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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 II 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 II 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 issues1.

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

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,

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 eastern pacific] where it is 60° south. Where the Southern Ocean Sanctuary meets the existing Indian Ocean Sanctuary, the former is considered to start at 55° south, the latter's southerly limit, so that the jurisdictions of the two sanctuaries do not overlap.

The other major decision taken at the meeting was regarding the Revised Management Scheme (RMS). When the moratorium on commercial whaling was decided, some states wanted new procedures for the management of whaling to be investigated for such a time as the moratorium was lifted. The RMS is the result of these studies.

Of the concerns raised by states regarding the RMS is that the scheme needs to be credible, with a fully effective verification system based on inspection and observation, if it is to reach international acceptance.

Climate Change ratifications

Two years after the Framework Convention on Climate Change was opened for signature at the Rio Summit, the following is the status of signatures, ratifications, accessions and acceptances to the Convention as of 30 June 1994.

accessions and acceptances to the Convention as of			Japan	13 Jun 92	28 May 93 (at)
30 June 1994.			Jordan	11 Jun 92	12 Nov 93	(r)
			Kazakhstan	8 Jun 92		
Country	Date of	Date of	Kenya	12 Jun 92		
	Signature	Ratification etc.	Kiribati †	13 Jun 92		
			Latvia	11 Jun 92		
Afghanistan	12 Jun 92		Lebanon	12 Jun 92		
Algeria	13 Jun 92	9 Jun 93 (r)	Lesotho	11 Jun 92		
Angola	14 Jun 92		Liberia	12 Jun 92		
Antigua and Barbuda	4 Jun 92	2 Feb 93 (r)	Libyan Arab Jamahiriya	29 Jun 92		
Argentina	12 Jun 92	11 Mar 94 (r)	Liechtenstein	4 Jun 92	22 Jun 94	(r)
Armenia	13 Jun 92	14 May 93 (r)	Lithuania	11 Jun 92	22 3011 34	41.7
Australia	4 Jun 92	30 Dec 92 (r)	Luxembourg	9 Jun 92	9 May 94	(r)
Austria	8 Jun 92	28 Feb 94 (r)	Madagascar	10 Jun 92	a ividy a4	111
Azerbaijan	12 Jun 92	20 100 54 (1)	Malawi	10 Jun 92	21 Apr 94	(r)
	12 Jun 92	29 Mar 94 (r)		9 Jun 93	21 Apr 34	111
Bahamas	8 Jun 92	23 Ividi 34 (1)	Malaysia		0.11 02	1.0
Bahrain			Maldives	12 Jun 92	9 Nov 92	(1)
Bangladesh	9 Jun 92	22 14 24 (-)	Mali	22 Sep 92	49.44 04	
Barbados	12 Jun 92	23 Mar 94 (r)	Malta	12 Jun 92		(1)
Belarus	11 Jun 92		Marshall Islands	12 Jun 92		(1)
Belgium	4 Jun 92		Mauritania	12 Jun 92		(r)
Belize	13 Jun 92	44 1 44 4 44	Mauritius	10 Jun 92		(r)
Benin	13 Jun 92	30 Jun 94 (r)	Mexico	13 Jun 92		(r)
Bhutan	11 Jun 92		Micronesia	12 Jun 92		(1)
Bolivia	10 Jun 92		Monacot	11 Jun 92		(1)
Botswana	12 Jun 92	27 Jan 94 (r)	Mongolia	12 Jun 92	30 Sep 93	(1)
Brazil	4 Jun 92	28 Feb 94 (r)	Morocco	13 Jun 92		
Bulgaria	5 Jun 92		Mozambique	12 Jun 92		
