



## **The National Data Center Preparedness Exercise 2009 – First Results**

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The NDC preparedness initiative was initiated by 8 signature states. It has now a history of more than 2 years with two successful exercises and subsequent fruitful discussions during the NDC Evaluation Workshops of the CTBTO. The first exercise was carried out in 2007 (NPE07). The objectives of and the idea behind this exercise have been described in the working paper CTBT/WGB-28/DE-IT/1 of the CTBTO.

The exercise simulates a fictitious violation of the CTBT and all NDCs are invited to clarify the nature of the selected event. This exercise should help to evaluate the effectiveness of analysis procedures applied at NDCs, as well as the quality, completeness, and usefulness of IDC products. Moreover, the NPE is a measure for the readiness of the NDCs to fulfil their duties in regard of the CTBT verification: the treaty compliance based judgments about the nature of events as natural or artificial and chemical or nuclear, respectively.

The NPE09 has started on 1 October 2009, 00:00 UTC. In addition to the previous exercises, three technologies (seismology, infrasound, and radionuclide) have been taken into account leading to tentative mock events generated by strong explosions in open pit mines. Consequently, the first event, which fulfils all previously defined criteria, was close to the Kara-Zhyra mine in Eastern Kazakhstan and occurred on 28 November 2009 at 07:20:31 UTC. It generated seismic signals as well as infrasound signals at the closest IMS stations. The forward atmospheric transport modelling indicated that a sufficient number of radionuclide stations were also affected to enable the application of a negative testing scenario. First results of the seismo-acoustic analysis of the NPE09 event were presented along with details on the event selection process.