

US Senate Test Ban Vote

Limiting the Damage to Verification

On 13 October the United States Senate voted 51-48 not to approve US ratification of the Comprehensive Nuclear-Test-Ban Treaty (CTBT). A major concern arising from the vote is its implications for verification of the treaty, in particular the work of the CTBT Preparatory Commission (PrepCom), which is setting up the future CTBT Organization (CTBTO) and its International Monitoring System (IMS).

Non-ratification by the US is especially troublesome because it is one of the 44 states named in Annex 2 of the treaty that have to ratify it before it enters into force. It also makes ratification by other nuclear weapon powers less likely. The US also pays the biggest share—about 25 per cent—of the PrepCom budget. US technology and support outside its regular contribution have also been essential in setting up the IMS. In addition, 38 IMS stations (5 primary seismic, 12 auxiliary seismic, 11 radionuclide, 2 hydroacoustic, 8 infrasound) and 1 radionuclide laboratory are located on US territory or operated by the US. From a verification point of view it is difficult to picture a CTBT without US participation.

Post-vote developments

The effect of the Senate's rejection of ratification on the work of the PrepCom will depend on the outcome of discussions between the executive and legislative branches of the US government on the constitutional implications of the vote. The White House argues that ratification of the CTBT has only been postponed. At the end of October, in a letter to several foreign ministers, US Secretary of State Madeleine Albright pledged that the US 'will continue to act in accordance with its obligations as a signatory under international law, and will seek reconsideration of the treaty at a later date when conditions are better suited for ratification'. Albright promised that 'the Administration continues to support strongly the treaty and the associated international regime'. The implication is that as a signatory which has not renounced the treaty, the US regards itself as being obliged to continue to pay its share of the PrepCom budget.

This view was immediately attacked by some Republican Senators who had taken the lead in obstructing US ratification. Senate majority leader Trent Lott reacted to the Albright letter (and similar statements by President Bill Clinton) by arguing that 'if the Senate does not consent to ratification of a treaty—and in this case we didn't—it has no status for the United States in international law. In fact, the Senate vote serves to release the United States from any possible obligations as a signatory of the negotiated text of the treaty'.

Seeking to retake the initiative in this battle over the respective foreign policy responsibilities of President and Congress and to keep the US in the CTBT regime, Albright announced on 10 November the establishment of a high-level Administration task force 'to work closely with the Senate on addressing the issues raised during the test ban debate'.

Also in this issue:

Climate Change Negotiations: Towards 2000 Endgame?

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Verification Research,
Training and Information
Centre
(VERTIC)

Baird House
15/17 St Cross Street
London EC1N 8UW
United Kingdom

Tel: +44 (0)20 7440 6960
Fax: +44 (0)20 7242 3266

e-mail: info@vertic.org
web: www.fhri.org/vertic

The Administration generally, and Albright personally, had been criticised as being too passive before the Senate vote. The proposed Task Force is one way the Administration hopes to avoid the same mistake in future. This seems to include learning lessons from

other ratification processes: Albright announced that at an 'appropriate point the potential need for additional conditions and understandings, as was the case with the Chemical Weapons Convention', would be included in the review.

Speaking of verification...

Thus the Senate refused to ratify the Comprehensive Test Ban Treaty. Some treaty opponents said it would be too hard to verify, the technology not being up to par. But the treaty's harshest foes are by and large the same people who are most bent on speeding up a national missile defence program—a technological challenge that makes verification look like child's play.

Geneva Overholser, 'Here's a secret: the Cold War is over', *International Herald Tribune*, 9 Nov. 1999, p. 8.

... there is a natural physical limit to how low you can go with absolute verification, if you're relying on seismic detection. That is why the crucial breakthrough for the CTB was the American success in persuading the world that there had to be on-site inspection. That wasn't a given. When we started the negotiation, there were a lot of countries that fought that. And we worked hard to get on-site inspection into the final treaty. That's the means to do it.

Under Secretary of Energy Ernie Moniz, press briefing on the CTBT, Washington DC, 5 Oct. 1999.

Now, if you don't put the treaty into force—no sensors, no on-site inspections, no deterrent—and if the United States walks away from it, the rest of the world will think they've been given a green light. So I think that argument has literally no merit, because nothing changes except our ability to increase our determination of such tests with the passage of the treaty.

