

VERIFYING IRAQ

Issue 79
March 1998

Trust & Verify

For those, like VERTIC, who support effective and efficient verification as the best means of ensuring confidence in the implementation of treaties and other agreements, the UN Special Commission for Iraq would seem, at first glance, to be a godsend. Extensive media coverage of uniformed UN inspectors arriving at guarded installations to conduct on-site inspections, of UN destruction teams blowing up Iraqi chemical weapons stockpiles and biological weapons laboratories and of the UNSCOM Executive Chairman huddled with senior Iraqi officials to resolve the latest impasse, has brought home to the general public the importance of verification. UNSCOM's detection and destruction of 39,000 chemical weapons, six missile launchers, 30 special chemical and biological weapon (CBW) warheads and CBW production capabilities have demonstrated the real-world consequences of effective verification. Successive stand-offs between Iraq and the UN Security Council over UNSCOM's activities have, on the other hand, graphically demonstrated the obstacles that can be put in the way of effective verification by a determined violator. All this has given unprecedented publicity to an activity—verification and monitoring—that was hitherto perceived as mysterious and arcane.

Yet for all its apparent value as verification exemplar, the Iraq case is unique. Unlike most other verification systems UNSCOM was established and operates under duress. It was created in 1991 by the UN Security Council as part of the ceasefire which ended Iraq's abortive attempt to annex Kuwait. Part C of Security Council resolution 687 of 3 April 1991, the so-called ceasefire resolution, called for Iraq to be disarmed of its weapons of mass destruction, associated delivery systems and production capabilities. Included were its nuclear, chemical and biological weapons capabilities and ballistic missiles with a range greater than 150 kilometres. Iraq's compliance and its cooperation with UNSCOM and the International Atomic Energy Agency (IAEA) in achieving these ends was linked directly to economic sanctions imposed in the same resolution. In addition, ever since the ceasefire the threat of resumed military action against Iraq has been part of the Security Council's calculus of coercion in seeking Iraqi compliance with its agreed obligations.

All this is very different from the normal verification and compliance arrangements for arms control and disarmament agreements. Such agreements are more or less freely arrived at by negotiation between more or less willing partners who see mutual security benefits to be gained. The verification system is usually predicated on the expectation that treaty parties will willingly cooperate in implementation and that the goal of the system is as much to engender mutual confidence as it is to detect violators. Implementation is not linked directly to punitive measures, even prospective ones, much less actual. While there will often be elaborate provisions for dealing with suspicious events or information obtained by the verification system, the process of dealing with proven violators is often left as vague as possible. Usually it is devolved to the UN Security Council as the ultimate arbiter of international behaviour.

The most recent confrontation between Iraq and the UN Security Council, in which a military attack on Iraq was threatened by two of its permanent members, the United States and United Kingdom, produced a new agreement on UNSCOM activities. It was negotiated by UN Secretary-General Kofi Annan with President Saddam Hussein in Baghdad on 23 February and endorsed by the Security Council in Resolution 1154 (1998) of 2 March. Despite fears that the agreement might have politicised UNSCOM's activities or diluted its mandate and powers, this appears not to be the case.

Concerns were initially expressed about the commitment in paragraph 3 for UNSCOM to respect the 'legitimate concerns of Iraq relating to national security, sovereignty and dignity'. This was seen as inviting Iraq to unilaterally impose restrictions on UNSCOM activities on these grounds. Yet UNSCOM has repeatedly given Iraq such reassurances—while in the same breath reiterating that 'immediate, unconditional

