

## **Design and Multi-Technology Analysis of the National Data Center Preparedness Exercise 2012**

NDC Preparedness Exercises (NPE) are regularly performed dealing with fictitious treaty violations to practice the combined analysis of all CTBT verification technologies and also for the mutual exchange of information between NDC and also with the IDC. The exercises are organized and coordinated at the German NDC (BGR). The NPE 2012 scenario was based on a selected seismic event from the Reviewed Event Bulletin serving as starting point for fictitious radionuclide dispersion. The internal trigger event was not provided to the participants. Hypothetical xenon and iodine concentrations at operational IMS stations were simulated by forward atmospheric transport modeling (ATM) and the detections in virtual samples announced. The first task was for all participants to confine the potential source region by means of atmospheric backtracking and to identify candidate waveform events. For participants without ATM capacity two additional entrance levels were offered upon request: either a space-time-box containing the trigger event or even the REB Event ID with waveform parameters. The presentation will provide an overview on the event selection process and radionuclide scenario as well as on the event analysis combining signals from waveform and RN/ATM-technologies. Finally, an outlook on the upcoming NPE will be given as well.

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