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Climate change: the evolving reporting system

Although it is one of its less contentious and hence less publicised aspects, the reporting system for the 1994 United Nations Framework Convention on Climate Change (UNFCCC) is fundamental to the treaty's future. Without an effective reporting system to provide information to allow parties' compliance and the overall progress of the regime to be assessed, the treaty will stand no chance of having a real and sustained impact on climate change.

Underpinning the system are so-called national communications that industrialised countries and states with economies in transition (EIT), known collectively as Annex I parties, are periodically required to submit. These are intended to detail how such parties are implementing their treaty commitments. There have been three national communications due to date. The first was due within six months after entry into force of the convention for each party, the second was due on 15 April 1997 (15 April 1998 for EIT nations), and the third was due on 30 November 2001. The deadline for the fourth national communication has been set at I January 2006. Annex I countries are also required to compile annual inventories of greenhouse gas (GHG) emissions and removals.

All reports are to be submitted to the UNFCCC Secretariat in Bonn, Germany, which collates, analyses and makes them available to the other parties and to the convention's subsidiary bodies for review. The four main bodies that comprise the UNFCCC's reporting and review system are:

- the Secretariat:
- the Subsidiary Body for Implementation (SBI), which analyses national communications in order to assess the status of implementation;
- the Subsidiary Body for Scientific and Technological Advice (SBSTA), which develops guidelines for refining national communications; and
- the Intergovernmental Panel on Climate Change (IPCC), which provides methodologies for GHG inventories and best practice guidance.

The annual Conference of Parties (COP) uses the national communications, and the various analyses of them, to review overall progress in implementation of the treaty. States may use the conference and the reporting and review system to exchange information on their experiences, both good and bad, in attempting to compile and present their national communications.

Reporting guidelines

An initial set of guidelines was produced in December 1993 by the Secretariat to assist parties in preparing their submissions, most critically with regard to what information ought to be included and what principles should be followed in presenting it. The guidelines were also

In this issue . . .

Larry McFaul examines the climate change reporting system, while Jennifer Kinzeler assesses peace monitoring in Liberia. Plus all of the usual features: Verification Watch, Science and Technology Scan, Peace Missions Monitor, Verification Quotes and VERTIC News and Events.

intended to facilitate the Secretariat's analysis of the submissions and to ensure that the COP and its subsidiary bodies gained sufficient information from them to permit a meaningful assessment of the convention's implementation.

The guidelines have evolved substantially over the past decade, thanks to the reporting and review bodies. The SBSTA has done considerable work, culminating in major overhauls of the guidelines for national communications in 1999 and for annual emissions inventories in 2002. The revised guidelines are more comprehensive and aim to assist the parties in supplying consistent, transparent, comparable, accurate and complete information.

The treaty's review bodies may also help improve reporting by two main means: compilation and synthesis reports and indepth reviews (IDRs). The former are drafted by the SBI, and summarise the information presented in national communications, thereby offering an overview of national activities relating to climate change. This information is crucial to COP assessments regarding the effectiveness of the UNFCCC's various provisions. IDRs, meanwhile, are a more detailed examination of individual countries' efforts, including a thorough technical analysis. Expert Review Teams (ERTS), comprising experts nominated by the parties, produce the IDRs. Annual reviews of GHG inventories, which commenced in 2003, involve an initial check of the data by the Secretariat, the preparation of a synthesis and assessment (s&A) report, also by the Secretariat, and a review of individual inventories by ERTs. The review procedures not only permit compliance and implementation to be assessed, but allow each party to improve the compilation and presentation of its future reports.

Report composition

The extensive development of guidelines and establishment of review systems has resulted in a far-reaching and comprehensive reporting format. National communications are now expected to include: information on national circumstances pertaining to GHG emissions and removals; GHG inventory information; policies and measures (PAMS) projections and the overall effect of PAMS; a vulnerability assessment, an assessment of the impact of climate change and information on adaptation measures; an account of financial resources and transfer of technology; a report on research and systematic observation (ground-and space-based systems); and information on education, training and public awareness initiatives.

Annual inventories should consist of a national inventory report (NIR) containing detailed information on parties' inven-

tories and the common reporting format (CRF) which parties use to report their GHG data. This allows comparisons to be made between parties. Parties must follow the IPCC's guidelines or IPCC-compatible methodologies in making their estimates and producing their reports.

The reporting record so far

As a result of these developments, parties have steadily improved the quality of their national communications. Analysis by the SBI has shown that the second round of national communications were of better quality than the first. Reporting on PAMS was clearer, although some transparency issues were noted. The quality of inventory data and GHG projections was also higher. Similarly, third national communications were of higher quality than those filed in the second round. Parties provided a wealth of information on PAMS, the presentation and reporting of which also improved significantly. But problems lingered in relation to transparency, terminology and categorisation of information.

Furthermore, the amount of detail provided varied widely. There were broad improvements in the quality and quantity of information on financial resources and technology transfers, but gaps remained. Parties improved their GHG projections compared with previous national communications and the SBI felt that they had put 'considerable efforts' into this. Some GHG projections did not comply fully with the guidelines. All national communications contained information on vulnerability and impact and adaptation measures. Only half of the reporting parties followed the guidelines on reporting on research. Reporting on systematic observation followed the guidelines more closely. With regard to education, training and public awareness initiatives, the third reports were more comprehensive than their predecessors, although there were variations in the level and scope of reporting.

