



Trust and Verify

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Chinese nuclear test

On 10 June, China carried out a nuclear test at the Lop Nor test site. The test had been expected, see *Trust & Verify*, No. 46, April 1994.

Unlike earlier tests, the Chinese authorities announced within a few hours that the test had taken place. The last test carried out by China, on 5 October 1993, was revealed by VERTIC within three hours of the event [see *Trust & Verify*, No. 41, October 1993 and 'Tracking Down a Chinese Nuclear Test' by Vipin Gupta and Philip McNab in *Verification 1994*].

Again within a few hours, the seismic networks to which VERTIC is connected (and which are not especially tuned to detect nuclear tests) had picked up the event, which was identifiable as a nuclear test by its seismic characteristics.

North Korea

The dispute between the International Atomic Energy Agency (IAEA) and the Democratic People's Republic of Korea (DPRK or North Korea) has taken many turns since the IAEA's Board of Governors resolution of 21 March that the DPRK had been in non-compliance with its safeguards agreement (INFCIRC/403) [see *Trust & Verify*, No. 45, March 1994].

On 31 March, the President of the United Nations Security Council made a statement on behalf of the Council which called on the DPRK to allow the IAEA to carry out the inspection activities that the Agency considered necessary to fulfil the safeguards agreement with that state. The DPRK's response was to state that the Council's statement was 'unjustifiable'.

On 21 April, the DPRK announced that the core of the 5-MW reactor was to be replaced. According to the DPRK, the reactor had been shut down about 10 days earlier; the implication of the DPRK's statement was that this was an unplanned stoppage.

In the following weeks there were requests from the IAEA to allow its inspectors to monitor the fuel as it was being removed from the reactor; North Korea did not comply.

On 12 May the IAEA announced that it had reached an agreement with the DPRK for an inspection team to monitor the discharge of fuel from the reactor.

Within a week, while inspection details were still being arranged, the DPRK started to remove fuel from the reactor. This required the breaking of seals placed by

the IAEA for safeguards purposes, an activity justified by North Korea as being required for unspecified 'safety reasons' connected with the 'unexpected' shut-down of the reactor in April.

When IAEA inspectors arrived at the reactor they were able to confirm that fuel rods had been withdrawn. However, at that time the Agency stated that they had access to the cooling pond where the withdrawn rods were being placed and that they had no evidence that any of the fuel was unaccounted for.

Toward the end of May the Agency was becoming increasingly concerned that the fuel being removed from the reactor was becoming jumbled and that this would make the safeguards tasks assigned to it difficult, if not impossible, if it were to continue. Most of the IAEA inspectors left North Korea at this time, leaving only two in the country.

On 24 May, the Defence Planning Committee and the Nuclear Planning Group of NATO met in Ministerial Session in Brussels. The communiqué issued at the end of the meeting included the following:

The refusal of the Democratic People's Republic of Korea to fulfil its obligations under the NPT and the safeguards agreement with the International Atomic Energy Agency, its recurring threat to withdraw from the Treaty altogether, and its history of exporting ballistic missiles and weapons technology to regions of instability pose a grave risk to peace and stability in the Far East and globally. This faces the whole international community with a serious, unprecedented problem. We intend to support every effort that may contribute to its resolution.

On 30 May, the President of the Security Council made a statement on behalf of the Council noting that it was 'gravely concerned' at the possible loss of safeguards information if the discharge operations were to continue. The statement included the following:

The Council strongly urges the DPRK only to proceed with the discharge operations at the five megawatt reactor in a manner which preserves the technical possibility of fuel measurements, in accordance with the IAEA's requirements in this regard.

On 2 June North Korea rejected the calls by the Security Council and threatened to withdraw from the NPT if sanctions were imposed.

The Director General of the IAEA, Dr Hans Blix, told the Security Council on 3 June that, in the opinion of the Agency, there were no technical or safety reasons why the DPRK should have needed to start discharging fuel from the reactor in May. In addition, there was no technical or safety reason why the discharge operations could not have been suspended at any point in order to allow the IAEA to carry out safeguards activities either at that time or at a future date.

By this time an estimated 5,000 of the 8,000 fuel rods in the reactor had been withdrawn.

On 7 June, Blix reported to the IAEA Board of Governors that the DPRK's proposal that Agency inspectors could take measurements of the fuel rods at a later date was not viable. Owing to the ongoing discharge operations, the North Korean proposal would not allow the Agency to have confidence in the safeguards measurements. The Agency would be unable to verify where, and for how long, each fuel rod had been placed in the reactor; this would, in turn, prevent the Agency from calculating how much plutonium, and its isotopic composition, was in each rod and prevent the Agency from calculating whether plutonium may have been extracted from the reactor in previous years.