ISSN 0966-9221

Verification Technology
Information Centre

VERTIC

Carrara House
20 Embankment Place
London WC2N 6NN
United Kingdom
Tel: 44 171 925 0867
Fax: 44 171 925 0861

e-mail:

info@vertic.org

web:

www.gn.apc.org/vertic/

Memorandum of Understanding between the United Nations and the Republic of Iraq

1. The Government of Iraq reconfirms its acceptance of all relevant resolutions of the Security Council, including resolutions 687 (1991) and 715 (1991). The Government of Iraq further reiterates its undertaking to cooperate fully with the United Nations Special Commission (UNSCOM) and the International Atomic Energy Agency (IAEA).
2. The United Nations reiterates the commitment of all Member States to respect the sovereignty and territorial integrity of Iraq.
3. The Government of Iraq undertakes to accord to UNSCOM and IAEA immediate, unconditional and unrestricted access in conformity with the resolutions referred to in paragraph 1. In the performance of its mandate under the Security Council resolutions, UNSCOM undertakes to respect the legitimate concerns of Iraq relating to national security, sovereignty and dignity.
4. The United Nations and the Government of Iraq agree that the following special procedures shall apply to the initial and subsequent entries for the performance of the tasks mandated at the eight Presidential Sites in Iraq as defined in the annex to the present Memorandum:
 - a) A Special Group shall be established for this purpose by the Secretary-General in consultation with the Executive Chairman of UNSCOM and the Director General of IAEA. This Group shall comprise senior diplomats appointed by the Secretary-General and experts drawn from UNSCOM and IAEA. The Group shall be headed by a Commissioner appointed by the Secretary-General.
 - b) In carrying out its work, the Special Group shall operate under the established procedures of UNSCOM and IAEA, and specific detailed procedures which will be developed given the special nature of the Presidential Sites, in accordance with the relevant resolutions of the Security Council.
 - c) The report of the Special Group on its activities and findings shall be submitted by the Executive Chairman of UNSCOM to the Security Council through the Secretary-General.
5. The United Nations and the Government of Iraq further agree that all other areas, facilities, equipment, records and means of transportation shall be subject to UNSCOM procedures hitherto established.
6. Noting the progress achieved by UNSCOM in various disarmament areas, and the need to intensify efforts in order to complete its mandate, the United Nations and the Government of Iraq agree to improve cooperation, and efficiency, effectiveness and transparency of work, so as to enable UNSCOM to report to the Council expeditiously under paragraph 22 of resolution 687 (1991). To achieve this goal, the Government of Iraq and UNSCOM will implement the recommendations directed at them as contained in the report of the emergency session of UNSCOM held on 21 November 1997.
7. The lifting of sanctions is obviously of paramount importance to the people and Government of Iraq and the Secretary-General undertook to bring this matter to the full attention of the members of the Security Council.

Signed this 23rd day of February 1998 in Baghdad in two originals in English.

For the United Nations
Kofi A. Annan
Secretary-General

For the Republic of Iraq
Tariq Aziz
Deputy Prime Minister

Annex to the Memorandum of Understanding between the United Nations and the Republic of Iraq of 23 February 1998

The eight Presidential Sites subject to the regime agreed upon in the present Memorandum of Understanding are the following:

- | | |
|---|------------------------------------|
| 1. The Republican Palace Presidential Site (Baghdad). | 5. Tharthar Presidential Site. |
| 2. Radwaniyah Presidential Site (Baghdad) | 6. Jabal Makhul Presidential Site. |
| 3. Sijood Presidential Site (Baghdad). | 7. Mosul Presidential Site. |
| 4. Tikrit Presidential Site. | 8. Basrah Presidential Site. |

The perimeter of the area of each site is recorded in the survey of the 'Presidential sites' in Iraq implemented by the United Nations Technical Mission designated by the Secretary-General, as attached to the letter dated 21 February 1998 addressed by the Secretary-General to the Deputy Prime Minister of Iraq.

and unrestricted' access is fundamental to the accomplishment of its tasks and that any attempt by Iraq to block such access reflects illegitimate concerns.

Another concern of critics was that the 'Special Group' to be established by the UN Secretary-General to conduct inspections of the eight 'Presidential sites' defined in the agreement would politicise and/or obstruct UNSCOM's work. The Special Group comprises senior diplomats appointed by the Secretary-General and experts drawn from UNSCOM and the IAEA. It is headed by a Commissioner appointed by the Secretary-General. It was feared that diplomats from countries favourably disposed towards Iraq might attempt to obstruct the inspectors' work, dilute their findings and politicise the evaluation of the findings. Even if none of these difficulties eventuated, the fact that Baghdad-based diplomats would be involved would, it was alleged, impair the Group's ability to conduct surprise inspections. The appointment of the Secretary-General's nominee to the position of Commissioner, it was feared, could detract from the authority of UNSCOM Executive Chairman Richard Butler.

