

remote sensing, with emphasis on high impact weather, climate and hydrometeorology. Taking into account evolving user requirements, the focus of VLab activities could be widened to support training related to ocean applications, hydrology and water management.

**OCEANTEACHER: A VERSATILE TOOL FOR OCEAN DATA AND INFORMATION MANAGEMENT TRAINING**

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**ОСЕАНТЕАЧЕР: МНОГОСТОРОННЕЕ СРЕДСТВО ДЛЯ ПОДГОТОВКИ КАДРОВ В ОБЛАСТИ УПРАВЛЕНИЯ ДАННЫМИ И ИНФОРМАЦИЕЙ ОБ ОКЕАНЕ**

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The International Oceanographic Data and Information Exchange (IODE) Programme of the Intergovernmental Oceanographic Commission (IOC) has a long tradition of providing technical training to data centres and marine libraries in Member States. As there are no formal academic curricula that focus on oceanographic data management, such training has been mainly passed on “from generation to generation” within the data centres. Through IODE, this national expertise has been shared internationally through ad hoc training courses or internships, resulting in a global network of 80 National Oceanographic Data Centres (NODCs). A technological “explosion” started with the Internet and World Wide Web in the early 1990s and has totally changed the operational processes of data centres and marine libraries. The combination of spectacular reductions in the cost of computer hardware -- combined with the availability of the Internet -- has offered many opportunities but also created many challenges, one being the need to re-train staff. A challenge to the IODE programme and to the NODCs has been the capacity to train and maintain a sufficient number of staff in each Member State. Experience during the past 20 years has shown that retention of staff is a major problem, especially in developing countries as competent and trained staff are often

“headhunted” by the private sector or they move to higher positions in their institutional hierarchy. It was thus found that within a few years staff at NODCs had changed completely and training had to be organized again. To face this challenge, as well as to address the continuing evolution in technologies, the IODE programme embarked on applying new technologies in its training programme. This started in 2000 with the “IODE ResourceKit” and has led to the OceanTeacher project, which started in 2003. The core concept of OceanTeacher is to develop an “encyclopedia” of knowledge related to ocean data and information management, as well as course outlines. This combination is used first and foremost during classroom-based courses but can also be used for distance learning. The success of the approach has led to the OceanTeacher Academy (OTA). This project, funded by the Government of Flanders (Kingdom of Belgium) provides an annual teaching programme including up to 10 courses, taught at the IOC Project Office for IODE in Oostende, Belgium, and sometimes also at regional sites. The regular cycle of standardized courses on oceanographic data and information management has a global geographic focus in terms of audience and provides the most up-to-date expertise to students. The courses are aimed at NODC staff but increasingly also at University students who otherwise would never be exposed to the importance of professional data and information management. Such courses are now also taught at Universities or Postgraduate courses. In order to address the long-term impact of the training effort, emphasis is increasingly placed on train-the-trainer and distance learning. In this regard it is worth noting that all lectures are now (starting March 2010) video-recorded and made available through the OceanTeacher web site. Experiments with live videocasting (and allowing interaction through chat-type technology) are also planned. It is expected that the use of these advanced multimedia techniques will substantially increase the student audience and therefore contribute to a more sustained impact of IODE’s training efforts.