

Civil Society's Contribution to CTBT Verification

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Introduction

Societal Verification was conceived as a system of monitoring compliance with treaties, and detecting attempts to violate them, by:

- inducing civil society's actors to report to an international authority any information about attempted violation going on in their countries;
- making all such reporting become the right and the responsibility of all citizens;
- making that right becomes an explicit part of the national codes of law in the countries party to the treaty. (Rotblat, 1993)

Historical Precedences

A large proportion of the more than 2050 historic nuclear weapons tests became known to the public.

- Seismic analysis revealed most underground test.
- Radionuclide debris indicated atmospheric tests and venting from underground nuclear explosions.
- Satellite image analysis was conducted on all major testing areas.
- Satellite radar interferometry was applied to the Nevada test site.

As a result, within one day nuclear tests were in the news and public pressure groups protested promptly.

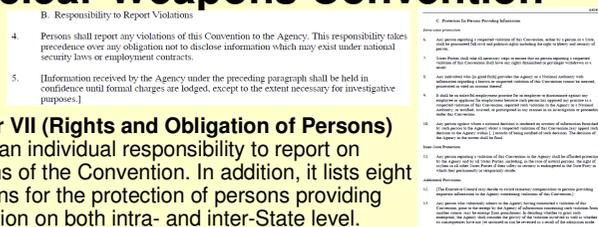
Societal Verification provisions in existing nuclear arms control

In humanitarian arms control and particularly in the Ottawa Convention banning anti-personnel mines, the civil society plays a constitutional role. Though a comparable influence cannot be expected for nuclear arms control, more than is current practice is possible and desirable.

Legal protection mechanisms in support of societal verification

1. While Article III of the CTBT deals in general terms with national implementation measures it does not specify what measures are to be taken by the States Parties, or how. It is for each State Party to decide what measures, in accordance with its constitutional processes, would be appropriate. These measures should include provisions to ensure that any individual who in good faith provides the CTBTO or the appropriate national authority with information regarding a known or suspected violation of the CTBT
 - cannot be arrested, prosecuted or tried on account thereof
 - shall be guaranteed full civil and political rights including the right to liberty and security of person; no such person shall have any rights diminished or privileges withdrawn as a result.
2. Any person reporting (in good faith) a suspected violation of the CTBT to the CTBTO or any appropriate national authority shall be afforded protection by the CTBTO and by all States Parties, including the right of asylum in all other States Parties if his or her safety or security is endangered in the State Party in which he or she permanently or temporarily resides. According to Art. II Sec. D par. 43 (g) the Technical Secretariat of the CTBTO, subject to prior approval by the Executive Council, shall negotiate such provisions in appropriate agreements or arrangements with States Parties or other States.

Societal Verification in the Model Nuclear Weapons Convention



B. Responsibility to Report Violations

4. Persons shall report any violations of this Convention to the Agency. This responsibility takes precedence over any obligation not to disclose information which may exist under national security laws or employment contracts.

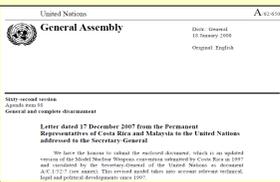
5. [Information received by the Agency under the preceding paragraph shall be held in confidence until formal charges are lodged, except to the extent necessary for investigative purposes.]

Chapter VII (Rights and Obligation of Persons) defines an individual responsibility to report on violations of the Convention. In addition, it lists eight provisions for the protection of persons providing information on both intra- and inter-State level.

Role of the civil society in CTBT verification

Data analysis related to the North Korean nuclear explosion of 2006 demonstrated that the international civil society has access to data and information though the official CTBT verification system is open to authorized governmental members only. Though it is extremely unlikely that a nuclear test remains undetected by the official verification system, civil society has an important role in

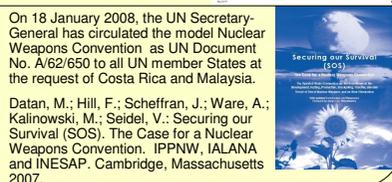
- Revealing internal information beforehand (by whistle-blowing or citizen's reporting);
- Providing additional data and analysis for threat assessment, for the political decision making process and a targeted conduct of Onsite Inspections;
- Creating worldwide transparency and public debate on suspicious events;
- Counterbalancing biased verification findings.



United Nations
General Assembly
Date: 1998
19 February 1998
Original: English

On 18 January 2008, the UN Secretary-General has circulated the model Nuclear Weapons Convention as UN Document No. A/62/650 to all UN member States at the request of Costa Rica and Malaysia.

Datan, M.; Hill, F.; Scheffran, J.; Ware, A.; Kalinowski, M.; Seidel, V.: Securing our Survival (SOS). The Case for a Nuclear Weapons Convention. IPPNW, IALANA and INESAP. Cambridge, Massachusetts 2007.

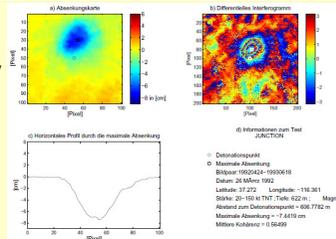


Technical means enabling civil society verification

- Any Citizen who happens to be close to a testing ground can use:
- Photo, video and audio equipment
- Specialized technical experts can use:
- Scientific and open source seismic raw data and event analysis
 - Commercial or open source multispectral images from satellites
 - Open source satellite radar images
 - Atmospheric radioactivity measurements in conjunction with open source atmospheric transport modeling

Example

Differential radar interferometry can be used to detect the small subsidence of a few centimeter over hundreds of meters that follow within the first weeks and years after an underground test. This can result in an event location that reduces the area of interest for Onsite Inspections down from about 1000 km from seismic analysis to around 1 km.



Britta Riechmann: Anwendung der differentiellen SAR-Interferometrie auf Nukleartestgebiete zur Verifikation des Comprehensive Nuclear-Test-Ban Treaty (CTBT). Diplom thesis submitted to the University of Hamburg, March 2009.

Summary

To the extent that technical verification measures, applied by states or international organizations, may provide unsatisfying results, societal verification could gain importance, in particular if based on new technologies. Societal verification could complement official verification, and even more so if whistle blowing and citizens reporting on breaches of contract are explicitly protected by law. Verification Agencies should not only be authorized to use open source information, but also be obliged to publish the results of compliance monitoring.

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Supported by:



German Foundation for Peace Research

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Joseph Rotblat, Societal Verification, in: J. Rotblat, J. Steinberger, B. M. Udgaonkar, A Nuclear-Weapon-Free World: Desirable? Feasible?, Boulder: Westview Press, 1993. "The concept of citizen's reporting has been discussed in the literature for many years, under different names, such as 'inspection by the people' or 'knowledge detection'. The idea was introduced in the late 1950s by Lewis Bohn and Seymour Melman and incorporated in the classic World Peace Through World Law by Grenville Clark and Louis Sohn. Leo Szilard, in his quixotic The Voice of the Dolphins also considered it an important part of the disarmament process."

Dieter Deiseroth, Societal Verification, BoD., Delmenhorst 2008 (ISBN 978-3-8370-6582-4).

Dieter Deiseroth, Societal Verification: Wave of the Future, in: Verification Yearbook 2000 (ISBN 1-899548- ISSN 1355-5847).