



On-Site Inspection Integrated Field Exercise in 2026 (IFE26)

Simon Summers

Policy Planning and Operations Section, OSI Division, PTS

Andrew Bramnik

Policy Planning and Operations Section, OSI Division, PTS

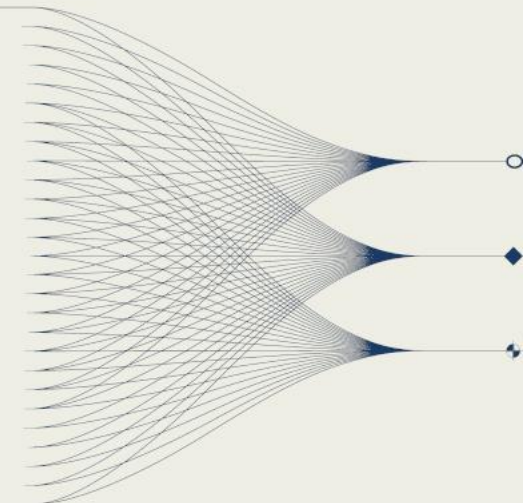


PUTTING AN
END TO NUCLEAR
EXPLOSIONS

..... INTRODUCTION AND MAIN RESULTS

An Integrated Field Exercise (IFE) provides an unrivalled platform to test various operational, procedural and technical elements of an on-site inspection (OSI) in an integrated manner. The next IFE shall be designed to demonstrate maintenance of existing capabilities and newly developed elements, and will allow for the review of policy, operational, support, logistical and technical capabilities from a holistic, cross-cutting perspective.

The next IFE is expected to involve nearly 250 participants, over a period of up to seven weeks, and an inspection area approaching the Treaty-permitted 1000km². This poster provides information on the exercise design, schedule, scope, location, expected challenges, as well as the general status of the planning and preparation process.





Aim and Objectives

The aim of the on-site inspection (OSI) Integrated Field Exercise in 2026 (IFE26) is to demonstrate and assess the current level of OSI capabilities and to identify areas for further development to prepare the CTBTO to conduct effective OSIs after entry into force (EIF) of the Treaty.

The key objectives of IFE26 are to:

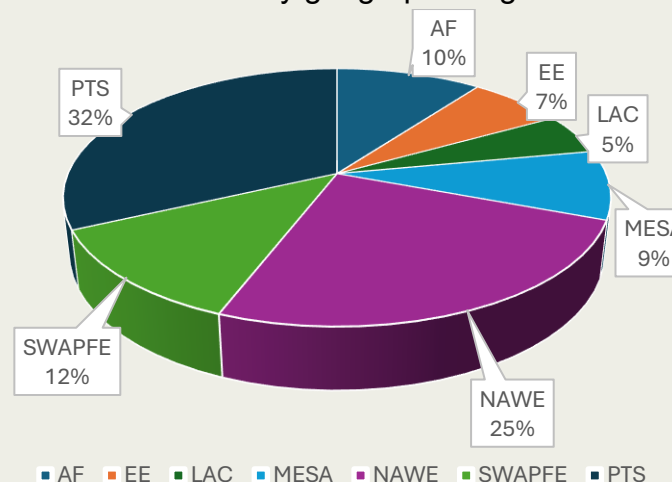
- test various operational, procedural and technical elements of an OSI in an integrated manner;
- demonstrate and evaluate progress made in the development of OSI capabilities since 2015;
- ensure that areas of existing OSI capability have been maintained;
- identify areas for further improvement of OSI capabilities and processes in preparation for EIF.

Locations and Participants

The host country for IFE26 field activities will be the Republic of Namibia, with CTBTO headquarters support provided from the Vienna International Centre (VIC) and CTBTO Test Centre in Seibersdorf, Austria.

Point-of-Entry activities will be conducted in Walvis Bay, the Base of Operations (BOO) will be located in Swakopmund, and the IFE26 inspection area (IA) will be up the Treaty-permitted 1000km² in the coastal Erongo Region. The selected IA offers a varied topographical environment with multiple scenario opportunities and many OSI-relevant natural and man-made features.