US President Bill Clinton, remarks on departure to the Pentagon, The White House, Press Release, Office of the Press Secretary, Washington DC, 5 Oct. 1999.

We, in the provisional technical secretariat, will continue to build up the global verification regime, which will take several more years. We hope that during this time, the United States will see its way to ratifying the CTBT.

Ambassador Wolfgang Hoffmann, Executive Secretary, CTBT Prepcom, quoted in Associated Press, 'Test Ban Treaty Work Will Continue, Vows CTBTO', Vienna, 14 Oct. 1999.

Alternative scenarios

Although it is too early to predict the exact consequences of the Senate vote for CTBT verification, there are three possible scenarios: the Administration might succeed in securing financial support for the CTBT and keep ratification on the table; a compromise could be struck between the White House and Congress; or the White House could lose the battle to keep the US in the CTBT regime.

Given that ratification of the CTBT during the term of the current Administration is unlikely, the White House must first prevent the Senate leadership from substantiating its claim that the rejection of the CTBT was final. To this end, it will be essential to win approval for the \$US 16 million for the PrepCom that is part of the Foreign Aid Bill currently before Congress. (Another \$US 4 million comes from the Department of Defense budget which has already been approved). Such a development would substantiate the assessment of the Executive Secretary of the PrepCom, Ambassador Wolfgang Hoffmann, that US non-ratification is 'no catastrophe'.

The Senate leadership and the White House might also agree a compromise. Thus, the Senate might cut some funding for the PrepCom while the treaty remains on the Congressional agenda. This would directly affect the CTBT's verification system. If the US does not pay its full share, other states would have to fill the financial gap. Even though it would be difficult for Congress to restrict technology transfers to Vienna, additional costs might occur if US technologies were no longer available to the Provisional Technical Secretariat. A third danger arises from the fact that other states might see a cut in the US contribution as an opportunity to reduce their own contributions to the PrepCom.

Finally, Congress could succeed in terminating the ratification process. As a first step Congress could end all US contributions to the IMS. Such a development would cause a deep crisis for the IMS, and might result in the collapse of the work being done in Vienna. The other way to clearly signal a US exit from the treaty would be the resumption of nuclear testing.

In the unlikely event that the US decided to completely reject the CTBT, treaty members would need to consider its provisional application or entry into force. They would also have to develop and supply substitutes for US technological support. Finally, the IMS would

have to be redesigned to function without US monitoring stations.

Although none of these problems alone poses an insurmountable hurdle, the combined effect would make it very unlikely that the CTBT could be fully implemented as envisaged. The network would be much less than global and the disproportionately large scientific and technological contribution of the US would be missing. The verifiability of the treaty would therefore be lessened, although by precisely how much is difficult at this stage to estimate.

An unambiguous rejection of the CTBT by the US could cause other states to also retreat from supporting the treaty. The international community has recently

shown that it is willing and able to conclude and implement international agreements without US participation, as in the cases of the Ottawa Convention and the International Criminal Court. But the CTBT falls into a different category: membership of the US, as a nuclear weapon state and the strongest military power, is politically imperative. The CTBT's verification system was designed on the assumption that the largest and most technologically capable states would be parties and that the verification coverage would be global. It is therefore vital that the US continues to actively support the work of the PrepCom and declares unambiguously that ratification will remain an option for the future.

Oliver Meier

Climate Change Negotiations Towards 2000 Endgame?

Over 4,000 delegates, including ministers and officials from 166 governments, recently met in Bonn, Germany, for the Fifth Conference of the Parties (COP5) to the 1992 UN Framework Convention on Climate Change (FCCC). Despite low expectations, the meeting, held from 25 October to 5 November, made encouraging progress towards fulfilling the Buenos Aires Plan of Action (BAPA) adopted by the Fourth Conference of the Parties in November 1998. The BAPA set the Sixth Conference of the Parties (COP6) in 2000 as the deadline for strengthening FCCC implementation and preparing for entry into force of the FCCC's 1997 Kyoto Protocol.

