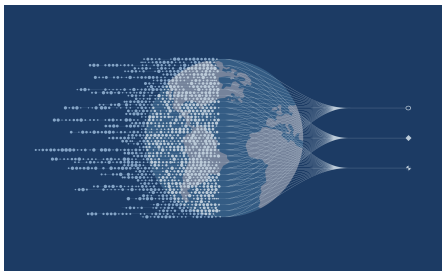

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Detection Capabilities: The Upgrading of CTBTO Auxiliary Stations in Indonesia

The Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) plays a pivotal role in global nuclear non-proliferation efforts through its extensive monitoring systems designed to detect natural phenomena and also nuclear explosions. The ongoing progress of upgrading CTBTO seismic sensors in Indonesia highlights the nation's commitment to supporting the International Monitoring System (IMS) in collaboration with the Indonesian Meteorology, Climatology, and Geophysics Agency (BMKG). Significant advancements have been made nationwide, particularly in improving six CTBTO auxiliary stations in Indonesia, which are integral to the global monitoring network. These enhancements focus on increasing detection capabilities and data reliability. Key initiatives include the integration of cutting-edge communication technologies, improvements in data collection systems, and the replacement of outdated sensors. These upgrades aim to enhance sensitivity, reduce latency, and ensure seamless data transfer to the IDC. The partnership between BMKG and the CTBTO is crucial for maintaining operational excellence, training local staff, and addressing the technological challenges posed by Indonesia's complex seismic environment. Initial findings indicate a marked improvement in data quality and detection performance, reinforcing Indonesia's role in the global seismic monitoring network. This development underscores the importance of ongoing technological advancement and international collaboration in fulfilling the CTBTO's mission to promote nuclear non-proliferation and enhance global security.

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