On 10 June, the Board passed a resolution to suspend the Agency's programme of technical assistance to the DPRK. The resolution had the support of 28 states represented on the Board, with one vote against (Libya) and four abstentions (China, India, Syria and Lebanon).

Three days later the DPRK announced that it would withdraw from the IAEA and that the two IAEA inspectors should leave the country.

The next day, 14 June, the scene changed as former US President Jimmy Carter had meetings with Kim Il Sung, President of the DPRK. The meetings between the two came up with short-term agreements, e.g., that the two IAEA inspectors could remain in the DPRK, and proposals for longer-term high-level diplomatic discussions, including a summit meeting between the leaders of the two Koreas.

Note: As this issue of *Trust & Verify* was being prepared for publication, the death of the North Korean leader Kim Il Sung was announced.

Background

The safeguarding of the fuel rods is of such significance because it is believed by some that North Korea has already been working on techniques to separate plutonium from spent fuel — 'reprocessing'.

The DPRK acceded to the NPT in 1985. It should have signed a full-scope safeguards agreement with the IAEA within 18 months of accession; however it did not do so until 1992.

When the safeguards agreement was signed, the DPRK stated that it had separated 90 grammes of plutonium March 1990 from fuel rods from the 5 MW reactor — the same reactor that it had claimed that the fuel rods have not been moved since start up in 1987.

The samples of plutonium supplied by the DPRK and analysed by the IAEA showed that, because of their isotopic composition, at least two batches of fuel had been processed. Other analyses indicated that there may have been four batches processed in the period 1989–92.

After questioning by the Agency, North Korean officials acknowledged that they had first been able to separate plutonium in 1975. This obviously opens a host of possibilities; hence the desire of the IAEA to inspect the DPRK's nuclear waste storage areas. The waste may indicate how much reprocessing has been carried out by the DPRK, and, therefore, how much plutonium may have been separated since 1975.

Although 20 years is a long time, the DPRK has only had access to spent fuel in any quantity since the 5 MW reactor started operations.

EC Foreign Affairs Council

On 13 and 14 June, Foreign Ministers of the European Communities' member states met in Luxembourg as the Foreign Affairs Council. The meeting discussed a wide range of issues including co-operation with Russia and Ukraine, the situation in the former Yugoslavia, confidence-building measures in Cyprus and other issues coming under the Common Foreign and Security Policy heading.

Export controls

According to a British Government statement on the meeting:

The Council discussed a Presidency compromise package designed to secure agreement to a regulation to create a common Community regime of export controls on dual use goods. The package was agreed by 10 member states, including the UK, but Denmark and Belgium asked for a little more time to reach a final decision.

These controls were to have been in place by the end of 1992, then by 31 March 1993 [see *Trust & Verify*, No. 36, March/April 1993 and the preceding two issues].

Note from the editor: the Foreign Affairs Council is an organ of the European Communities, not of the European Union (see *Trust & Verify* No. 44, January/February 1994). However, it has often been cited in the press as an EU organ.

While the distinction may seem to be of minority interest as the EC is one of the 'pillars' of the EU, the difference in international legal status is significant. For example, it is the European Economic Community that has joined the Climate Change Convention.

UK and nuclear testing

The British position on including provisions on safety tests under a comprehensive test ban treaty (CTBT) appears to be changing.

Asked specifically about the MoD's policy on 'the retention of the right to conduct safety tests' under a CTBT, Minister of State Jonathan Aitken said on 14 June:

We will look for a verifiable and effective prohibition of *all* nuclear tests, with the aim of making a contribution to our non-proliferation objectives. [emphasis added]

However, exactly a week later, Baroness Chalker, speaking on behalf of Her Majesty's Government, told the House of Lords:

[W]e never made a demand that safety tests should be excluded from the treaty. But the whole question of tests on an exceptional basis to confirm the safety of the nuclear stockpile will need to be addressed in the negotiations. We have said that under a CTB we will develop non-testing methods further to guarantee confidence in safety and reliability. However, we expect the issue of safety or confidence tests to be looked at closely in the coming weeks.

Whaling

The International Whaling Commission held its 46th annual meeting on 23–27 May at Puerto Vallarta, Mexico.

The meeting decided on the creation of the Southern Ocean Sanctuary, within which commercial whaling will be banned indefinitely.

