



ID: J11

Type: Panel discussion

## uncertainty among scientists, to policy makers and the public

*Friday 2 July 2021 11:30 (1 hour)*

Uncertainty inherently affects every measurement and each scientific statement. This basic fact is often overlooked in communication between scientists, and even more so in the public conversation on scientific topics. Scientific results, be they the product of preliminary investigations or firmer outcomes of peer-reviewed studies, are often perceived as immutable, overlooking the fact that all findings are subject to continuous scrutiny and revision as new data or theories become available. Regional and cultural perspectives also play a role in the communication and perception of uncertainty. Failure to communicate effectively on this issue can undermine public confidence and have a direct impact on perceptions of risk, and the consequences of such misconceptions have become especially prominent in the context of the global coronavirus pandemic. In the CTBT context, uncertainty is an inescapable element of the characterization and communication of Treaty-relevant events, as well as in the framework of civil and scientific applications. This panel discussion addresses strategies for effectively communicating uncertainty when reporting about science, with the objective of delivering a clear message to audiences. It is relevant for scientists, policy makers and public information professionals.

### Promotional text

**Primary author:** Mr RICKWOOD, Peter (Atomic Reporters)

**Co-authors:** Ms ME, Angela (Chief Research and Trend Analysis Branch at the United Nations Office on Drugs and Crime (UNODC, Vienna)); Mr GILLIES, James (Particle Physicist and Senior Communications Advisor at CERN (Geneva, Switzerland), former Head of Communications at CERN); Mr ARORA, Nimar (founder of Bayesian Logic Inc., Berkeley, (California, USA) and inventor and developer of NET-VISA, a Bayesian machine-learning tool for Seismo-Acoustic automatic event association); Mr MEKHAIMER, Sayed (National Data Centre & National Institute of Astronomy and Geophysics (NRIAG), Cairo (Egypt), expert on application of Bayesian inference approaches to address the uncertainty in radionuclide source term estimation)

**Presenter:** Mr RICKWOOD, Peter (Atomic Reporters)

**Session Classification:** Panel discussion on Science communication

**Track Classification:** Backbone elements