Timeliness problems

The main problem hampering the effectiveness of the reporting and review system, and one which the SBI has expressed concern about, is the lateness of submissions. Problematically, the number of parties that are obliged or have volunteered to report as Annex I parties has fluctuated between 35 and 4I. Nonetheless, only I5 submitted their first national communication in time to be considered in the compilation and synthesis report. Just nine submitted their second national communication by the due date, while a slightly improved 13 presented their third national communication on time. In regard to the submission

of annual inventories, parties have recently been better in meeting their deadlines, but there is still room for improvement. Twenty-two states filed their annual inventories by the due date in 2002, while 29 did so in 2003.

Tardiness in submitting reports affects the completeness and hence the usefulness of the review process and makes preparation of meaningful compilation and synthesis reports difficult. The information in national communications quickly becomes out of date, especially in relation to policy developments. The limited number of submissions also undermines the drawing of comparisons between parties. The assessment by the COP and the subsidiary bodies of the extent to which parties are implementing the treaty and how to proceed is far less precise than if it is based on an insufficient number of national communications.

The way ahead

The UNFCCC's reporting and review system is in a stage of dynamic and progressive evolution. In general, the quality of national communications is good and the guidelines and review process, which are currently extensive, are continuing to evolve. For example new software is being developed for GHG inventories and there are training programmes underway for ERTS. There is reason to be optimistic that the problems that have been identified in reporting to date can be resolved. The most heartening development is that the capacity of parties to report has clearly increased over the past decade, as demonstrated by a marked improvement in the quality of reports themselves. As parties gain experience with the new guidelines, the writing of national communications should become more efficient and result in more timely submissions. The advent of annual emission inventory reviews should help speed the process. Nevertheless, the parties should still be encouraged to report more promptly.

Compared with other verification regimes, where there is no institutionalised advice and support for parties struggling to meet their reporting requirements, the climate change regime has a plethora of mechanisms. Continued improvement in the reporting and review processes should be a natural consequence of the help available. For parties which continue to flounder in meet their reporting obligations, targetted assistance, from the Secretariat, subsidiary bodies, other parties and the non-governmental sector, is vital.

Larry McFaul

VERTIC Environment Researcher

Verification Yearbook 2003

In a year in which verification has been brought to the fore in international discourse in a way that has been without precedent, *Verification Yearbook 2003* continues VERTIC's internationally recognised series of independent, authoritative analysis of verification trends and developments in arms control and disarmament, the environment, and other issues.

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The preface to *Verification Yearbook 2003* is by Wolfgang Hoffmann, Executive Secretary, Comprehensive Nuclear Test Ban Treaty Organization (CTBTO). The introduction by VERTIC Executive Director Trevor Findlay examines the state of multilateral verification, while the other 13 chapters analyse the following topics.

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Trevor Findlay and Ben Mines.

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'An essential resource'

Michael Krepon, President Emeritus Henry L. Stimson Center, Washington, DC

Liberia: multifarious monitoring

The Liberian civil war began in December 1989 when Charles Taylor launched an insurgency against the military regime of President Samuel Doe. Fighting between Liberians United for Reconciliation and Democracy (LURD), the Movement of Democracy in Liberia (MODEL) and the Liberian government has subsequently cost more than 200,000 lives and generated over 850,000 refugees. Several attempts at achieving peace have resulted in the establishment of multiple monitoring mechanisms, sometimes simultaneously, including three peace operations—one regional and two fielded by the United Nations (UN)—and three implementation monitoring bodies. Indeed, at least to the outside world, the complexity and opaqueness of the conflict seem matched by the complexity and opaqueness of the means for ensuring the peace.

In 1993, the UN deployed the United Nations Observer Mission in Liberia (UNOMIL), comprising just 368 military observers, to monitor the developing peace process. UNOMIL's mandate was continually extended, as the mission proved that it could play a vital role, even though its numbers were reduced to 92 by the end of 1996. UNOMIL was terminated in September 1997 after the successful holding of presidential elections. Unfortunately, Charles Taylor's victory prompted a resumption of civil war.

The Liberian peace process finally got back on track on 17 June 2003, when the warring parties signed a new ceasefire agreement. This provided for a 15-member Joint Verification Team (JVT), consisting of representatives of the Liberian government, the rebel opposition, the Economic Community of West African States (ECOWAS), the UN and the United States. The JVT was supposed to map the locations of the opposing forces to provide peacekeepers with knowledge of the situation on the ground prior to their arrival. The JVT never materialised, however, partly because continuing violence posed a threat to verifiers in the field and partly because no country was willing to volunteer aircraft to transport them around the country.

Despite the supposed ceasefire, fighting intensified throughout June and July. In response, on I August the Security Council adopted Resolution 1497, authorising member states to deploy a sub-regional multinational force to support implementation of the ceasefire until a longer-term UN stabilisation mission could arrive. The ECOWAS Mission in Liberia (ECOMIL), comprising 3,500 soldiers from Benin, Gambia, Ghana, Guinea-Bissau,

Mali, Nigeria, Senegal and Togo, began deploying just three days later, on 4 August.

Meanwhile, joint pressure from international leaders and the rebel groups forced Taylor to resign as president on 11 August: three African presidents escorted him into exile in Nigeria and power was transferred to Vice-President Moses Blah. On 18 August the warring parties signed a Comprehensive Peace Agreement in Accra, Ghana, declaring an end to the conflict and calling for establishment of a National Transitional Government of Liberia (NTGL) to ensure implementation of the agreement and prepare for elections in October 2005.