Burkina Faso	12 Jun 92	2 Sep 93 (r)	Myanmar	11 Jun 92		
Burundi	11 Jun 92		Namibia	12 Jun 92		
Cameroon	14 Jun 92		Naurut	8 Jun 92	11 Nov 93	(r)
Canada	12 Jun 92	4 Dec 92 (r)	Nepal	12 Jun 92		(r)
Cape Verde	12 Jun 92		Netherlands	4 Jun 92		(r)
Central African Republic	13 Jun 92		New Zealand	4 Jun 92		(r)
Chad	12 Jun 92	7 Jun 94 (r)	Nicaragua	13 Jun 92		***
Chile	13 Jun 92		Niger	11 Jun 92		
China	11 Jun 92	5 Jan 93 (r)	Nigeria	13 Jun 92		
Colombia	13 Jun 92	0 0411 00 117	Norway	4 Jun 92	9 Jul 93	(1)
Comoros	11 Jun 92		Oman	11 Jun 92	0 00100	44.5
Congo	12 Jun 92		Pakistan	13 Jun 92	1 Jun 94	(r)
Cook Islands	12 Jun 92	20 Apr 93 (r)	Panama	18 Mar 93	1 5011 54	164
Costa Rica	13 Jun 92	20 Apr 55 (11	Papua New Guinea†	13 Jun 92	16 Mar 93	(r)
Cote D'Ivoire	10 Jun 92		Paraguay	12 Jun 92	TO WILL DO	117
	11 Jun 92		Peru	12 Jun 92	7 Jun 93	(r)
Croatia	The second second	5 Jan 94 (r)	Philippines	12 Jun 92	7 3011 33	111
Cuba	13 Jun 92	5 Jan 54 (1)	Poland	5 Jun 92		
Cyprus	12 Jun 92	70-102 ()			21 Dec 93	(r)
Czech Republic	100	7 Oct 93 (ap)	Portugal	13 Jun 92		200
Democratic People's Rep			Republic of Korea	13 Jun 92	14 Dec 93	(r)
of Korea	11 Jun 92		Republic of Moldova	12 Jun 92	0 1 - 01	4.4
Denmark	9 Jun 92	21 Dec 93 (r)	Romania	5 Jun 92	8 Jun 94	(r)
Djibouti	12 Jun 92		Russian Federation	13 Jun 92		
Dominica		21 Jun 93 (ac)	Rwanda	10 Jun 92		
Dominican Republic	12 Jun 92	post of the contract	Saint Kitts and Nevis	12 Jun 92	7 Jan 93	(1)
Ecuador	9 Jun 92	23 Feb 93 (r)	Saint Lucia	14 Jun 93	14 Jun 93	(r)
Egypt	9 Jun 92		Samoa	12 Jun 92		
El Salvador	13 Jun 92		San Marino	10 Jun 92		
Estonia	12 Jun 92		Sao Tome and Principe	12 Jun 92		

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Gabon

Ghana

Greece

Grenada

Guinea

Guyana

Hungary

Indonesia

Iran (Islamic Republic of)

Iceland

Ireland

Jamaica

Israel

Italy

India

Haiti Honduras

Guatemala

Guinea-bissau

Gambia

Germany

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Senegal	13 Jun 92			
Seychelles	10 Jun 92	22 Sep 92 (r)		
Sierra Leone	11 Feb 93	25 pah 25 (1)		
Singapore	13 Jun 92			
Slovenia				
1 20 1 20 2 20 2 20 2	13 Jun 92			
Solomon Islands	13 Jun 92	04 0 00 14		
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)		
Tuvalut	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	20 18181 00 117		
Viet Nam	11 Jun 92			
Yemen	12 Jun 92			
Yugoslavia	8 Jun 92			
Zaire	11 Jun 92			
Zambia		20 14- 22 1-1		
	11 Jun 92	28 May 93 (r)		
Zimbabwe	12 Jun 92	3 Nov 92 (r)		
Organization	Date of	Date of		
	Signature	Ratification etc.		
EECT	13 Jun 92	21 Dec 93		
Totals	166	79		

Notes:

t = 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/Tuvalul declares its understanding that

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.

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Trust & Verify

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

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.

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