



Evolution of the CTBTO Infrasond Technology Roadmap

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The CTBTO's nuclear explosion monitoring program needs to maintain its effectiveness and ensure its long-term relevance to the verification regime. The aims of its Infrasond Technology Roadmap (ITR) are to (1) establish a clear way forwards in accordance with the overall CTBTO nuclear monitoring vision, (2) couple scientific work with technology management, and (3) build upon existing technological accomplishments and project them into near-future technical targets. This ITR has a time horizon of seven years, and its activities are closely aligned to the Provisional Technical Secretariat's Technology Foresight Program, which extends its perspective to 20+ years.

Phase 1 of the Roadmap effort requested input from the international infrasond community through the Request for Contributions released on 15 November 2012 (RFC R1). A set of metrics were selected to lend fairness, accountability, and scientific integrity to the evaluation of technical topics. The RFC was an inclusive, participatory effort inviting individual scientists to identify and assess technologies and procedures that can be infused into the IMS to meet its monitoring requirements and help evolve technology to achieve a reliable, sustainable and trustworthy monitoring system. We received over 680 individual topic evaluations from 52 members of the international infrasond community, with a 93% response rate. We present the statistical results from our survey as well as the highlights of the draft Infrasond Technology Roadmap Document.