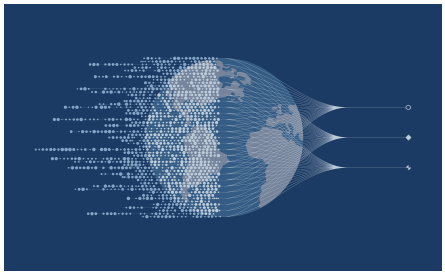

ID: **P4.3-536** Type: **E-poster**

Disaster Recovery in the CTBTO

The Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) operates the International Monitoring System (IMS), a global network of 306 certified facilities, comprising seismic, hydroacoustic, infrasound, and radionuclide technologies, transmit data to the International Data Centre (IDC) via the Global Communication Infrastructure (GCI). The IMS is essential for detecting and verifying nuclear test explosions, underpinning international security. A catastrophic disaster could result in the partial or total loss of the CTBTO's primary computer center (PRI) at the Vienna International Centre, significantly impacting the IDC's ability to fulfill its operational requirements of providing timely data and products to States Signatories. To address this critical vulnerability, the CTBTO is exploring disaster recovery strategies, including the development of an alternative backup site (ALT) capable of sustaining IDC operations during a disaster. A two-month pilot study was conducted to test the use of an ALT for receiving and disseminating IMS data. It provides insights into the CTBTO's required measures to mitigate risks, ensure operational continuity, and preserve the integrity of global nuclear-test monitoring. The outcomes of this initiative will strengthen the resilience of the IMS and the IDC against future disasters and provide guidance on the phased approach for the implementation of an ALT.

E-mail

alexander.sudakov@ctbto.org

In-person or online preference

Primary author: Mr SUDAKOV, Alexander (CTBTO Preparatory Commission)

Co-authors: Mr GRAHAM, Gerhard (CTBTO Preparatory Commission); Mr PRETORIUS, Jacques (CTBTO Preparatory Commission); Mr MFONDOUM, Roland (CTBTO Preparatory Commission)

Presenter: Mr SUDAKOV, Alexander (CTBTO Preparatory Commission)

Session Classification: P4.3 Use of enabling Information Technologies

Track Classification: Theme 4. Sustainment of Networks, Performance Evaluation, and Optimization: T4.3 Use of enabling Information Technologies