The June ceasefire agreement had, in addition to the ill-fated JVT, also provided for a Joint Monitoring Commission (JMC) to monitor the ceasefire, investigate reports of violations and recommend action. Comprising equal numbers of representatives of the parties, as well as representatives of the UN, the African Union (AU) and the International Contact Group on Liberia (ICGL), it was also meant to supervise the disengagement of forces. Unlike the JVT, the JMC was actually established, but not until after the Comprehensive Peace Agreement was concluded in August 2003. It is difficult to determine how effectively the JMC has fulfilled its mandate so far: although it reportedly began operations in August, it appears to have only begun meeting intensively in mid-September with the advent of a new UN force.

On 19 September, the Security Council unanimously approved Resolution 1509, creating the United Nations Mission in Liberia (UNMIL)—the long-term stabilisation force previously mooted. UNMIL will remain in the country for an initial 12 months from the time of its deployment on 1 October 2003. It will have up to 15,000 military personnel, including as many as 250 military observers, 160 staff officers and 1,115 civilian police (CivPols). Deployment has begun, but it may take until early 2004 for the entire force to be in place. Its mandate includes monitoring implementation of the ceasefire, assisting in the disarmament, demobilisation, reintegration and repatriation (DDRR) of all armed forces, providing security at key government installations, protecting UN staff, facilities and civilians, supporting the work of the JMC and helping prepare for elections.

Efforts to monitor the Liberian peace process have been further expanded, although seemingly unnecessarily, with the establishment of an Implementation Monitoring Committee (IMC). It is supposed to do as it name suggests, as well as meeting regularly with the NTGL to resolve any compliance difficulties. The membership of the IMC appears, however, to be identical to that of the JMC. Even more confusingly, the two bodies are chaired by the same person, Nigerian Lieutenant-General and UNMIL Force Commander Daniel Opande. At its first meeting on 28 November, the IMC noted that considerable progress had been made in the peace process and commended the JMC for 'meeting regularly for the past ten weeks', which seems, in the circumstances, damnation by faint praise.

By late November, despite some progress in establishing the transitional arrangements, serious violations of the ceasefire were recurring. The IMC announced that it was requesting the JMC to propose measures to be taken in response. The existence of two monitoring bodies, with apparently identical membership and chairs and significant overlap of mandates, seems a surreal way to ensure the smooth implementation, in a complex environment, of an already troubled peace accord.

Jennifer Kinzeler
VERTIC intern

Peace Missions Monitor

Nigeria to comply with part of ICJ ruling

In October Nigeria announced that it would surrender 33 border villages near Lake Chad to neighbouring Cameroon, following an October 2002 ruling by the International Court of Justice (ICJ) in The Hague, Netherlands. Nigerian President Olusegun Obasanjo initially refused to comply with the ruling, but later agreed to settle the dispute through a Nigeria—Cameroon Mixed Commission set up under UN auspices. The commission has said that Cameroon should surrender some villages currently under its control to Nigeria. These moves clear the way to tackling the much thornier issue of the reputedly oil-rich Bakassi Peninsula, which the ICJ also awarded to Cameroon and which Nigeria has so far refused to hand over.

Northern Ireland: decommissioning goes awry

The Ulster Unionist Party (UUP) has rejected the third act of decommissioning by the Irish Republican Army (IRA) announced by the head of the International Independent Commission on Decommissioning, Canadian General John de Chastelain, on 21 October. In his first misstep since assuming the position, de Chastelain appeared to frustrate both Unionists and the Irish and British governments by confirming only that the amount of weapons and explosives decommissioned was 'considerably larger' than previous amounts, and refusing to be drawn on further detail. The Unionist demand for 'full disclosure' of decommissioned weapons seriously conflicts with the IRA's desire for confidentiality. While in theory the commission is supposed to enjoy sufficient trust on both sides that its pronouncements will be accepted at face value, the vagueness of its latest verification act has somewhat tarnished its previously impeccable reputation. Meanwhile, in the 26 November 2003 elections to the Northern Ireland Assembly, the ultra-loyalist Democratic Unionist Party (DUP) and Sinn Féin, the IRA's political wing, won the most seats. This is likely to create further challenges for verified acts of decommissioning and the Northern Ireland peace process as a whole.

Burundi mission fully deployed

The African Mission in Burundi (AMIB) has now reached its full strength of 3,128 troops after delays caused by funding and logistical difficulties. Following the collapse of a 2002 ceasefire, its mission now is to supervise, observe, monitor and verify implementation of the 8 October 2003 Pretoria Protocol on Political, Defence and Security Power Sharing. Signed by the Transitional Government and the country's largest rebel group, the Conseil National pour la defense de la democratie-Forces pour la defense de la democratie (CNDD-FDD), the agreement envisages a complete ceasefire, the demobilisation, disarmament and reintegration of rebel forces and the holding of a presidential election in November 2004. Ethiopia, Mozambique and South Africa completed deployment of their troops on 19 October, under the command of the African Union.

Source US Department of State, www.state.gov/p/io/rls/rm/2003/25858.htm; 'Nigeria agrees to surrender 33 villages to Cameroon', Yahoo! News, 29 October 2003; 'Nigeria to hand land to Cameroon', BBC News, 29 October 2003, www.bbc.co.uk; 'David Trimble statement in full', BBC News, 21 October 2003; 'Blair seeks arms disclosure', BBC News, 22 October 2003; 'Burundi rebels, government sign peace agreement', UN Wire, 8 October 2003, www.unwire.org; All Africa Online, www.allafrica.com.



Iran reveals secret nuclear programme but will sign Additional Protocol

Iran submitted a 'letter of intent' on 10 November 2003 to the International Atomic Energy Agency (IAEA) confirming that it will sign an Additional Protocol to its existing comprehensive safeguards agreement with the Agency. As a confidence-building measure, Iran also declared that it would temporarily suspend all uranium enrichment and reprocessing activities. The pronouncement came following an October visit to Tehran by the foreign ministers of France, Germany and the UK. In addition, Iran submitted a comprehensive dossier describing its nuclear programme to the IAEA by the Agency's deadline of 31 October.

