SnT 2025 8 SEPTEMBER ONLINE DAY 9 TO 12 SEPTEMBER AT HOFBURG PALACE, VIENNA & ONLINE
CTBT: SCIENCE AND TECHNOLOGY CONFERENCE

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Requirements and management of support infrastructure for large scale OSI exercises

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Equipment Section / OSI Division / CTBTO

CTBTO PREPARATORY COMMISSION | PUTTING AN END TO NUCLEAR EXPLOSIONS

INTRODUCTION AND MAIN RESULTS

OSI exercises require support beyond the scope of infrastructure used by the Inspection Team. The work of non- IT participants (exercise management and control team, external service providers, external evaluators as well as players simulating the Inspected State Party – amounting up to 80-90 people) must be supported in an integrated manner along with the core infrastructure elements used by the Inspection team of 40. These additional components must be arranged in a least intrusive manner, allowing the testing and evaluation of the Inspection Team Base of Operations capabilities. Non- IT infrastructure therefore must be fully interoperable but clearly distinguishable from standard deployed OSI components.

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Key principles

- Integrated design and combined deployment of IT and non- IT infrastructure to reduce exercise costs.
- In game “Inspected State party components and support” (like ablution facilities, fuel, catering, transportation etc) must be played realistically and established as part of the exercise negotiation process but integrated with pre-arranged and contracted support provided by external service providers. This is a key consideration during the exercise planning phase to enable realistic evaluation of IT infrastructure and its ability to negotiate and arrange support for OSI.
- Utilize or duplicate existing IT components to the best extent possible and keep full interoperability to enable dual use of system components for redundancy.
- To the extent possible, facilitate free play for the Inspection team during the exercise to control and manage their own base of operations

(Inspection team must plan, establish, manage and re-deploy the BOO as part of the exercise and any other infrastructure must be clearly marked and deemed “invisible” for the exercise play purposes.)

Arrangements used during BUE- 24

- All non – IT infrastructure was pre- installed in a designated area and containers were pre-arranged by PTS prior to the arrival of the IT.
- IT power distribution system was used to support both areas of operations resulting in an extensive reliance on an IT only system designed to support solely smaller scale operations and leaving limited redundancies to mitigate potential failures.
- Access control and pathways within the BOO was shared for all players.
- Catering and recreation areas were shared for all players.

Lessons identified

- Separated deployable non-IT capabilities worked out very well but additional capabilities are required to further enhance support.
- Key infrastructure (e.g. power distribution) must be separated but fully interoperable to enable full IT control over the Base of Operations. The secondary power system powering the Non- IT component can be used as a back- up or vice versa.
- Separation of IT/ISP catering area from infrastructure used by other non- IT components would keep IT-ISP interactions more realistic.
- If possible, separate access roads to non- IT areas would be beneficial