

October 1998

Programme for Promoting Nuclear Non-Proliferation, Newsbrief, Number 43

Citation:

"Programme for Promoting Nuclear Non-Proliferation, Newsbrief, Number 43", October 1998, Wilson Center Digital Archive, Contributed by Michal Onderco from the private papers of Benjamin Sanders. Copies also available in MS 424, University of Southampton Special Collections. <https://wilson-center.drivingcreative.com/document/260494>

Summary:

A compilation of the latest news, events, and publications related to nuclear weapons and nuclear non-proliferation. The "Newsbrief" was produced by the PPNN and personally edited by Ben Sanders.

Credits:

This document was made possible with support from Carnegie Corporation of New York (CCNY)

Original Language:

English

Contents:

Original Scan

PROGRAMME FOR PROMOTING NUCLEAR NON-PROLIFERATION

Number 43

NEWSBRIEF

3rd Quarter 1998

Editorial Note

The **Newsbrief** is published every three months, under the auspices of the Programme for Promoting Nuclear Non-Proliferation (PPNN). Its principal aim is to give information about the spread of nuclear weapons and their means of delivery, and about moves to deter that spread; where appropriate reference is also made to related developments with respect to other weapons of mass destruction and their means of delivery. The **Newsbrief** further contains references to relevant developments in the realm of the peaceful use of nuclear energy. The contents of the **Newsbrief** are based on publicly available material.

This issue covers the period 1 July to 30 September 1998.

Information contained in the **Newsbrief** is selected and presented with the intention of giving an accurate and balanced depiction of pertinent events and situations. As space is limited, it is necessary to choose among items of information and present them in condensed form. Even so, the present issue of the **Newsbrief** is longer than usual, because it has had to make reference to the many relevant events in the Korean Peninsula, Iraq and South Asia that took place in the period covered, and to report on the General Conference of the IAEA that was held in September.

Subheadings are used in the **Newsbrief** primarily to facilitate presentation; they should not be seen as judgements on the nature of the events covered. Related developments that might logically be dealt with under separate subheadings may be combined under a single one if doing so makes the text more readable.

Unless otherwise indicated, dates (day/month) refer to 1998. Where reference is made to an uninterrupted series of items in a daily newspaper, only the first and last dates of the series are given. For example, "6-25/8" following the name of a particular publication means that use has been made of items appearing there on each day from 6 to 25 August 1998. To save space, names of publications that are referred to repeatedly are abbreviated; a list is given on the back page.

PPNN's Executive Chairman, Ben Sanders, is editor of the **Newsbrief**. He produces it and takes responsibility for its contents. The inclusion of an item does not necessarily imply the concurrence of the members of PPNN's Core Group, collectively or individually, either with its substance or with its relevance to PPNN's activities.

Readers who wish to comment on the substance of the **Newsbrief** or on the way any item is presented, or who wish to draw attention to information they think should be included, are invited to send their remarks to the editor for possible publication.

I. Topical Developments

a. The Non-Proliferation Treaty

- On 18 September, Brazil deposited its instrument of accession to the NPT. President Cardoso had signed the document during a visit to Brasilia of the UN Secretary-General; on that occasion he also ratified the Comprehensive Test Ban Treaty (CTBT). (**Folha de Sao Paulo**, 3/7, in **BBC**, 6/7; **Agencia Estado news agency** [Sao Paolo], 13/7, in **BBC**, 15/6; **R**, 13/7; **IHT**, 14/7;

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NZZ, 16/7; **Disarmament Diplomacy**, July; **direct information**)

b. Nuclear Disarmament and Arms Limitation

- At its assumption of the presidency of the European Union, on 1 July, the Federal Chancellor (Prime Minister) of **Austria** stated that his country will never join NATO unless it abandons the nuclear first-strike option. (**FT**, 26/6; **G**, 26/6; **StV**, 26/6)
- At a meeting in Almaty, in early July, with the heads of state of Central Asian republics, **China's** President Jiang Zemin called for a world-wide prohibition of nuclear weapons and their complete elimination. (**R**, 6/7)
- On 11 August, the Conference on Disarmament (CD) agreed to establish an Ad Hoc Committee to negotiate, on the basis of the report of the Special Coordinator (the so-called Shannon Report of 1995) and the mandate contained therein, a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices (FMCT). Obstacles to a resumption of discussions on this issue are said to have been removed after several former opponents changed their position. Discussions during July between Pakistan and the US appear to have led the former to announce at the resumption of the session on 30 July of the CD that it would support the immediate commencement of negotiations on an FMCT. India had already announced that it was ready to join negotiations on the FMCT (see below, page 16). Shortly afterwards, Israel's Prime Minister announced that his country had agreed to join the talks. He explained that President Clinton had asked Israel not to oppose the establishment of the Ad Hoc Committee which he said was a procedural step and support for the establishment of the Committee did not indicate that Israel was taking a position on the treaty and its contents, with which it had fundamental problems. Israel was not a member of the CD when the Shannon Report was adopted, and is understood to be opposed to having its nuclear activities covered by international inspection. Like a number of other CD members, it is also averse to having the FMCT cover existing stocks, rather than merely providing for the cessation of the production of fissile material.

On 20 August the CD appointed Ambassador Mark Moher of Canada Chairman of the Ad Hoc Committee. Before the adjournment of the CD in early September, the Committee held two meetings and had a general exchange of views as the first step to substantive negotiations. It was unable to agree to recommend to the CD that it should continue in 1999 with Ambassador Moher as Chairman.

The Ad Hoc Committee of the CD on negative security assurances, chaired by Ambassador Antonio de Icaza of Mexico, held nine meetings between 19 May and 1 September and recommended to the CD that it should be re-established at the beginning of the 1999 session.

No progress appears to have been made in the CD on the establishment of any further mechanism to address nuclear disarmament. After intensive consultations the then-President of the CD was reported to have concluded that the positions of delegations on the matter were still too far apart to be bridged.

The CD was unable to agree on its expansion by five new members. Candidates had been Ecuador, Ireland,

Kazakhstan, Malaysia and Tunisia. Reportedly, Iran blocked the move because of an Irish report criticising Tehran's human rights record.

(**CD/1299**, 12/3/1995; **ACRONYM Institute**, 30/7, 6/8, 13/8, 20/8, 8/9; **AP**, 30/7, 6/8, 7/8; **Ha'aretz** [Jerusalem], 7/8; **R**, 7/8, 20/8; **Israeli PM's Office**, 11/8; **NYT**, 12/8; **FT**, 12/8; **UN PR DFC/348**, 3/9)

- The **United Kingdom** Strategic Defence Review was published on 8 July. It provides for the reduction of the overall number of operationally available warheads on the UK's Trident submarine-launched missiles (the only nuclear weapon still in the UK arsenal) from 300 to 200, which is said to represent a cut of more than 70 per cent since the end of the Cold War. The Review announces that normally there will be no more than one Trident submarine on patrol at any a time, of a total of three (to be raised to four at the start of the next century), each carrying 48 warheads, reduced from a maximum of 96.

The Strategic Defence Review White Paper states that the "current defence stocks" of the UK amount to 7.6 tonnes of plutonium, 21.9 tonnes of highly enriched uranium and 15,000 tonnes of other forms of uranium. It declares that 4.4 tonnes of plutonium and over "9,000 tonnes of non-highly-enriched uranium will now be placed under European atomic energy community safeguards, and made liable to inspection by the [IAEA]". The White Paper further states that reductions in planned warhead numbers will permit the placing of a "surplus of 0.3 tonnes of weapons-grade plutonium under international safeguards". The paper further says that the UK "will ... cease exercising [its] right as a nuclear weapon state under the Nuclear Non-Proliferation Treaty to withdraw fissile material from safeguarded stocks for nuclear weapons. Future withdrawals will be limited to small quantities of materials not suitable for weapons purposes and the details will be made public. No material withdrawn from safeguards will be used in nuclear weapons. All planned future reprocessing will also be carried out under safeguards and [the UK] intend to publish an initial report by 2000 on past defence fissile material production."

(**UK Strategic Defence Review**; **AP**, 8/7; **NYT**, 9/7; **Disarmament Diplomacy**, July; **SF**, 28/9)

- In Moscow there are suggestions that **Russia's** new Prime Minister, the former Foreign Minister Yevgeny M. Primakov, may make the ratification of the START II Treaty by the Duma a priority. During the summer, Russian parliamentary leaders had threatened to postpone ratification because of alleged US violations of START I. According to the Russian military, the US has helped the UK test Trident missiles in the US to see whether they could carry more warheads than the eight allowed by START I. The Russian military have also claimed that the US has adapted the landing gear of B-1B strategic bombers in a way that would supposedly make it easier to restore their capability to carry cruise missiles. They further object to US uncontrolled scrapping of MX missiles.

During a state visit to Moscow in early September, US President Clinton discussed with President Yeltsin future negotiations on START III and there are indications that discussions of a possible text have started at the working level. It is noted that the visit was made notwithstanding earlier US contentions that it would only take place if START II had been previously ratified.

(AP, 6/7, 7/7, 27/8; R, 7/7; NYT, 7/7, 1/9, 2/9; WT, 7/7; direct information)

- United States Senator Domenici has urged his own country and the **Russian Federation** to begin the disposition of larger quantities of excess plutonium than are under discussion at present. According to the Senator, the amounts currently considered for disposition are too small to reduce the threat of diversion and re-use. He has urged that the rate of disposition be increased to ten metric tons a year. Domenici is said to have given up on the idea of burning excess plutonium as MOX fuel in European reactors, for which it seems there is little support among Belgian, French and German companies. Russia, too, will apparently only be willing to use up the excess plutonium as MOX in its VVER reactors if the West funds the exercise, including constructing the MOX fabrication plant. For now, Domenici is understood to propose converting excess plutonium into "unclassified forms" and putting it in safeguarded storage. The senator and several of his colleagues have urged the White House to seek an agreement with the Russian Federation to control each country's rate of weapons dismantlement and plutonium disposition. The senators have also pointed out that the planned rates of MOX use are unequal, with the US planning to use almost three times as much as Russia.

US Vice President Gore, on a visit to Moscow, and Russia's (then) Prime Minister Kiriyenko signed a five-year agreement on the management of excess weapons-grade plutonium. Under the agreement the two countries will continue their cooperation on small-scale tests and demonstrations of Pu disposition technologies on which, it is said, each side would spend about \$1 billion.

On 2 September, Presidents Clinton and Yeltsin signed a "Joint Statement of Principles for Management and Disposition of Plutonium Designated as No Longer Required for Defense Purposes", which includes a commitment for the two sides to develop transparency measures, including appropriate international verification. The two states have each identified approximately 50 metric tons of 'excess' weapons-grade plutonium to be used in MOX fuel or immobilised with high-level waste in glass or ceramic form. The Statement is to be followed by a formal bilateral agreement, which experts from both sides have been directed to start negotiating and which should be finalised by the end of the current year; the first negotiations were set to start in Moscow in September.

The two countries should as soon as possible set up MOX fabrication facilities. Reportedly, several hundred million dollars will be needed to build facilities in Russia and the US for the production of MOX fuel and the processing of pu-waste into glass or ceramics. Lifetime costs for the programme may run to \$7 or 8 billion.

During the IAEA's General Conference, on 22 September, US Secretary of Energy Bill Richardson, the Russian Minister of Atomic Energy, Yevgeny Adamov, and the Agency's Director General, Mohamed ElBaradei, reviewed progress under a joint project that started two years ago for the development of concepts that would enable the IAEA to draw meaningful and independent conclusions when verifying containers holding "classified forms" of plutonium, without gaining access to information that could reveal nuclear weapon design or manufacturing secrets. Reportedly, these concepts will soon be tested using prototype equipment. The parties are also

developing a model verification agreement for the implementation of the new verification regime. Such agreements should allow states to submit to verification weapon-origin fissile material, which would remain subject to IAEA verification until it is determined to be no longer usable for the manufacture of nuclear weapons. Parties are also said to consider options for financial arrangements. In this context, the Agency's Director General in his speech to the General Conference, proposed the creation of an IAEA Nuclear Arms Control Verification Fund.

Earlier there had been reports that **France, Germany** and the **United States** had agreed to work together to help **Russia** reduce its excess plutonium stockpile by five tons of plutonium a year. DoE has said that the effort was supposed to begin with the construction of a plutonium conversion facility in Russia, to be followed by a MOX fuel fabrication plant. Russian reactors would then be modified so as to take MOX fuel. The project should be underway by the year 2003.

The US Department of Energy (DoE) has released the draft Environmental Impact Statement for its surplus plutonium disposition programme. Reportedly, DoE's preferred option for the disposition of the 50 metric tons of plutonium declared to be in excess of US weapons needs is to immobilise 17 metric tons and fabricate the remaining 33 into MOX fuel. Three groups of firms from various countries have responded to DoE's request for proposals on the disposition of excess plutonium as MOX fuel in civilian reactors.

In **France** and in **Japan** licenses have been issued for the introduction of MOX fuel into nuclear power reactors. The French license pertains to four units; a number of additional license applications are currently pending. There is a report that the total number of reactor units which could use MOX fuel now stands at 20. The license issued in Japan is in regard to the second power reactor in that country to start burning MOX fuel; 14 to 16 more plants are expected to do so by the year 2010.

(NN, 8/7, in UINB, 98.28; SF, 20/7, 31/8, 14/9, 28/9; NF, 27/7, 10/8; NW, 30/7, 10/9; NN, 26/8; Statement from **Russian Presidential Press Service**, 2/9, in **BBC**, 8/9; **IAEA Press Release PR 98/18**, 22/9)

- The agreement between the **Russian Federation** and the **United States** under which Russia was to sell to the US uranium from dismantled nuclear weapons appears to be in trouble. Under the agreement, the US committed itself to buy 500 tons of highly-enriched uranium (HEU) from Russia for an estimated total of \$8 billion, blend down the HEU, sell the now low-enriched uranium (LEU) for civilian power use, and supply Russian in exchange with natural uranium. Moscow expected to be able to sell the natural uranium for \$4 billion. It was understood that on the American side the transaction would be handled by the government-controlled US Enrichment Corporation (USEC). In July, USEC was privatised; it subsequently announced that it would sell off more than 30,000 tons of its own natural uranium. The result was expected to be a fall in uranium prices to about half of the price Russia expected to get for its uranium. This prompted Russia to raise doubts about the future of the agreement. Comments from Washington expressed the hope that the agreement could be renegotiated but it seemed that Russia was unwilling to do so. Several European uranium trading firms which had been close to concluding agreements to pur-

chase uranium indicated they would not finalise the deals while American uranium producers questioned the legality of the transfer of the uranium to USEC. Russia was said to have urged the US government to either buy the USEC material or put a moratorium on its sale. Against expectations this matter was not settled at the Moscow Summit but during the General Conference of the IAEA in September, the two states signed a report intended as a framework for overcoming the current obstacles. Steps to be taken include deferring sales of uranium by DoE (presumably for ten years), making an advance payment to Russia to be repaid through future deliveries, and helping return a portion of the natural uranium to Russia. In turn, Russia commits itself to conclude an agreement with western trading firms that will allow it to realise fair value for its material. First comments from uranium trading specialists express surprise at the manner in which the joint report ventures into areas of private trade. (FF, 27/7, 3/8, 10/8, 28/9; NYT, 5/8; NF, 7/9; DoE News, 22/9; Ux, 28/9 in UINB, 98.39)

- The **United States** House of Representatives has increased to \$142 million the funds for dismantling and destroying Russian strategic weapons systems. This work is to be carried out by American contractors pursuant to the START I agreement. (WP, 25/9; IHT, 26-27/9)
- **Russia's** current economic problems are reported to compound the discontent already growing in its nuclear establishment as a result of the sharp cut-back in nuclear-weapon activities. Reportedly, dissatisfaction among nuclear personnel led in early September to a walk-out by staff from the closed nuclear cities of Arzamas-16 and Chelyabinsk-70 to protest non-payment of salaries for up to ten months. The situation is raising questions about the continued safety of Russia's nuclear complex and the potential spread abroad of its nuclear expertise. Reportedly, the government in Moscow has plans to cut 45,000 nuclear jobs in the short term. To help deter the departure of scientists and technicians for possible jobs abroad, thereby adding to the nuclear proliferation potential of countries like the DPRK, Iran or Iraq, the US has been contributing to a programme designed to provide alternative employment. In September, the Congress authorised the expenditure of \$20 million to retrain nuclear-weapon experts and help move them into civilian occupations. During the IAEA's General Conference, US Secretary of Energy Richardson and Russia's Minister of Atomic Energy Adamov signed an agreement under which the two states will cooperate in creating civilian jobs and setting up commercial enterprises in Russia's ten nuclear cities. The US reportedly will invest \$30 million over the next five years, sharing experience in restructuring gained at US nuclear centers, helping in the conversion of military installations to civilian production, and providing training in business planning and related disciplines. (ABC, 8/9; Moscow Times, 8/9; WP, 18/9; National Journal [Washington], 19/9; IHT, 19-20/9, 21/9; AP, 22/9; DoE News, 22/9; NYT, 23/9, 27/9; AFP, 30/9)

c. Nuclear Testing

- During the period covered by this Newsbrief, the following ratifications to the Comprehensive Nuclear Test Ban Treaty (CTBT) were deposited: Australia (9 July), Brazil (14 July), Spain (31 July), Grenada (19 August), Germany (20 August), Jordan (25 August), and El Salvador (11 September), bringing the total number to 21. In addition,

Malaysia signed the CTBT on 23 July, bringing the total number of signatures to the Treaty to 150.