The dossier reveals that Iran has systematically concealed a sizeable clandestine nuclear programme for the past 18 years. It has developed an extensive domestic fuel cycle, from uranium mining to small-scale production and reprocessing of plutonium. Iran also enriched uranium with both centrifuges and lasers. The latter is not traditionally used to produce fuel for power reactors as it is expensive and uneconomical, giving rise to suspicions regarding Iran's nuclear weapon ambitions. Despite these revelations, however, the IAEA has stated that, to date, there is no evidence of a nuclear weapon programme, presumably meaning no production of nuclear weapons. The IAEA initiated a verification process immediately, but it is expected to take some time to reach a conclusion on whether Iran's programme has been fully declared and whether or not it is for peaceful purposes.

Nevertheless, the dossier reveals a deliberate, long-term effort to conceal material, facilities and activities that should have been declared under Iran's existing safeguards agreement. Despite pressure from the US for a tougher stance, the IAEA Board of Governors meeting on 20–26 November agreed a compromise resolution that censured Iran over its nuclear programme but stopped short of referring it to the Security Council or recommending sanctions. The resolution warned Iran, though, that further breaches could lead to supplementary action by the IAEA.

The Additional Protocol will allow the Agency to conduct more intrusive monitoring of Iran's nuclear activities and to extend its inspections to areas that it was previously denied access to. In the meantime, Iran has agreed to act as if its Additional Protocol were in force. Source 'Iran to sign Additional Protocol and suspend uranium enrichment and reprocessing', IAEA press release, 10 November 2003, www.iaea.org; Dr Mohamed ElBaradei, 'Introductory statement to the Board of Governors', 20 November 2003, www.iaea.org; Joe Fiorill, 'IAEA describes broad and systematic Iranian concealment of nuclear activities', Global Security Newswire, 11 November 2003, www.nti.org; 'UN nuclear panel meets on Iran', BBC News, 20 November 2003, www.bbc.co.uk.

Early warning: better late than never

A joint Us—Russia ballistic missile early warning facility—the Joint Data Exchange Center—is finally to open after years of delay. Us and Russian officials began discussing its creation as far back as 1992, but the project, officially announced in 1998, lost momentum as relations between the two countries turned sour over the war in Kosovo and as a result of logistical hold-ups. The centre, which is to open in Moscow in early 2004, is designed to prevent false alarms of missile launches by sharing information and allowing personnel from the two countries to consult and resolve ambiguities. Each side will have access to near real-time, continuous flow of information from early warning sensors, including launch time, launch point, rough direction of launch, and impact point and time. The centre will be staffed 24 hours a day, seven days a week by some 20 Us Department of Defense officers and a similar number of Russians.

Source 'us-Russia: joint early warning center to open next year', Global Security Newswire, 16 July 2003, www.nti.org; Peter Baker, 'Nuclear "milestone" divides us, Russia', *The Washington Post*, 13 June 2001, p. A23.

Kimberley Process advances

Non-governmental organisations (NGOS), the World Diamond Council and more than 70 countries attended the Kimberley Process Plenary in Sun City, South Africa, from 29–31 October 2003, where a major breakthrough occurred in difficult negotiations on monitoring issues. The countries unanimously agreed to implement a voluntary 'peer review' system to ensure the viability of the Kimberley Process Certification scheme. Under this scheme all rough diamonds are required to have certificates of origin when sold or moved between participating states. The process was launched to curb trade in 'blood diamonds', blamed for funding several protracted conflicts in Africa. A number of NGOS, though, are concerned that the monitoring regime is still not strong enough to prevent trade in illegal diamonds, since it is voluntary. The Democratic Republic of

the Congo (DRC) and the Republic of Congo did, however, reach a bilateral agreement to control illicit diamond trading between them. They were also among the first of several countries to volunteer to be peer reviewed.

Source 'Kimberley Process gets bigger teeth', *Business Day*, 31 October 2003, www.allafrica.com; 'New agreement may curtail trade in conflict diamonds', *Voice of America*, 31 October 2003, www.voa.gov; 'Diamond industry and NGOS hail Kimberley Process breakthrough', *World Diamond Council*, 31 October 2003, www.worlddiamondcouncil.com; 'Diamond traders agree to checks', *The Times*, 31 October 2003; 'Kimberley Process Plenary meeting ends', *SABC News*, 31 October 2003, www.sabcnews.com.

Heavy metal protocol enters into force

The sixth protocol to the 1979 Convention on Long-Range Transboundary Air Pollution (LRTAP) entered into force on 23 October 2003 (see *Trust and Verify* no. 110). The United Nations Economic Commission for Europe (UNECE) has now announced that the seventh protocol will enter into force on 29 December 2003. Adopted on 24 June 1998 in Aarhus, Denmark, the protocol aims to regulate heavy metal emissions, particularly of cadmium, lead and mercury, in order to prevent damage to human health and the environment. Another requirement is the phasing-out of leaded petrol. The convention's Expert Group may consider adding other heavy metals to the protocol, which provides for extensive monitoring, reporting, review and compliance procedures.

Source 'Protocol to control heavy metals to enter into force', United Nations Economic Commission for Europe, 7 October 2003, www.unece.org; 'Protocol on heavy metals to enter into force this year', UN Wire, 7 October 2003, www.unwire.org; for information on the Cooperative Programme for Monitoring and Evaluation of Long-Range Transmission of Air Pollutants in Europe see www.emep.int/.

