

## EDITORIAL

### ANNIKA THUNBORG

#### CTBTO SPOKESPERSON



From 11 March and over the ensuing weeks, scientists at the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) worked around the clock. When the devastating magnitude 9.0 earthquake struck northern Japan, CTBTO data contributed to rapid tsunami warning alerts and tracked the dispersal of radioactivity from the damaged Fukushima plant around the world.

The global alarm system of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) is being set up to scan the world for any sign of a nuclear explosion. In the process of detecting the needle in the haystack – the nuclear test – the system registers over 30,000 events a year. This information can be used for a wide range of civil purposes, from enhancing our understanding of the Earth to following volcanic ash clouds and the movement of whales.

Our verification regime demonstrates the synergy between making the world secure from nuclear weapons and promoting human welfare and development.

Several articles in this issue of CTBTO Spectrum touch upon this point. They focus on the CTBTO's contribution to mitigating the disasters in Japan, on our dedicated data analysts who distinguish between

earthquakes and explosions, on the committed chief who leads the team that ensures the smooth running of the CTBT monitoring system, on the National Data Centre in the Republic of Congo as a model for the Central African region, and on why the Portuguese State Secretary believes that a facility agreement is one of the best tools for building up the verification regime.

International security expert Alyson Bailes discusses the need for a related kind of synergy: the one between weapons of mass destruction and conventional arms – a topic we will revisit in a later edition of Spectrum. She also expresses her hope that future generations of women will want to focus on this subject. I echo her sentiments and trust that in the very near future, women all over the world will be given the same opportunities and support as men to become politicians, diplomats and experts on non-proliferation and disarmament as well as scientists and technical experts in the verification sciences. Remember that you will receive a warm welcome at the CTBTO!

In the wake of the Fukushima disaster, it has become even more important to focus on the nexus between nuclear safety and nuclear security, and on the need to put in place layer upon layer of mutually reinforcing international, regional and bilateral non-proliferation and disarmament arrangements in order to build a safer and more secure world. UN Secretary General Ban Ki-moon has recently highlighted this nexus as part of his five-point strategy to improve nuclear safety. In her article "Safeguarding the Arab Renaissance", Princess Sumaya of Jordan underlines the necessity of connecting these dots in the Arab world.

We usually associate the CTBT with peace and security: it is a core element of nuclear non-proliferation, a catalyst for nuclear disarmament, and part and parcel of a nuclear-weapon-free world. It also prevents further health and environmental damage caused by nuclear explosions. And it can serve as a confidence – and security-building measure. The President of Switzerland Micheline Calmy-Rey and the New Zealand Disarmament Minister Georgina te Heuheu elaborate eloquently on these aspects in their respective articles.

But it is also important to remember that the CTBT is crucial in connection with the development of nuclear energy for peaceful purposes. Whatever impact the Fukushima disaster has on the predicted nuclear renaissance it is a fact that more and more States are mastering the nuclear fuel cycle. The decision between using nuclear energy for peaceful or for weapons purposes will become more a political and legal issue rather than one of technology and know-how. The CTBT provides the last and clearly visible barrier between permitted and prohibited activities – a legal line that needs to be drawn clearly and irrevocably.

The CTBTO's global nature with its equal and democratic distribution of data proved to be an important asset for governments, organizations and people all over the world during the Fukushima disaster. The CTBT, which is equally non-discriminatory with the same rights and obligations for all its members, sets a new legal and verification standard for nuclear weapons, thus making a great contribution towards creating a safer and more secure world.