

## AGA 2: Disarmament Verification II

Time: Thursday 11:15–13:30

Location: H8

**Invited Talk**

AGA 2.1 Thu 11:15 H8

**TPNW Verification: Domains, Boundary Conditions, Priorities & Problems** — •THOMAS E. SHEA — Vienna

The TPNW provides a potential framework for eliminating existing arsenals in all nine nuclear-armed states, eliminating critical nuclear weapons infrastructure, and detecting any attempts to rearm in the future. The TPNW will require a verification system tailored to each nuclear-armed state reflecting its nuclear programs and respecting its laws governing nuclear safety and security. Each verification system should address eleven pursuits. Full verification will be costly, sometimes controversial, and will likely require prolonged periods before a state can be declared to be disarmed. Finding hidden weapons and clandestine manufacturing and support facilities will require the use of information obtained by the verification authorities together with information provided by states and other parties. Cybersecurity considerations will govern which verification technologies will be approved by each nuclear-armed state to prevent espionage and approved by the verification authorities to assure scientific authenticity

**Invited Talk**

AGA 2.2 Thu 12:00 H8

**International Partnership for Nuclear Disarmament Verification: Current Status and Future Prospects** — •IRMGARD

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The International Partnership for Disarmament Verification (IPNDV) includes technical experts and government representatives from Nuclear Weapon States and Non-Nuclear Weapon States to work jointly on procedures and technologies that would allow for effective verification of nuclear disarmament. In Phase I (2016-2017), IPNDV identified 14 key steps in the nuclear weapons dismantlement lifecycle. In Phase II (2018-2019), IPNDV broadened its work to consider wider aspects of nuclear disarmament verification while at the same time deepen the work on specific elements of verification. In moving from paper to practice, five practical exercises and technology demonstrations were conducted, including the Nuclear Disarmament Verification (NuDiVe) Exercise, co-hosted by Germany and France. Phase III (2020-2025) builds on current working methods and engages in further hands-on activities, including scenario-based discussions, practical exercise, such as NuDiVe 2021, and technology demonstrations. The talk will discuss the Partnerships' achievements so far and give an outlook to the next steps.

**45 min. lunch break**