Model Pacific firearms law

The Pacific Island Forum agreed at its thirty-fourth meeting—held in Auckland, New Zealand from 14–16 August 2003—a model law on small arms and light weapons (SAIW). The members of the Forum are: Australia, Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The new model law aims to harmonise domestic legal controls on the importation, possession and use of firearms, particularly among small island state members. A number of them have recently experienced armed violence involving these weapons, including Bougainville, Fiji, New Caledonia, Samoa and the Solomon Islands. While there is no domestic SALW production in the region, weapons have been trafficked into it. Poor storage and regulations have

also led to illicit transfers and the smuggling of armaments within the region. Reviews of existing SAIW legislation revealed loopholes and inconsistencies, ineffective licensing and weapons marking criteria, and key differences in penalties for violations. Australia hosted a workshop to develop the model law and to promote best practice in managing and securing legitimate stockpiles. The model law contributes to the efforts of Forum members to implement the 2001 United Nations Programme of Action on Small Arms and Light Weapons. Ineffective implementation and enforcement of small arms and other national legislation on regional security issues are also being addressed through the Oceania Customs Organisation.

Source 'Forum Communiqué', 34th Pacific Islands Forum, Auckland, New Zealand, 14–16 August 2003, PIFS(03)II; 'Principal findings' in David Capie, Under the gun: the small arms challenge in the Pacific, Victoria University Press, Wellington, New Zealand, www.vuw.ac.nz; 'Small arms in the Pacific', Pacific Islands Forum Secretariat press statement, Suva, Fiji, I April 2003, www.forumsec.org.fj; Statement by H.E. Penny Wensley, Ambassador and Permanent Representative of Australia to the United Nations, United Nations Conference on the Illicit Trade in Small Arms and Light Weapons in all its Aspects, New York, 10 July 2001, www.australiaun.org.

New anti-corruption convention, corruption rankings announced

A new international treaty, the United Nations Convention Against Corruption, was agreed on 1 October 2003. If adopted by the UN General Assembly, it will be opened for signature at a conference in Mérida, Mexico, from 9–11 December 2003. It is more comprehensive than existing anti-corruption treaties in providing for prevention, criminalisation, international cooperation, asset recovery and implementation mechanisms. It commits states to criminalising certain forms of undesirable conduct, such as bribery, embezzlement and money laundering. To promote its implementation and to review progress, a Conference of the States Parties is envisaged no later than one year after entry into force.

Transparency International (TI), an international NGO committed to combating corruption, has been an active participant in the drafting of the convention. It has just released its 2003 Corruption Perceptions Index (CPI) for the 133 nations for which data was available. Based on 17 surveys carried out by 13 independent institutions, the CPI reflects the perceptions of business people, academics and risk analysts. Countries were scored on a scale of zero (highly corrupt) to ten (least corrupt). The CPI shows that corruption thrives in wealthy states, as well as in developing ones, notably in Greece and Italy. Finland topped the list as the least corrupt country, while Bangladesh was ranked the most corrupt.

Source 'Transparency International releases annual corruption rankings', UN Wire, 7 October 2003, www.unwire.org; 'Consensus reached on UN Convention Against Corruption', UN Information Service, 2 October 2003, www.unodc.org; 'Transparency International Corruption Perceptions Index', 7 October 2003, Transparency International, www.transparency.org/cpi/2003/cpi2003.en.html.

Little progress on biological weapons

States parties to the 1972 Biological Weapons Convention (BWC) held their first meeting as part of the new process for reviewing treaty implementation agreed at the Fifth Review Conference in 2002. Held in Geneva, Switzerland, from 10–14 November 2003, the gathering considered the results of the August 2003 Experts Meeting on national implementation measures and mechanisms for securing pathogenic material. However, the meeting failed to adopt recommendations on either of these topics or even to agree 'common understandings' as envisaged for the new process.

The result, therefore, was a purely procedural report, largely due to the insistence of non-aligned states, led by South Africa, that the meeting must not negotiate politically binding measures. Meetings in 2004—to be chaired by South Africa—are set to consider more contentious issues, further reducing the prospect of achieving substantive progress until the Sixth BWC Review Conference in 2006.

Positive outcomes of the November meeting included the decision to exchange information, share experiences and assist states considering adopting new or amended laws. Unfortunately, the countries that would benefit most from this information exchange—those known to have ineffective legislation—were not among the 92 states parties represented at the meeting. Any progress on treaty implementation is likely to occur only outside the treaty process, such as an initiative by 11 states to share their experiences and to provide necessary resources either bilaterally or regionally.

Source 'Final report', Meeting of States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction', BWC/MSP/2003/4, Geneva, 14 November 2003.

Landmines: taken on trust

States parties to the 1997 Ottawa Convention, banning antipersonnel landmines, have affirmed their treaty commitment to deal with serious concerns about non-compliance by enforcing national laws to prevent and punish treaty-prohibited activity. Such national laws are required under Article 9, yet only 35 of the 136 states parties have adopted new legislation for this

purpose. Eleven others claim that existing laws are sufficient to satisfy the range of treaty obligations, including the ban on anti-personnel landmine use and requirements to clear mined land, destroy stockpiles and assist landmine victims. The remaining states have yet to implement any legislation at all. Meanwhile, the treaty has almost achieved 100 percent compliance with the obligation to provide an initial transparency report on implementation. States parties expect to reach this goal—which is unprecedented—by the First Review Conference, to be held in Nairobi, Kenya, from 29 November–3 December 2004.

