



Capacity Building

The Preparatory Commission offers States Signatories training

courses and workshops in technologies associated with the International Monitoring System, the International Data Centre and on-site inspection, thereby assisting in the strengthening of national scientific capabilities in related areas. Such capacity building serves to enhance the real and potential technical capabilities of States Signatories throughout the globe, as well as those of the Commission. As technologies expand and improve, so too does the knowledge and experience base of designated personnel. Training courses are held at the Headquarters of the Commission, as well as in numerous external locations, often with the assistance of hosting States.

HIGHLIGHTS IN 2007

- Successful completion by six participants of the first analyst training course since 2003
- 13th introductory course for members of Permanent Missions in Vienna
- Workshops on noble gas technology in Las Vegas and infrasound technology in Tokyo
- Training courses in France and Hungary related to the 2008 Integrated Field Exercise
- Procurement of a new e-learning management system.



Participants of IMS-IDC regional training course for station operators and NDC technical staff, Costa Rica, July 2007.

provides station operator training on the specialized equipment installed at these stations. As there is more than one equipment supplier, training is provided by each of the providers, either at its own facilities or at an operational station. Station operators are given theoretical as well as hands-on experience during this five day course.

TRAINING STATION OPERATORS

In 2007, the PTS organized six training courses for station operators and NDC technical staff: an IMS-IDC introductory training course, a technical training course on radionuclide detection equipment, an IMS-IDC regional technical training course, two technical training courses on noble gas monitoring systems and an IDC analysts' course.

In total, 28 NDC technical staff members from 21 States Signatories and 29 station operators from 18 States Signatories participated in the courses. In addition, four participants from one State Signatory attended a PTS visitors' programme.

NOBLE GAS TECHNICAL TRAINING

The most recent addition to the provisional verification system is the radionuclide noble gas monitoring station. As demonstrated after the nuclear event in the Democratic People's Republic of Korea in October 2006, this new element of the radionuclide network can provide valuable information on suspected nuclear tests, even at great distances (see also *International Data Centre: "Performance Test for the Commission"*). The noble gas technical training course

TRAINING ANALYSTS

Review of data and generation of reviewed data products are at the core of PTS functions. Analysts sift through volumes of data, providing an accurate accounting of all events that meet specific criteria. The job is demanding and requires a high degree of skill. The IDC analysts' course is the longest of the PTS training courses; it lasts three months and requires a huge commitment from the participants. From the numerous applicants, only a handful are chosen to come to Vienna for the demanding course of instruction. Most of the course offers hands-on training with the analytical tools, preceded by a short theoretical introduction. By the end of the three months, the trainees leave in a much stronger position to apply for analyst positions at the PTS.

TRAINING INSPECTORS

Two OSI training courses related to the 2008 field exercise in Kazakhstan were conducted in 2007, during which the PTS used the opportunity to test technologies and equipment provided as contributions in kind (for more on the exercise, see *Preparing for On-Site Inspections*). In July, the French Government



Team discussion during the OSI introductory training course in Arcueil, France, July 2007.

hosted an introductory course for the IFE at the French Training Centre for the Prohibition of Chemical Weapons in Arcueil. An advanced training course, hosted by the Hungarian Government, was conducted in the Peace Support Training Centre of the Hungarian Defence Forces, Szolnok, and in the field camp, Táborfalva, in October and November.

The main objectives of these courses were to familiarize participants with procedures, software and equipment to be used in the IFE, to enhance teamwork and to provide feedback critical for the continuing preparation of the exercise. The courses also enabled the PTS to identify training and logistical requirements, as well as potential risks, that will need to be addressed prior to the start of the IFE.

The 13th introductory course for members of Permanent Missions in Vienna was conducted in October at the Headquarters of the Commission. An important element of the OSI programme, this introductory course represented a valuable opportunity to create another outreach forum for OSI activities, as well as ensuring that the role and work of the PTS with regard to OSI are understood and approved by the main stakeholders.

A successful regional course was conducted in Brazil in April. An impressive field demonstration of a decontamination facility by the nuclear–biological–chemical unit of the Brazilian Army and an emergency evacuation demonstration provided a unique opportunity to train the selected experts. It was also an opportunity to raise awareness of the importance of improvement and continual training for the specific field expertise related to OSI.



Noble gas workshop, Las Vegas, November 2007.

NOBLE GAS AND INFRASOUND WORKSHOPS

Las Vegas

In November, a noble gas workshop was held in Las Vegas, Nevada, USA, and hosted by the Pacific Northwest National Laboratory. The workshop focused on research and development necessary for xenon measurement, calibration of noble gas systems, operational testing of noble gas equipment, quality control concepts for the noble gas network, categorization of noble gas events and certification requirements for IMS noble gas systems. A special session on the nuclear event in the Democratic People's Republic of Korea in October 2006 was also conducted.

Tokyo

Also in November, the annual infrasound technology workshop was held in Tokyo. The event was hosted by the Japan Weather Association and the Center for the Promotion of Disarmament and Non-Proliferation of the Japan Institute of International Affairs. The workshop covered technical issues related to the study of infrasound in general and specific topics such as wind noise reducing systems, data processing and instruments. The workshop highlighted the major advances in infrasound research during the past year.

E-LEARNING

Traditionally, training activities by the PTS have been limited mostly to typical classroom training and field

exercises. To enhance the learning opportunities for States Signatories and PTS staff, e-learning was introduced to complement classroom training.

For example, as part of the development of the OSI regime, a training programme has been developed for future inspectors. E-learning is intended to replace as much as possible the lecture room part of OSI courses for future inspectors, leaving more time for actual field activities during the courses.

The primary objectives of the e-learning practices of the organization are as follows: (a) to increase the number of participants in PTS training activities; (b) to prepare individuals prior to their participation in traditional classroom training and field exercises; (c) to reduce lecture room time in favour of field activity or hands-on exercises; (d) to provide a means for individuals to learn at their own pace where appropriate; and (e) to broaden the base of potential candidates for posts in the PTS, thereby assisting recruitment.

The e-learning facilities of the PTS took a large step forward in 2007 with the procurement of a learning management system. The new system has all of the necessary features such as computer platform independence and compatibility with the official languages of the United Nations. In addition, it meets the requirements of the existing hardware, software, networking and security systems of the PTS. Courses can be updated quickly and easily. The system is secure and allows tracking of security violations as well as robust password checking. The user interface is clear and easy to follow, which is essential in view of its diverse population of users. The cost of the system was also notably lower than that provided by the previously selected contractor.

The contract for the new system was signed in November. Implementation, installation and testing of the system were scheduled to take place in the first quarter of 2008.