EU support for

the Comprehensive Nuclear-Test-Ban Treaty and its verification regime

Working Paper by the European Union

The European Union considers the Comprehensive Nuclear-Test-Ban Treaty to be of crucial importance to nuclear disarmament and non-proliferation and its entry into force remains a top priority for the European Union.

1. "The importance and urgency of the signature and ratification, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty" (CTBT), is the first of the 13 practical steps agreed upon already at the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons for systematic and progressive efforts to achieve complete disarmament, and reiterated during the 2010 Review Conference.
2. Actions no. 10 to 14 of the 2010 NPT Review Conference Action Plan confirm the importance of the signature and ratification of the Comprehensive Nuclear-Test-Ban Treaty, upholding the moratoria on nuclear-weapons test explosions or any other nuclear explosions, refraining from any action that would defeat the object and purpose of the Treaty, recognising the contribution of the Conferences on Facilitating the Entry into Force of the Treaty to the progress made towards the entry into force, promoting the entry into force and implementation of the Treaty at the national, regional and global levels, and encouraging the Preparatory Commission for the CTBTO to fully develop the verification regime for the CTBTO.

3. Since the Comprehensive Nuclear-Test-Ban Treaty was opened for signature in 1996, 183 States have signed and 164 have ratified the Treaty. Of the 44 Annex 2 States required to ratify to achieve the entry into force of the Treaty, 36 have done so. All the Member States of the European Union have demonstrated their commitment to the Treaty by ratifying it and by applying provisionally its Basic Obligations as stated in Article I. They furthermore supported the Joint Ministerial Statements resulting from the biennial ‘Friends of the CTBT’ Ministerial meetings in 2012 and 2014, and the Final Declarations of Article XIV Conferences in 2011 and 2013.

4. The entry into force and universalisation of the CTBT is a key priority of the European Union. The EU is encouraged by the ratifications of the Treaty by eleven States since the 2010 NPT Review Conference, and is ready to continue actively working with the CTBTO,
as well as with all States, to promote the Treaty's entry into force. In this respect, the EU considers it of utmost importance that all States that have not yet done so sign and ratify the CTBT without delay, in particular the remaining eight Annex 2 States necessary for the CTBT entry into force. In this context, the EU wishes to highlight that no linkages should be made between ratifications of one State or another and that each of the remaining Annex 2 States should show leadership to bring the Treaty closer to its entry into force. Furthermore, the ratification of the Treaty is also a measure to build trust and confidence in on-going nuclear disarmament and non-proliferation efforts, both globally and regionally.

5. The EU uses every opportunity to advocate CTBT ratification in international fora and meetings with countries that have not yet signed or ratified the Treaty, and continues to conduct political demarches to promote the entry into force of the Treaty in those countries. The EU has also carried out, in cooperation with the Preparatory Commission of the CTBTO, as well as with partner countries, a number of CTBT outreach activities in different regions of the world.

6. The EU's political efforts have been complemented by its financial commitment to support the CTBTO. Through three Joint Actions and two Council Decisions, the EU has provided the CTBTO with more than 15.5 million EUR in voluntary contributions since 2006, which place the EU amongst the most important financial contributors to the CTBTO. The extra-budgetary support provided by the EU has considerably enhanced the Provisional Technical
Secretariat (PTS)'s monitoring and verification capabilities and strengthened the credibility of the CTBT verification regime. The support has been used, *inter alia*, for:

- The establishment of an E-learning training programme (Joint Action I);
- The Integrated On-Site Inspections Field Exercise 2008 (Joint Action II) and the Integrated Field Exercise 2014 (EU Council Decision V);
- Radio-Xenon Assessment and Measurement, Characterization and Mitigation (Joint Actions II, III and EU Council Decision V);
- Technical assistance and Capacity Building (Joint Actions III, EU Council Decisions IV and V);
- Developing Capacity for Future Generations of CTBT Experts (EU Council Decision V);
- Enhancing the Atmospheric Transport Model (ATM) (EU Council Decision V);
- The Auxiliary Seismic stations (EU Council Decisions IV and V);
- Strengthening cooperation with the scientific community (EU Council Decision IV);
- Strengthening the On-Site Inspection (OSI) capabilities with the development of a noble gas detection system (EU Council Decision IV); and
- The Pilot Project to financially support the access of developing countries to official meetings of the Preparatory Commission (EU Council Decision V).
- The provision of extended technical support to selected National Data Centres (EU Council Decision V).

