

### **3.3-P11. Extended NDC-in-a-BOX (EU/CTBTO Joint Action V) data model: Integrated data acquisition, processing and analysis platform for NDCs**

CTBTO provides technical assistance that enables Member States to work with monitoring data and IDC products. This assistance includes the distribution and installation of NDC software package. This NDC-in-a-box consists of software to receive, work with and analyze the data. CTBTO is extending the current NDC-in-a-box with additional software enabling users to easily combine data from regional and global networks (e.g. IMS, FDSN) and to significantly improve the NDCs processing capabilities. To achieve this, the NDC will use an open source database (PostgreSQL) that replicates the CSS database table from the IDC, and applications will exchange information with SeisComp3 or NDC processing pipelines. In the NDC platform, formats are standardized with CSS and CSS-miniSEED (i.e. miniSEED binary data referenced in CSS Wfdisc structure). New tools operate data format conversion between SEED/miniSEED and CSS/CSS-miniSEED. New expert modules for seismo-acoustic analysis (DTK-GPMCC, DTK-DIVA and DTK-Jade) as well as processing tools (detector and locator) used in IDC operations will be made available to NDCs, either connected to the NDC environment or plugged in near real-time to Seiscomp3 mediator. The poster explains how the new functionality in the extended NDC-in-a-Box provides to NDCs an integrated acquisition, processing and analysis platform for S/H/I data.

**Primary author:** MILJANOVIC TAMARIT, Vera (CTBTO)

**Presenter:** MILJANOVIC TAMARIT, Vera (CTBTO)

**Track Classification:** 3. Advances in sensors, networks and processing