Throughout the process of establishing the verification system, the Provisional Technical Secretariat of the CTBT Preparatory Commission aims for effectiveness, efficiency and continual improvement through the implementation of its Quality Management System (QMS). This system is focused on customers, such as States Signatories and National Data Centres, and aims at fulfilling the responsibilities of the Commission in establishing the CTBT verification regime in compliance with the requirements set forth in the Treaty, its Protocol and relevant documents of the Commission.

Highlights in 2011

Enhancement of the PTS performance reporting tool and creation of a radionuclide concentrations tool

Further development and consolidation of procedures related to the QMS

Feedback from users of data, products and services during the NDC Evaluation Workshop in Bucharest
DEVELOPING THE QUALITY MANAGEMENT SYSTEM

The main purpose of the QMS is to ensure the continuous provision of high quality products and services. The QMS is a ‘living system’ that can be adjusted, in keeping with the emphasis placed by the organization on customers and continual improvement.

As part of the ongoing work to consolidate QMS procedures, efforts focused on developing and testing the procedure for coding and controlling QMS related documents as well as the workflow of the QMS document management system. Manuals, policies, quality plans, records, reports, specifications, SOPs and work instructions prepared by the PTS will all be organized within this system.

In line with a recommendation made by the 2010 Quality Management Workshop, the glossary of verification related terms was updated.

Process Metrics Manual and Performance Reporting Tool

One of the functions of the QMS is to identify and put into effect key performance indicators (KPIs) for evaluating PTS processes and products, thus facilitating management review and continual improvement. KPIs are parameters used to quantify the performance of the processes of an organization. They are primarily employed to assess the progress in reaching objectives and to supply quantitative information for prescribing a course of action. The aim of the QMS is to support the objective of consistently meeting verification system requirements.

It encompasses all contributing PTS processes and work products.

The PTS Process Metrics Manual was compiled on the basis of the definitions of the KPIs contained in the draft IMS and IDC Operational Manuals and was issued. In addition, a test version of PRTool, comprising a Web platform to display information on performance for most of the KPIs and their trends, was made available for authorized users.

The capabilities of PRTool were expanded to strengthen its potential for helping to assess improvement of processes and products on the basis of the values of the related KPIs and their trends, was made available for authorized users.

The KPIs and their trends were displayed in the performance reporting tool (PRTool). PRTool proved its potential and flexibility after the Fukushima accident when a new information technology application called CRTool, based on this design and dealing with radionuclide concentrations and radioisotope ratios, was launched expeditiously.

The graphical displays provided by CRTool were used during the briefings for States Signatories on developments related to the Fukushima event. States Signatories also have online access to performance information expressed in terms of the KPIs related to the strategic goals of the Commission.

EVALUATING ON-SITE INSPECTION ACTIVITIES

The main focus of the evaluation of OSI activities centred on the preparations for the evaluation of the next IFE and a related series.
of three core build-up exercises preceding it. These exercises are designed to ensure the maturity of OSI components when finally tested in the IFE. The general approach to the whole evaluation was presented at the first meeting held under the expert advisory mechanism in May. Feedback was received after the meeting regarding the further development of the evaluation approach.

The evaluation concept is being developed and set out in the draft blueprint for the evaluation document, which will evolve as and when information on the build-up exercises is released. Moreover, the development process will involve the implementation of lessons learned from the evaluation and the experience gained along the way. Thus feedback on the approach to the first build-up exercise will be incorporated into the design of the second and so on.

The evaluation concept takes two different approaches in order to reflect the two distinct purposes of the build-up exercises and the IFE. Since the former are viewed as ‘dress rehearsals’ for the IFE, in which progress can be assessed, the evaluation of the three exercises will take a formative approach in order to help shape the operational capability being exercised. It will do so by providing feedback which can be incorporated into the next exercises or be used to make adjustments prior to the IFE.

The IFE, on the other hand, is regarded as a test vehicle for benchmarking operational capability and determining the level of OSI preparedness. Therefore the approach to its evaluation will be summative.

The evaluation of the advanced training course of the second training cycle for surrogate inspectors took place in June-July.

**FEEDBACK FROM NATIONAL DATA CENTRES**

The 2011 NDC Evaluation Workshop was jointly organized by the Government of Romania and hosted by the National Institute for Earth Physics. Seventy-four participants representing 32 States Signatories, NDCs and the PTS attended the workshop in Bucharest from 3 to 7 October.

The objective of the workshop was to provide a forum for NDC experts to share their experiences in fulfilling their verification responsibilities and to provide feedback on all aspects of the data, products, services and support provided by the PTS. The workshop focused on the results of the 2010 NDC Evaluation Workshop, the results of the 2010 NDC Preparedness Exercise (NPE10) and plans for subsequent exercises, as well as data fusion concepts and their importance to the NDC mission.
In its Quality Policy, the PTS underlines its focus on customers. The 2011 NDC Evaluation Workshop reviewed the status of implementation of the recommendations offered by previous such workshops.

NDC experts shared their experiences in fulfilling their verification responsibilities and provided feedback to the PTS on all aspects of PTS data, products, services and support. Discussions included a wide variety of topics related to data acquisition and analysis. The importance of communicating clearly to the NDCs any changes in parameters was emphasized. The discussions also covered aspects of gaining a better understanding of the degree to which PTS data and products are used by the NDCs and the importance of providing feedback and addressing questions to the PTS through the established channels.

The NDCs expressed their views on issues such as differences between the IDC and NDC bulletins, shifts and mismatches in event locations, missing events and sources of discrepancies in bulletin comparisons. They also reported on the civil use of scientific data and pointed out the importance of training and software.

NDC feedback to the PTS on services covered a broad range of aspects, including use of IDC products, performance reporting, documentation and access.

The presentations on establishing and running newer NDCs addressed the organization and activities of the respective NDCs in developing countries. The presentations described examples of data analysis carried out using the hardware and software available to the NDCs, putting in perspective evidence of some difficulties still to be resolved in the installation and application of the software.