A 'high-level segment' on 2-3 November allowed ministers and heads of delegation to move the politics forward. Ministers took part in an 'exchange of views' organised around two themes: 1) progress in dealing with climate change, and 2) promoting implementation of the Buenos Aires Plan of Action and early entry into force of the Kyoto Protocol. These talks injected new optimism into the process as many ministers supported a call initiated by Chancellor Schröder of Germany for the Protocol's entry into force by 2002—ten years after the Climate Change Convention was adopted at the Rio Earth Summit. Speakers at the 'high-level segment' also called for intensified efforts and a strengthened role for the President in order to achieve success at COP6.

The engagement of ministers allowed delegates to agree that COP6 be held in The Hague, Netherlands,

in November 2000. This was a breakthrough, since the US, supported by Canada, Australia and New Zealand, had previously proposed moving COP6 back to the northern spring of 2001. Delegates also adopted a decision, proposed by the Conference President, Jan Szyszko of Poland, on implementation of the BAPA. The decision requests the subsidiary bodies to intensify the preparatory work required to enable COP6 to take decisions on issues included in the BAPA and requests the President to take all necessary steps to intensify the negotiating process.

In technical discussions, verification continued to receive great attention. Substantial progress was made on national communications under the Convention. New guidelines were adopted for the preparation of Annex I parties' annual greenhouse gas inventories and national communications, and for the technical review of the inventories. This is an important first step towards improved reporting standards and more rigorous analysis of inventories. Another achievement was the decision to create a consultative group of experts, consisting of members predominantly from developing countries, with the objective of improving non-Annex I national communications. The Group will help identify non-Annex I parties' technical and financial needs and the difficulties they face, and facilitate and support the preparation of their national communications.

The current focus on verification issues under the Protocol is in the Subsidiary Body for Implementation/Subsidiary Body for Scientific and

Technical Advice (SBI/SUBSTA) Joint Working Group on Compliance, which made good progress throughout the fortnight. Parties considered the design and coverage of the compliance system, eligibility of various bodies to raise compliance issues, sources of information, structure of a compliance body and consequences of non-compliance. The Alliance of Small Island States (AOSIS), Australia, the EU, Japan and the US provided diagrammatic submissions to explain their ideas for a compliance system. There was agreement that the system should allow for both facilitative and enforcement functions, and operate through at least one small standing body. Some parties suggested that different processes should carry out the facilitative and enforcement functions. Others felt they should be dealt with by one process.

Delegates also differed on whether the compliance system should focus on Protocol Article 3 (greenhouse gas reduction and limitation commitments) or whether it should also address compliance with other Protocol commitments and the rules of the Kyoto Mechanisms (Trading, the Clean Development Mechanism and Joint Implementation). On eligibility to raise issues, delegates agreed that a party could raise an issue about its own or another party's compliance, but were divided over the potential roles of the secretariat, the inventory expert review teams and the Conference of Parties/Meeting of Parties (COP/MOP). Environmental NGOs called for a role for civil society in raising compliance issues. A range of potential consequences of non-compliance were suggested by parties, many emphasising that agreeing consequences in advance would ensure predictability and deter non-compliance. At the end of the meeting

it was agreed that the Joint Working Group (JWG) would complete its work in time for COP6 to adopt a decision on a compliance system.

Discussions also began on the Protocol articles that deal with national systems for estimating and reporting greenhouse gas emissions, and procedures for reviewing the information supplied. Parties started to discuss guidelines for these systems, which are likely to be more stringent than those currently operating under the Convention. Delegates noted the continuing work of the Inter-governmental Panel on Climate Change Inventories Task Force on uncertainties and good practice in inventory preparation. They also discussed the use of adjustments to inventory data during the technical review stage. It was agreed that work would continue in this area.

Other important agenda items included development of rules for the Kyoto Mechanisms and the use of the land use, land use change and forestry sector to meet Kyoto targets; capacity building; technology transfer; emissions from international transportation; and adverse effects of climate change and impacts of response measures. Decisions on all these issues were also deferred until COP6, which means 2000 is likely to be an extremely busy year for all those involved in the Climate Convention. To help meet the challenges ahead, the subsidiary bodies will meet in both June and September next year and numerous intersessional workshops are planned. VERTIC will continue to monitor and play an active role in all verification-related discussions.

