

## **Future Technologies for Nuclear Test Verification: Novel Use of an Interactive Information Management Tool**

As part of its mandate, the CTBTO's nuclear explosion monitoring programme aims to maintain its sustainability and long-term effectiveness for the verification regime. The Technology Foresight Programme aims to identify and review potential future technologies, which is also consistent with the aims of the Science and Technology conference series. As part of the Foresight activities, a database within the Pivot environment was developed. This database is populated through a peer-review mechanism; it can be used to explore hypotheses about the future of verification technologies to assist programme managers and decisionmakers to prioritise projects and investments. Through the underlying categories in Pivot we were able to identify technologies that represent potential quick wins: technologies at early development stage, with short maturity and development time, with low financial and institutional cost, with substantial positive verification capability impacts. These technologies might be identified as high-priority. By contrast, a set of future CTBTO-relevant technologies could be seen as lower priority, due to limited verification capability impact, high financial and organisational development and implementation cost, and a long potential impact time. In this paper we review the gains from exploring future technologies in a Pivot environment.

**Primary author:** JAIN, Amit (Comprehensive Nuclear-Test-Ban Treaty Organization)

**Presenter:** JAIN, Amit (Comprehensive Nuclear-Test-Ban Treaty Organization)

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