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# of additional monitoring and OSI technologies

Friday, 23 June 2023 11:00 (1h 30m)

After Entry into Force, the Conference of States Parties shall according to CTBT, Article II, paragraph 27 (f) consider and review scientific and technological developments that could affect the operation of this Treaty. According to the CTBT, Article IV, paragraph 11: "Each State Party undertakes to cooperate with the Organization and with other States Parties in the improvement of the verification regime, and in the examination of the verification potential of additional monitoring technologies such as electromagnetic pulse monitoring or satellite monitoring, with a view to developing, when appropriate, specific measures to enhance the efficient and cost-effective verification of this Treaty."

Specifically, the IMS may be expanded beyond the four sensor technologies of the current IMS. National Data Centres don't need to wait since they have no limitations in which sensor technologies they apply in analysing announced or potential nuclear explosion events like optical and radar satellite observations. Also, the IDC conducts the requested service of Expert Technical Analysis on IMS and other relevant data provided by the requesting State Party to help the State Party concerned to identify the source of specific events. Therefore, additional monitoring technologies are not a hypothetical possibility for the future.

For On-site Inspection, the obligation is to use only those techniques specified in the Protocol, Part II, paragraph 69 that deals with the Inspection Activities and Techniques. A proposal for the first comprehensive draft list of equipment for use during OSIs was presented by the Provisional Technical Secretariat (PTS) of the Commission in 2021. It covers all permitted inspection activities and techniques except for drilling. Advances in science and technology have influenced the proposed specifications of OSI equipment since the CTBT opened for signature and will continue to do so. Gaps like drilling still need to be closed, data fusion and automation to be enhanced and it needs to be ensured that observables that are associated with nuclear explosions conducted in environments other than underground can be detected.

This panel will discuss which potential additional technologies would be useful and what progress has been made in demonstrating them.

Oral preference format

Promotional text

E-mail

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