The northern boundary of the sanctuary is at 40° south, except between 130° west and 50° west [the

Senegal	13 Jun 92		
Seychelles	10 Jun 92	22 Sep 92	(r)
Sierra Leone	11 Feb 93		
Singapore	13 Jun 92		
Slovenia	13 Jun 92		
Solomon Islands	13 Jun 92		
Spain	13 Jun 92	21 Dec 93	(r)
Sri Lanka	10 Jun 92	23 Nov 93	(r)
Sudan	9 Jun 92	19 Nov 93	(r)
Suriname	13 Jun 92		
Swaziland	12 Jun 92		
Sweden	8 Jun 92	23 Jun 93	(r)
Switzerland	12 Jun 92	10 Dec 93	(r)
Thailand	12 Jun 92		
Togo	12 Jun 92		
Trinidad and Tobago	11 Jun 92	24 Jun 94	(r)
Tunisia	13 Jun 92	15 Jul 93	(r)
Tuvalu†	8 Jun 92	26 Oct 93	(r)
Uganda	13 Jun 92	8 Sep 93	(r)
Ukraine	11 Jun 92		
United Kingdom	12 Jun 92	8 Dec 93	(r)
United Republic of Tanzania	12 Jun 92		
United States of America	12 Jun 92	15 Oct 92	(r)
Uruguay	4 Jun 92		
Uzbekistan		20 Jun 93	(ac)
Vanuatu	9 Jun 92	25 Mar 93	(r)
Venezuela	12 Jun 92		
Viet Nam	11 Jun 92		
Yemen	12 Jun 92		
Yugoslavia	8 Jun 92		
Zaire	11 Jun 92		
Zambia	11 Jun 92	28 May 93	(r)
Zimbabwe	12 Jun 92	3 Nov 92	(r)

Organization	Date of Signature	Date of Ratification etc.
EECT	13 Jun 92	21 Dec 93
Totals	166	79

Notes:

† = declaration made; (r) = ratification; (ac) = accession; (at) = acceptance; (ap) = approval

Declarations

Fiji, Kiribati, Nauru, Papua New Guinea and Tuvalu: Upon signature the following formal declaration was made by each of the states:

The Government of [Fiji/Kiribati/Nauru/Papua New Guinea/Tuvalu] declares its understanding that

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Trust & Verify

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What is VERTIC?

VERTIC is an independent organization aiming to research and provide information on the role of

signature of the Convention shall in no way constitute a renunciation of any rights under international law concerning state responsibility for the adverse effects of climate change, and that no provisions in the Convention can be interpreted as derogating from the principles of general international law.

EEC: Upon signature the following formal declaration was made:

The European Community and its Member States declare, for the purposes of clarity, that the inclusion of the European Community as well as its Member States in the lists in the Annexes to the Convention is without prejudice to the division of competence and responsibilities between the Community and its Member States, which is to be declared in accordance with Article 21.3 of the Convention.

Monaco: The instrument of ratification contains the following declaration:

In accordance with sub-paragraph g of article 4.2 of the Convention, the Principality of Monaco declares that it intends to be bound by the provision of sub-paragraphs a and b of said article.

VERTIC News

Verification 1994

The latest in VERTIC's series of yearbooks, *Verification 1994*, is now available, priced £35. A leaflet distributed with this issue contains an order form.

Copies of earlier volumes are still available – *Verification 1993* (£35), *Verification Report 1992* (£25) and *Verification Report 1991* (£20); all four volumes are also available at a price of £75 for the set.

All book orders should add postage and packing costs (per book): UK £2, Europe £3, rest of the world £6 by air or £3 by surface.

Payment should be made by sterling cheque/money order (made out to VERTIC) or by credit card.

VERTIC is also arranging a scheme for a single annual subscription for all its publications, including the *Verification* yearbook, *Trust & Verify* and occasional papers and reports.

verification technology and methods in present and future arms control and environmental agreements.

VERTIC co-ordinates six working groups comprising 21 UK consultants and 11 overseas advisors.

VERTIC is the major source of information on verification for scientists, policy makers and the press.

VERTIC is funded primarily by grants from foundations and trusts and its independence is monitored by an Oversight and Advisory Committee.

Other publications

In addition to *Trust & Verify*, VERTIC publishes the *Verification* series of yearbooks, in association with Brassey's, and a variety of research reports each year. Details of VERTIC publications are available on request.

Carrara House
20 Embankment Place
London WC2N 6NN

Telephone 071 925 0867
Facsimile 071 925 0861

VERTIC
Verification Technology Information Centre