However such fears also appear, so far, to be largely unfounded. The Secretary-General has made clear that Mr Butler's authority will not be undermined or the work of the inspectors allowed to be impaired. He has appointed as Commissioner a very experienced disarmament expert, Jayantha Dhanapala, former head of the UN Institute for Disarmament Research (UNIDIR), Chairman of the last Non-Proliferation Treaty Review Conference and currently the UN's new Under Secretary-General for Disarmament and Arms Limitation. Mr Dhanapala will be alert to the diplomatic and technical pitfalls, and respectful of UNSCOM's prerogatives. As a Sri Lankan it will be difficult for Iraq to portray him as an American dupe. As to the possibility that the element of surprise might be lost in conducting on-site inspections, this is already difficult to achieve given the close surveillance and tailing of UNSCOM personnel that the Iraqis carry out. The diplomats involved in the Special Group will not receive information on which site is to be inspected until they are collected for the inspection.

Although it was supposed that the US and UK would be unable to be represented on such a group, since they do not maintain diplomatic missions in Baghdad, in fact their representatives stationed in nearby countries are being used. There are also sufficient Western and non-pro-Iraq countries represented in Baghdad to provide a politically balanced Special Group and to ensure that the

potential number 'leakers' is likely to be minuscule and therefore easily identifiable. Perhaps the major danger is that the Iraqis will shun contact with the UNSCOM Chief Inspector and his officials during inspection visits and deal only with the diplomats, attempting to play them off against the experts. How such a tactic works out in practice depends on who the diplomats are and the cohesion of the Special Group as a whole. One encouraging feature is that the diplomats will simply accompany the experts and not participate in their inspection procedures and will not have the power to stop inspections.

Further safeguards are contained in the agreement itself. The Special Group is obliged to operate under established UNSCOM and IAEA procedures, in addition to specific procedures relating to the special nature of the Presidential sites, and the Group's report is to be submitted to the Security Council via the Executive Chairman of UNSCOM and through the UN Secretary-General.

The agreement also obliges Iraq and the UN to improve 'cooperation, and efficiency, effectiveness and transparency of work' to enable UNSCOM to complete its tasks expeditiously. This provision might, at first blush, be felt to contain the seeds of difficulties, since it applies to both Iraq and the UN. After bitter experience UNSCOM has curtailed the transparency of its activities to avoid tipping the Iraqis off as to its next moves. Iraq might now attempt to claim that this is illegal under the new agreement. Balanced against this however is the proviso that obliges Iraq and the UN to implement the recommendations of UNSCOM's emergency meeting of 21 November 1997 which include a requirement for 'immediate, unconditional and unrestricted access'. The real reason for Iraq's demand for transparency in UNSCOM's work may be its desire that the diplomats from various countries who act as the Commissioners of the Special Commission in New York rein in the activities of Executive Chairman Butler. This is likely to be resisted by Butler and Kofi Annan.

Finally, the reference in the agreement to the Secretary-General's undertaking to bring the lifting of sanctions to the Security Council's attention is also benign. It commits the Secretary-General to doing no more than he was already doing, not just at the behest of Iraq but of UN humanitarian agencies concerned with the impact of sanctions on the Iraqi people.

In sum then, the UN/Iraq Memorandum of 23 February adds nothing of substance to existing arrangements and commitments and should not, of itself, be an impediment to UNSCOM's work. It

does however add another layer of complexity which Saddam Hussein, on past form, will seek to exploit. Ultimately, whatever the legal niceties of any accords, Saddam is likely to do whatever he perceives to be in his best interests. Surprisingly, at the time of writing it appears that this involves complying with the latest agreement. The threat of force appears to have worked, at least for now. The Special Group's first inspection of a Presidential site has been conducted smoothly and access has been given to several sites linked to Iraqi intelligence from which UNSCOM had previously been barred. While this is encouraging, the past record of Iraqi deceit and obstruction does not bode well for the

fulfilment of UNSCOM's mandate over the long haul.