- **China** has said it will not respond to India and Pakistan by resuming its nuclear tests. (IHT, 4/6)
- A study made by experts from the National Institute for Health and Medical Research of **France** and the French Office for Protection against Ionising Radiation has found that the 41 atmospheric nuclear tests carried out between 1966 and 1974 over the Mururoa atoll have not led to an increase in cancers among the local population. However, one of the scientists involved in the study has since drawn attention to an abnormally high incidence of thyroid cancer in the area. (NW, 6/8; Lib, 30/8)
- For moves by **India** and **Pakistan** in regard to the CTBT, see below [South Asia].
- The International Atomic Energy Agency (IAEA) has reported that over most of the area near the former Soviet nuclear weapons test site at Semipalatinsk, in **Kazakhstan**, where between 456 and 470 nuclear explosions were conducted, there is little or no residual radioactivity. In a preliminary assessment released in July, the Agency states that two areas are heavily contaminated and that more information and investigation is needed to establish the level of contamination of the entire site. The contamination of Ground Zero, the central point of atmospheric and surface explosions, of which respectively, 86 and 30 took place, is confirmed as having been 'relatively localised'. The testing at Semipalatinsk was halted in 1989. (NW, 23/7)
- The **Russian Federation** has announced that it plans to carry out a 'subcritical' nuclear test in the next few months as part of its effort to maintain its military stockpiles in an appropriate condition. Russia has denied reports in the American press that it is preparing for a weapons test. (R, 23/7, 25/9)
- On 26 September, the **United States** conducted this year's second underground subcritical test. According to the US Department of Energy it involved less than 2.5 kg of conventional high explosives and some 200 grams of plutonium. Another subcritical test will be staged later this year. The mayors of Hiroshima and Nagasaki have criticised the event.

A nuclear-fusion research programme conducted in the US is criticised by American scientists as a violation of the CTBT. The programme involves minute bursts of pure fusion energy. Experts believe that the programme could lead to the development of pure-fusion weapons. A study by the Institute for Energy and Environmental Research expresses the view that these laboratory thermonuclear explosions are prohibited and should be stopped immediately; DoE denies that the experiments are "nuclear explosions" as defined in the CTBT. The Institute's study is also said to call for a halt of a project being carried out in **France**, which ignites fusion with laser beams.

The US Senate has approved next year's American contribution for the budget of the Preparatory Commission to the Comprehensive Test Ban Treaty Organization with 49 votes to 44. The vote is taken by Republican senators as a sign that the two-thirds majority (67 votes) needed to adopt the CTBT is lacking.

DoE has announced that it has developed two detonation identification devices that "represent a quantum leap beyond existing monitoring devices, with greater sensitivity, full automation, near real-time reporting, and novel nuclear radiation detectors". Reportedly, one of these devices will analyse air samples for radioactive particles from underground nuclear explosions and the other would detect above-ground nuclear explosions. DoE says the devices will be placed around the world to monitor compliance with the CTBT and that information collected will be sent to a temporary data centre in Arlington, Virginia and eventually to the CTBTO, in Vienna.

(NYT, 15/7; R, 28/7; WP, 3/9, 4/9; Kyodo News, 24/9; AP, 27/9; IHT, 29/9)

d. Nuclear Trade, International Cooperation and Nuclear Export Issues

- The US National Security Agency, which has reviewed what might have happened to the encoded circuit boards that were part of an American satellite launched in **China** and that disappeared after the missile crashed two years ago, is reported to have come to the conclusion that the devices, which are housed close to the fuel tank of the rocket, probably did not survive the crash. The review was made in response to allegations in the US Congress that the circuit boards had been removed clandestinely. It was noted moreover, that in the unlikely event that the circuit boards had been recovered intact, Chinese technicians would not have been able to know which of the chips were encoded. Republican members of both houses of the US Congress maintain nevertheless that by allowing this cooperation, the Clinton Administration has put the country's security at risk. The issue has been a subject of investigations in House and Senate committees and in late September the Congress adopted a bill shifting controls on exports of satellites from the Department of Commerce to the State Department. China has denied the allegation by US Senate majority leader Lott that it used American satellite technology to enhance its military capabilities. The State Department spokesman has said that allowing American satellites to be launched in China is in the US national interest because, among other things, it encourages China to improve its non-proliferation practices; he also denied that this policy had contributed to China's military missile capabilities.

Shortly before leaving his post, Secretary of Energy Federico Peña authorised a number of American firms to make nuclear supplies to China. Before they can do so, however, China will have to guarantee that US equipment and technology will be used only for peaceful purposes and will not be re-exported to a third party. In August the US Nuclear Regulatory Commission (NRC) issued licenses for reactor components to be incorporated in Candu reactors which Canada is constructing in China. Canada is reported to have obtained assurances that any items exported will only be used for peaceful purposes and that no US-origin components incorporated into Candus will be transferred to a third country without prior US consent.

(NYT, 9/7, 18/9; SF, 13/7; USIA, 14/7; AP, 15/7; NW, 13/8)

- There is a report that **Iran**, which has just agreed with **Russian** industry on the completion of the first VVER-1000 reactor at Bushehr, would still prefer to have **Germany** complete the reactors which it started in the 1970s.

Apparently, while the Netherlands and the US would not be in favour of restarting cooperation with Iran, a number of other European states would be ready to do so. (NW, 1/10)

- It has been announced in Moscow that the **Russian Federation** has agreed to provide 85 per cent of the financing (estimated at US \$2.5–3 billion) for its share of the construction of the two VVER-1000 power reactors that will be built at Kudankulam, in the state of Tamil Nadu in southern **India**, at an interest rate of four per cent, i.e., half of the going western rate. The announcement was well received in India, where it was seen as proof that its brief post-test isolation was over. Western media stressed that the deal came at a time when strict adherents to the non-proliferation regime were seeking to use the Nuclear Suppliers Group (NSG) for the imposition of an effective embargo on nuclear technology and equipment transfers to India, and only a short time after the May summit of the G-8 at Birmingham had agreed not to export technology that could be used in the nuclear-weapon programmes of India and Pakistan. The expectation of western observers that Russia's move would affect the plans of the G-7 to give it large-scale financial support has since proven to be wrong, but under present conditions the likelihood of Russia being able to provide financing at the favorable conditions agreed upon is seen in the West as slim. The project was originally negotiated in the 1980s but was suspended at the breakup of the Soviet Union. On 20 July, the two sides signed a contract for the preparation of a Detailed Project Report, which is expected to take 30 months to prepare. The first of the two reactors should then take another seven years to complete. The Indian Cabinet approved the deal on 9 September. (G, 23/6; IHT, 23/6; WP, 23/6, NYT, 23/6; NN, 23/6, 25/6; **Electrical India**, 30/6; NW, 2/7; AP, 20/7; **Hindu**, 21/7, in UINB, 98.30; R, 9/9. See also **Newsbrief** No. 42, p. 6)

e. IAEA Developments

- On 1 July, Mr. Piet de Klerk, **Netherlands**, assumed the function of Director of the Division of External Relations in the Agency's Department of Administration. Among Mr. de Klerk's academic credentials are degrees in atomic physics, solid state physics, mathematics and philosophy. He has served as a counsellor in the Dutch Permanent Mission to the International Organizations in Vienna, has been head of the arms control section in the Netherlands Ministry of Foreign Affairs and deputy head of the Political Department of the Netherlands Embassy in Bonn.

Mr. Nikolai Khlebnikov, **Russian Federation**, has become Director of the Division of Technical Services in the Agency's Department of Safeguards. He holds a PhD in Chemical Technology of Rare and Radioactive Technologies and has served as laboratory head in the Central Research Institute of Atomic Information in Moscow. He has been section head in the IAEA Department of Safeguards and most recently was division head in the Russian Ministry of Atomic Energy (Minatom).

Ms. Jill Cooley, **United States**, has assumed the post of Director of the Division of Concepts and Planning, Department of Safeguards. Ms. Cooley has degrees in mathematics, physics and nuclear engineering. She has been department head of safeguards studies in the Oak Ridge Gaseous Diffusion Plant, Technical Advisor in the Office of Nuclear and Safeguards, US Department of State, and department head for the Safeguards Program of

Martin Marietta Energy Systems, Inc. Since 1995, she has been a section head in the IAEA safeguards department.

(IAEA Press Release, PR 98.11, 3/7)

- The **42nd Regular Session of the IAEA's General Conference** was held in Vienna from 21 to 25 September. It was attended by representatives of 105 member states and of six states not members of the Agency. The Conference elected Ambassador Roberta Lajous Vargas, Resident Representative of Mexico to the IAEA, as its President.
- At the start of the session, the General Conference approved an application for membership in the Agency by Benin. The IAEA now has 128 member states.
- The Conference further decided to hold its 43rd Regular Session in Vienna, on 27 September–1 October 1999.
- In his message the Secretary-General of the United Nations said that the Agency's mandates and tasks remained vital for maintaining world peace, preventing the proliferation of nuclear weapons and ensuring the peaceful and safe use of nuclear technology for sustainable development. The Secretary-General deplored the recent setback in hitherto successful global efforts to prevent the proliferation of nuclear weapons. He called it a powerful reminder that the genie cannot be put back in the bottle, that one must focus on the driving forces behind the acquisition of nuclear weapons and must work not only on weapons capabilities but equally on real and perceived insecurities. The statement underlined the importance of the nuclear non-proliferation regime, and of credible IAEA safeguards. It mentioned the progress made in strengthening the safeguards system. The Secretary-General reiterated his call on countries to sign or ratify the CTBT and also referred to the issue of nuclear safety as well as to illicit trafficking, which he called a "very real threat". The statement mentioned the role the IAEA has to play in encouraging the involvement of civil society in international affairs. A short excerpt from the statement is reproduced in **Section IV. Documentation** of this **Newsbrief**.
- Dr. Mohamed ElBaradei participated in the General Conference for the first time in his capacity of Director General. In his statement he highlighted the role of the Agency in nuclear verification and the security of material, nuclear and radiation safety, technology transfer and nuclear power, and outlined steps to strengthen the Agency's programmes. Under the heading 'nuclear verification and the security of material' he gave a run-down of Agency activities in the field of safeguards, referring also to problems encountered in regard of the DPRK and Iraq. With regard to nuclear disarmament, he referred to the Trilateral initiative with the Russian Federation and the USA for the development of technical, financial, and legal arrangements and modalities for possible IAEA verification in the two countries of nuclear material transferred from military to peaceful uses. He welcomed the UK's decision to declare the total size of its stocks of nuclear material in the civilian and in the military sectors and to put substantial amounts of material from the British military programme under IAEA safeguards. Dr. ElBaradei called for the establishment of a Nuclear Arms Control Verification Fund and said he had been requested by the Board of Governors to prepare an options paper on the issue of financing such a fund.

The Director General referred to some topical issues in the area of nuclear verification and the security of material. Pursuant to a 1997 General Conference mandate he had started consultations with Middle Eastern states to obtain additional and more detailed views on the early application of full-scope agency safeguards in that region. With regard to the DPRK the Agency was continuing to assert its right to perform inspections under the safeguards agreement but the cooperation received from the DPRK had not increased. Regarding Iraq, the Agency's activities had produced a technically coherent picture of that country's clandestine nuclear programme, but a degree of uncertainty — "inherent in any country-wide verification process that seeks to prove the absence of readily concealable objects or activities" — remained as to the completeness of this picture. This did not prevent the full implementation of the IAEA's plan for the ongoing monitoring and verification (OMV) of Iraq's compliance with the relevant Security Council resolutions. However, as a result of the suspension by Iraq on 5 August of its cooperation, the Agency was unable to inspect any new locations or to fully implement its OMV plan. With respect to illicit trafficking the Director General referred to the Agency's Illicit Trafficking Database Programme which had recorded a number of incidents involving nuclear material and other radioactive sources.

The portion of the Director General's speech pertaining to nuclear verification and the security of material is reproduced in **Section IV. Documentation** of this **Newsbrief**.

With respect to nuclear and radiation safety, the address focused attention on the IAEA's aim to develop a comprehensive nuclear safety regime consisting of three elements: internationally legally binding agreements; non-binding safety standards; and measures to provide for the application of those agreements and standards. The Agency had undertaken the preparation or revision of the entire set of international safety standards, comprising seven documents that cover the areas of nuclear, radiation, waste management and transport. One aspect of the Agency's work in this field was the "Agency assessment of the radiological legacies of past military activities and waste disposal practices". The Director General referred to the study of the radiological situation at the atolls of Mururoa and Fangataufa which had concluded that there would not be any health effects that could be diagnosed or discerned attributable to exposures to the radiation from residual radioactive materials. He also pointed out, however, that other Agency studies made in other areas had come to different conclusions.

Dr. ElBaradei spoke of the outstanding impact and results of the technical cooperation programme, given its relatively modest size. In the area of nuclear power the Director General mentioned, among other things, the importance of comparative energy assessments; 35 states were conducting independent energy option analyses by using a methodological framework developed by the IAEA and eight other international organizations. He further discussed issues of spent fuel and radioactive waste management. He mentioned that the Agency had set up a working group on Nuclear Fuel Cycle Options which would also examine options for plutonium management.

A sizeable portion of the Director General's speech was devoted to the reform and review of the Agency's performance. He said that the Agency had to make sure that its

programmes “do meet the new priorities of ... members states, reach out more effectively to opinion leaders and civil society and achieve greater efficiency wherever possible”. He described the comprehensive three-level review process he had set in motion with respect to the Agency’s management and programme, both within the Secretariat and with the help of an outside Senior Expert Group. He intended to prepare an Agency “Medium Term Strategy” to chart the direction of the Agency over the next five years. In the conclusion of his speech the Director General called on member states to support the programmes and budgets they have approved, and underlined the need for prompt and full payment of contributions.

- The General Conference approved the Agency’s regular budget for 1999, which calls for expenditures of US\$224 247 000, representing a real reduction of 0.1 per cent compared with the 1998 budget. It also approved a target of \$73 000 000 for voluntary contributions towards the Agency’s Technical Assistance and Cooperation Fund for 1999 compared with \$71 500 000 million for 1998. The portion of the regular budget to be spent under the heading of Nuclear Verification and Security of Material is \$80 812 000. (IAEA Documents GC(42)/7)
- Eleven new members were elected to the Board of Governors for a two-year term, viz: Brazil, Chile, Egypt, Greece, Jordan, Norway, Saudi Arabia, Singapore, Slovakia, Sudan and Uruguay. The other 24 Board members, which have either been designated by the Board or were elected by the General Conference in 1998, are Argentina, Australia, Belgium, Canada, China, France, Germany, Ghana, Hungary, India, Italy, Japan, Republic of Korea, Mexico, Morocco, Pakistan, Peru, Russian Federation, Slovenia, South Africa, Sweden, United Kingdom of Great Britain and Northern Ireland, United States of America, Viet Nam. (IAEA Document GC42)/21; Press Release PR 98/20)
- The following reflects elements of statements made in the General Debate that received particular attention.

Australia stressed current problems in South Asia and outlined steps India and Pakistan could take so as not to go further up the ladder of nuclear escalation. As “practical measures” the Australian delegate listed accession to the CTBT, NPT membership, involvement in a fissile material cut-off treaty, refraining from building nuclear warheads, placing all nuclear facilities under IAEA safeguards, concluding Additional Protocols, and abiding by international norms on nuclear exports. China urged the Agency to strike a balance between its promotion activities and safeguards, which should complement each other. Cuba repeated the reasons why it has not yet joined the NPT but stressed that it supported efforts to strengthen safeguards and announced that it was discussing with the IAEA the possibility of applying some aspects of the Additional Protocol to its activities. India expounded on the reasons why it had been obliged to take the decision to carry out nuclear weapon tests. It called once again for the elimination of all nuclear weapons in a time-bound framework, and drew attention to the call by the NAM summit for an international conference on this matter. India said, among other things, that since the indefinite extension of the NPT the prospects for a nuclear-weapon-free world had dimmed alarmingly; his remark that criticism of the recent tests had come especially from states that enjoyed the security of the nuclear umbrella of a nuclear-weapon state,

and that those states “could perhaps be looked upon as surrogate nuclear-weapon states” invited comment, as did his reference to “a new kind of colonialism through technology control”. Japan referred to the Conference on Urgent Actions for Nuclear Disarmament and Non-Proliferation which was held in August with participants from 16 countries. It discussed at some length the situation with respect to the DPRK and the reason why it had decided to suspend its involvement in the light-water reactor project for the time being. Pakistan emphasised its willingness to join the CTBT and its refusal to be coerced into “joining this or any other Treaty”. It expressed discomfort over the apparent assumption by the IAEA of functions that “are best left to New York and Geneva”; the trend in emphasis towards the verification role of the IAEA needed to be countered and corrected.

The Russian Federation drew attention to its development of an inherently safe nuclear fuel cycle and underlined the Agency’s safety programme on VVER and RBMK reactors. The information provided by South Africa on the work it was doing on a Pebble Bed Modular Reactor Project for a 100 MWe power reactor that would be suitable for use by developing nations received much attention. It urged states not only to conclude additional protocols to their safeguards agreements but to bring them into early effect. The United States expounded on the work done jointly with Russia on drawing down nuclear stockpiles and on the control of plutonium and highly-enriched uranium excess to defence needs. Its delegate called on all nuclear-weapon states to make their excess fissile material available to international inspections as soon as practicable and welcomed the UK move in this regard. He described the work done with Russia on redirecting national nuclear laboratories to other missions.