Clare Tenner



Verification Watch

IAEA Conducts First Short-Notice Inspection of Uranium Mine

Additional Protocols to NPT Safeguards Agreements with the IAEA provide for short-notice access to certain undeclared nuclear facilities. The first such visit to a 'front end' site was conducted at the Ranger Uranium Mine and Concentration Plant in the Northern Territory of Australia on 28 June 1999. Two IAEA inspectors on mission in Australia had informed the Australian Safeguards and Non-Proliferation Office (ANSO) on 23 June that the Agency required access to the mine. Despite minor

logistical difficulties, the visit was a success. The inspection team—following a work plan developed in Vienna—took samples from the coarse ore stockpile, the fine ore stream and the ore concentrate product drum as well as other facilities. Inspectors also took swipe samples. All samples will be analysed at IAEA Analytical Laboratories in Austria. The team was allowed unrestricted access to the site, an indication of the co-operation between the facility operator and the inspection team. The IAEA and ANSO hope the exercise will yield new insights into how short-notice inspections to 'front end' facilities can be improved.

Source: Australian Safeguards and Non-Proliferation Office (ANSO), *Annual Report 1998-99*, Australian Government Publishing Service, Canberra, 1999, pp. 65-66.

43rd IAEA General Conference Strengthens Safeguards

The IAEA General Conference, held from 27 September to 1 October 1999 in Vienna, was attended by representatives of 111 countries. During the conference 6 more states—the Czech Republic, Ecuador, Indonesia, Monaco, Norway and Slovakia—signed Additional Protocols. The Protocols authorize the IAEA to apply verification measures that improve the Agency's capability to detect undeclared nuclear activities. Altogether, 45 states have concluded Protocols which have been approved by the IAEA Board of Governors, while others are in the process of negotiating them. Seven Additional Protocols have entered into force.

Sources: IAEA Press Release, *PR 99/13*, 1 October 1999; *PPNN Newsbrief* 3rd quarter, 1999.

Israel Conducts IMS Calibration Explosion

Israel exploded 5 tons of conventional explosives on 10 November under the Dead Sea as part of a project on 'Improvements in Monitoring the CTBT in the Middle East by the Israeli Seismic Network'. According to Dr Aoife O'Mongain of the British Geological Survey, which assisted in the tests, the explosion was used to calibrate two seismic stations which will participate in the International Monitoring System for the CTBT. The test, which took place 100 metres below the surface, was witnessed by US and Russian experts. Israel will host two auxiliary seismic stations and a radionuclide laboratory as part of its CTBT obligations.

Source: Damian Carrington, 'Fake Quake Shakes Israel', BBC Online, 10 Nov. 1999, <http://news.bbc.co.uk/1/hi/english/sci/tech/newsid>

CFE: Transparent Russian Treaty Violation

With revisions to the 1990 Treaty on Conventional Forces in Europe (CFE) awaiting final agreement by states prior to the OSCE Summit in Istanbul from 18 to 19 November, Russia informed CFE states parties that it has violated the treaty. 'Our people in Vienna were instructed today to inform the OSCE that in order to curtail the activities of terrorists in Chechnya we have deployed a concentration of forces exceeding the limits of the Vienna document', Russian Embassy spokesperson in Vienna, Mikhail Shurgalin, was quoted as saying. He confirmed, however, that Russia remained committed to the treaty. Russia had

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invoked the provisions of the agreement which permit limits on conventional arms deployments to be exceeded in exceptional circumstances if a state's 'supreme national interests' are threatened.

A White House National Security Council spokesperson in Washington called the notification 'positive' because 'the fact that the Russians explained the impact of current military actions on treaty limits demonstrated that the treaty is an important tool to exercise international scrutiny'.

Source: Bill Gertz, 'Russia Tells U.S. It Will Violate Arms Pact', *Washington Times*, 7 Oct. 1999.

OAS Agrees Convention on Transparency in Conventional Weapons Acquisition

The General Assembly of the Organization of American States (OAS) on 7 June 1999 approved the Inter-American Convention on Transparency in Conventional Weapons Acquisition. The agreement aims 'to contribute more fully to regional openness and transparency in the acquisition of conventional weapons by exchanging information regarding such acquisitions, for the purpose of promoting confidence among States in the Americas' (Article 2). The Convention is modelled on the UN Conventional Arms Register. Parties will annually report imports and exports of major conventional weapons such as battle tanks, armoured combat vehicles, large calibre artillery, combat aircraft, attack helicopters, warships and some missiles and missile launchers. Declarations will list the quantity and type of imports and exports. States parties will also notify the Secretariat of the OAS, the depositary for the Convention, of acquisitions through imports and national production. The Secretariat will distribute the declarations, notifications and information supplied voluntarily by members and non-members to all states parties. The Convention contains no verification or compliance mechanism, but states can 'consult on information' pursuant to the Convention.