Iraq has repeatedly given solemn undertakings to divest itself of its weapons of mass destruction and relevant research and production capacities and to cooperate with UNSCOM and the IAEA in doing so. The Security Council should not allow itself to be cowed by Iraq into making further deals, however cosmetic the resulting changes to monitoring and verification arrangements. It is time to draw a line.

Trevor Findlay

The Non-Proliferation Treaty: Strengthened Review, Strengthened Safeguards

The second session of the Preparatory Committee (PrepCom) for the 2000 Review Conference of the parties to the Nuclear Non-Proliferation Treaty (NPT) takes place in Geneva from 27 April to 8 May. It will be the first PrepCom since the Board of Governors of the International Atomic Energy Agency (IAEA) approved an Additional Protocol to strengthen nuclear safeguards, the chief means by which compliance with the NPT is monitored and verified. The PrepCom will provide an excellent opportunity for NPT states parties to welcome this result and assess current and future implementation of the IAEA Programme to Strengthen the Effectiveness and Improve the Efficiency of Safeguards, of which the Protocol forms an important legal component.

The IAEA's Strengthened Safeguards Programme

The Programme (formerly nicknamed '93+2') was initiated in 1993 and was prompted by the discovery of Iraq's clandestine nuclear weapons activity, and different experience gained from North Korea's non-compliance with IAEA safeguards and South Africa's unilateral nuclear disarmament. Pressure for reform of the safeguards system also arose from IAEA budgetary constraints, combined with increases in the number of reactors and the quantity of nuclear materials which required safeguarding. While the programme was intended for the Non-Nuclear Weapon States (NNWS) party to the NPT, the Nuclear Weapons States (NWS) participate in elements of it on a voluntary basis in recognition of their commitment to non-proliferation.

Implementation of 'Part I' began in 1995. These measures, which clarified and developed existing verification commitments under the 1972

INFCIRC/153 model, which all NNWS parties to the NPT are obliged to sign, include:

- a requirement by states to provide enhanced information about their nuclear materials and reactors;
- reaffirmation of the IAEA's right to conduct broader ad hoc inspections to verify initial and subsequent declarations and no-notice inspections at strategic points;
- clarification that IAEA environmental sampling can be conducted where inspectors have access;
- improved technologies for monitoring and analysis; and
- better co-operation with states and regional organisations.

It was decided that the more far-reaching measures under Part II would take the form of a Protocol to be added to states' comprehensive safeguards agreements. A special safeguards committee, open to all interested parties, met between July 1996 and April 1997. They succeeded in negotiating a Protocol (INFCIRC/540) that, when implemented, will significantly facilitate verification of NPT commitments, through improved information and access beyond nuclear materials and reactors, including:

- the entire nuclear fuel cycle from mining to waste;
- nuclear-related research and development;
- nuclear technology and non-nuclear materials;

- any building on any safeguarded site;
- decommissioned facilities;
- activities beyond a site, if necessary, if they could be functionally related to the site;
- environmental sampling, if necessary, anywhere on a state territory;
- multiple-entry visas to be provided to IAEA inspectors to facilitate the surprise element of certain kinds of inspections;
- simplification of procedures for designation of inspectors.

The NPT's Strengthened Review Process

At the 1995 NPT Review and Extension Conference the parties decided to extend the Treaty indefinitely. In addition two decisions relevant to nuclear safeguards were taken. First, it was decided that instead of a preparatory meeting taking place only in the 12 months prior to each Review Conference, in future a meeting would be held in each of the preceding three years. These would consider 'principles, objectives and ways in order to promote the full implementation of the Treaty' and to make recommendations to the Conference. Second, a document entitled 'Principles and Objectives for Nuclear Non-Proliferation and Disarmament' (abbreviated somewhat nautically to P&O) was agreed. It stated that 'IAEA safeguards should be regularly assessed and evaluated. Decisions adopted by its Board of Governors aimed at further strengthening the effectiveness of IAEA safeguards should be supported and implemented and the IAEA's capability to detect undeclared nuclear activities should be increased'.