- The Conference had before it a number of draft resolutions pertaining to the principal issues mentioned also in statements made in the general debate. The following subjects are singled out as being most relevant in the context of the **Newsbrief**. As the **Newsbrief** went to press, final resolution numbers were not available. (General Conference Documents reproduced are in **Section IV. Documentation of this Newsbrief**.)
- As in previous years, the question of **strengthening the safeguards system** received much favourable attention. A resolution which, among other things, affirmed that strengthening the effectiveness and improving the efficiency of the safeguards system with a view to detecting undeclared nuclear activities must be implemented rapidly and universally, and which requested all concerned states to conclude additional protocols promptly, was adopted without a vote. The Director General had informed the Conference that 32 states had so far signed or were shortly expected to sign Additional Protocols to their safeguards agreements. On 22 September, the European Commission and the 15 member states of the European Union signed three Additional Protocols with the IAEA: 13 of these pertain to the non-nuclear-weapon states members of the EU, the other two respectively to France and the UK. (IAEA Document GC(42)/37, 24/9, reproduced; PR 98/19, 22/9)
- The **safeguards situation in the Democratic People’s Republic of Korea** had not improved, notwithstanding repeated efforts on the Agency’s part to persuade Pyongyang to allow it to take the steps necessary to verify its full compliance with the safeguards agreement, and to take

steps to ensure that the necessary information is preserved. A resolution similar to that of last year, modified in light of the newest developments, was adopted by a vote of 49 in favour, zero against and eight abstentions. The fact that the number of votes in favour was less than half the number of Agency members, was remarked on in the session. (IAEA Document GC(42)/30, 23/9, reproduced)

- On **Iraq**, a resolution similar to the one adopted last year and sponsored once again by a large number of preponderantly Western nations formed the subject of considerable debate. The text was criticised by, among others, Morocco, which proposed amendments to soften the language; Algeria, which called for an attempt to reach consensus on a text, and Russia, which felt that the text as proposed did not take into account the latest discussions in New York. Due to an apparent error in interpretation, the resolution was pronounced to have been adopted without a vote; subsequently, however, the President acceded to a request for a roll call vote, which resulted in the adoption of the resolution by 57 votes to none, with 25 abstentions. Abstaining delegations included African and Asian states, China, Cuba, the Russian Federation, and the Arab nations except Kuwait. (IAEA Document GC(42)/14, 28/8; GC(42)/29, 23/9, reproduced)
- A resolution was submitted by Australia, Canada, Japan and New Zealand to express concern over the **nuclear tests in South Asia**, call on the states concerned to implement resolution 1172 (1998) of the Security Council (see **Special Insert to Newsbrief 42**, page ten) and urge them to join the CTBT and the NPT. This proposal led to a heated debate, in which India and Pakistan held that the subject was outside the field of competence of the Agency's General Conference, while a number of states proposed amendments to soften the language. India had previously submitted written proposals for amendments. South Africa proposed language to strengthen operative paragraph 6. In the original version this would have "welcomed the determination" of the five nuclear-weapon-states to fulfil their commitments relating to nuclear disarmament under Article VI of (the NPT) and would have called upon those states to intensify their efforts to reduce nuclear weapons; in the amended version it "urges" those states to do so. Most of the delegates that had been in favour of the original version of the proposal found it difficult to support the amended version. In a separate vote the amended paragraph 6 was adopted by 40 votes in favour, 38 against, and ten abstentions. Many of the original supporters therefore abstained in the roll call vote on the resolution as amended, which was adopted by 44 votes in favour, 2 against (India and Pakistan) and 43 abstentions. It is noted that Ireland and Sweden were the only EU members voting in favour of the resolution as a whole, and that in the vote on the amendment, Ireland expressed its support. (IAEA Document GC(42)/36, 23/9; GC(42)/26/Rev.1/Mod.1, 25/9, reproduced)
- As in 1997, a resolution was adopted without a vote, on '**Measures Against Illicit Trafficking in Nuclear Materials and Other Radioactive Sources**'. It welcomes the Secretariat's activities in the fields of prevention, response, training and information exchange and invites the Director General to continue this work. (IAEA Documents GC(41)/17, 27/8; GC(42)/34, 23/9, reproduced)
- As in 1997, a group of Arab nations submitted a draft resolution on the application of **IAEA safeguards in the**

Middle East. The 1998 version affirms the 'urgent need' for all states in the region to accept the application of full-scope safeguards to all their nuclear activities as an important confidence building measure, calling on Israel as the only state in the region that is not a party to the NPT, to accede to the Treaty 'without further delay', and requesting the Director General to continue consultations with states in the Middle East on the application of full-scope Agency safeguards. As before, the draft was discussed at length in the Committee of the Whole and in informal consultations. In the end, a text was formulated that was adopted with 80 votes in favour, 2 against (Israel and the US) and 4 abstentions. (IAEA Document GC(42)/34, 22/9, reproduced)

A draft resolution on **Israeli Nuclear Capabilities and Threat**, submitted by Kuwait and co-sponsored by fourteen Arab states, was not put to the vote. (IAEA Documents GC(42)/8, 8/6; GC(42)/25, 22/9)

The issue of Israel also figured in the consideration of delegates' credentials. A letter from Kuwait on behalf of the Arab delegations to the General Conference had expressed reservations about the Israeli credentials. Upon a proposal by Morocco, the phrase "with the reservations expressed above" was added to the recommendation by the General Committee, that the Conference should adopt its examination of delegates' credentials. The resulting text was adopted by the General Conference with 56 votes in favour, four against and 19 abstentions. (IAEA Document GC(42)/41, 24/9)

- Once again, the question of the composition and eventual **extension of the Board of Governors**, which is the subject of Article VI of the Agency's Statute, played an important part. For the past year, the matter had been the subject of arduous discussions in the Board of Governors, whose Chairman, Ambassador Ikeda of Japan, is said to have achieved substantial progress towards a solution. Agreement was reached in the General Conference on a statement read out by the President, that the Conference takes note with appreciation of the report of the Board of Governors on the matter, and refers the issue back to the Board for further consideration, instructing it to report to the 43rd session of the General Conference "on a final formula, taking into account the progress made so far. (IAEA Document GC(42)/19)
- Among substantive items that were subject to resolutions of the General Conference the following may be mentioned: **Convention on Nuclear Safety (GC(42)/31)**; **Measures to Address the Year 2000 (Y2K) Issue (GC(42)/32)**; **The Safety of Radiation Sources and the Security of Radioactive Materials (GC(42)/33)**; **Safety of Transport of Radioactive Materials (GC(42)/38)**; and **Study of the Radiological Situation at the Atolls of Mururoa and Fangataufa (GC(42)/39**, reproduced. These resolutions were adopted without a vote.

f. Peaceful Nuclear Developments

- Units 1 and 2 of the Kozloduy power station in **Bulgaria** will be shut down in 2004 or 2005. Reportedly, in 1993 Sofia had undertaken that the shut-down would begin in 1997 in return for an EBRD grant for equipment to improve plant safety. This equipment has since been delivered and installed but apparently Bulgaria now claims that it needs the four units to operate at least until the end of their design lives, which for unit-1 would have been 2003. Units 3 and 4 would be shut down in the period

2008-2012. This schedule leaves a gap of two years as compared with the closure dates on which understanding was thought to have been reached in 1993 and to which the European Union still seeks to adhere. (NW, 10/9, 24/9; NN, 15/9; **direct information**)

- In the **Czech Republic**, the caretaker government that was replaced in July had called for an evaluation by an independent international commission of the wisdom of completing the Temelin VVER-1,000 nuclear power plant. Given the increase in the cost of completion to \$3 billion and the five-year delay in the work schedule, doubt had been raised about the plant's cost effectiveness. In July there were reports that the new government might not go through with the project; the person expected to become Prime Minister publicly expressed doubt at the wisdom of completion. The new coalition government includes several ministers who previously supported the project and a compromise has been worked out under which a Temelin Evaluation Team will include experts from outside the Czech Republic recommended by the European Commission. Calls for the completion of the plant, which will presumably provide more power than any of the alternative sources now considered would be able to supply, have increased recently. The Austrian press has published the news that plans now call for the completion of the facility in the year 2001. It seems to be generally expected that the Evaluation Team will conclude that the project has now cost so much that it will be more cost-effective to complete the plant than to terminate construction.

(**Austrian Press Agency**, 1/7; **DP**, 3/7; **SDZ**, 3/7; **StV**, 3/7; **NW**, 9/7, 3/9, 10/9; **E**, 11/7; **KV**, 15/7; **NZZ**, 17/8. See also **Newsbrief** no. 42, p. 7.)

- In **France** the decision to close the Superphénix reactor is now reportedly irreversible, with the majority of the members of the parliamentary inquiry commission set up last April acquiescing in a minority report by seven out of its 30 members. The closure is expected to lead to the job loss of 2,100 employees and to affect 5,000 more. (**Tribune de Genève**, 18/6; **NW**, 9/7. See also **Newsbrief** no. 42, p. 7.)
- The outcome of the recent general elections in **Germany**, where at the time this issue of the **Newsbrief** went to press a coalition was being formed between the Social Democrats (SPD) and the Green Party, is expected to lead to an early phase-out of nuclear energy. The coalition moreover, is likely to be supported by the Democratic Socialist Party, the former Communists, who are also opposed to nuclear power. Germany's nuclear industry had said it was ready to accept a deal under which a few of the smallest and oldest units would be shut down but the new coalition may well be in a position to dictate more stringent measures. (**NW**, 9/7, 6/8, 1/10; **Ux**, 28/9 in **UINB**, 98.39)
- **Japan** has announced that at the end of 1997 its domestic inventory of fissile plutonium was 5006 kg. Overseas it held 19.1 MT, 3549 kg in the UK and 15 534 kg in France, all of which is to be fabricated into mixed-oxide (MOX) fuel. (**NF**, 29/6)
- The upgraded first unit of the Mochovce VVER-440, in the **Slovak Republic**, was connected to the grid on 4 July and started operating at full capacity on 28 August. The event has provoked harsh criticism from Austria's government and press, which had long tried to persuade Bratis-

lava not to complete the reactor. Recently, the Austrian government, which currently holds the presidency of the European Union, has moved to make Slovak membership dependent on the shut-down of the station. This is not thought likely to succeed, if only because part of the upgrades have been carried out by French and German firms, whose governments are not expected to accept the Austrian contention that the plant still presents an unacceptable safety risk. It has also been revealed in Bratislava that several Austrian firms have been involved in the completion of Mochovce-1, and that some have let it be known that they would like to participate in the completion of further units. The argument used by one of the firms to justify its involvement was that if the politicians were unable to stop the project, Austrian firms could at least help ensure the safety of the reactor. In July, the Slovak authorities permitted a joint French-German safety assessment institute, Riskaudit, to review the pre-operational safety report for the facility. Further safety reviews, under IAEA auspices, were expected.

One factor that is said to have led Austria's opposition to have little success so far was the manner in which the media, assisted by national and international anti-nuclear groups, stirred up public opinion to near hysteria, without adequate technical grounds. The expert commission which in May visited Mochovce to check into its safety features and which, although members disagreed among each other, was initially said to have objected to the start-up, published its report in mid-July, according to which most of the upgrade was said to have raised the plant to a level comparable to the majority of western power reactors, with the exception that there was still question about the possible embrittlement of the reactor vessel and the fact that the facility has no containment. The company managing Mochovce has rejected the accusation that it had not given the experts all the access and information they had sought. The Slovak government has formally stressed that it will strictly follow IAEA safety standards. Under an agreement reached on 16 July between Austria and the Slovak Republic, an independent team of experts has considered the risk of pressure vessel embrittlement and reportedly has found no cause for concern. It is also reported that several scientists have raised concerns about the seismic risks of the Mochovce site, some of them claiming that this is on an active fault which is said to be "in a process of tectonic reactivation". Seismic upgrades had been planned at Mochovce and it is reported that an IAEA-sponsored review team will visit the plant to see if the original seismic measures have been upgraded sufficiently to comply with recent seismic data. Meanwhile, nuclear opponents have begun an e-mail campaign to support a civil action against Mochovce.

Mochovce-2 is expected to be completed in the autumn of 1999 and the Slovak government has announced that it intends to complete the other two units as well.

Allegedly contradicting past promises that the old power station at Jaslovske Bohunice would be shut down after Mochovce had operated for a year, Slovak Prime Minister Meciar said on 9 September that Bohunice would be shut down only once all four Mochovce units had been completed. Since then, Meciar lost a general election.

(**R**, 8/6; **DP**, 9/6, 2/7, 6/7, 29/8; **DT**, 9/6; **FAZ**, 9/6; **KV**, 9/6, 29/8; **NN**, 9/6, 6/7, 24/7, 21/9; **NZZ**, 9/6; **StV**, 9/6, 24/7; **SDZ**, 9/6, 29/8; **SN**, 9/6; **CTK News Agency** [Prague], 2/7, 14/7, and 21/7, in **BBC**, 9/7, 17/7, and 23/7,

respectively; **News** [Austria], 2/7; **KV**, 2/7, 5/7; **SN**, 6/7; **StV**, 6/7, 16/7; **NW**, 9/7, 16/7, 23/7, 30/7, 20/9; **Oesterreich-1 Radio**, 15/7, in **BBC**, 17/7; **DW**, 16/7; **Europe Energy**, 31/7; **CTK Business News**, 9/9. See also **Newsbrief** no. 42, pages 7 and 8.)

- Questions have arisen about the ownership of the Krsko power station in **Slovenia** which, before recent political upheavals in the area, had been assumed to belong jointly to Slovenia and Croatia. The operator of the plant is expected to embark with financial assistance from Germany on a modernisation programme, whether or not the dispute has been settled, claiming that the Croatian utility HEP is not a part owner of the plant. At the same time, there seems to be a question regarding the title of the Slovenian government. In early August, when Croatian members of the supervisory board of the operating company had failed to attend a meeting of that board, plant management shut off the supply of power to Croatia; the surplus was said to have been switched to Italy instead. A meeting held in late August between foreign and economics ministers of both countries may have created a better atmosphere for future discussions and there is thought to be a likelihood of a settlement in the not-too-distant future. The Croatia state electricity company, meanwhile, is reported to have paid some of its debts to the Slovenia power company, which has in turn reconnected one of the transmission lines. (**NW**, 30/7, 6/8, 3/9; **Croatian Radio**, 30/7, in **BBC**, 31/7; **DP**, 1/8; **Radio Slovenia**, 4/8, in **BBC**, 6/8; **Slovenska Tiskovna Agencija**, 4/8)
- Polls conducted in **Sweden** before the 20 September elections in that country did not reveal wide-spread support for a phase-out of nuclear energy. The ruling party, the Social Democrats, has been weakened in the election and observers consider it possible that if they form a coalition with either the Liberal or the Christian Democratic Party, decommissioning will be put off. Just before the election, Industry Minister Sundstroem said at a press conference that industry had accepted early nuclear decommissioning but the latter have since denied this. Meanwhile, the deadline of 1 July, set by the government for the shut-down of Barsebäck-1, has passed with the unit continuing to perform at full power. One of the government's negotiators in the nuclear phase-out process has predicted on television that the owner of the Barsebäck reactor, Sydkraft AB, will close the plant down voluntarily for a compensation of between 3 and 5 billion Swedish crowns and part ownership in another power station. Sydkraft has let it be known that it has not yet had a concrete offer and that it will only shut down the reactor if it receives an offer that is acceptable to its owners. The company's head has said that compensation should be in the form of power-generating capacity equal to the unit that would be shut down, rather than in the form of cash. The minister for industry and commerce has said that the country's large power excess justifies the shut-down; however, the surplus is said to be mainly on the hydro side and the question is what would happen during a very dry year when hydro cannot cover the needs. (**R**, 8/7; **E**, 11/7; **NN**, 11/7, 25/8; **NW**, 23/7, 24/9; **direct information**)
- Contrary to prior reports, the European Bank for Reconstruction and Development (EBRD) does not yet seem to have decided whether to contribute \$1.2 to 1.7 billion towards the estimated cost of completing the Khmel'nitsky-2 and Rovno-4 power reactors in **Ukraine**, al-

though it had apparently changed its earlier opinion and agreed that the reactors represent Ukraine's most economic energy investment option. The EBRD had let it be known that it supports the completion of the two plants on condition that Ukraine reform its electricity market. While the government in Kiev has formally stated that Chernobyl will not be shut down until the G-7 and the European Union provide the funds for the completion of the two reactors as well as aid to mitigate the social problems which closing Chernobyl will bring with it, Ukrainian President Kuchma said in late September that Russia would help fund the K-2/R-4 project although Kiev had not formally rejected a loan from the EBRD. Ukraine is said also to plan repairing and restarting Chernobyl-1, which was shut down after a fire in 1991.

A Danish Television documentary has raised again a theory of the 1980s, according to which the explosion of Chernobyl-4 could have been caused by an earthquake. Reportedly, 22 seconds before the disaster an earthquake was recorded that had its epicentre 12 km from the reactor, which, allegedly, was built on a tectonic fault.

(**R**, 22/6, 10/7, 23/9; **NN**, 24/6; **NW**, 1/10)

- In the **United States** the nuclear power station at Three Mile Island is for sale. In 1979, a partial core-meltdown occurred at unit-2 of the facility, which has since been permanently entombed. Cleanup of the site has been completed. Unit-1 has continued to function normally; in May 1998 it set a world record by completing 616 days and 23 hours of uninterrupted operation. (**NYT**, 7/7)

g. Nuclear Policies and Related Developments in Nuclear-Weapon States

- China is reported to have increased the number of its inter-continental ballistic missiles from 18 to 24. Two more are expected to be added in December. (**DT**, 22/7)
- Discussions in the **United States** are continuing about the option to be taken for the production of tritium for the US nuclear weapon programme. The House of Representatives is said to be opposed to the use of commercial nuclear reactors for this purpose but the Senate wishes to preserve the option of having tritium produced in the unfinished Bellefonte-1 reactor of the Tennessee Valley Authority (TVA), which would be completed for this purpose but would not be used for the commercial production of electricity. The new compromise authorisation bill prohibits DoE from taking a final decision for a year, giving Congress time to consider proliferation, cost and security aspects of the issue. Meanwhile, DoE is still considering the possibility of producing tritium in an accelerator; this option is strongly supported by the Republican Chairman of the Senate Armed Services Committee. It is also said to be supported by medical specialists who believe the accelerator could also be used to make radio isotopes for diagnostic and treatment purposes. DoE says that the revenues from this activity would be relatively small, while the operating costs of the accelerator, which consumes large amounts of electricity, would be much higher. (**NW**, 2/7; **NF**, 13/7, 21/9; **R**, 22/9)
- In the **United States** a study published under the auspices of the Brookings Institution claims that since 1940 the country has spent "at least" \$5.48 trillion on nuclear weapons. According to the study, 'Atomic Audit: The Costs and Consequences of US Nuclear Weapons Since

1940', about one-third of American military spending went towards nuclear weapons. Adding cleaning up the environment, the total comes to \$5.82 trillion. Of this sum nuclear weapons accounted for seven per cent; deploying the weapons, including the costs of missiles and bombers, accounted for 55.7 per cent; defence against nuclear attack took up 16.1 per cent; targeting and controlling the weapons took 14.3 per cent; and nuclear waste management and clean-up about 6.3 per cent. The study asserts that the current annual budget of \$4.5 billion for the Stockpile Stewardship Program exceeds "the historical average for research, development, and testing" by \$900 million a year. (NYT, 1/7; USIA, 1/7; WP, 1/7; IHT, 2/7)

- The **United States** Department of Defense may look for a firm that could compete with the Lockheed Martin corporation for the contract to build an anti-missile defence system. Five consecutive tests of the system as developed by Lockheed — known as Theater High-Altitude Area Defense (THAAD) — have failed and the Department is now said to be thinking of going for an entirely new design. So far, THAAD is said to have cost \$3.2 billion — according to the Defense Department's spokesman it is \$732 million over budget while altered requirements have led to a further cost increase of \$265 million — and to be four years behind schedule. Lt. Gen. Lyles, the head of the Ballistic Missile Defense Organization, has stated he is confident THAAD will overcome its problems and that a working system can be deployed by 2006. As reported, Lockheed Martin has now made a deal with the US army under which it must achieve three direct hits in the next five tests of THAAD or pay \$75 million. The next test has been postponed from August to the end of the current year. The US Defense Department speaks of a "three plus three" programme: three years of development and, from 2000, three years from decision to deploy to actual deployment. So far, US attempts to develop a national missile defence system are said to have cost \$45 billion.