Source 'Final report', Meeting of the States Parties to the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction', APLC/MSP.5/2003/5, Geneva, 17 October 2003; 'Intervention of the International Committee of the Red Cross, General Status and Operation of the Convention, Article 9, Fifth Meeting of States Parties', Geneva, 18 September 2003, www.gichd.ch.

OSPAR and Helsinki Commissions join forces

The OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic and the Baltic Marine Environment Commission (the Helsinki Commission (HELCOM)) met on 25–26 June 2003 to discuss measures to protect the marine environment. The 1992 OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, which resulted from the amalgamation of the 1972 Oslo Convention and the 1974 Paris Convention, is concerned with ecosystems and biological diversity, hazardous substances and radioactive materials. The 1992 Helsinki Convention for the Protection of the Marine Environment of the Baltic Sea Area is concerned with eutrophication, land-based pollution, the marine transport sector, environmental impact of fishing, and protection of biodiversity.

Ministers at the meeting said that HELCOM's priorities should include monitoring and assessment of the Baltic marine environment, nature conservation, eutrophication, hazardous substances, and maritime safety. The OSPAR Convention obliges parties to report on their national implementation measures, and (as far as information is available) on discharge permits, emissions and environmental quality.

The OSPAR Commission, for its part, formulated a new monitoring and assessment strategy to prepare for the next overall appraisal of progress in 2010. It hopes to create a healthy and sustainable marine environment in the northeast Atlantic within a generation.

Source OSPAR Commission website, www.ospar.org, 19 September 2003; HELCOM website, www.helcom.fi, 19 September 2003.



Science & Technology Scan

Scanner can detect concealed weapons

A new mobile scanner being developed by scientists for a British police force can detect guns and knives concealed under clothing. It has been adapted from technology used to search people at airports. The Metropolitan Police hopes to begin using the scanner by the start of 2004. As well as law enforcement, this technology has potential application in the verification field, such as in detecting violations of small arms limitation agreements and the monitoring of compliance with peace accords.

Source 'Police develop weapon scanner', BBC News, 8 November 2003, www. bbc.co.uk; 'Weapon scanner "ready by new year", BBC News, 9 November 2003, www.bbc.co.uk.

New arms control software

A team led by the US Defense Threat Reduction Agency (DTRA) has completed development of new arms control software—the Integrated Notification Application (INA)—that will replace three existing systems. The INA provides the 55 members of the Organization for Security and Co-operation in Europe (OSCE), the OSCE Conflict Prevention Centre and the North Atlantic Treaty Organisation (NATO) with a single application for processing outgoing and incoming notifications with regard to the following treaties: the 1990 Conventional Armed Forces in Europe Treaty (CFE) and the 1999 Adapted CFE Treaty, the 1999 Vienna Document on confidence- and security-building measures (CSBMS), and the 1992 Open Skies Treaty. The INA will assist states in complying with complex agreements by providing a single, more robust user interface in line with the processes and user roles established by the OSCE.

Source 'Technology development directorate fields new arms control software', *Connection*, vol. 5, no. 4, April 2003, pp. 3 and 11.

Earth Observation System proposed

On 31 July 2003, the Earth Observation Summit in Washington, DC, resulted in 34 nations, plus the European Commission, adopting a declaration aimed at improving the collation of Earth observation information through an integrated Earth Observation System (Eos). An intergovernmental working group, the Group on Earth Observation has been set up to prepare a ten-year implementation plan. The Integrated Global Observing Strategy (IGOS), involving 14 Earth observation organisations, has noted that terrestrial monitoring is in disarray and that there is no global inventory of such activity.

Terrestrial observations could have many advantages for monitoring and verification of international agreements. One project overseen by the IGOS, for example, measures the global flux of carbon, which is important for monitoring compliance with the 1997 Kyoto Protocol. Some observers, while welcoming the principle of gathering more data, fear that the proposal is a way of delaying US government action on global warming. Source 'Earth watchers keep an eye on the big picture', *New Scientist*, vol. 2405, 26 July 2003, p. 9; 'NOAA participates in US-hosted earth observation systems summit: nations join together to take the pulse of planet earth', *National Oceanic and Atmospheric Administration Magazine*, 27 August 2003, www.noaanews.noaa.gov; 'US proposes planet watch', BBC News, 31 July 2003, www.bbc.co.uk.

New device can 'see' invisible gas

A device designed by scientists at the University of St Andrews, Scotland, allows users to identify gases that, ordinarily, are invisible to the naked eye. Researchers from the university's Photonics Innovation Centre used laser technology combined with mechanical scanning techniques and optics to detect and produce live video pictures of an invisible gas. As well as numerous commercial and safety uses, the detector may have some application in the verification field, including detecting gas plumes for quantifying carbon emissions.

Source 'Device detects "invisible" gas', BBC News, 18 August 2003, www. bbc.co.uk.

US to expand commercial satellite use

us President George W. Bush is ordering federal agencies to rely to the maximum practical extent on private satellite companies to provide images from space. This marks a fundamental shift in government policy, replacing a nine-year-old presidential directive signed by President Bill Clinton. The new directive seeks to limit the use of the us government's own satellites to the most sensitive, high-priority tasks and requires that government departments use commercially available imagery wherever possible to satisfy routine needs. The new policy recognises the improved quality and range of commercial imagery. The us government will continue to reserve the right to restrict the sale of commercial satellite data to anyone deemed a risk to national security.

Source Eric Lichtblau, 'Us to rely more on private companies' satellite images', *The New York Times*, 13 May 2003, www.nytimes.com.