While the first of the 'enhanced' PrepComs, held in New York in 1997, devoted much of its energies to procedural discussions, substantive debate was conducted on three 'clusters' of topics—disarmament, safeguards and peaceful uses—and also other areas identified for further discussion. Almost all delegations which addressed safeguards issues explicitly supported the IAEA Programme for Strengthening Safeguards, demonstrating that it is an area where consensus can be generated as the PrepComs assemble recommendations for the Review Conference.

The Chair's Working Paper, which summarised 'general agreement' on the major issues addressed in the clusters, reflected this. It stated that 'conclusion of negotiations on the '93+2' model protocol and its expected adoption by the [IAEA Board of Governors] in May is welcomed as a significant contribution to strengthening safeguards. Parties...should conclude and ratify

agreements with the IAEA and implement the 93+2 package...as soon as possible'.

Significant progress has indeed been made and should be reflected in the 1998 PrepCom discussions. The Additional Protocol has entered into force for Australia and is being applied there and also provisionally in Armenia. Georgia, Lithuania, the Philippines, Poland, Uruguay, and Jordan have signed it. Canada and the European Union (EU) countries are expected to sign following IAEA Board approval in June. Official consultations have also been held with Japan and Hungary, and informal discussions held with the Republic of Korea. This list includes NNWS with large civil nuclear fuel cycles, thus setting an important example. Others will be expected to signal to their intentions at the PrepCom.

There are other safeguards-related issues that this and the 1999 PrepCom should consider. There should be a renewed call for and review of progress made by the 40 NNWS which have not fulfilled their legally-binding commitments to negotiate an INFCIRC/153-type safeguards agreement. These states may wish to signal their intention to apply the Additional Protocol provisionally in the meantime.

The Additional Protocol enables verification of exports and imports of nuclear-related equipment and non-nuclear material. These are listed in its Annex II and are almost the same as the Nuclear Suppliers' Group (NSG) and Zangger Committee exporters' groups lists of items directly related to nuclear processes and which trigger safeguards. Non-aligned states have long demanded that the activity of exporters' groups be more transparent. The 1997 PrepCom Chair's Paper included language offering support for 'efforts to enhance transparency in multilaterally agreed nuclear export guidelines' and a call for all states to join in this activity. The Additional Protocol offers a framework for doing this. The NSG, which also has restraint mechanisms for dual-use technology, has been criticised for denying technology transfers to states parties even though they have comprehensive safeguards agreements. It has been pointed out that this contradicts the right of NPT parties under Article IV to have access to peaceful nuclear technology. If parties implement the Additional Protocol fully, this could engender the extra confidence that supplier states apparently need before exporting such technology.

Given the new Additional Protocol undertakings by NNWS, it will continue to be expected that the NWS adopt measures that demonstrate their commitment to non-proliferation. At the May 1997 Board meeting they made initial declarations of intent to make various voluntary offers. The

United Kingdom and France, which are finalising their commitments along with other EU states, undertook to provide additional information and access at civil facilities, and information regarding other activities and exports related to the nuclear fuel cycles of the NNWS. China is offering roughly the same information but not the access, and Russia is presently offering to provide more limited information. The United States volunteered to accept all measures, subject to national security considerations. All three states are currently engaged in informal discussion with the IAEA. Another important measure would be for the NWS to further transfer excess, non-weaponised nuclear material to civil cycles and place them under safeguards. Progress in the US and Russia on this last year is likely to be reported at the PrepCom and it would be

appropriate for them and others to announce future plans then as well.

Conclusion

Mohammed ElBaradei, IAEA Director General, stated in the March IAEA Board meeting that '[t]he conclusion of all Additional Protocols by the end of the year 2000 is not an unrealistic goal'. Implementation of the new IAEA safeguards system is one area where momentum and consensus among the NWS and NNWS can be built at PrepComs in the lead-up to the 2000 NPT Review Conference. In this way strengthening of safeguards and strengthening of the review process can be mutually enhancing.