7. The European Union and its Member States are currently considering an additional Council Decision to provide financial support to the Organisation beyond 2015.
8. The European Union attaches utmost importance to completing and maintaining a credible and operational verification regime for the Comprehensive Nuclear-Test-Ban Treaty. The Organisation has demonstrated its ability to effectively monitor the compliance with the Treaty and to provide the international community with independent and reliable means of ensuring compliance. In this sense, the European Union believes that the operational readiness of the verification regime can help promote its entry into force. The European Union is involved both politically and financially in various ways to strengthen the verification regime and strongly supports the work of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization in this regard.

9. A verifiable Comprehensive Nuclear-Test-Ban Treaty is of utmost importance for nuclear disarmament and non-proliferation and effectively complements the Treaty on Non-Proliferation of Nuclear Weapons. In this regard, the European Union recognizes that the cessation of all nuclear weapon test explosions and all other nuclear explosions, by constraining the development and qualitative improvement of nuclear weapons and ending the development of advanced new types of nuclear weapons, constitutes an effective measure of nuclear disarmament and non-proliferation in all its aspects.

10. Since 2010, the Preparatory Commission has continued to work to ensure the IMS's ability to detect any nuclear explosions. By the end of 2014, the total number of certified stations and radionuclide laboratories was 281. This amounts to 83 per cent of the total IMS
network. Significant progress has also been achieved in the installation of noble gas monitoring systems with 22 certified noble gas systems. During that time, the IDC has also fulfilled all the requirements to move to Phase 5b of the IDC Progressive Commissioning Plan and the European Union welcomes that Phase 5b activities commenced in 2015. In this regard, it remains important that States have confidence in the IMS's ability to detect any nuclear explosion. This has been one of the focus points in developing the detection capability of the System.

11. Significant progress has been achieved in the field of on-site inspections in recent years with the build-up and conduct of the Integrated Field Exercise in 2014. The EU recognises the success of that Exercise which took place in Jordan. The IFE14 simulated the various phases of an on-site inspection, and provided the opportunity to test 15 out of the 17 inspection techniques listed in the Treaty, as well as operational elements of an on-site inspection, such as an enhanced Operations Support Centre, an improved field communication system, and an operational deployment system for transporting equipment.

12. Over the last two decades, technologies that can assist with the detection of nuclear tests have advanced significantly. One particular example is the technology for detection of radioactive noble gases, developed, inter alia, by France and Sweden and supported through Joint Actions and Council Decisions of the European Union. The effectiveness of this technology was again demonstrated in February 2013 when the Democratic People’s Republic of Korea conducted its third nuclear test, which was strongly condemned by the
European Union at every appropriate occasion. The explosion was not only immediately detected by the IMS seismic and infrasound network, but radioactive noble gases were also detected by the Organisation's network, confirming the nuclear nature of the explosion.

13. Recent experience and scientific developments show that the combined methods of remote and onsite detection techniques contribute to a powerful and credible verification regime as originally envisaged under the Treaty in 1996. The European Union will continue to support endeavours to ensure that the latest verification technology developments are used in the Comprehensive Nuclear-Test-Ban Treaty verification regime in an effective manner.

14. The European Union will continue to support all efforts to complete the verification regime and to promote the entry into force and the universalisation of the Treaty, to the best of its political, technical and financial capabilities.