In a report dated July 15 1998, the Commission to Assess the Ballistic Threat to the United States, a bipartisan expert body set up at the behest of the US Congress and headed by Donald H. Rumsfeld, a Republican former Secretary of Defense, has concluded that there are several states, including the DPRK, Iran and Iraq, that would be in a position to develop and deploy ballistic missiles to attack the US 'with little or no warning' causing 'major destruction to US cities', within about five years (ten for Iraq) after a decision is taken to do so. This assessment of the time needed is shorter than estimated by US intelligence agencies and has received much attention in the American press. Republican politicians insist that the Commission's conclusions must lead to a thorough review of US intelligence and defence capabilities. The White House press secretary has said that the US intelligence community stands by the accuracy of the conclusions reached by the Gates (intelligence) Commission in 1996 that, 'there was no proximate threat of ICBM's that could be delivered on the US with the exception of China, Russia, and perhaps North Korea by the year 2010'. The director of the Central Intelligence Agency has written to the Congress confirming the CIA's earlier threat assessments. Intelligence officials are quoted as saying that the Commission had examined the same information as had government analysts but its conclusions differed because, where the government assigned various degrees of certainty to each possible assessment, the Commission everywhere assumed the worst about unknown factors.

The Commission's report [issued before the DPRK tested its long-range missile — Ed.] is adding fresh fuel for the call by Congress for the early development of a strong anti-missile defence. Arms control experts in the US are concerned that this trend might put the ABM Treaty at risk, which in turn would seriously jeopardise further disarmament negotiations with Russia. Dr. Richard L. Garwin, one of the members of the Commission, has gone to press with his concern that the Commission's findings are interpreted by some as providing support for a new national missile defence system. According to Garwin, no defensive system under consideration can neutralise the threats but the defence now being developed "would not even detect, let alone counter, ship-launched short-range missiles, nor could the proposed defense work against ICBMs that employ simple countermeasures". The general heading the North American Aerospace Defense Command has also expressed the view that the US will be vulnerable to an intercontinental missile attack "sooner rather than later", but has likewise indicated that he would not "go to space with weapons".

On 5 August, a bipartisan group of members of the House of Representatives introduced a bill with the sole content that: "It is the policy of the United States to deploy a national missile defense system". The same day the House of Representatives, by a vote of 240 to 188, decided that the US must not participate in the consulting body of Belarus, Kazakstan, Russia and Ukraine on the ABM Treaty. Republican politicians say the measure was intended to prevent the Administration from changing the ABM without Senate ratification, but Democrats are quoted as saying that it is intended to force the US to break the ABM Treaty. In early September, Democrats in the Senate blocked debate on a Republican-sponsored bill that would speed deployment of a national defence system against long-range missiles. They argue that the system supported by the majority is already antiquated, that it will weaken US security, and that deploying it will undermine the ABM.

A US 'Titan' rocket that was to put a 'top-secret' observation satellite in orbit has exploded on launch. The satellite is said to have cost \$1 billion; the missile is estimated to have been worth about \$300 million.

(UPI, 9/7, 15/7, 27/7; NYT, 10/7, 16/7, 28/7, 13/8, 10/9; **Report of the Commission to Assess the Ballistic Threat to the United States**, 15/7; R, 15/7, 5/8, 6/8, 8/12; AP, 16/7, 28/7, 29/7, 5/8, 9/9; WP, 16/7; USIA, 16/7, 8/9. See also **Newsbrief** no. 42, page 9.)

h. Proliferation-Related Developments

- **Algeria** has denied as 'completely false and a mere fantasy' a report in the Spanish daily newspaper *El Pais*, according to which the Spanish secret service (CESID) has informed the government in Madrid of its conclusion that Algeria is conducting a nuclear project that far exceeds its civilian needs. Allegedly, CESID has said that, with help from Argentina and China, Algeria (which is a party to the NPT) has acquired the technological means with which in two years it could produce weapons-grade plutonium. Algeria has said that its nuclear programme is conducted exclusively for peaceful purposes; Argentina has pointed out that the 1.5 MW research reactor it has provided to Algeria is under IAEA safeguards. (EP, 23/8, 25/8; DW, 24/8; IHT, 24/8; StV, 24/8; **Algerian Radio**, 24/8, in **BBC**, 26/8; **Clarín** [Buenos Aires], 27/8)

- Allegations about clandestine efforts by the **Democratic People's Republic of Korea (DPRK)** to produce nuclear weapons continue to surface in international media. In early August US intelligence sources claimed that they had photographic evidence of a site 25 miles north of the nuclear centre at Yongbyon, where, they suspected, 15,000 workers were laying the foundations for a reactor or a reprocessing plant. Reportedly, these facilities were being built into a mountain side. There did not seem to be evidence that the cement-pouring process had been started.

The report prompted questions among observers as to the grounds for the conclusion that the work was connected with a nuclear plant rather than a facility of another kind, and why the DPRK would wish to build a new reactor and a reprocessing plant when it already has both. South Korean experts said they doubted Pyongyang was capable of building an underground nuclear facility. Some US security officials said they had not reached conclusions about the project and were closely following events at the site to confirm their true nature. During high-level bilateral talks in New York in late August, the US reportedly warned the DPRK against that constructing a new nuclear facility would run counter to the Agreed Framework, but at the same time spokesmen for several branches of the US government said they had no evidence that the DPRK was not in compliance with the Agreed Framework, and they reconfirmed the US' intention to adhere to that instrument.

The publication of the report — which is understood to have been leaked to *The New York Times* after the Washington intelligence community had considered it for several weeks — has given rise to much speculation and skepticism. Because no attempt seems to have been made to hide the activity from satellite observation, it has been suggested that it may be a ploy to prevail on the US to soften economic sanctions. Another possibility raised is that, although the activities are not necessarily connected with nuclear purposes — experts say the site may just as well be prepared for a ballistic-missile launching station or a chemical weapons plant — there are sources in Washington that suggest they are presented as such for domestic US purposes, viz, to demonstrate that the Agreed Framework is ineffective, and to help persuade Congress not to support the activities of the Korean Peninsula Energy Development Organization (KEDO).

Russian officials have reacted to the news by noting that the evidence presented by Washington is not sufficient to conclude that the DPRK is constructing new nuclear facilities. The South Korean Ministry of Foreign Affairs and Trade has been quick to support US contentions that the activities observed at the site may be nuclear-related but a presidential spokesman in Seoul said that construction was at a stage where it was difficult to judge whether or not there was ground for concern. One high-ranking ROK official called the report "pure fiction". The South Korean press by and large seemed to hold to the line that there was no concrete evidence of clandestine nuclear activities in the North, and reflected the impression that the government had evidence that the activities in the DPRK did not point to the construction of a nuclear facility. At its recent high-level talks with the US, the DPRK is understood to have denied that the underground facility being built near Yongbyon is nuclear-related and to have expressed willingness to allow the US to inspect the site. The DPRK's UN Mission in New York has said that "if [*sic*]

the American allegations are proven groundless through a visit to the site", the US is obliged to make appropriate compensation "for slandering and disgracing the DPRK".

On 31 August it was reported that the DPRK had launched a long-range ballistic missile, of which the first stage fell into the Sea of Japan, possibly in Russian territorial waters, and the second crashed in the Pacific Ocean 360 miles to the north-east of the American military base at Misawa, Japan, after apparently travelling 780 miles (1,300 km) and crossing Japanese territory. US sources identified the missile as the 'Taepodong-1', an upgraded version of the DPRK's earlier 'Nodong-1' missile which, in turn, was based on Russian 'Scud' missile technology. There were varying estimates of the range of the nuclear-capable 'Taepodong-1': the US Defense Department spoke of 900 miles, while the Central Intelligence Agency (CIA) claimed it was 1,200 miles. Reportedly, a successor, Taepodong-2, is under development. This is expected to have a range between 2,400 and 3,600 miles.

US authorities expressed "deep concern" at the potentially destabilising effect of Pyongyang's possessing a missile of such range and its capability of extending the range further. In Washington, where the launch had been expected for some time, there was speculation about the motives for the timing of the event. Some saw it in the context of the impending fiftieth anniversary of the DPRK and the imminent inauguration of Kim Jong Il as Great Leader of the country. There were also suggestions that it might have been a signal (some spoke of 'an advertisement') by the DPRK — which according to the CIA is already the world's biggest missile exporter — that it had long-range missiles available for sale abroad. In the US, Congressional critics of the Administration promptly took the event, together with the unproven allegation that the DPRK was constructing another nuclear facility, as proof that Pyongyang was bound on a new course of aggression and had no intention of complying with the Agreed Framework; there were suggestions that Pyongyang had never met its obligations in that context and members of both houses of the US Congress asserted that the missile launch had doomed the light-reactor deal and ended the credibility of KEDO. Representative Gilman, Chairman of the House International Relations Committee, who had twice vainly tried to meet with a senior DPRK official in the framework of the high-level talks in New York, announced that Congress would reassess all further aid to the DPRK. He called for urgent talks with Japan and the ROK on theater missile defence in East Asia. Another influential representative stated that the missile launch had effectively ended the Administration's hopes for further Congressional funding for KEDO. On 2 September the US Senate decided by 80 votes in favour and 11 against to prevent the further implementation of the Agreed Framework unless the President can certify that the DPRK is not pursuing a nuclear-weapons capability and is not providing ballistic missiles to countries mentioned in the State Department's terrorist list [*sic*].

In Japan, whose government had earlier urged the DPRK not to carry out the expected test flight, the missile launch caused strong reactions among officials, public and press. The government announced a ban on all air traffic with the DPRK until the end of the current year; the suspension of food aid to that country; and the postponement of further talks on the normalisation of relations between the two countries. Ways to stop the remission of funds to Pyongyang from ethnic Koreans living in Japan — which make

up a substantial part of the country's revenues — were considered but this measure was found to be impracticable. According to press reports at the time, Japan retracted its endorsement of the resolution it had previously agreed to on cost sharing for the light-water reactor agreement, but it has since been reported from Tokyo that if there is progress in missile talks between the DPRK and the US, which have been set to resume on 1 October, it may lift the suspension of its contribution to the project. Reportedly, this is a condition for the Diet to approve the contribution. The several partners were to have signed the resolution formally on 31 August when Japan decided to suspend its agreement; this caused KEDO to withdraw an earlier news release on the adoption of the resolution. The ROK, which had already confirmed that it would contribute \$3.22 billion to the project, is also reported to have said that it might reconsider its role under the Agreed Framework; at the same time, however, Seoul urged Japan not to withdraw from the project, without which, as South Korea's Unification Minister said, it would be difficult to solve "the North Korean nuclear problem". The DPRK denounced Japan's "fuss" over the missile flight, calling its behaviour "ridiculous", given Japan's ignorance of the purpose of the launch. Japanese sources have since claimed to have evidence of preparations in the DPRK for a second missile launch; a report from Russia in early September said that another launch looked imminent. It has now been disclosed that, indeed, the DPRK had planned further launches in case the first one failed.

Initially, the flight of the missile was seen by Japanese, ROK and US sources as the test-launch of a strategic ballistic missile. On 4 September, however, Pyongyang claimed that the launch had served to put a satellite in orbit; it indicated the radio frequency on which "immortal revolutionary hymns" were supposedly broadcast from the satellite. While not immediately ruling out the possibility that the launch had been undertaken both to test a new missile and to put a small satellite in orbit, experts in Japan, the ROK and the US at first reacted skeptically to this contention. Soon after, however, American experts confirmed that the trajectory of the rocket and other characteristics of the flight lent credibility to the North's claim; also, the fact that the third stage of the missile, containing the nose cone, was fired off, would apparently have been consistent with the attempt to put a satellite in orbit. Reportedly, however, searches did not confirm the presence of the satellite, which Pyongyang claimed circled the earth every two hours and 45 minutes and would stay in orbit for two years. At first, US defence officials expressed doubt that the launch involved a satellite; its Space Command said it had not identified any object orbiting the earth "that correlates to the orbital data the North Koreans have provided in their public statement". Observers were unable to hear anything in the frequency bands identified by Pyongyang for the broadcasts. After several days US authorities came to the conclusion that the event had most probably been an attempt to launch a very small satellite, which had malfunctioned and failed to achieve orbit. The DPRK, meanwhile, denied that the launch had failed and claimed the satellite was still in orbit. The US Defense Department said that while the launch may have failed, it did give a "distressing" signal that the DPRK was attempting to develop a missile of intercontinental range and that it was well on the way to achieving an advanced technology in that field. As some analysts suggested, the missile programme was evidently still plagued by technical problems and any payload the DPRK could send over the

medium-to-far distance would still be too small to pose a military threat to the American mainland. Rather than, as initially believed in Washington, being a test of the two-stage Taepodong-1, it is now thought in the US, as well as in South Korea and in Russia, to have been a multi-stage extended version, of which at least the third stage used solid fuel. US defense officials have noted the ability of DPRK technicians to get the rocket stages to separate, but they have also pointed to the failure to orbit the satellite as an indication that the DPRK has not yet fully mastered solid-fuel technology. A senior defence official was quoted as saying that if the DPRK perfected a third stage in future tests, its missiles would have a range of some 3,500 miles (5,600 kms). Both Japan and the US have warned the North against further launching attempts. Japan has pointed out that its attitude to the event was the same whether the launch had the purpose of putting a satellite in orbit or was merely a missile test; either indicated that the DPRK was capable of hitting the Japanese mainland. Japan's Prime Minister has said that his country might launch its own reconnaissance satellite.

In a statement from its President, the UN Security Council has expressed regret that the DPRK had not given advance notification of the launch. The statement said *inter alia* that such activity poses harm to fishing and shipping; it appealed to the DPRK to refrain from such activities but recognised the right of states to develop space programmes for peaceful purposes if they are transparent and compatible with international safety norms. The DPRK UN mission has filed a formal protest against the Council's consideration of the issue.

On 5 September, Marshal Kim Jong Il, eldest son of the previous head of state, Kim Il Sung, was inaugurated as the DPRK's 'Great Leader' and as chairman of its National Defence Commission. Although in fact head of state, Kim Jong Il did not receive the formal title of President; by constitutional amendment this was reserved for his late father, who was named "eternal President".

Prior to these developments, a report of the US General Accounting Office (GAO), issued on 7 July, had spoken of Pyongyang's unwillingness to grant full inspection access to its nuclear activities which, according to the GAO report, was possibly provoked by fear that evidence might be found of a continuing nuclear-weapons programme. The GAO report alleged that before the conclusion of the Agreed Framework, in 1994, the DPRK could have stockpiled more plutonium than it has acknowledged. The report also revealed that Pyongyang had not responded to requests for information about the whereabouts of nuclear components that were to have been installed in two reactors scrapped under the agreement. Further, the report maintained that the IAEA had been prevented from installing monitoring devices on nuclear waste tanks and that some of the waste in those tanks might have been removed to hide evidence of earlier plutonium production. Frank Murkowski, the chairman of the Senate Committee on Energy and Natural Resources, which asked for the GAO report, claimed that it showed the Agreed Framework to be a "folly". The US Administration has said that it agrees with the statement in the report that the DPRK has not yet clarified the discrepancy about the amount of weapons-grade plutonium it had produced, and that it had not given the IAEA the access it needs to do so. To critics of the Agreed Framework the Administration has pointed out that according to that document, until Pyongyang provides the IAEA all the access it needs it will not receive the key

components that would permit the reactors to operate. In the meantime the IAEA does have the access to monitor the freeze of the DPRK's nuclear facilities, which is still in effect. As to suggestions that the North might have a secret nuclear-weapons programme, the US State Department spokesman — also speaking before indications of new nuclear activities had been disclosed — stated literally: "We do not have evidence of a secret program above and beyond the program we are now monitoring ... the suggestion that they are secretly building another nuclear programme is something that we don't believe is true".

In his statement to the June session of the IAEA's Board of Governors, the IAEA's Director General pointed to the continuing inability of the Agency to verify the completeness and the correctness of the initial declaration of nuclear material made by the DPRK, and accordingly the Agency's inability to conclude that there had been no diversion of nuclear material. He said that there had been no positive progress in the nine rounds of technical discussions with the DPRK. In the latest round, the DPRK had informed the Agency that it planned to construct and operate a heavy oil-fuelled boiler at the site of the 5-MW reactor to produce electricity and steam for district heating, using equipment at the site such as turbines and steam generators. The Agency had expressed no objection, on the understanding that inspectors would be able to visit the plant on an average twice a year "to confirm that the new scope of operations of these buildings was not relevant to the purpose of the freeze". The DPRK had confirmed this understanding. The DPRK had also requested the Agency to make arrangements, including the detachment of seals, for maintenance and inspection activities at the 'Radiochemical Laboratory'. In response, the Agency had noted that this work should be so done as to avoid altering information available about the DPRK's past activities. Agency inspectors would observe the maintenance activities.