Suzanna van Moyland

Verification Watch

Chemical Weapons Convention

The first ever mock international challenge inspection under the Chemical Weapons Convention (CWC) was held in the United Kingdom from 2-6 February. Royal Air Forces Valley, North Wales, hosted a 10-strong inspection team accompanied by observers from the Organisation for the Prohibition of Chemical Weapons (OPCW). Under the CWC, challenge inspections can be conducted by the OPCW's full-time inspectors with as little as 12 hours notice.

Between entry-into-force of the CWC in April 1997 and the end of February 1998, the OPCW conducted 152 routine inspections in 24 states.

Although the United States ratified the CWC on 24 April 1997, the House of Representatives has yet to finalise implementing legislation. The opportunity, therefore, exists to rectify two implementation provisions passed by the Senate on 23 May (S 610) that contradict the CWC's solid verification provisions. First, Section 304 (f) (1) states that "[n]o sample collected in the [US]...may be transferred for analysis to any laboratory outside the territory of the [US]". Under the CWC, samples taken by inspectors may be taken outside the country on the rare occasions that further analysis is necessary. Such samples can provide hard evidence of cheating. Second, S 610's Section 307 states that 'the President may deny a request to inspect any facility in the [US] in cases where the President determines that the inspection may pose a threat to the national security interests of the [US]'. This directly contradicts US obligations under the CWC as stated in Article IX to accept any time, any place,

challenge inspection on US territory. These clauses could weaken the OPCW's authority regarding the US and other states, some of which may be tempted to emulate the provisions to cheat on their commitments, and could impact upon the negotiation and/or implementation of other treaties.

OPCW inspections began on 5 March on chemical weapons stockpiles outside the city of Dzerzhinsk, Nizhnii Novgorod Oblast in Russia, according to Russian newspaper reports. Russia has publicly declared 40,000 agent tonnes of chemical weapons at seven sites and the US 33,000 tonnes. Under the 1990 Bilateral Destruction Agreement, the US and USSR agreed that stockpiles be destroyed over the next 10 years. However, the Agreement never entered into force and the verification work in Russia is now conducted by the OPCW, using the stronger verification provisions of the CWC. Russia ratified the CWC at the end of last year and handed over initial reports on stockpiles in January.

Bosnia: Verifying Implementation of Dayton

The First Conference to review implementation of the Agreement on Confidence- and Security-Building Measures in Bosnia and Herzegovina, under the auspices of the Organisation for Security and Co-operation in Europe (OSCE) auspices was held in Vienna from 16 to 20 February. The Agreement, concluded in Vienna on 26 January 1996 in accordance with Annex 1-B of the General Framework Agreement for Peace in Bosnia and Herzegovina (the Dayton Agreement), establishes a set of measures to enhance mutual

confidence and reduce the risk of conflict. The Conference reported that 'by December 1997 131 inspections [of arms depots] had been completed successfully, and that in the first two years of implementation, no significant problems were noted during inspections which were carried out in a professional and friendly manner'.

Six thousand, five hundred and eighty pieces of equipment were destroyed by the end of the reduction period (21 November 1997). The NATO Stabilisation Force (SFOR)—which has supported the OSCE in its arms control tasks—announced on 17 February that numbers of military arms depots must now be reduced by one quarter to facilitate monitoring. SFOR also organised joint patrols with the unarmed UN International Police Task Force to remove excess weaponry from local police stations.

Strategic Arms Reduction Treaty

Both Russia and the US are a year ahead of schedule in implementing the START I nuclear disarmament treaty. During the third year of implementation (ending 5 December 1997) 57 inspections were completed without incident. William Cohen, US Secretary of Defense, who visited a nuclear weapons storage site at Russia's Sergeev Posad, said that it is 'essential' that the US allocates \$442m for the next fiscal year to enable continued work under the Co-operative Threat Reduction Programme (also known as the Nunn-Lugar programme) which assists in nuclear weapons dismantlement and fissile materials security in Russia. Meanwhile, the START II Treaty remains unratified by Russia's Duma.