News & Events

New grants

VERTIC has been awarded a two-year grant of £107,000 by the Esmée Fairbairn Foundation for its work on monitoring and verification of the Kyoto Protocol. This has allowed it to resume its environment programme in full and to employ a new environment researcher (see below). VERTIC has also received a discretionary grant of Us\$6,000 for its arms control and disarmament programme from the Geneva-based Oak Foundation. VERTIC is grateful for this financial support from two new funding sources.

Environment Researcher appointed

VERTIC is pleased to announce the appointment of Larry McFaul as its new Environment Researcher. Larry, who has a BA (Hons) in Classics from Oxford University and an MSC in Environmental Assessment and Evaluation from the London School of Economics and Political Science, has been an environmental intern at VERTIC since September.

VERTIC final report on BWC national implementation legislation



VERTIC's latest report, *Time to lay down the law: national legislation to enforce the BWC,* assesses the status of national legislation to enforce the BwC's core prohibitions. The report provides comparative analysis of existing legislation, makes recommendations for increasing the rate of adoption of legislation, and proposes ways to make

existing and new legislation more effective. It should be of use to states parties preparing to adopt or amend legislation, states and organisations providing assistance to states parties, and to the international community generally. *Time to lay down the law*, written by Angela Woodward, VERTIC'S Legal Researcher, is the final report by VERTIC'S project on the status of national implementation legislation for the BWC, funded by the Ploughshares Fund.

The report can be downloaded in portable document format (PDF) from VERTIC's website at www.vertic.org or it can be obtained in hard copy by contacting VERTIC's Information Officer & Networker, Jane Awford (jane.awford@vertic.org). A companion dataset of the legislation collected is available at www.vertic.org/datasets/bw_legislation.html.

Staff news

TREVOR FINDLAY met with Dr Dimitrius Perricos, Acting Executive Chairman of the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) in New York on 6 October. The next day he gave a presentation at the Australian Mission to the UN in New York at the joint launch of his book on *The Use of Force in UN Peace Operations*, published in 2002 by Oxford University Press for the Stockholm International Peace Research Institute, and that of Alexandra Ovosseloff on *Le conseil de sécurité des Nations Unies et la maîtrise de la force arméé (The United Nations Security Council and the Use of Armed Force)*, published in 2003 by Bruylant of Brussels.

On 8 October he met with Taylor Seybolt at the United States Institute of Peace in Washington, DC, and on 9 October with Amy Salzman of the Wallace Global Fund to talk about funding opportunities. He also discussed biological weapons issues with Jonathan Tucker of the Monterey Institute at its Washington office on 8 October. On 14 October he met with Peter Kogan of Educational Programs Abroad to discuss VERTIC's intern programme and with Juliet Prager of the Joseph Rowntree Charitable Trust on 20 October to review VERTIC's activities.

Trevor attended a Charity Fundraising Conference run by Action Planning on 22 October. On 11 November Jacky Rowland of BBC Four News interviewed him on the IAEA's report on Iran. On 18 November he met with Lukas Haynes of the John D. and Catherine T. MacArthur Foundation at VERTIC's offices. Sue Davis of BBC Current Affairs also interviewed him that day on the background to the nuclear programmes of India and Pakistan. On 20 November he met with Lorraine Elliot, a Reader in the Department of Politics and International Studies, University of Warwick, to examine possible co-operation.

Jane awford worked with Ben Mines to finalise the Iraqi weapons inspection dataset and continued research for the online version of the Verification Organisations Directory. On 14 October she and Jennifer Kinzeler attended a Pugwash talk on 'Causes of war: role of the media' by Robert Hinde, Senior Research Fellow at the Centre for Defence Studies, King's College London. Jane represented VERTIC at the World Civil Society Forum (WCSF) UK Support Group meeting on 1 November. The meeting was convened to brief members on the UN Secretary-General's High-level Panel on UN—Civil Society

Relations, to hear the results of the group's opinion survey of civil society organisations (CSOS) in the UK on UN—civil society relations, and to discuss whether UK-based CSOS would like to participate in future meetings of the forum. She also took part in 'Becoming Media Savvy' on 4 November, a training day organised by Reporting the World to help NGOS become more effective in using the news media. Jane began organising the launch of the *Verification Yearbook 2003* and the VERTIC Christmas party, with the help of Ben Handley. Jane and Ben Handley are working to establish a system for updating the VERTIC website and rules for adding and updating entries in the VERTIC contacts database. She represented VERTIC in a focus group on 12 November to evaluate *Jane's Defence Weekly* from the reader's standpoint and to preview a trial online version.

BEN HANDLEY produced financial reports and the draft 2003–04 budget for VERTIC'S Board of Directors. In addition to dealing with daily administration of VERTIC'S office, Ben helped to arrange the VERTIC Christmas party and the *Verification Year-book 2003* launch on 18 December. He also coordinated the process to recruit VERTIC'S new Environment Researcher and has been looking into possible new offices for the Centre.

JENNIFER KINZELER has been researching the monitoring aspects of African peace missions and surveying the human rights field to establish what training materials exist for human rights monitors, how they are used, and their effectiveness. She attended a meeting at the Royal Institute of International Affairs on 6 November on 'Children in armed conflict: what the UN Security Council can do'. Jennifer will return to the Us in December to continue her studies at the College of Charleston, South Carolina. VERTIC is grateful for her contribution and wishes her well in future.

LARRY MCFAUL has been examining the reporting and review requirements of the UNFCCC. He attended a meeting at the UK Department for Environment, Food and Rural Affairs (DEFRA) on 20 November to examine issues likely to arise at the Ninth Conference of the Parties (COP9) to the UNFCCC in Milan, Italy, in December 2004. He has also been updating VERTIC's Agenda 21 table for online release. He assisted Jane Awford in updating entries in VERTIC's contacts database with an environmental connection.