Source: 'Inter-American Convention on Transparency in Conventional Weapons Acquisition', distributed as document CD/1591 to members of the Conference on Disarmament, Geneva, 26 Aug. 1999.

Correction

In the last issue of *T&V* we incorrectly reported that The Hague, Netherlands, was the first city to have officially bid to host the future verification organization for the Biological and Toxin Weapons Convention. In fact, the Swiss government had earlier proposed Geneva. We thank the Swiss Foreign Ministry for pointing this out to us.

VERTIC/Wilton Park Conference on Monitoring and Verification of Peace Agreements, March 2000

Planning is proceeding for the joint VERTIC/Wilton Park conference to be held from 24 to 26 March 2000 at Wilton Park on the Monitoring and Verification of Peace Agreements. For details see the insert in this edition of *Trust & Verify*.

VERTIC/Acronym Institute Project on Biological Weapons Protocol

The Acronym Institute and VERTIC have begun a joint project to monitor the negotiations on a verification protocol for the Biological and Toxin Weapons Convention (BTWC) currently being conducted by an Ad Hoc Group of states parties in Geneva. Henrietta Wilson, formerly of the Berlin Information-center for Transatlantic Security (BITS), has been engaged to follow and analyse the negotiations and to report regularly for the Acronym Institute's website (www.acronym.org.uk) and *Disarmament Diplomacy* and to provide analyses for VERTIC publications. VERTIC's participation in this project is being funded by the W. Alton Jones Foundation.

New Landmine Monitor Grant

VERTIC, for the second year running, has been awarded a grant of \$US 5,000 by Landmine Monitor to conduct a landmine research project. This year VERTIC will monitor and report on the activities of the United Nations in helping implement the 1996 Ottawa Convention banning anti-personnel landmines.

VERTIC Workshops on Greenhouse Gas Inventories

VERTIC hosted two successful side events at the Fifth Conference of the Parties to the UN Framework Convention on Climate Change, held in Bonn, Germany, from 25 October to 5 November.

The first workshop, on 'Uncertain Inventories: Implications for the Kyoto Protocol', was held on Saturday 30 October. Despite the unpopular time slot allocated to the event, approximately 30 people attended to hear four speakers: John Lanchbery, former VERTIC Director of Environment

Programmes, explained the origins of uncertainty in greenhouse gas inventories; Susan Subak, of the Natural Resources Defence Council, analysed in more detail the high uncertainties attached to emissions estimates of greenhouse gases other than carbon dioxide; Fiona Mullins, of Environmental Resources Management, spoke on the implications of uncertain inventories for trading greenhouse gas emissions; and Jake Werkesman, of the Foundation for International Environmental Law and Development (FIELD), commented on the challenges posed by the uncertain inventories for current negotiations on a compliance regime for the Kyoto Protocol. Clare Tenner, Environment Researcher at VERTIC, chaired the session. A report on the event will be available shortly on VERTIC's website.

The second event, on the EU Monitoring Mechanism, was held on 2 November. It was jointly arranged by VERTIC, the Institute for European Environmental Policy (IEEP) and FIELD. Two high-level keynote speakers ensured a good attendance and lively discussion. They were Marianne Wenning, Deputy Head of the European Commission's Climate Change Unit, who outlined recent developments on the mechanism, and Gordon McInnes, Programme Manager, Monitoring and Thematic Reporting, at the European Environment Agency (EEA). Marianne outlined current Commission activities aimed at strengthening the mechanism. Gordon gave an account of the EEA's work in assisting member states in compiling the inventories and helping the Commission assess progress using these inventories. Clare Tenner emphasized the importance of formal pre- and post-submission inventory review in improving the transparency and comparability of inventories. Jurgen Lefevre of FIELD commented on the links between the Monitoring Mechanism and the EU 'burden sharing' agreement under the Kyoto Protocol. Joy Hyrinen of IEEP chaired the meeting, which marked the start of collaborative work between VERTIC, IEEP and FIELD on EC Climate Policy.