Compiled by Suzanna van Moyland

VERTIC News

VERTIC Strategic Plan

The Board of Directors at its 19 March meeting approved the VERTIC Strategic Plan setting out the aims and objectives of the Centre to 2000. The plan includes the following new mission statement for VERTIC:

VERTIC is an independent, non-profit making, non-governmental organisation whose mission is to:

promote effective and efficient verification as a means of ensuring confidence in the implementation of treaties or other agreements which have international or national security implications.

Verification will be taken to include the negotiation, monitoring, implementation and review of agreements and the establishment of confidence-building measures to supplement them.

VERTIC aims to achieve its mission by means of:

- research
- training
- dissemination of information, and
- interaction with the relevant political, diplomatic, technical and scientific communities.

Staff News

Trevor Findlay has been concentrating on managerial and fund-raising activities. In March he was awarded an Evans-Grawemeyer Travel Award by the Australian Department of Foreign Affairs and Trade to enable him to conduct final research at the United Nations in New York for his book *Fighting for Peace: The Use of Force in Peace Operations*, which is to be published by Oxford University Press for the Stockholm International Peace Research Institute (SIPRI).

John Lanchbery has focused on follow-up activities related to the Kyoto Protocol. In late January he met with the head of the US delegation to the Climate Change Convention to discuss the developing US position. He attended the Royal Institute of International Affairs (RIIA) post-Kyoto conference in early February, which was well attended by climate negotiators and industry representatives. In late February he gave a talk to the Linean Society on the Kyoto Conference for the UK Climate Action Network.

His writings during the period include two chapters for a forthcoming book on the outcome of the Kyoto Conference to be published by the RIIA; an article for the *Review of European Community and International Environmental Law (RECIEL)* on the implications of uncertainties in emissions estimates for the implementation of the Kyoto Protocol; an article on political and ethical aspects of emissions trading and joint implementation for the US magazine *Environment*; and a report on the effect of uncertainty on emissions trading for the United

Nations Conference on Trade and Development (UNCTAD).

Suzanna van Moyland continued to monitor the implementation of the IAEA's programme to strengthen the effectiveness and improve the efficiency of safeguards, and is preparing a report on this for the NPT Preparatory Committee. She is also continuing work on her paper on sustaining a verification regime in a nuclear weapon-free world, as part of VERTIC's Getting to Zero

project. She attended the Königswinter Conference, an annual Germany-UK discussion forum, in Edinburgh from 26-29 March.

Correction: In the last edition of *Trust & Verify* we neglected to note that *Suzanna van Moyland's* talk on 'Human Factors' at the IAEA in Vienna in September 1997 was funded by the UK Department of Trade and Industry through its Safeguards Programme Letter agreement with the UK Atomic Energy Agency (UKAEA).

Trust & Verify Goes Cyber!

From our May issue onwards *Trust & Verify* will be available free on the Internet or specially delivered to you via Email. Those who have not yet requested an Email copy can do so by filling out the form on the back of the publications insert in this copy of *Trust & Verify*. Or catch it on the World Wide Web from May @ www.gn.apc.org/vertic/



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

Trust & Verify

Trust & Verify is published by VERTIC six times a year. Unless otherwise stated, views expressed in *Trust & Verify* are the responsibility of the author and do not necessarily reflect those of VERTIC and/or its staff. Material from *Trust & Verify* may be reproduced, although we request acknowledgement wherever appropriate.

Subscription rates are £15 (individual) or £20 (organisation) per year. Payments may be made by cheque (in Pounds Sterling only) or by MasterCard, Visa or Eurocard. Please complete the coupon on the back page of the publications insert in this edition.

Board of Directors

Sir Hugh Beach GBE KCB DL
Lee Chadwick MA
John Edmonds CMG CVO
Dr Owen Greene
Dr Colin Hines
Dr Jeremy Leggett

Personnel

Dr Trevor Findlay, *Executive Director*
John Lanchbery, *Environmental Project Director*
Suzanna van Moyland, *Arms Control & Disarmament Researcher*
Nicola Elborn, *Administrator*
Christine Schilke, *Intern*