# VERIFICATION RESEARCH, TRAINING AND INFORMATION CENTRE

Development House, 56–64 Leonard Street London EC2A 4LT, United Kingdom

> Tel +44 (0)20 7065 0880 Fax +44 (0)20 7065 0890 Website www.vertic.org

# The Role of the CTBT in Regional and Global Security: Perspectives of the Research Community David Cliff, Researcher

VERTIC address to a cross-regional workshop on the 'Role of the CTBT in Regional and Global Security' Istanbul, Turkey – Wednesday 16 November 2011

Mr Chairman, ladies and gentlemen,

I'm here on behalf of the Executive Director of VERTIC, Andreas Persbo, who with regret was unable to attend this week. And let me begin by saying that it is a great pleasure to have been given the opportunity to take part in this meeting, among such distinguished participants.

The invitation to deliver a statement to this workshop, when we received it several weeks ago, in fact came at a particularly timely moment for VERTIC.

Timely, that is, because just last month we released the fifth and final paper in a series of commissioned publications on the CTBT, and moreover because we are currently in the process of organising a seminar on CTBT verification that we are intending to hold in the United States in the early part of next year.

Along with the planned seminar, the series of papers to which I have just referred has been an enterprise jointly funded by the Ploughshares Fund and the Norwegian government. It is a series that has drawn on the experience and expertise of several extremely knowledgeable commentators on nuclear arms issues in general and the CTBT in particular.

The papers themselves have dealt with a wide range of CTBT-related issues. Edward Ifft of the US State Department wrote for us in a personal capacity on the on-site inspection regime of the treaty; Victor Slipchenko, who was involved in CTBT negotiations for the Russian Federation in the 1990s, wrote on Russia's potential role in helping to secure US ratification; and Jeffery Lewis, then at the New America Foundation, wrote for us on the prospects for entry-into-force of the treaty.

Most recently, Dr John Walker of the UK Foreign & Commonwealth Office wrote a briefing paper for VERTIC in which he expressed his own views on the role of the CTBT's International Monitoring System and its associated architecture in the deterrence of nuclear testing.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> 'The CTBT: Verification and Deterrence', John R. Walker, VERTIC Brief No. 16, October 2011.



<sup>&</sup>lt;sup>1</sup> 'On-site inspections under the 1996 Comprehensive Nuclear Test Ban Treaty (CTBT): Modalities', Edward Ifft, *Occasional Papers 1*, December 2009; 'On-site inspections under the 1996 Comprehensive Nuclear Test Ban Treaty (CTBT): Technical Considerations', Edward Ifft, *Occasional Papers 2*, December 2009.

<sup>&</sup>lt;sup>2</sup> 'Russia, ratification and the CTBT's entry into force', Victor Slipchenko, Occasional Papers 3, June 2010.

<sup>&</sup>lt;sup>3</sup> 'The CTBT: Prospects for entry into force', Jeffrey Lewis, *Occasional Papers 4*, June 2010.

All of these papers are freely available on the VERTIC website. As this is a statement that seeks to present and reflect some of the views of those within the research community, I felt that it would be appropriate to punctuate this statement with highlights from these papers. I hope that you find this to be a valuable approach.

### The CTBT's role in security—now and in the future

The importance of the CTBT in the overall nuclear non-proliferation regime—and its relevance for nuclear disarmament efforts—is, by now, well-established and needs little repetition here.

VERTIC has been a strong supporter of the CTBT, and the work of the Preparatory CTBTO, for many years.

We fully recognise both the value of the treaty in shoring up the increasingly robust norm against the detonation of nuclear devices and, crucially, the capabilities of the CTBT's global verification and monitoring systems (even in their as-yet unfinished state).

I've been given the task here today of saying a few words from the perspective of the research community on the role of the CTBT in regional and global security. And I think that, at least conceptually, the best way to consider this issue is to see it from two different angles:

First: the role of the CTBT on global peace and security *now* (i.e. with the treaty not in force but surrounded by a well-developed, global verification regime.) And second: the *potential impact* of the CTBT on peace and security in a future with the treaty actually in force.

#### **Present realities**

It is indeed a remarkable achievement that after a long and technically-demanding process, the globe-spanning International Monitoring System (IMS) of the CTBT is now largely in place, functioning well—and to a very high level of sensitivity.

As John Walker wrote in his recent VERTIC brief on verification and deterrence: 'A [verification] regime that can demonstrate a very high level of technical reliability, coverage and sensitivity presents a formidable obstacle to anyone who wants to cheat. The IMS does that.'

The seminar that VERTIC is planning for next year is, at least in part, designed to highlight the capabilities of the IMS, and the difficulties that it presents for a state wishing to conduct a clandestine nuclear test.

Even though it serves a treaty that is not currently in force, it is no stretch to argue that the effectiveness of the CTBT's verification regime and the sharing of data gathered, coupled to the underlying normative trend against nuclear testing that the very existence of the CTBT enhances, combine through the deterrence of nuclear testing to positively influence peace and security on both regional and global scales.