In the past few months, the US Administration had been stepping up its efforts to find the funds needed to supply the DPRK with the 550,000 tons of heavy fuel oil due to it this year under the 1994 Agreed Framework. Up to July the US was said to have supplied approximately 220,000 tons. At that time, Congress appropriated \$5 million to pay for the July delivery and the Administration was seeking an additional \$10 million. There was no certainty, however, that Congress would provide funds for the remainder, as it felt that it was incumbent on KEDO to do so. Total cost to the US of current oil deliveries was assessed at \$50 million (KEDO's Executive Director spoke of \$60–65 million): twice the amount expected. The discrepancy appears to be due to lower than expected contributions from other countries. In their appeals to Congress for additional funds, Administration officials pointed out that it would be irresponsible to give the DPRK a pretext to back out of its agreement just because there is not enough money to buy the approximately 300,000 metric tons of heavy fuel oil due to be delivered by mid-October. By early August KEDO was said to be in debt for \$47 million. The European Union denied press reports that it would contribute \$16 million to help cover that debt. Australia said it would contribute \$1.2 million; up to that point it was understood to have provided \$6.6 million to the heavy fuel oil programme. Nevertheless, with about half the shipments promised for 1998 still to be made, it appeared possible that the US would be unable to live up to its obligations under the Agreed Framework. On 19 June, a letter from the DPRK's vice foreign minister had warned that if by mid-July the US did not deliver the

oil it had promised, Pyongyang might have to review the terms of the Agreed Framework under which it undertook to freeze its nuclear programme; it was noted in Washington that this was the first time that a threat of this kind included a time limit. In mid-August, a foreign ministry spokesman in Pyongyang said that his country might be forced to unfreeze [*sic*] its nuclear programme unless the US lifted its economic sanctions. Washington replied that the Agreed Framework was not contingent on "extraneous issues" but it also said that everything would be done to obtain the funds. Again in September a DPRK spokesman expressed the hope that the US would resume its oil supplies because if not "irrevocable consequences may arise".

On 10 September, however, the Appropriations Committee of the US House of Representatives voted to delete all funding for DPRK oil deliveries with the argument that it would not be right "to give US taxpayer money ... to subsidize the war machine of North Korea". This measure could be undone through a House-Senate conference decision which would presumably be contingent on a presidential assurance that the DPRK has suspended all nuclear weapons activities. On 17 September news came that the US House of Representatives, in a vote of 255 to 161, had decided to drop funding for KEDO from the budget allocation for foreign aid. The State Department expressed serious concern about the move, stressing that the Agreed Framework was in the US interest and that without funds it would be harder to convince the DPRK to fulfil its part of the Agreement. KEDO's Executive Director had already said publicly that the organisation was critically short of money to supply the DPRK with heavy fuel oil. The RoK government and parliament are said to have made urgent appeals to the US Congress to continue funding the oil shipments.

On 30 September, with missile talks between the US and the DPRK about to resume, the US Administration announced that the President had used his authority to shift \$15 million from other programmes to buy 150,000 metric tons of heavy fuel oil for the DPRK. The next day the State Department said that Congress had agreed to the Administration's request for \$30 million to fund KEDO. The spokesman also announced that contributions had been received from Australia, the Czech Republic, Finland, Indonesia, New Zealand and Singapore.

Reportedly, questions about the availability of funds have raised disquiet among South Korean firms involved in the reactor project. Ground-levelling at the building site at Kumho was to be completed in August, but, pending agreement on cost-sharing, work has slowed down. On 28 July, KEDO's Executive Board adopted a new budget for the construction costs of the light water reactors, revised to account for the new exchange rate between the South Korean won and the dollar and totals \$4.6 billion, as against \$5.18 billion agreed upon in December 1997. The Board was understood to have reached a basic agreement on cost-sharing, under which the RoK would pay \$3.22 billion, or 70 per cent of the total; Japan would make a fixed contribution of \$1 billion; and the remainder would be shared by the US and the European Union (EU). While KEDO did not disclose the cost-sharing ratio between the US and the EU — and the latter has since denied reports of a deal under which it would cover the unmet costs of the reactor project — US media speak of a contribution by the latter of about \$85 million, of which a portion would go towards the purchase of heavy fuel oil. This would still leave a gap of well over \$300 million. Reportedly, the US

would be expected to give an overall guarantee that all outstanding costs will be met, which means that it could theoretically be responsible for the entire outstanding sum. The agreement still needs the approval of the governments of Japan, the RoK, the US and the EU, and as reported above, recent events have caused a suspension of proceedings in this regard. The EU in particular is seen as having some last-minute doubts. It had been reported earlier that Brussels was skeptical of the efficacy of the Agreed Framework, in part because it provides for the suspension of IAEA safeguards, but that it might be prevailed upon to contribute as long as European firms are in a position to vie for contracts. In early September European officials said that while the European Council of Ministers had originally been expected to act positively on plans to increase KEDO funding, the DPRK's missile test would not make this any easier. It had also been noted that Iranian experts were present at the launch of the DPRK missile; this was seen as a possible warning from Pyongyang that unless the US agreed to a \$500 million annual payment, Pyongyang would not give up its missile development programme and would go on selling missiles to Iran. At the DPRK/US meeting in September the two sides were reported to have agreed that reactor construction should start in November. It should be noted that the figures for the total cost of the project do not include outlays for a basic power grid infrastructure.

Meanwhile, the question has arisen when the project could be completed. It is thought unlikely that the original deadline of 2003 can be met; the present assessment is that the completion date will not be before 2005 and may well be much later, particularly if the implementation of the project construction continues to be interrupted by political incidents.

KEDO's executive director has said that the preliminary work for reactor construction was almost completed and that reactor construction could go forward once the "turnkey" contract had been negotiated with the Korea Electric Power Company (KEPCO) of South Korea.

In early July, the South Korean government returned to the North the bodies of nine men found on board a DPRK submarine seized in South Korean waters. Seoul reportedly presented to the North evidence that the boat had been on an intelligence mission; Northern officials were said at the time not to have offered objections to this evidence. A week later, shortly after RoK intelligence officials had warned that the DPRK might intensify its incursions, the South Korean military reported finding the body of a fully armed diver whose extensive underwater gear led them to suspect that he was an intelligence agent; apparently he had suffered a heart attack. They also found an underwater propulsion unit that could have towed three or more persons. There was suspicion that at least two more agents might have infiltrated. The DPRK denied any connection with the dead diver and accused the South not only of having staged that affair, but also of having deliberately sunk the submarine that was seized earlier, while it was adrift in international waters with engine trouble, and instead of rescuing the crew forcing them to commit suicide. In a letter to the UN Security Council, the DPRK called for an apology from Seoul. The find of the frogman and of the underwater equipment triggered strong reactions in Seoul, where the new government was widely criticised for its "sunshine policy" towards the North, which, it was alleged, had made it drop its guard. The South Korean government for its part demanded an apology from the

DPRK and an immediate stop to activities of this kind. Washington also took a serious view of the matter and called on the DPRK to cease its "provocative acts"; in late July it was announced that US naval forces would be detailed for anti-submarine surveillance off the Korean coast. Pyongyang has denounced this move as "an undisguised military provocation ... tantamount to a declaration of war"; the US has responded that the situation was due to the North's violation of the armistice. The DPRK has also reacted sharply to the announcement that Russian and American naval forces would hold joint maneuvers in the northern Pacific as they have done for the last four years.

According to many South Korean observers, incidents such as the recent border intrusions by the DPRK are promoted by hard-line military officers to raise tension in the Peninsula and counter Seoul's efforts to improve relations, which they see as potentially destabilising. Others have pointed out that intrusions of this kind occur regularly as part of the DPRK's long-term intelligence-policy. There have also been suggestions that these actions and an over-all hard-line attitude of DPRK officials had to be seen in light of the (then) impending inauguration of DPRK leader Kim Jong Il as President: an RoK official was quoted as saying that various Northern intelligence organisations could be vying with each other to show off their bravery. A high military official in Seoul warned that further infiltration attempts should be expected, for the same reasons. Yet another suggestion was that the latest submarine incident involved a team of DPRK commandos sent to kill or abduct before the inauguration former high-level DPRK official, Hwang Jang-Yop, who defected in February 1997.

The DPRK has reported that food stocks have run out; a few days after the news that it had launched a ballistic missile, Pyongyang once again called for food assistance from abroad. Reportedly this year again farm crops were damaged by bad weather, and almost 210,000 hectares (well over 500,000 acres) of arable land have been damaged. According to information collected by a group of US congressional staff members, three years of famine in the North may have brought the deaths from famine-related illness as well as starvation of between 300,000 and 800,000 people; some estimates speak of 2 million. The RoK has announced that it is sending \$3 million worth of food aid to the North, under the auspices of UNICEF; the shipment was said to have been delayed because of the RoK economic crisis and the recent submarine excursions. Pyongyang has called upon the US to lift all sanctions. Earlier this year there was a possibility that this might occur soon, but the latest infiltration of armed DPRK agents, the reports about possible clandestine nuclear activities and the test-firing of a ballistic missile were seen as an impediment to an early easing of the US embargo. Prior to the latest events in the DPRK, there had been suggestions in Washington that, after the launch in Iran of a missile supposedly supplied by Pyongyang, the US had contemplated offering the DPRK a deal under which sanctions would be lifted in return for a halt in its missile exports. There has been no further news on this issue, but meanwhile the US has said it will send the North 300,000 tons of wheat and other cereals. In late September, the US Congress was said to consider cutting off all humanitarian aid to the DPRK, a move expected not only to add to the food shortage in that country, but also to have a negative affect on its relations with the US.

(LT, 4/6; Jiji Press [Tokyo], 4/6; NYT, 1/7, 7/7, 15/7, 24/7, 17/8, 1-6/9, 10/9, 11/9, 15/9; IHT, 3/7, 28/8, 1-3/9, 7/9, 11/9; WP, 6/7, 18/8, 22/8, 26/8, 31/8, 2/9, 3/9, 6/9, 11/9; R, 6/7, 13-15/7, 27/7, 28/7, 31/8, 1/9, 2/9, 4/9, 8/9, 10/9, 13-17/9, 29/9; AP, 6/7, 13/7, 15/7, 21/7, 26/7, 13/8, 18/8, 19/8, 24/8, 30/8, 31/8, 1-12/9, 14-16/9, 21/9; GAO/RCED-98-210, 7/7; USIA, 7/7, 15/7, 27/7, 30/7, 14/8, 17/8, 27/8, 31/8, 2/9, 8-11/9, 14/9, 15/9, 17/9, 1/10; KT, 8/7, 13-15/7, 28/7, 29/7, 27/8, 28/8, 17/9, 22/9; YOS, 11/7, in BBC, 13/7; CHI, 13-15/7, 18/7, 20/7, 30/7, 17/8, 26/8, 1/9, 8/9, 15/9; KH, 14/7, 15/7, 31/7; UPI, 14/7, 24/7; ASS, 16/7, 30/7; NW, 23/7, 30/7, 6/8, 13/8, 20/8, 27/8, 10/9; KEDO Press Release, 28/7; WSJ, 18/8, 15/9; NF, 24/8; FT, 26/8, 5-6/9; LAT, 1/9; DJ, 1/9, 5/9, 9/9, 10/9; NG, 2/9, 5/9; Izv, 4/9; AFP, 7/9; US Space Command News Release, 8/9; KCNA, 10/9; Joongang Ilbo [Seoul], 24/9. See also Newsbrief nos. 37, pages 8-10; 39, page 18; and 42, pages 9 and 10.)

- **South Asia:** since mid-June, India and the United States have been engaged in high-level talks about nuclear disarmament, and in particular the possibility of India becoming a party to the CTBT. The first three meetings were reported to have achieved "steady movement" and to have yielded greater understanding on both sides, but no breakthrough that could bring an early end of sanctions; at the third session, the American demand that India should not deploy nuclear weapons is said to have been "bluntly rejected". After the most recent meetings, differences were said to have "narrowed" and there were suggestions in the American press that India might undertake to sign the CTBT as a condition for a visit by US President Clinton. As reported in New Delhi, the main reason why India cannot sign the CTBT soon is domestic opinion; the fact that the US Congress has not ratified seems to be another obstacle. The Prime Minister's principal secretary has been quoted as saying that Mr. Clinton would not be able to come anyway while sanctions are in place and reports from Washington also reflect the expectation that the trip would be postponed indefinitely.

Already after the first round of US-Indian talks, an Indian official briefing western journalists stated that India would develop a nuclear arsenal that should give it a "minimum deterrent" against China. He was quoted as saying further that his country possessed deliverable nuclear weapons, and stressing that India was not willing to cease developing its nuclear arsenal, as it had been urged to do by the five permanent members of the UN Security Council (P-5), nor to halt its missile tests. He indicated, however, that New Delhi might be willing to accept the CTBT "in its present form" once it knew whether and to what extent this would lead to the lifting of economic sanctions. The spokesman further stated that even before "possibly" signing the CTBT, India would be ready to formally commit itself not to conduct further tests and not to transfer nuclear technology to other states, and to promise that it would join negotiations in the Conference on Disarmament on a fissile material cut-off treaty. According to a subsequent report from New Delhi, Prime Minister Vajpayee has said that India would not sign the CTBT unconditionally but was prepared to "discuss" it. He has since clarified that while he knows the Treaty cannot be changed, he would seek nuclear technology in return for India's accession. He also said that one of the reasons why India's attitude to the Treaty has changed is that it needs no further tests.

Jaswant Singh, India's senior advisor on foreign policy, has said that India was already adhering to the substance

of the CTBT and was willing to accept a *de jure* formalisation of its nuclear test moratorium. He, too, stated that neither India's strategic deterrence nor its missile development programme was on the negotiating table and added that India now had sufficient data to continue with computer simulation and therefore with its "scientific development" [*sic*] programme.

In New Delhi, India's Defence Minister was quoted as saying that the presence of three nuclear powers in India's neighbourhood had justified the decision to stage the tests, viz, "Pakistan in the west, China in the north and the United States in the south in Diego Garcia". Reportedly, India is preparing for the development of a nuclear triad, of air-, ground- and submarine-launched nuclear weapons and is developing a submarine-launched missile named 'Sagarika'; reports vary as to whether this is a ballistic or a cruise missile. Indian sources claim that work on the hull and the reactor of the first nuclear submarine is well-advanced and assembly might be complete by 2004. The propulsion unit would be a pressurised-water reactor, of which a land-based prototype is supposed to have been tested. *Jane's Defence Weekly*, however, quoting official sources, has said that India plans to lay the keel of its first nuclear-powered submarine in 2001/2; that the vessel should be completed around 2006 or 2007; and that it will be equipped to launch nuclear-armed cruise missiles. New Delhi is said to be planning to build a fleet of altogether five nuclear submarines. With regard to land-based missiles, defence minister Fernandez has announced that development has begun on a more powerful version of the medium-range 'Agni' missile. This would have a range of about 1,200 miles (2,000 km) and have the same payload as the earlier model (1,000 kg).

Indian officials and persons described as "senior defense analysts" have said that India is planning to develop a nuclear strike force of from 30 to 100 weapons, and delivery systems that can reach Beijing. K. Subrahmanyam, a senior Indian strategist, has come out against the deployment of nuclear weapons in order to reduce the risk of accident. His successor as director of the Institute for Defence Studies and Analyses in New Delhi, Air Commodore Jasjit Singh, was quoted in the *New York Times* as saying that India has enough plutonium for more than 100 bombs, that it would build 30 bombs, and that it would deploy nuclear weapons. He also said, however, that the emerging Indian strategy invokes [*sic*] a doctrine of "recessed deterrent" by which India remains one step short of assembling nuclear weapons. The *New York Times* has also reported that Indian estimates of the available store of warheads ranged from 25 to 75, but that the logistics needed to make them into a 'minimum deterrent' were as yet incomplete, partly, it seems, because the nuclear developments came as a surprise to most of India's military authorities, who were thus unable to take account of the new development in their strategic planning; India is also believed to lack a unified, formal nuclear command. Military leaders have since proposed the creation of a panel of top cabinet members and defence officials to control the country's nuclear arsenal. There are reported to be scant funds for the maintenance of a nuclear deterrent, and plans for the development of a nuclear 'triad' are seen as far from realisation.

Press reports have spoken of widespread anti-nuclear protests in Indian cities on 6 August, the anniversary of the atomic bombing of Hiroshima.

US Deputy Secretary of State Strobe Talbott, who conducted the talks in New Delhi, also had several rounds of talks with **Pakistani** authorities during which, *inter alia*, the question of Pakistan's adherence to the CTBT was said to have been discussed. A meeting held in late August was called "serious, substantive and constructive". Already before this meeting there had been indications that Islamabad was considering signing the CTBT no matter what India decided to do in this respect. In early September, Pakistan's Parliament planned to debate the issue but the opposition parties announced they would refuse to take part in the debate because, as they said, the government had already decided to join anyway but had not made clear what deal it had been offered in return. There was also the feeling that Pakistan's accession to the CTBT would put it at a disadvantage towards India. The minister of state for foreign affairs denied on 15 September that there was a decision to sign.

During a visit to New York in early July, **Pakistan's** Foreign Secretary said that India was using a fictional threat from China and unverified charges that Pakistani terrorists were infiltrating Kashmir to justify its nuclear-weapons programme and threaten Pakistan. In late July, Prime Minister Vajpayee met his Pakistani counterpart Sharif in Colombo, at the biennial summit of Heads of Government of the South Asian Association of Regional Cooperation (SAARC). On that occasion, India had been expected to propose to Pakistan a nuclear no-first-use agreement. A senior official from India's foreign ministry had earlier said that discussions on such an agreement could later be broadened to a regional level. Before the summit meeting, Prime Minister Vajpayee had also said he was ready to have talks on Kashmir and repeated his call for a no-first-use agreement between India and Pakistan.

The initial meeting between the two prime ministers at the SAARC summit was reported to have covered "every issue of mutual interest" but not to have been cordial. A second meeting was said not to have brought agreement on the resumption of the stalled peace talks; shortly after, there were reports that the talks "had collapsed in acrimony". Meanwhile, tension escalated and small-scale exchanges of fire between the two sides in Kashmir intensified.

On 23 September, the two Prime Ministers met in New York on the occasion of the regular session of the UN General Assembly. In a joint statement after the meeting, the two prime ministers said they had carried out "a detailed review of new developments in the region during the past few months". They stated as their common belief that an environment of durable peace and security was in the supreme interest of both India and Pakistan, and of the region as a whole. They expressed their determination to renew and reinvigorate efforts to secure such an environment. They agreed that the peaceful settlement of all outstanding issues, including Jammu and Kashmir, was essential for this purpose.