BEN MINES attended the European Safeguards Research and Development Association (ESARDA) Meeting of the Working

Verification Quotes

There are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns; the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tend to be the difficult ones
US Secretary of Defense Donald Rumsfeld, quoted in The Economist, 6 December 2003, p. 47

This is a very, very difficult area to monitor and the obvious and sensible thing to do to take away the attraction to people smugglers is to excise those islands from the migration zone

Amanda Vanstone, Australian Immigration Minister, explaining Australia's decision to remove retrospectively Melville Island from Australia's 'migration zone' to prevent a boatload of Kurds who landed there from claiming asylum. Quoted in Roger Maynard, 'Kurds spark Australian immigration row', The Times, 6 November 2003, p. 14.

Rule #3: Obtain Verification
Reuters advertisement, Time, 22 September 2003, p. 17.

We should not tolerate breaches, whether small or large, but we should [also] focus... on the new chapter, and on the complexity of the task facing the IAEA'

Dr Mohamed ElBaradei, Director General of the IAEA on Iran's admission that it had violated its nuclear nonproliferation undertakings, *The Times*, 13 November 2003, p. 19.

Impossible to believe

US Under-Secretary of State John Bolton on the IAEA's statement that it could not confirm (yet) that Iran had a nuclear weapons programme, *The Times*, 13 November 2003, p. 19.

Most 'miracles' fail rigorous verification test Headline of story on the Pope's record-breaking creation of 477 saints and 1,319 'blesseds', *The Times*, 20 October 2003, p. 14.

We need photographic evidence. What we want to see is verification Piers Morgan, editor of *The Mirror*, after it had mistakenly revealed that former Beatle Sir Paul McCartney's wife had given birth to a boy, 'Mirror image turns Macca girl into boy', *The Guardian*, 31 October 2003.

We don't trust anything. We verify

Mark Gwodzecky, IAEA spokesperson, quoted by Vivienne Walt, 'Weapons evidence is lacking so far', USA Today, 12 December 2002.

Group on Verification Technologies and Methodologies in Como, Italy, on 17 October 2003. He also attended a private discussion meeting with Us Ambassador Charles Pritchard at the International Institute for Strategic Studies (IISS) on 31 October. Ambassador Pritchard spoke on 'The Bush policy on North Korea and the next steps in resolving the nuclear crisis'. On 17 November he attended the Harvard–Sussex Programme's 'Sussex Day' at the University of Sussex, where Brian Jones, former branch head of the Scientific and Technical Directorate of the Defence Intelligence Staff, UK Ministry of Defence, gave

a presentation entitled 'War, words and wmD'. Ben also oversaw the launch of the UNMOVIC inspections dataset on the VERTIC website on 22 October.

ANGELA WOODWARD, along with Trevor Findlay, met with David Steuerman of Canada's Department of Foreign Affairs and International Trade on 13 October to discuss biological weapons issues. On 17 October she participated in the Mountbatten Centre for International Studies/Foreign and Commonwealth Office (MCIS/FCO) Nuclear Nonproliferation Study Group meeting at the FCO. On 27 October, along with Trevor Findlay and Ben Mines, she met with Group Captain Andrew Steele of the UK Joint Arms Control Implementation Group (JACIG) to discuss their respective projects and opportunities for collaboration. Angela represented VERTIC at the BioWeapons Prevention Project (BWPP) Board Meeting in Geneva on 7 November. On 8–9 November she participated in the twentieth Workshop of the Pugwash Study Group on the 'Implementation of the Chemical and Biological Weapons Conventions' in Geneva. Angela represented VERTIC at the BWC Meeting of States Parties in Geneva on 10–14 November, delivering VERTIC's statement to the meeting on 12 November and liaising with delegations on VERTIC's report entitled *Time* to lay down the law: national legislation to enforce the BWC. On 18 November David Ruppe of Global Security Newswire interviewed Angela about the meeting.

VERTIC wishes everyone a merry Christmas and a happy and peaceful New Year

hrough verification

VERTIC is the Verification Research, Training and Information Centre, an independent, nonprofit making, non-governmental organisation. Its mission is to promote effective and efficient verification as a means of ensuring confidence in the implementation of international agreements and intra-national agreements with international involvement. 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.

PERSONNEL Dr Trevor Findlay, Executive Director; Jane Awford MA, Information Officer & Networker; Ben Handley, Administrator; Jennifer Kinzeler, Intern; Larry McFaul, Environment Researcher; Ben Mines, Arms Control & Disarmament Researcher; Angela Woodward BA (Hons), LL.B., Legal Researcher.

BOARD OF DIRECTORS Susan Willett BA (Hons), MPhil (Chair); Gen. Sir Hugh Beach GBE KCB мс; Lee Chadwick ма; Dr Owen Greene; Joy Hyvarinen, LLM, LLM; Dr Bhupendra Jasani.

INTERNATIONAL VERIFICATION CONSULTANTS NETWORK Richard Butler AO (arms control and disarmament verification); Dr Roger Clark (seismic verification); Jayantha Dhanapala (multilateral verification); Dr John Gee (chemical verification); Dr Jozef Goldblat (arms control and disarmament agreements); Dr Edward Ifft (arms control and disarmament agreements); Dr Patricia Lewis (arms control and disarmament

agreements); Peter Marshall CMG OBE (seismic verification); Robert Mathews (chemical and biological disarmament); Dr Colin McInnes (Northern Ireland decommissioning); Dr Graham Pearson (chemical and biological disarmament); Dr Arian Pregenzer (co-operative monitoring); Dr Rosalind Reeve (environmental law).

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