## **Future possibilities**

Once the treaty comes into force, of course, the on-site inspection (OSI) provisions of the CTBT can where necessary be brought into play.



In any scenario where a nuclear explosion is suspected, and assuming that an OSI is approved, the ability of the CTBTO to conduct an on-site inspection—with all its attendant technologies and techniques—would equip the organisation with a powerful additional tool to conclusively detect instances of non-compliance.

As Edward Ifft noted in December 2009, 'one can expect that there would be a high probability that a properly conducted OSI would identify any militarily significant nuclear explosion,' and crucially, that 'the possibility of an OSI should have a powerful deterrent effect on any country contemplating cheating.'

Notably, following their first-hand participation in the CTBT's Integrated Field Exercise in 2008, Oliver Meier and Andreas Persbo wrote that the mock OSI conducted in Kazakhstan 'testifies to the robustness of the burgeoning verification regime, which looks destined to become far more effective than most expected when the CTBT was negotiated.'<sup>5</sup>

'[W]hat occurred on the steppes of Kazakhstan,' they wrote in 2009, 'should inspire confidence in the CTBTO's operational readiness by the time the treaty becomes legally binding.' 6

It is likely that the next Integrated Field Exercise, scheduled to take place in 2014, will result in similar conclusions.

And so, as Dr Walker has written: 'Knowing that the treaty's OSI capability is effective and would stand a very good chance of uncovering facts strongly suggestive of non-compliance, a cheating state will have to obstruct the inspectors in the field.'

But that is by no means a good option for a non-compliant state.

'A systematic pattern of evasion, delay, obstruction, obfuscation and down-right hostility tells its own story,' Dr Walker has noted, 'especially since inspectors are allowed to comment on the cooperation (or lack thereof) provided by an Inspected State Party in their final inspection report.'

#### Bridging the entry-into-force divide

Staying with a forward-looking perspective, how to transition between these two states—that is, from present realities to a future in which the CTBT is in force—is the obvious challenge confronting nuclear arms control and disarmament policy-makers.

Jeffrey Lewis, however, struck an upbeat tone in his paper for VERTIC, which we released in June 2010.

As he and many others have argued, US ratification of the CTBT would represent a significant step forward along the road to entry-into-force, with China possibly following suit if the US Senate was to vote in favour of ratification.

But even among Annex II 'hard cases' in places such as the Middle East, Central and Northeast Asia, Dr Lewis sketched out avenues to ratification that even if they cannot be divorced from regional power struggles and security issues are nonetheless not inconceivable to foresee.



<sup>&</sup>lt;sup>5</sup> 'Testing the Treaty's on-site inspection capabilities: The Integrated Field Exercise 08', Oliver Meier and Andreas Persbo, *CTBTO Spectrum 12*, April 2009, p23.

<sup>&</sup>lt;sup>6</sup> Ibid.

To take just the case of the US though, where efforts to ratify the treaty are slower-moving than many hoped in the immediate aftermath of Barack Obama's 2009 speech in Prague, Victor Slipchenko argued (also in 2010) that in fact the Russian Federation might be able to play an important role in securing US ratification of the CTBT.

Russia, Mr Slipchenko wrote in his VERTIC paper, could usefully reaffirm (but at a high political level) previous statements of Russian officials that align its understanding of the terms of the treaty with that of the US. That is, that the CTBT is a *zero*-yield treaty: an absolute ban, with no low-set thresholds whatsoever.

Moreover, Mr Slipchenko argued that the Russian Federation should reaffirm past suggestions of potential confidence-building measures that could be taken after entry-into-force (such as exchanges of test site geological data and the results of certain tests)—but that Russia should additionally suggest that negotiations over such measures begin *before* EIF.

#### **Conclusion**

In conclusion, though it is not yet in force, the CTBT has already made a positive impact on peace and security around the world and has rightly been described as a crucial building block for both nuclear non-proliferation and disarmament.

Its positive impact is a function both of (a) the growing norm against nuclear testing that the steadily rising number of signatory and ratifying states has promoted and helped to strengthen, and (b) the effectiveness of the CTBT's verification and monitoring systems—which, even without the availability of the OSI provision, are able to detect the signatures of nuclear explosions large and small with high levels of confidence.

Once the treaty is in force, its impact will be greater still.

Not only would entry-into-force send out a powerful signal that nuclear testing is no longer acceptable to the overwhelming majority of the international community (including all five NWS), but the enhanced compliance mechanisms associated with OSIs will add an extra layer of security by making it that much more difficult to get away with a clandestine nuclear explosion.

And for those reasons entry-into-force is of course a desirable goal. But I think, and I'd like to conclude with this, that the treaty is not in the 'limbo' that some see it as languishing in. Indeed, that—to my mind—is very far from the case.

That the CTBT has gone some 15 years without entering into force is obviously not ideal but this should not be a cause for despondency. Rather, the value that the treaty adds to the maintenance and bolstering of peace and security on global and regional levels is clear even today.

And *that* is an undoubted cause for encouragement.

Mr Chairman, ladies and gentlemen, thank you for your attention.