Workshop on Visiting Mechanisms in International Law

Organised by the Association for the Prevention of Torture (APT) and co-sponsored by VERTIC, the workshop was held in Geneva from 23-24 September. It was designed to familiarise those involved in preventing torture with the on-site inspection and other verification and monitoring arrangements used in such fields as arms control and

disarmament and the environment. Trevor Findlay gave a paper on the arms control and disarmament experience. Many involved in the humanitarian and human rights fields were surprised by the sophistication and extent of intrusive verification mechanisms used in disarmament and arms control regimes. APT intends to publish all the papers presented, as well as a record of the proceedings. For further information contact: APT, Route de Ferney 10, Case postale 2267, CH-1211, Geneva 2, Switzerland; tel: +41 22 734 20 88; fax: +41 22 734 56 49; email: apt@apt.ch; website: www.apt.ch.

Seminar on Israeli Nuclear Policy

On 27 September VERTIC held a closed seminar on Israeli nuclear policy given by Avner Cohen, author of *Israel and the Bomb* (Columbia University Press, New York, 1999). It was attended by other NGOs and focussed on the evolution of Israeli nuclear policy and attitudes towards arms control.

Visitors to VERTIC

Recent visitors to VERTIC have included:

- Charles Moore, W. Alton Jones Foundation, Virginia, US
- Timothy McCarthy, Senior Analyst, Center for Nonproliferation Studies, Monterey Institute of International Studies, California, US
- Dr Peter Zimmerman, Scientific Advisor, Bureau of Arms Control, US State Department, Washington, DC, US
- Rebecca Johnson, Acronym Institute, London
- Jong-Riol Lee, Director General, Dialogue Operation Department and Oh Choong-Suk, Assistant Director, Office of the South-North Dialogue, Ministry of Unification, Seoul, Republic of Korea
- Hyung-Suk Kim, Visiting Fellow, International Institute for Strategic Studies (IISS), London
- John Carlin, journalist with *El Pais*, Madrid, Spain
- Jason K. Cameron and Peter D. Corcoran, Safeguards Officers, Atomic Energy Control Board, Ottawa, Canada
- Dr Marianne Hanson, Department of Government, University of Queensland, Australia.

Staff News

Trevor Findlay attended the CTBT Article XIV Conference in Vienna from 6 to 8 October, as well as meeting with IAEA and CTBT officials and touring the nerve centre of the Provisional International Monitoring System (IMS) at CTBTO headquarters. On 7 October he and Oliver Meier had a luncheon

meeting with the new UK Minister of State for Foreign Affairs, Peter Hain, MP. While in Vienna he also attended some sessions of the Informal Exchange of Views on a Compliance System for the Kyoto Protocol to the Climate Change Convention, sponsored by the Austrian government. On 20 October he and Oliver Meier had talks in London with John Walker and Andrew Barlow of the Arms Control and Disarmament Research Unit of the UK Foreign and Commonwealth Office (FCO) on biological weapons and CTBT issues. During a visit to New York at the end of October he had discussions with the Carnegie Corporation of New York, the Ford Foundation and the Second Chance Foundation, the UN Department of Disarmament Affairs, the UN Secretary-General's Executive Office and with non-governmental organizations (NGOs). On 26 October he gave a presentation on 'Verifying a Nuclear Weapons Convention' to a Disarmament Week seminar at UN headquarters organized by the NGO Committee on Disarmament (New York). In London, he attended the last seminar to be held by the London-based Council for Arms Control, on the subject of the future of arms control on 1 November; a 3 November meeting organised by the International Security Information Service (ISIS) on the BTWC Protocol negotiations; and on 8 November a seminar on the future of the CTBT organised by the Weapons of Mass Destruction Working Group of the International Institute for Strategic Studies (IISS).

His publications during the period included an ISIS Briefing Paper, 'The Verification and Compliance Regime for a Nuclear Weapon-Free World' (no. 2 in the ISIS Special Briefing Series on UK Nuclear Weapons Policy) and *The Blue Helmets First War? Use of Force by the UN in the Congo 1960-64*, published by the Lester B. Pearson Canadian International Peacekeeping Training Centre, Clementsport, Nova Scotia, Canada.