Approximately 250 PTS staff and national experts are envisaged to participate in IFE26 with the following provisional breakdown by geographic region:



Availability of Equipment and Techniques

Inspection Activities and Techniques as per Para 69/Pt. II Protocol	Exercised in IFE08 (Fully/limited/not tested)	Exercised in IFE14 (fully/limited/not tested)	Availability for IFE26 (fully/limited/not)
Position finding from the air and surface	Fully played	Fully played	Fully available
Visual Observation from the air, at and below the surface	Fully played (Ground VO not developed)	Fully played (improved ground VO incl. CONOPS and SOP)	Fully available
Video from the air, at and below the surface	Not played	Partially played	Fully available
Still photography from the air, at and below the surface	Fully played	Fully played (chain of custody tightened and interfacing with IIMS)	Fully available
Multi-spectral imaging incl. infrared measurements from the air, at and below the surface	Not played	At least partially played (relying on States Signatories support)	Fully available
Measurements of levels of radioactivity above, at and below the surface using gamma radiation monitoring and energy resolution analysis from the air, and at or under the surface	Limited played (CiK equipment not in accordance with WGB specifications)	Fully played (relying on States Signatories support)	Fully available
Measurements of Argon-37	Not played (Demo only)	Fully/partially played (relying on States Signatories support)	Off-site analysis available, field capability in development
Measurements of RadioXenon	Not played	Fully/partially played (relying on States Signatories support)	Fully available
Environmental sampling and analysis of solids, liquids and gases from above, at and below the surface	Limited played	Fully played	Fully available
Passive seismology	Fully played (30 stations)	Fully played (full set of 50 stations, improved SOP and software)	Fully available (with data telemetry capability)
Resonance seismometry	Not played	Not played (not envisaged as part of Action Plan)	Partially available (using PSM equipment, no data processing capability)
Active seismic surveys	Not played	Partially played (add. resources required, relying on States Signatories support)	Fully available (contracted active source)
Magnetic field mapping from the air and at the surface	Partially played (CiK)	At least partially played (depending on States Signatories support)	Fully available (using contracted equipment from the air)
Gravitational field mapping	Not played	Fully played (instrument and topographic survey equipment, SOP)	Fully available
Ground penetrating radar	Limited played	Fully played (state of art equipment and software)	Fully available
Electrical conductivity measurements (ECM)	Not played except ECM/DC (partially played)	Partially played	Fully available
Drilling	Not played	Not played	Partially available (concept)



Scenario Development

An external **Scenario Task Force** (STF), to which selected States Signatory experts were invited to contribute, is charged with the development of a technically realistic, scientifically credible, rationally coherent, temporally logical, and intellectually motivating scenario for the IFE that shall facilitate the near-realistic testing of OSI processes, procedures and techniques, consistent with objectives for the OSI Exercise Programme.

Challenges include:

- identifying several suitable locations, with adaptations as needed, to stimulate an inspection team to exercise its treaty functions including the application of a wide suite of available techniques;
- Developing a model exercise timeline to predict Inspection Team activities, and injects to expedite, disturb or otherwise steer activities to enable exercise objectives to be met;
- Preparing required scenario implementation data products for respective inspection activity/techniques.

Whilst generic scenario details are largely developed, an STF Site Visit in October 2025 will facilitate the site identification process, enabling the scenario to be finalised after a Peer Review.

Cross-Cutting Issues

The **Health, Safety and Security** of all participants during IFE26 is critical. Reconnaissance assessment visits shall be conducted and suitable arrangements including standby ambulances/paramedics and security services at the BOO or of equipment in the field, put in place in coordination with the VIC Joint Medical Services and in collaboration with Namibian authorities.

A reliable **OSI Communications System** is essential to ensure communication within and between participants in the field, the Base of Operations and the Operations Support Centre in Vienna. It supports real-time tracking, protects the health and safety of participants, and enable swift emergency responses. A communications Field Test is scheduled in Namibia in early 2026 to test various technologies and ensure full functionality during IFE26.



Planning and Preparation Status

The Republic of Namibia submitted an offer to the CTBTO to serve as the host country for the next Integrated Field Exercise.

Progress is being made in securing contracts for accommodation, transportation, aircraft rental, equipment shipment and other operations support services, all pending approval from the Government of Namibia.

Upcoming in-country activities include:

- Regular Preparatory Visits to address operational-technical and contractual issues including communications; health, safety and security; logistics; outreach; exercise design and timelines.
- Field Tests on Aerial Overflights and Communications and Data Telemetry to ensure operability during IFE26
- Training Courses for host country experts and non-IT teams to ensure they are fully prepared to fulfil their roles.