On the same day, Prime Minister Nawaz Sharif of Pakistan, in his address to the General Assembly referred to the issue of the CTBT as follows:

Pakistan has consistently supported the conclusion of a CTBT for over 30 years. We voted for the Treaty when it was adopted by the UN General Assembly in 1996. There is no reason why the two countries cannot adhere to the CTBT. In a nuclearized South Asia, CTBT would have relevance if Pakistan and India are

both parties to the Treaty. The Non-Aligned Summit has called for universal adherence to the CTBT, specially [*sic*] by the nuclear weapon states. This demand is consistent with the Treaty's requirement, that all nuclear capable states, including India, must adhere to the CTBT before it can come into force. Pakistan will oppose any attempt to change this fundamental requirement at the Conference of States Parties to the Treaty scheduled to be held in September 1999. Such a change can only be made by consensus. Pakistan is, therefore, prepared to adhere to the CTBT before this Conference. However, Pakistan's adherence to the Treaty will take place only in conditions free from coercion or pressure.

In this regard, we expect that the arbitrary restrictions imposed on Pakistan by multilateral financial and development institutions will be speedily removed. We also expect that discriminatory sanctions against Pakistan will be lifted. And we count on the full support of the world community for a just resolution of the Jammu and Kashmir dispute.

On the nuclear issue, Pakistan will insist on the principle of equal treatment with India, be it in terms of status or any kind of incentives. It must also be well understood that if India were to resume nuclear testing, Pakistan will review its position, and in case we have adhered to the CTBT, invoke the supreme interests clause as provided under Article Nine of the Treaty.

The next day, Indian Prime Minister Atal Behari Vajpayee spoke in the UN General Assembly as follows:

Mindful of its deteriorating security environment which has obliged us to stand apart from the CTBT in 1996, India undertook a limited series of five underground tests, conducted on 11 and 13 May 1998. These tests were essential for ensuring a credible nuclear deterrent for India's national security in the foreseeable future.

These tests do not signal a dilution of India's commitment to the pursuit of global nuclear disarmament. Accordingly, after concluding this limited testing programme, India announced a voluntary moratorium on further underground nuclear test explosions. We conveyed our willingness to move towards a *de jure* formalisation of this obligation. In announcing a moratorium, India has already accepted the basic obligation of the CTBT. In 1996, India could not have accepted the obligation as such a restraint would have eroded our capacity and compromised our national security.

Mr. President, India, having harmonised its national imperatives and security obligations and desirous of continuing to cooperate with the international community is now engaged in discussions with key interlocutors on a range of issues, including the CTBT. We are preparing to bring these discussions to a successful conclusion, so that the entry into force of the CTBT is not delayed beyond September 1999. We expect that other countries, as indicated in Article XIV of the CTBT, will adhere to this Treaty without conditions.

Western states reacted cautiously to the two statements and diplomats pointed out that much needed to be done before the conditions laid down by both states could be met. Similar reactions could be heard from states in the region.

Already in late July, at a closed-door meeting of the regional forum on security of the Association of South East Asian Nations (ASEAN) in Manila, the nuclear tests carried out by India and Pakistan had been a prominent issue. While, reportedly, the forum did not adopt a forthright condemnation of the tests, as proposed by the representatives of the recognised nuclear-weapon states, the tests were criticised as exacerbating tension in the region and raising the spectre of a nuclear arms race. A chairman's statement from the Philippines' foreign minister Domingo Siazon called on the two states to accede to the NPT and join the CTBT, without conditions or reservations, refrain from actually developing nuclear weapons or deploying missiles to deliver them, and preventing exports of nuclear-weapon related material.

When the NAM summit in September discussed the issue of nuclear proliferation, India and Pakistan reportedly sought recognition as "second-tier" nuclear-weapon states, in a category distinct from that of the initial five recognised nuclear-weapon states. While there was no consensus on a condemnation of the tests staged by the two countries there appears to have been some support for a call on them not to weaponise. In the end, the heads of state or government meeting at Durban simply "noted the complexities arising from nuclear tests in South Asia, which underlines the need to work even harder to achieve [their] disarmament objectives, including elimination of nuclear weapons. They considered positively the commitment by the parties concerned in the region to exercise restraint, which contributes to regional security, to discontinue nuclear tests and not to transfer nuclear weapons-related material, equipment and technology. They further stressed the significance of universal adherence to the CTBT, including by all Nuclear Weapons States, and commencement of negotiations in the Conference on Disarmament on fissile material". The portion of the text of the document adopted by the Heads of State or Government regarding disarmament is reproduced below under **IV. Documentation**. Earlier, South Africa's Deputy Foreign Minister had said that his country would try to convince other NAM members to sign a petition calling on India, Pakistan and Israel to give up their nuclear weapons. Reportedly, Brazil, Egypt, Ireland, Mexico, New Zealand, Slovenia, South Africa and Sweden had already signed the petition. A Joint Ministerial Declaration to this effect was issued on 16 June by the ministers of foreign affairs of those states. The text is reproduced below, under **IV. Documentation**.

In late July, Japan's then foreign minister, Keizo Obuchi, who has since become Prime Minister, offered to mediate between India and Pakistan.

In July, the US Senate unanimously adopted a law, the Farm Export Relief Bill, providing for an initial nine-month exemption from sanctions on India and Pakistan government-guaranteed credits to farmers for food products and fertilisers sold to those states. The House of Representatives adopted a bill exempting agricultural commodities from the embargo for one year. The measure came at a time when American wheat prices were exceptionally low, Pakistan was seeking to purchase 385,000 tons of wheat, and America farmers were fearful of other suppliers stepping in. US observers note that the ban on agricultural exports was the most meaningful portion of the sanctions imposed on India and Pakistan after they staged their nuclear tests. The US Senate has voted unanimously to give the President the authority also to waive

other economic sanctions on the two states. The Administration had asked to be given greater flexibility in the matter, so as to have more leverage in its dealing with proliferation issues. Officials in Washington stressed, however, that sanctions would not be waived unless substantial progress was made towards nuclear non-proliferation goals. The Administration said it would not oppose moves by the International Monetary Fund to negotiate a financial rescue package for Pakistan, which was said to be on the brink of economic collapse.

Meanwhile, reports from Washington indicate that both the US Administration and the Congress are tending towards the conclusion that sanctions are not always effective in making foreign policy and are liable to hurt domestic commercial interests. The recognition seems to be growing that the unilateral imposition of penalties is particularly ineffective.

In Almaty, on 3 July, China, Kazakstan, Kyrgyzstan, the Russian Federation and Tajikistan issued a joint declaration calling for a nuclear-weapon-free zone in Asia. The declaration made special reference to the recent nuclear tests by India and Pakistan.

There are American press reports alleging that India's missile programme makes use of French, German, Russian and American technology supplied for peaceful purposes. In Germany, the managing director of a firm exporting machine parts was convicted of having violated export control laws. The man, who is said to have at one time been an informant for the German central intelligence agency and who is now also revealed to have been connected to Pakistan's nuclear programme since 1963, reportedly sold to Pakistan "preforms", i.e., moulds, partially finished castings, or pre-machined slugs for the manufacture of centrifuge rotor scoops used in the enrichment of uranium. The verdict is seen as an important precedent because it means that preforms for items on nuclear commodity control lists may themselves also be covered by the pertinent proscriptions. The man received a prison term of three years and nine months and was also fined for tax evasion. Since in the European Union export control policies are expected to be harmonised, the decision may affect controls in other European countries.

India and Russia are planning to enter into a new ten-year defence cooperation agreement when their present agreement expires later this year. Reportedly, the new agreement will provide for the joint development of systems, including anti-tactical ballistic missile systems. Russia has meanwhile sold India an aircraft carrier reportedly capable of carrying 16 fighter planes, 19 helicopters, anti-ship missiles and sea-to-air missiles. The sale price for the vessel is stated as \$2 billion, representing 80 per cent of India's 1997 defence budget.

Pakistan has claimed that it is developing a new medium-range missile, the 'Shaheen-1', capable of carrying nuclear warheads. A longer-range version of this missile is expected to be ready for testing within a year. Reportedly, US officials believe that Pakistan is using the 50 MW(th) heavy-water moderated natural-uranium reactor which China has helped it build at Khushab for the production of weapons-grade plutonium. No reprocessing plant is said to have been positively identified in Pakistan, but there appear to be a number of places where plutonium separation may take place. At the same time, US officials say that they no longer have confidence that Pakistan is not enrich-

ing uranium to weapons-grade levels; about ten years ago Pakistan had informally promised the US not to enrich uranium to more than 20 per cent U²³⁵ and apparently Washington gave credence to that promise. Dr. Abdul Qadeer Khan, who started Pakistan's uranium-enrichment effort, was quoted as claiming that Pakistan continued to produce high-enriched uranium and the government in Islamabad has not denied this.

In early July, a Pakistani national, Iftikhar Khan Chaudhary, who claimed to be a nuclear scientist, asked for asylum in the US and offered to give details of his country's nuclear weapons programme. He gave several press conferences in which he was reported to have said that Pakistani military intelligence had information that India was about to launch a nuclear attack on Pakistan's nuclear installations; that Pakistan was planning a preemptive nuclear attack on India; that it had deployed nuclear-armed missiles at two sites on the Indian border and had enough fissionable material for 12 to 18 warheads; that Iranian and Chinese technicians had visited Pakistan's nuclear installations and that the latter's nuclear efforts had received funds from Saudi Arabia and the United Arab Emirates. The Pakistani government called the self-proclaimed defector — who was variously said to be a low-level civil engineer without access to sensitive information and a junior accountant in a firm supplying tiles and bathroom fixtures — a fraud, who might be acting on behalf of a foreign intelligence agency. The papers he presented in the US were said to be forgeries. Presently, US officials expressed strong doubts about the man's claims; academic nuclear experts who questioned him found that he seemed to have little or no knowledge of nuclear physics or of the Pakistani nuclear establishment, and it was generally concluded that he was an imposter.

Claims that India's nuclear weapons efforts are assisted by Israel continue to appear in the international press, as does the assertion that Israel had planned to assault Pakistani nuclear installations. According to an Israeli source, a warning to this effect was sent to Islamabad by Yashir Arafat. Anxiety about an Israeli threat is reported to have been fanned by the repeated presence of what are believed to have been Israeli jets (and are now thought to have been American aircraft) in Pakistani air space shortly before Islamabad's tests were held. Further concern may have been raised by the flight over Central Asia of an Israeli military cargo aircraft which was supposedly carrying two armour-plated vehicles for the Israeli prime minister to use during a visit to China. There were also reports that senior Israeli security officials had warned that attempts by Iran to acquire nuclear weapons would force Israel to launch a preemptive strike. Reportedly, there is concern in Israel that Iran might offer financial support to Pakistan in return for assistance with nuclear and missile development. The Pakistani information minister, in early June, denied that Pakistan had any aggressive intentions towards Israel.

Israeli press media have reported about allegations made in Pakistan that two of the devices detonated by India last May were in fact Israeli-made. India's prime minister, A.B. Vajpayee has categorically denied reports of nuclear cooperation between India and Israel and has underlined his country's "ties of trust and friendship" with the Arab world. Israeli experts also stress that the country's nuclear programme is so highly classified that reports of foreign cooperation cannot be credited; the suspicion is expressed that reports of this kind may have been spread to deligitimise India in the Arab world.

In the aftermath of the Indian nuclear tests the US Central Intelligence Agency (CIA) is reviewing its early warning procedures. Reportedly, the CIA is trying to make sure that early warnings, including also those that contradict generally accepted views, are taken into account in intelligence analyses. The CIA is also reported to be recruiting additional personnel.

There have been reports in the Indian press that the Chairman of India's Atomic Energy Commission, Dr. R. Chidambaram, who is also the Vice Chairman of the International Union of Crystallographers, was refused a visa when preparing to travel to the US to attend a meeting of the American Crystallographic Association. According to these reports, the visa denial was in retribution for India's nuclear tests. Officials at the US consulate where the application was made, and at the Embassy in New Delhi, are supposed to have said that the visa was not denied but the application had been withdrawn when it had been explained to the applicant that a routine security check would have to be made. According to the State Department, requests for visas from a number of Indian and Pakistani nuclear physicists were placed under indefinite review after the nuclear tests in May. In addition, seven Indian scientists working in the US are reported to have been asked to leave that country. Reportedly, Canada has informed the IAEA that it would not welcome Indian nuclear experts to meetings in Canada "until further notice". Three senior scientists from the Indira Ghandi Centre for Atomic Research were refused visas for various scientific meetings in the UK.

It was announced in Washington that President Clinton had decided to postpone his visit to India and Pakistan. According to the White House the trip would only be made when circumstances would permit the visit "to look to the future with the kind of relations we hope will characterize the 21st century, not the 20th" and a spokesman said the atmosphere was still not conducive to the visit.

(**WP**, 2/6, 2/7, 16/7, 25/7, 6/9, 30/9; **Hatzofe** [Tel Aviv], 5/6, and **Israeli Television**, 8/6, both in **BBC**, 8/6; **JFR**, 11/6; **FT**, 24/6, 6/7, 16/7; **Al-Majallah** [London], 25/6; **UPI**, 25/6, 13/7; **LT**, 27/6; **G**, 29/6; **AP**, 1/7, 2/7, 4/7, 6-8/7, 10/7, 14/7, 20/7, 21/7, 23/7, 27/7, 28/7, 31/7, 6/8, 1/9, 7/9, 9/9, 15/9, 16/9; **USIA**, 1/7, 6/7, 7/7, 21/7, 29/9; **JDW**, 1/7, 22/7; **IHT**, 2-4/7, 7/7, 16/7, 28/7, 26/8, 24/9, 25/9; **NYT**, 2-4/7, 7/7, 8/7, 10/7, 14-16/7, 21/7, 22/7, 25/7, 30/7, 31/7, 1/8, 7/8, 27/8, 7/9, 19/9, 20/9, 23/9, 25/9, 26/9, 29/9-1/10; **R**, 2/7, 10/7, 14/7, 18/7, 20/7, 21/7, 26/7, 30/7, 31/7, 15/9, 16/9, 19/9; **US Department of Agriculture**, press release 15/7; **NW**, 16/7, 30/7; **WT**, 16/7; **Al-Akhbar** [Islamabad] 17/7, in **BBC**, 20/7; **LAT**, 20/7; **PTI news agency**, 21/7, in **BBC**, 23/7; **I**, 22/7; **Hindu**, 23/7; **ASS**, 24/7; **DJ**, 27/7, 29/7; **NF**, 27/7, 10/8, 7/9; **Australian**, 28/7; **FT**, 28/7; **AFP**, 11/8; **R**, 25/8, 8/9; press statements from the respective UN missions; **direct information**. See also the Special Insert to **Newsbrief** no. 42.)

- During a visit to Islamabad Iran's foreign minister declared that his country did not intend to become a nuclear-weapon state.

On 22 July, it was disclosed in Washington that Iran had that day tested a ballistic missile with a range of approximately 800 miles (1,250 km), i.e., capable of hitting, according to a US Administration source, Israel, Saudi Arabia, Southern Russia and Turkey. The missile was seen to blow up in the later stage of flight; American observers

said they did not know whether this was accidental or had been done on purpose. US authorities are said to believe that the missile, which the Iranians call the Shahab-3, is identical to the upgraded Nodong (also called the Taepodong-1) missile of the DPRK (see above, pages 12 and 13) that may have been retro-engineered in Iran. Some analysts believe that the missile was made in the DPRK; Pyongyang is said to rely on launches by other states of its missiles to obtain test results. Teheran is reported to be working on a next-generation missile, Shahab-4, which is to have a range about 50 per cent greater than that of the Shahab-3. There is speculation that this may be identical to the DPRK's Taepodong-2.

According to reports from Washington, Iran will be capable of deploying Shahab-3 within one or two years. Analysts believe that the missile's range indicates that it is destined to carry a nuclear warhead. President Clinton was quoted as saying that if the missile becomes operational it could change the 'stability dynamics' of the Middle East. Israeli officials reacted by saying that there was no immediate indication that Iran had missiles that could accurately hit targets in Israel, and there were suggestions that the launch might have been meant in the first place as a political signal, at a time when US Vice-President Gore was about to visit Moscow, where he was expected to urge the government to stop giving assistance to Iran's missile programme, which, as some US intelligence analysts believe, may have helped that country to develop its medium-missile capability earlier than predicted. However, it is believed that most of Iran's missile construction capacity is based on technology supplied by the DPRK; China is also thought to have assisted. Beijing has since promised not to supply Iran with cruise missiles or assist it with new nuclear projects.

The US Administration has imposed trade sanctions on nine Russian companies and institutes which it says have violated export restrictions worked out between the two states, by making exports that could assist Iran's missile programme. Russia's government has announced that it has begun an investigation into the matter, which is said to have been the subject of discussions during meetings with Russian officials both by the US President and the Vice President.

Israel has said that the missile launch confirmed earlier warnings that Iran was trying to obtain a long-range missile capability, but Israeli experts do not see the event itself as particularly threatening because, as reported, they do not believe that Iran can have gone very far in building up a significant supply of operational missiles. The country's Prime Minister, on the other hand, has called Iran's missiles 'a very severe strategic threat against Israel'; he advocates international pressure on Iran to stop it developing ballistic missiles. Meanwhile, Israel is working on its anti-ballistic missile defence. It has announced that its Arrow-2 missile successfully destroyed a simulated target. At the previous test, a year ago, the missile went off course and had to be destroyed.

(LT, 2/6; White House Press, 15/7; NYT, 16/7, 23/7, 24/7, 15/9; AP, 22/7; NPR, 23/7; USAI [transcripts of briefings by Departments of State and Defense], 23/7; WP, 23/7, 24/7; DT, 24/7; IHT, 25-26/7; ITAR-TASS, 28/7 in BBC, 30/7; R, 27/9)

- There have been reports in the US press of differences within the UN among those who wish to see the verifica-

tion regime in Iraq reduced as and when it becomes evident that a particular file can be closed — allegedly including the Secretary-General — and those who believe that recently discovered evidence of Iraqi weapons efforts indicates that important items of information are still being withheld, warranting continuing investigation in all areas. The divergence of views is suggested to be much like that among Security Council members, of whom some feel that sanctions should be maintained while others seek an early end to measures they profess to have little effect beyond causing malnutrition and disease. During the latter part of the reporting period it appeared that states who had been pressing for reductions in the weight of the sanctions, notably France and Russia, were conceding that recent events had reduced the likelihood of a decision to that effect being adopted soon. This was reflected in the adoption, on 9 September, of a resolution suspending the practice of reviewing the situation every sixty days.

