its first meeting in Perugia. WG 129 will hold a second meeting in Cape Town in October 2008 (see also Open Letter No. 1) and plans to have a session on DOES at the 2009 Montreal assembly.

_Sci_ence enabling focus areas._ Here, there are again three priority areas identified: 1. Revision of equation of state for seawater, 2. Systematically observing the oceans, and 3. Role of physical and chemical processes as key elements of the structure and dynamics of marine ecosystems.

As a proposed strategic action for area 1, the document recommends that IAPSO forms a working group on this topic.

RESPONSE: In 2005, SCOR/IAPSO WG 127 (The thermodynamics and equation of state of seawater) was formed. As reported in my Open Letter No.1, excellent progress has been made already by this WG with the submission of an important paper to Deep–Sea Research on seawater salinity. Also, earlier this month I received a progress report from the Chair of this WG (Trevor McDougall) which outlines the future work to be done. I will be happy to send a copy of this report upon request.

Among the proposed strategic actions for area 2, the document recommended that IAPSO promotes the assessment and evaluation of new physical and chemical sensors (particularly those designed for autonomous use) of the oceans.

RESPONSE: IAPSO is strongly supporting a follow-up action on a presentation by Tom Rossby of URI at the Bergen (August 2007) SCOR meeting. In his talk entitled "Sustained ocean observations from merchant marine vessels", Tom argued that the merchant marine has a presence on the high seas second to none, and that the many ships on the seas could be instrumented to regularly monitor the subsurface ocean, in an analogous way that satellites monitor the global atmosphere and ocean surface. The SCOR executive committee has now received a formal proposal for the formation of a panel to examine the feasibility of this new paradigm, and IAPSO will support the travel of one IAPSO delegate to meetings of this panel. In addition, at the Montreal joint assembly, we plan to have a session on state-of-the-art ways of measuring the ocean’s interior.

Among the proposed strategic actions for area 3, the document recommends that IAPSO promotes the use of models to downscale from the basin scale atmospheric and oceanic variability to the scale of regional ecosystems.
RESPONSE: This topic was actually discussed at Perugia by the IAPSO EC and, as a consequence, we shall have an IAPSO symposium at the Montreal assembly that will deal with climate change and its impacts on the nearshore coastal environment.

_Outreach, education and transfer of knowledge_ This is an area where the NCs for IAPSO could play an important role, by offering to give public lectures on the oceans, the observation of its properties, and the role of the oceans in climate change. At the same time, past and current EC members of IAPSO should be willing to speak to national committees of IAPSO, or to national oceanographic societies about the activities of IAPSO. I would be happy to receive an invitation from any National Correspondent to give such a presentation, and would try to fit this in to my travel schedule.

_VISIBILITY AND COMMUNICATION_ The proposed hard copy of an IAPSO leaflet (see Open Letter No. 1) will help make our association more visible to the public, as well as to the scientific community. It was also suggested in the strategy document that IAPSO establish an electronic newsletter, to be prepared by the Secretary General (SG), with input from the EC and perhaps also the NCs. *I would like to hear your thoughts on this idea.

_PARTNERSHIPS_ As noted in Open Letter No. 1, SCOR is an important partner of IAPSO, and we shall continue this strong relationship. I also believe that we must continue to interact with the other associations of IUGG, and indeed, we shall hold our next joint assembly (in Montreal, 19–29 July, 2009) with two of them, IAMAS and IACS (see Open Letter No. 1). Through IUGG, we also have a formal liaison with IOC (Intergovernmental Oceanographic Commission), and IAPSO vice president Eugene Morozov serves us in this capacity. In 2001, we held a joint assembly with IABO in Argentina, and since then, IABO has participated in a number of our symposia in Sapporo (2003), Cairns (2005) and Perugia (2007). They will also contribute to three symposia in Montreal in 2009.

_ORGANIZATIONAL STRUCTURES_ At the Perugia assembly, the position of Deputy SG for IAPSO was abolished and replaced by the position of Treasurer, which is now occupied by Fred Camfield. IAPSO has a statutory Bureau, consisting of the President, Past President, SG and Treasurer, and they are charged with preparing the agendas for the meetings of the EC and NCs. With the help of the EC members, they will also be responsible for preparing the scientific program for the assemblies.

* Your comments on the IAPSO Strategy Document, and how we might further act on its recommendations would be highly appreciated.*

With best wishes,

Lawrence Mysak
President, IAPSO
and
Canada Steamship Lines Professor
McGill University
805 Sherbrooke St. W.
Montreal, QC H3A 2K6
Tel. 514-398-3768 FAX 514-398-6115
E-mail: lawrence.mysak@mcgill.ca
website: http://www.esmg.mcgill.ca