Oliver Meier attended the 12th Pugwash Workshop on the Implementation of the Chemical and Biological Weapons Conventions on 26 and 27 September. He presented a co-authored paper with Iris Hunger on the role of NGOs in the Ad Hoc Group negotiations. From 5 to 7 October he met with officials at the IAEA and CTBTO in Vienna, as well as the German Mission in Vienna. From 6 to 8 October he observed the CTBT Article XIV Special Conference. In preparation for the conference he co-authored with Trevor Findlay both a *VERTIC Briefing Paper* on the International Monitoring System and a briefing paper for the Coalition to Reduce Nuclear Dangers (see www.clw.org). He also had an op-ed on the CTBT published in the German daily *Frankfurter Rundschau* on 5 October. His follow-up activities to the CTBT conference and US non-ratification of the treaty included giving interviews on BBC World

Radio Europe and BBC World Radio Asia on 12 October, and Pacifica Radio and BBC World TV Europe on 14 October. Oliver also wrote an article entitled 'Verifying the CTBT: Responses to Republican Criticisms' for the November issue of *Disarmament Diplomacy*. On 20 October he met with John Walker and Andrew Barlow of the FCO Arms Control and Disarmament Research Unit to discuss the BTWC negotiations and CTBT issues. He attended private discussion meetings at IISS on the future of Europe's Common Foreign and Defense Policy, the CTBT, and Biological Weapons in the Middle East on 25 October and 8 and 12 November respectively, and the final seminar of the Council on Arms Control at King's College London on 1 November. A research report written by Oliver, 'Involving India and Pakistan: Nuclear Arms Control and Non-proliferation after the Nuclear Tests', was published by the Berlin Information-centre for Transatlantic Security (contact: bits@bits.de).

Clare Tenner spent the last two months preparing for and attending the Fifth Conference of the Parties to the UN Framework Convention on Climate Change (COP5), held from 25 October to 5 November in Bonn, Germany. From 6 to 7 October she attended an Informal Exchange of Views on a Compliance System for the Kyoto Protocol to the Climate Convention, arranged by the Austrian Government and held in Vienna. On 19 October she attended a meeting between British environmental NGOs and the British delegation to the Climate Convention to exchange ideas on the forthcoming conference. She also prepared *VERTIC Briefing Paper 99/4*, 'The EC Monitoring Mechanism: Towards comparable and transparent greenhouse gas inventories?', for distribution at the COP. She presented this paper in Bonn on 2 November at a VERTIC side event to the COP. Clare chaired a second VERTIC side event in Bonn on 30 October on uncertain greenhouse gas inventories.

Angela Woodward, in addition to administering the Centre, attended the final seminar of the Council for Arms Control, King's College London on 1 November and met with staff at the Programme for Promoting Nuclear Non-Proliferation (PPNN), Southampton, on 12 November. She also participated in a Filemaker Pro 4.0 training course on 9 November.

The next edition of *Trust & Verify* will appear in February 2000.

We take this opportunity to wish all our readers a Merry Christmas and Happy Millennium.



VERTIC is the Verification Research, Training and Information Centre, an independent, non-profit making, non-governmental organisation. Its mission is to promote effective and efficient verification as a means of ensuring confidence in the implementation of treaties or other agreements that have international or national security implications. VERTIC aims to achieve its mission through research, training, dissemination of information and interaction with the relevant political, diplomatic, technical, scientific and non-governmental communities. A Board of Directors is responsible for general oversight of VERTIC's operations and an International Verification Consultants Network provides expert advice. VERTIC is funded primarily by grants from foundations and trusts.

Personnel

Dr Trevor Findlay, *Executive Director*

Dr Oliver Meier, *Arms Control & Disarmament Researcher*

Clare Tenner BSc(Hons), MRes, *Environment Researcher*

Angela Woodward BA(Hons), LL.B, *Administrator*

Board of Directors

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Susan Willett BS(Hons), MPhil

International Verification Consultants Network

Richard Butler AO (*arms control & disarmament*)

Dr Roger Clark (*seismic verification*)

Dr Jozef Goldblat (*arms control & disarmament*)

Dr Patricia Lewis (*arms control & disarmament*)

Peter Marshall OBE (*seismic verification*)

Dr Robert Matthews (*chemical disarmament*)

Dr Colin McInnes (*Northern Ireland decommissioning*)

Dr Graham Pearson (*chemical & biological disarmament*)

Dr Arian Pregenzer (*co-operative monitoring*)

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