The shift followed the stiffening in Iraq's position *vis à vis* UNSCOM's continuing activities, during the first half of July. In a televised address on 17 July President Saddam Hussein hinted at "forceful measures" that might be taken if the embargo was not removed soon. Shortly afterwards, Iraq's Revolution Command Council (RCC) and the leadership of the Ba'ath Party called for an immediate end to the embargo and cautioned against "any political or technical measure by any party to obstruct the lifting of the embargo or prolong it". UN officials warned of likely problems in October, when the Security Council would take its semi-annual decision regarding the maintenance or lifting of sanctions.

On 23 July, Ambassador Richard Butler, Executive Chairman of the United Nations Special Commission (UNSCOM), reported to the Security Council that Iraq had refused to hand over documentation on chemical and biological "special munitions" allegedly used in its war with Iran, that had been found by inspectors during a visit to what was declared to be an 'especially sensitive site'. The find was said to have coincided with the discovery of fragments of ordnance that, according to analyses made at an American military laboratory, carried traces of the 'VX' chemical warfare agent. Iraqi authorities had not allowed the documentation either to be taken away or photocopied. It was subsequently sealed jointly by UNSCOM and Iraq and left in Iraqi custody in the understanding that it would be unsealed by Deputy Prime Minister Tariq Aziz during Ambassador Butler's visit to Baghdad in August. The Executive Chairman concluded in his letter that Iraq's action contravened UNSCOM's rights. The existence of the documents also contradicted Iraq's earlier assertion that there was no documentation on the subject of non-conventional munitions.

With respect to nuclear matters, in late June and early July, members of the IAEA's Iraq Action Team met with Iraqi officials to clarify questions and concerns regarding Iraq's clandestine nuclear programme. On 27 July, the Agency's Director General submitted an interim status report to the Security Council. Presented to the Council by the head of the Agency's Iraq action team, the report is understood to have confirmed that the IAEA had found no evidence that Iraq had nuclear weapons, and that there were no indications that it had ever managed to produce any. It also said, however, that Baghdad's failure to account for important items of nuclear equipment and blueprints left uncertainties which were compounded by Iraq's lack of full transparency in the provision of information. The IAEA

said that it could not provide absolute assurance of the absence of readily concealable items such as components of centrifuge machines. In particular, Agency inspectors are said not to be certain that a vacuum induction furnace used to melt uranium into hemispheres for the core of a nuclear device has been destroyed, as Iraq claims; they also say that Iraq has failed to provide documentation on its nuclear programme, including weapon designs and experimental test data. The report is said to have expressed the assumption that Iraq has retained documentation of its clandestine nuclear programme, specimens of important components, and possibly amounts of non-enriched uranium, and to have referred to the still open question about an offer of help Iraq may have received from a foreign nuclear expert, possibly A.Q. Kahn, of Pakistan.

The status report was understood to say that the enduring uncertainties about Iraq's intentions and capabilities were factored into the IAEA's Ongoing Monitoring and Verification (OMV) scheme. Reportedly, it further said that if, at its next review, the Security Council should decide that current IAEA inspection could be replaced by OMV, that regime would have to include a range of intrusive inspection techniques, including unannounced inspections at any site, aerial surveillance, and environmental monitoring of air, water, soil and vegetation.

The status report is said to have stressed that Iraq retains a cadre of well educated, highly experienced personnel. This point has taken on special importance in light of disclosures, in mid-August, by a high-ranking Iraqi nuclear physicist who defected in 1994, about ongoing Iraqi efforts to maintain a nuclear-weapon programme. The US-trained scientist, Khidhir Abdul Abas Hamza, whose defection and presence in the US had been a secret, but who claimed he felt compelled to speak out in light of the recent recurrence of Iraq's unwillingness to cooperate with UNSCOM, has described how he was engaged after the end of the Persian Gulf War in preparing young colleagues to work on a nuclear-weapons programme that would be resumed as soon as inspections were reduced and sanctions lifted. Dr. Hamza, said to have been at one time head of Iraq's nuclear-weapons programme, claimed that until the 1990 war the country was operating two uranium-enrichment processes [presumably ultracentrifuge and electromagnetic isotope separation — Ed.], either of which could have produced enough HEU to make a bomb within one or two years and, that at the time of the Gulf War, Iraq would have been ready to purify the HEU from its research reactor programme and use it in a weapon. He is also quoted as saying that obtaining technology, material and components from states like Brazil, France (reactor), Germany (foundry for uranium and other bomb-related components; vacuum furnaces), Italy (reprocessing equipment), Switzerland (machine tools to make centrifuge components), the Soviet Union and the United States (computer) was surprisingly easy and that some of the companies involved helped concoct cover stories to justify the purchases. He also alleged that, whereas some firms had been prepared to sell entire facilities, Iraq's ruler opposed large deals involving sensitive technology, lest this should tip off foreign intelligence services. Dr. Hamza is said to have dwelt extensively on the incentives for specialists to work on nuclear weapons, and the cruel punishments meted out to those who failed to produce results or refused to cooperate.

According to the Israeli newspaper *Ha'aretz*, the former senior UNSCOM inspector W. 'Scott' Ritter has claimed

in a closed meeting of the Washington Institute for Near East Policy in early September, that Iraq has three 'technologically complete' nuclear bombs and only needs the fissionable material to make them operational. Mr. Ritter reportedly said that UNSCOM knew where and how the devices were concealed, but had not received orders to inspect the site. He is said to have repeated this in a subsequent direct interview with *Ha'aretz*. UNSCOM's Executive Chairman has rejected the allegations, and senior officials at the IAEA in Vienna have categorically denied that UNSCOM had such information.

Already at the time the Agency's status report was drawn up, Iraq was understood to be putting difficulties in the way of the implementation of the IAEA's OMV, by, among other things, preventing the Agency's aircraft from using an air base near Baghdad, insisting on the reduction of intrusive inspection in return for allowing the IAEA to use environmental monitoring, and demanding access to 'raw data' collected by the Agency during its surveillance activities, in particular in aerial radiation surveys.

Nevertheless, on 29 July it was reported that Russia wanted the Security Council to act on a draft resolution declaring that Iraq had complied with its obligations regarding the cessation of its nuclear-weapon efforts, and calling for the replacement of the current inspection regime by OMV. This move seems to have been blocked by the UK and the US, who maintained that Iraq had to be in full compliance before sanctions could be lifted.

In anticipation of the talks set for early August between UNSCOM's Executive Chairman Richard Butler and Iraq's Deputy Prime Minister Tariq Aziz, the RCC and the leadership of the Arab Socialist Ba'ath Party held another meeting on 30 July, presided over by President Saddam Hussein. This adopted a statement condemning the actions of UNSCOM and putting further cooperation into question. Iraq's Vice President warned that "all options [were] open" for the Iraqi leadership to end the sanctions. While not specifying what action was contemplated, the Vice President said that the time-frame for Iraqi action would be "not long, not even months, but a shorter time".

On 2 August, Ambassador Butler arrived in Baghdad amidst hostile comment from the local media and threats of unspecified action from Iraq's authorities. After two brief sessions, in which Butler is said to have reiterated his call for further disclosures about Iraq's biological and chemical weapons and to have submitted a proposal to accelerate the work, and Tariq Aziz reportedly was unwilling to discuss any further cooperation with UNSCOM and repeated his earlier contention that Iraq did not have any weapons of mass destruction, the talks were adjourned on 3 August with no clear prospect of resumption. In a joint televised press conference, Deputy Prime Minister Tariq Aziz said that he had not expected the session to be fruitful because he had all along had the impression that UNSCOM was "back to its old games and tricks". He reiterated that Iraq had fulfilled all requirements of resolution 687 long ago and did not "possess anymore any proscribed weapons" [*sic*]; that equipment used in producing those weapons had also been destroyed; and that for years now UNSCOM had not found any evidence of non-compliance. Referring to the new programme of action proposed by UNSCOM, Tariq Aziz said there was no point in continuing a useless job if this only involved digging into minor details of previous issues. For his part, Butler confirmed that no progress had been made; a

proposal to accelerate work had been rejected; and it was not known when the next meeting would be held.

In an interview given on his return trip, Mr. Butler said he had almost been able to close the files on chemical weapons and missiles. He had offered Iraq an accelerated work schedule for the next five weeks to try and resolve most of the outstanding issues, but his Iraqi counterpart had refused to accept the proposal because he was not ready to go on working with UNSCOM on these issues. Mr. Aziz had also told him that no more discussions would take place for the present.

The RCC and the Iraqi leadership of the Ba'ath Party met again the following day and issued a statement concluding that UNSCOM was not "ready to acknowledge the essential facts related to the implementation of ... resolution 687 and to report these facts to the Security Council so that the latter would fulfil its obligation toward Iraq". It said that the conferees had made a series of decisions which would be announced soon and would continue meeting "to take the necessary additional measures to protect Iraq's national interests and to put an end to the injustice imposed on it". Shortly after, the Iraqi parliament met in extraordinary session and called for an immediate end to sanctions.

On 5 August, Baghdad announced it would no longer accept the current intrusive inspection regime and said it was 'freezing' its cooperation with UNSCOM. It stopped UNSCOM inspectors — of whom up to one hundred remained at the organization's Baghdad office — from entering several plants (a few days later, inspection teams were allowed to carry out some routine inspections) and only permitted the continuation of 'passive' monitoring through the use of surveillance cameras. At the same time, Iraq said UNSCOM should be restructured — presumably meaning that Ambassador Butler should go — and be relocated to Geneva or Vienna.

Back in New York, on 6 August, Ambassador Butler reported to the Security Council on the Iraqi refusal at the meeting of 3 August to discuss any substantive issues, and on UNSCOM's conviction that, given Iraq's continued reluctance to provide information on a range of outstanding issues, and its practice of revising data previously presented as 'full and final', it was too early to "close the books" on its activities with regard to chemical and biological weapons. Regarding biological weapons, Butler presented an outside technical evaluation of the "full, final and complete disclosure" by Iraq on its activities in this field. This was the third such evaluation, made at Iraq's request by a group of international experts. As in the two previous cases, the experts concluded that the information provided by Iraq did not suffice for credible verification; this reportedly prompted Baghdad to say they had been "brainwashed by UNSCOM".

The Security Council was reported to be "dismayed" at the renewed crisis; in a presidential statement it called Iraq's action "totally unacceptable". The UN Secretary-General stated that Iraq had acted "clearly in violation of the resolutions of the Security Council and the memorandum of understanding I concluded in Baghdad in February." Mr. Annan rejected as unacceptable Iraq's suggestion that UNSCOM be restructured and moved. In the Security Council, Iraq's usual supporters were seen to distance themselves from Baghdad's move, and to call for utmost restraint. The US recalled that last March, the Council had warned of "the severest consequences" if Iraq were to

renege on its agreement with the Secretary-General. At this stage, however, Washington, like London, was said to feel that, rather than threatening military action while not being able to count on international support, it should leave the matter in the hands of the Security Council. The US did warn that Iraq's intransigence only ensured that sanctions would be continued indefinitely. Reportedly, the US Administration hoped that the present approach could lay the foundation for military action if necessary, while giving Iraq a chance to change course if confronted with a united Security Council.

In that light, the US was also seen to be going along with the Secretary-General's urging that countries friendly to Iraq should convince it to resume its cooperation with UNSCOM, possibly in return for greater Iraqi involvement with the Council's handling of the case. The Secretary-General was reported to have also suggested that the Council should evaluate Iraq's compliance with its resolutions and recognise progress in a number of areas. He asked his special envoy in Baghdad, Indian Ambassador Prakash Shah, to urge President Saddam Hussein to resume the cooperation with UNSCOM. Accordingly, in a meeting on 13 August, the Council decided to postpone action until it received the results of Ambassador Shah's mission.

In mid-August, a leading US newspaper asserted that after UNSCOM's talks with Iraq broke down, in early August, US Secretary of State Madeleine Albright had urged Ambassador Butler not to carry out plans to make surprise inspections at two sites that might hold new information on Iraq's chemical and biological programmes. Ms. Albright denied the report, saying that it was up to UNSCOM to decide where and when it makes inspections. She later added that "UNSCOM had intended to follow up [on the early-August meeting in Baghdad] with some particularly intrusive inspections, which we supported. However, when Iraq suspended all inspections on Aug. 3, we understood that Saddam had done something which even his backers in the Security Council could not defend. It was in that context that I consulted with Mr. Butler, who came to his own conclusion that it was wiser to keep the focus on Iraq's open defiance of the Security Council". Subsequently she was reported to have reiterated that concern about creating a deep split in the Security Council had prompted her to question the timing of certain inspections. Ms. Albright rejected a report from an American news network that over the past few months, London and Washington had been trying to get UNSCOM to drop plans for surprise inspections, and had in fact been undermining UNSCOM's efforts. UNSCOM also formally denied the allegation that it had been given or accepted external direction with regard to operational activities. According to the newspaper report, a leading member of the US Permanent Mission in New York had put to Mr. Butler a series of questions regarding planned inspections, and had left him with the understanding that the US did not support his plan. Another US official is supposed to have denied this version of the story and to have said that, in fact, the diplomat in question had expressed his support.

In response to this publicity, American, British and UN officials were quoted as saying that Mr. Butler had intended to proceed as planned and had brought an inspection team with him when he arrived in Baghdad on 2 August, but that after the events of 3 August the UK and the US had suggested that he should not try to make inspections Iraq would bar anyway. Reportedly, Ambassador Butler had

been told by US sources that Washington wished to avoid another military crisis before it could prepare the political ground, and wanted to make sure any confrontation would be between Iraq and the Security Council rather than between Iraq and himself. Subsequently, Mr. Butler had "made the tactical decision" to pull out the inspectors.

In a speech on 9 August, Iraq's President once again attacked the US and its allies for maintaining the sanctions. He was understood not to have referred to the dispute with UNSCOM, but Iraq's official newspaper, *Al Iraq*, demanded that UNSCOM's inspectors should have their immunity lifted and be dealt with as foreigners engaged in spying and sabotage. UNSCOM meanwhile held back on intrusive inspections and limited its field activities to the maintenance of long-term surveillance equipment. The UN Secretary-General reportedly suggested at this point that the Security Council might adopt a "comprehensive reassessment" of the situation that might lead to a new policy of engagement with Iraq. Initial reactions from the UK and the US to this suggestion were understood to have been skeptical.

Responding to the situation resulting from the restrictions imposed by Iraq, the Director General of the IAEA on 11 August wrote to the President of the United Nations Security Council to confirm that the IAEA was carrying out a limited implementation of its OMV plan within the restrictions imposed by Iraq, and was awaiting instructions from the Council on how to proceed further. The letter pointed out that the effectiveness of OMV depended on the full exercise of the Agency's rights of access and that any diminution of or interference with those rights would greatly reduce the level of assurance provided through the implementation of the OMV plan. The Director General observed that Iraq's refusal made it impossible for the IAEA to investigate remaining questions and concerns. The letter stated that the restrictions had resulted in the discontinuation of inspection of sites judged to have capabilities suitable for conducting weapons-related work. It advised the Security Council that the limited activities currently undertaken under the restrictions imposed by Iraq fell far short of full implementation of the OMV plan and would result in a significantly reduced level of assurance.

On 12 August, there were reports that Iraq was putting a stop to all long-term-monitoring activities and would not allow inspectors to respond to violations detected by surveillance equipment. Further, Baghdad let it be known that it had suspended all participation in talks on past weapons-development activities. On the same day, UNSCOM's Executive Chairman addressed a letter to the Security Council along the same lines as that of the IAEA's Director General. Ambassador Butler's letter stated that, under present circumstances, UNSCOM could not continue to provide the Council with the same level of assurance of Iraq's compliance with its obligations not to reestablish its proscribed weapons programmes. The situation was said to have raised concern at UNSCOM that Iraq might have provoked the suspension of inspection activities to prevent inspectors from finding evidence of ongoing biological or chemical weapons efforts.

On 17 August, the Security Council, in letters from its President to the IAEA and UNSCOM, acknowledged that under present circumstances they could not assure the Security Council that Iraq would not reestablish its proscribed weapons programme, but reminded them that

they had the mandate to "carry out a full range of activities including inspections", and told them to report back to the Council should they be "hindered in any way from undertaking these activities." The formulation was said to be the result of a compromise between the UK and the US, who had sought a firm reply to Baghdad, and a majority of members who wanted to avoid a showdown. It was hoped that the agreed language, which did not mention using force or taking any reprisals, would test Iraq's intentions and would, if Iraq failed to give a positive response, eventually unite members of the Council in the recognition that Iraq was ignoring its decisions.

Also on 17 August, Iraq advised the UN mediator that it did not intend to resume its cooperation with the IAEA and UNSCOM. Baghdad said it would not let inspectors visit sites that had not already been visited, until Iraq was declared free of weapons of mass destruction and the Security Council lifted its embargo. Iraq's UN representative said that the two organizations had been "unjust and unfair". On 20 August, Ambassador Prakesh Shah reported to the Security Council, which decided unanimously that Iraq had not met conditions for easing the sanctions, and accordingly renewed them once again.

Meanwhile, following the Council's letter, Ambassador Butler wrote to Iraq's Deputy Prime Minister that he had been ordered to continue his work, and invited Baghdad to continue its cooperation. In a strongly worded reply Tariq Aziz rejected Mr. Butler's approach and told him that Iraq did not trust him and would not cooperate with UNSCOM until the UN lifted the embargo. Ambassador Butler responded with the warning that he might have to send inspection teams to new sites, testing Baghdad's resolve to block such inspections. Subsequently he advised the Security Council that Iraq had now also taken to blocking routine monitoring activities and was preventing inspectors from returning to sites they had visited previously, including one where UNSCOM had stored missile parts for future observation.

In the ensuing stalemate Baghdad let it be known that it wanted the present UNSCOM staff to be replaced; in several statements, Iraq's UN representative did not rule out shutting down all future technical monitoring and surveillance of Iraq's installations, pending a Security Council initiative that would "address Iraq's concerns". The US delegation, meanwhile, which repeated its determination to make Baghdad comply with the Security Council's resolutions but faced a lack of support in the Security Council for military action, was seen to be shifting to a new tactic of patience, keeping the sanctions in place and waiting to achieve Iraqi compliance through attrition.

