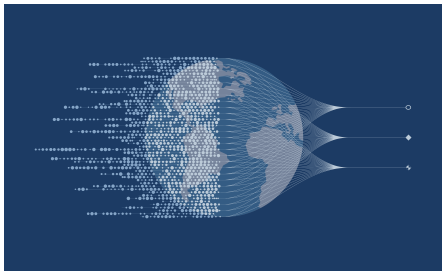

ID: **Ke09** Type: **Keynote**

the Impact of OSI Exercises and Field Tests

The Comprehensive Nuclear-Test-Ban Treaty, describes the sole On-Site Inspection (OSI) techniques that can be used for the verification process. Over the years, there have been rapid advances in technology which have changed the scope of equipment, software and data analysis providing both increase in efficiency and enhancement in resolution.

We are currently in the preparatory phase before the Treaty enters into force—mandated by the resolution establishing the Preparatory Commission—which designates this window as critical for compiling comprehensive operational manuals. acquiring, provisioning, and technically testing all relevant inspection equipment.

OSI Field Tests and Exercises demonstrate the current operational capabilities, which in turn, make possible the operationalization of technological advances. These exercises go far beyond ensuring equipment operational readiness. They also capture massive data sets and rich experiential information on the implementation of the OSI techniques that allow their improvement and recalibration of equipment, methods and dataflows, all in compliance with the Treaty and PrepCom resolutions. This is especially true if engagement in these activities is broadened.

By fostering greater involvement of technical experts, policy-makers, and students in analysing and utilising data from these exercises, the OSI community can generate meaningful feedback to strengthen capacities, enhance readiness, and inspire innovation. In this keynote I will explore opportunities for leveraging exercise-derived data, and propose pathways to broaden community contributions, thereby ensuring OSI techniques remain robust, future-ready, and scientifically grounded in support of global nuclear disarmament and security.

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In-person or online preference

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Session Classification: Keynote on broadening the impact of OSI exercises and field tests