This approach, described by House Speaker Newt Gingrich as a secret shift "from confrontation to appeasement", met with strong opposition from the Republican majority. Already for some time Washington observers had raised the question, how long the Clinton Administration would be able to maintain wait-and-see policy. Republican politicians and media commentators denounced the Administration's supposedly "soft line", citing its failure to reactivate the military forces in the Persian Gulf area as evidence of defeatism and laxness. Friends and opponents of the President alike ascribed the perceived inaction at least in part to his domestic difficulties. Allegations were also aired, especially in conservative print media, that August's bombing attacks on US embassies in Africa had been instigated by Iraq, and that the White House had

failed to follow up on indications to that effect. Some publications suggested that even if there was no direct link between the bombings and Iraq's hostility, the Administration's supposed passivity with regard to Iraq's "terrorism" tended to encourage terrorism in general.

Subsequent American cruise-missile attacks on presumed terrorist targets in Afghanistan and Sudan, on 20 August, were thought to have defused this argument, especially since, reportedly, at the time the most damaging criticism was aired, the President's security advisers and the Defense Department had already made plans for the attacks. Against strong denials from Sudan and growing doubts expressed by a variety of international experts, including, allegedly, the (American) designer of the factory, US intelligence and defence officials claimed they had evidence that the pharmaceutical factory in Khartoum that was one of the targets had been used to produce EMPTA, a precursor of the nerve agent VX, with assistance from Iraqi scientists. This claim, which was later revealed to have been based on "strong surmise", has since also met with considerable doubt within the US. Former US President Carter has called for an investigation of its validity.

Allegations of a connection between the Khartoum plant and Iraq have not been substantiated, but the issue of the latter's possession of the VX nerve agent remains a topic of lively discussion. Apparently the French and Swiss laboratories which were asked to make further analyses of the traces of VX (see also *Newsbrief* 42, page 14) that were supposed to have been found on ordnance located in Iraq have not yet been able to reach specific conclusions in this regard and according to Ambassador Butler results will not be released until they have been reviewed by experts. Butler has been quoted as saying, however, that the real issue was that Iraq had told UNSCOM for years it had never made VX. When UNSCOM inspections revealed this not to be true, Iraq had said it had made 200 litres of the substance. Subsequently, UNSCOM was able to demonstrate that Iraq had made four metric tons of VX. The real issue, therefore, according to Ambassador Butler was not the warhead remnants or the analyses but the true end figure of the amounts of VX involved.

The issue of supposed US intervention in UNSCOM's inspection plans had been one of the arguments for opponents of the Administration to question its actions and motives. The Chairman of the Subcommittee on Near Eastern and South Asian Affairs of the US Senate Foreign Relations Committee had called for an investigation of the issue of US Administration intervention in UNSCOM's activities. Criticism of the Administration's Iraq policy intensified when, on 26 August, a senior American member of UNSCOM's staff, former US marine intelligence officer William S. ('Scott') Ritter, resigned. In a range of public media interviews and in Congressional hearings Mr. Ritter blamed the Security Council and the Secretary-General for what he termed "a surrender to Iraqi leadership" that made a "farce" of UNSCOM's efforts; he asserted that the supposed policy shift was backed implicitly by the US, which was secretly trying to find a diplomatic solution and avoid confrontation. In his letter of resignation Mr. Ritter alleged that UNSCOM had been frustrated in its attempts to push ahead aggressively just when it was on the point of making important discoveries about Iraq's weapons programme. Mr. Ritter said he had made his resignation letter public in the hope of forcing the US and the UN to take a tougher stance, and to block the adoption of a compromise solution under which files

would be closed prematurely, so that Iraq could maintain the means to make weapons of mass destruction.

The Administration strongly denied Mr. Ritter's contention that it had interfered with UNSCOM's activities "through interference and manipulation"; Secretary of State Albright, whom Mr. Ritter had implicitly accused, stressed that the US had been "by far the strongest international backer of UNSCOM". At a Senate hearing in early September, where he testified at length, Mr. Ritter repeated his view that the Administration and the UN had been too conciliatory. His criticism was avidly used by opponents of the Administration to condemn its handling of foreign policy crises in Iraq as well as the DPRK. Democratic senators, while lauding Mr. Ritter's dedication, reminded him that the formulation of foreign policy was not within his area of competence. In a newspaper interview, Ambassador Butler praised Mr. Ritter as a very valuable member of UNSCOM but he also said that in his testimony, which was often inaccurate in chronology and detail, Mr. Ritter had inflated his role; he had been involved in only part of UNSCOM's tasks. He had also made misleading statements to the Senate about Mr. Butler's dealings with Security Council members and particularly those with Secretary of State Albright; in that context Mr. Butler was said to be especially perturbed about Mr. Ritter's accusation that UNSCOM had cancelled investigations as a direct result of pressure from Ms. Albright. Mr. Butler was also heard to say that the statements had damaged UNSCOM's interests. There was speculation in the press that the incident might prompt a review of America's Iraq policy, including reconsideration of the possibility of unilateral use of force.

Following further allegations by Mr. Ritter in various publications and hearings, including the accusation referred to above that UNSCOM had known of the presence of three partially fabricated nuclear weapons in Iraq but had not alerted the IAEA or the Security Council, Amb. Butler stated at a news conference on 1 October that Mr. Ritter had said some things that were not correct and had also revealed confidential information. He announced that he had ordered Mr. Ritter in writing to stop revealing information he had gathered while working for UNSCOM. The claim by Mr. Ritter that Israel had shared information with UNSCOM and that he had cooperated closely with that country has received much media attention and is said to have led to strong reactions in the Arab world. Mr. Butler pointed out in this context that Israel was only one of 50 countries that shared intelligence with the Commission.

On 9 September the Security Council unanimously adopted a resolution (1194) in which it condemned Iraq's decision to suspend cooperation with UNSCOM and the IAEA, which it called a "totally unacceptable contravention of its obligations", and demanded that Iraq rescind this decision. The Council also decided not to conduct the review of sanctions scheduled for October, and to hold no further reviews until Iraq rescinds its decision. (The text is reproduced below under **IV. Documentation**.) While the resolution makes no reference to further Council action in the absence of a positive reaction from Iraq, the US Administration has said it attaches much value to it as an expression of the view of the full membership of the Council and a step towards more forceful action, should conditions demand this. There had been reports from Baghdad before the adoption of the resolution that the Iraqi government had threatened that if the Council decided not to lift the sanctions, Iraq would take "the necessary action". On 14

September the Iraqi National Assembly said that it would ask the government to sever all relations with UNSCOM unless the Security Council retracts its decision not to review the sanctions. This demand was endorsed by the RCC. The Council also criticised the UN Secretary-General, charging that he had failed to honour a promise to end the embargo against Iraq. The Council also demanded a comprehensive review of Iraq's relations with the United Nations.

In late September, an Iraqi delegation headed by Deputy Prime Minister Tariq Aziz came to New York with the stated objection of seeking a comprehensive review of Iraq's relations with the United Nations. In discussions with members of the Security Council and with the Secretary-General. Mr. Tariq Aziz was reportedly told that before any broad review can be undertaken Iraq must rescind its ban on intrusive UNSCOM inspections. In a speech to the General Assembly, Iraq's Foreign Minister called the effects of the embargo "tantamount to internationally proscribed acts of genocide" and in the run-up to the meeting of the Security Council at which UNSCOM and the IAEA are to present their status reports it appeared that Iraq was holding firm to its refusal to go back on the decisions of 5 August.

Karl-Heinz Schaab, the German engineer who was indicted on charges of high treason for the sale to Iraq of classified design information (see *Newsbrief* no. 41, page 11), particularly regarding centrifuge enrichment, and who had fled to Brazil, has returned to Germany and has been arrested.

(*NYT*, 1/7, 18/7, 24/7, 27/7, 28/7, 30/7, 3-10/8, 13-15/8, 17-19/8, 21/8, 23-27/8, 2-5/9, 9/9, 10/9, 15/9, 16/9, 25/9; *WP*, 3/7, 5/8, 9/8, 14/8, 20/8, 29/8, 15-17/9, 21/9, 29/9, 1/10, 2/10; *IAEA PR* 98/10, 3/7; 98/12, 28/7; 98/13, 11/8; *I*, 13/7, 3/8, 1/9; *Baghdad Radio Network*, 21/7, 21/8; *AP*, 29/7, 3/8, 12/8, 13/8; *Iraq News Agency*, 30/7, 4/8, 14/9; *Iraq Satellite Channel*, 3/8; *NZZ*, 4/8; *R*, 4/8, 30/7, 3/8, 5/8, 7/8, 9/8, 10/9, 30/9, 1/10; *G*, 5/8, 6/8, 7/8, 19/8; *IHT*, 5/8, 6/8, 7/8, 20/8, 26/8, 28-30/8, 2/9, 26/9, 27/9, 29/9; *AFP*, 7/8, 8/8, 22/8, 19/9; *DW*, 7/8; *FAZ*, 7/8; *FT*, 7/8, 9/8, 29/8; *LM*, 7/8; *E*, 8/8; *LT*, 10/8, 29/8; *WT*, 13/8, 14/8, 20/8; *NPR*, 17/8; *SG-sp*, 18/8; *O*, 30/8; *WSJ*, 31/8; *NW*, 1/10; *direct information*. See also *Newsbrief* no. 42, pages 12-14.)

- According to press reports, the previous Prime Minister of **Israel**, Shimon Peres, implied in an interview during a visit to Jordan that Israel has nuclear weapons. He is quoted as having said: "We built a nuclear option not in order to have a Hiroshima but an Oslo."

Israel is reported to have obtained the first twelve of a total of 25 American F-15I long-range aircraft equipped with over-the-horizon missile-launching means and in-flight refuelling capabilities, that are said to enable it to hit targets in Iran. Reportedly, each month two further aircraft are delivered. Israel is also said to have ordered three German-built 'Dolphin'-class submarines from which it could launch cruise missiles. It is apparently developing an air-launched cruise missile that, according to American military sources, could be "easily" adapted for submarine launch. Experts see these developments as a reflection of Israel's conviction that the development of an 'Islamic Bomb' in the Middle East is unstoppable and that it needs to have a second-strike capability for the case that its land-based nuclear weapons are wiped out in a surprise attack.

The news of the submarine purchase is said to have raised great concern in Egypt, which claims that the deal violates a German undertaking not to sell armaments to countries involved in conflict.

(*LT*, 25/6; *G*, 2/7; *FAZ*, 10/7; *IHT*, 15/7; *South China Morning Post*, 15/7)

i. Nuclear Material Trafficking and Physical Security

- Sponsored by the IAEA, the World Customs Organization, and the European Commission, an international conference was held in Dijon, **France** on the prevention of trafficking in radioactive materials. The conference was attended by over 300 participants from 85 states. Representatives from several participating organisations are reported to have signalled a shift of smuggling of radioactive materials from individuals to organised crime, although it was acknowledged that thefts of weapons-grade nuclear material had until now been "relatively rare". A claim made at the conference by a senior official from the European Commission that since 1994 small quantities of plutonium and HEU have been seized in a number of European countries including Austria, Finland, Germany, Greece and Italy, is said not to be confirmed by the IAEA's data and has been questioned by officials from several of the countries named. (*R*, 14/9; *Le Bien Public* [Dijon], 15/9; *AFP*, 17/9; *NW*, 17/9)
 - In **Azerbaijan** four people have been arrested trying to sell a container with radioactive cesium. Shortly afterwards, three further containers were found. Since 1994 it seems that ten containers with cesium have been recovered from a total of 24 that were said to have been missing from a factory not far from the country's capital, Baku. (*NZZ*, 23/6)
 - In a remote northern village of **Bangladesh**, police are said to have found a box marked "uranium-1-lb atomic energy, Russia". The find is reported to have raised fears among Bangladeshi officials that the country is being used as a conduit for moving nuclear material to India and Pakistan. (*South China Morning Post* [Hong Kong], 25/7)
 - A parliamentary committee in **Germany**, which investigated the smuggling in 1994 of 363 grams of plutonium on a commercial flight from Moscow to Munich, is reported to have concluded that there is no reason to believe that the German security services staged the incident, as had been alleged by opposition politicians. One version of the affair is that this was a 'sting' operation, in which German security officers knew of the planned smuggling and let the transaction proceed in order to catch the culprits in the act. The committee's report acknowledges that some areas of uncertainty remain, but opposition members of the Bonn parliament stick to their allegation that the affair was provoked, if not actually set up, by the security service.
- A small quantity of HEU seized by police in Germany in 1994, as well as 2.7 kg of HEU confiscated by police in Prague that year are now reported to have been stolen from stocks at Chelyabinsk-65.
- (*R*, 23/6; *DW*, 24/6; *FAZ*, 24/6; *SDZ*, 24/6; *NF*, 21/9)
- Also in **Germany**, a case of apparent sabotage has been discovered at a non-nuclear part of the Kruemmel nuclear

power plant. Pulley cables on two mobile cranes used to move equipment are said to have been cut through, possibly by opponents of nuclear energy. (NW, 17/9)

- Police in Chennai (formerly Madras), in **India**, reported in July that they had seized 6 kg of "enriched uranium" from the house of a nuclear engineer. A subsequent report said the material was 'ilmenite'. (AFP, 23/7; IHT, 25/7; Xinhua News Agency, 23/7)
- In September there was a report that a sailor had taken over an *Akula*-class nuclear submarine near Murmansk, in **Russia**, after killing eight other sailors. He is said to have died during an assault by special forces. The event, which appears to be one of several instances of Russian soldiers having lost control is seen as a reflection of the bad conditions under which in particular low-level recruits are obliged to serve in the nuclear navy. It has also raised questions about security at the Murmansk nuclear submarine base. (R, 11/9; CdS, 12/9; LT, 12/9G; G, 14/9; I, 14/9; NW, 17/9; NZZ, 14/9)
- **Russian Federation:** Earlier rumours have been confirmed that in 1991, the environmentalist organisation Greenpeace had considered buying, through the intermediary of a senior Russian army lieutenant, a nuclear warhead for an SS-21 missile, that was stored in a bunker in eastern Germany, at a cost of \$250,000. It is said to have been Greenpeace's intention to have the authenticity of the device verified and then unveil it in front of the world's media, to show the supposed ease with which former Soviet weapons could fall into the hands of terrorists. The Russian officer had claimed that he could steal a warhead and deliver it and would then escape to Sweden. The deal was about to be consummated when the officer's unit was moved. Reportedly, the exercise had been authorised by senior officials of the organisation. The news of the failed exercise has led to questions in the international press about the judgement exercised by an organization supposed to protect public safety. (I, 25/7; DW, 27/7; NZZ, 27/7; FAZ, 28/7; SDZ, 28/7; N, 6/8; SF, 24/8; **direct information**)
- Police in **Turkey** are reported to have arrested six people smuggling 13 glass tubes allegedly holding "nuclear material" which was said to have come from Iran. The suspects are said to have been looking for customers and claimed they were on their way to Istanbul to sell the tubes for \$1,000 each, saying it was snake poison.

Istanbul police officers have arrested four Turkish and three Kazakh nationals and an Azerbaijani who were trying sell 4.5 kg (10 lbs) of uranium (described as 'mainly unrefined') which had supposedly been smuggled from Russia. The asking price was \$1 million.

(Anatolia News Agency, 1/7, in BBC, 3/7; IHT, 3/7, 8/9)

- In May, the IAEA and the World Customs Organization (WCO) signed a Memorandum of Understanding on cooperation in developing and implementing joint projects to "contribute further to the fight against illicit nuclear trafficking". (IAEA Bulletin, June)
- **United States** security officials seeking to eliminate the organisation supposedly led by Osama bin Laden, the Saudi exile suspected of anti-western terrorist activities, including the bombing in August of US embassies in Kenya and Tanzania, claim to have found documentary

evidence that in 1993 a person described as a senior deputy to bin Laden tried to purchase enriched uranium. The reports do not indicate whether the attempt succeeded. (NYT, 26/9, 1/10)

j. Environmental Issues

- The authorities in **France** responsible for regulating nuclear transport and radioprotection have allowed the resumption of spent fuel shipments to the La Hague reprocessing plant on a site by site basis. Shipments had been halted because some of the shipping casks were found to be slightly contaminated. Electricité de France has since taken additional measures to ensure cask and rail car cleanliness. Reportedly, recent checks have revealed no contamination above detection thresholds. It seems that the cause of the contamination previously measured has not yet been fully established. In **Germany**, the minister of environment and nuclear safety in the Kohl government decided to keep the ban on shipments of spent fuel in force until the general elections of 27 September. German utilities were said to be increasingly concerned that in the near future the situation would affect their operations but the environment minister has said that although some progress had been made in finding the "root cause" of the contamination, shipments should not resume until the matter had been fully cleared up. With the present change in government there is said to be a possibility that the prohibition will be extended indefinitely. Traces of radioactive contamination have now also been found on an empty container used to transport low-level waste. A further complication has arisen as a result of allegations that utility operators and transport companies may have concealed the information about radiation of casks and vehicles. The matter is currently under investigation by state law officers. An article in the trade press points out that the phenomenon was described in a 1990 safety guide published by the IAEA, which draws attention to the fact that when containers are immersed in cooling ponds while being loaded with irradiated fuel, low levels of contamination may be absorbed into the surface of the casks. This may defy washing and escape detection prior to dispatch but after a long journey and increases in temperature, radioactivity may come back to the surface.

In the **Netherlands** and in **Switzerland** the ban on spent fuel shipments is also maintained and Swiss authorities are quoted as saying that it might be months before it can be lifted. In **Sweden**, too, minor contamination has been found on spent fuel transport casks.

(NF, 29/6, 13/7; NN, 14/9; CN, 6/7; NW, 9/7, 30/7, 17/9; R, 11/8, 14/9; DW, 12/8; StV, 28/8. See also **Newsbrief** no. 42, page 15.)

- In **Japan**, agreement has been reached between Aomori Prefecture, Rokkasho Village and the country's nuclear power industry that shipments of up to 32 metric tons of reprocessing waste will be allowed into the country. The agreement seems to have solved the situation that had arisen when Aomori's governor refused the vessel *Pacific Swan* that was carrying vitrified high-level reprocessing waste from France permission to dock. A reprocessing plant is under construction at Rokkasho and is scheduled to start operating in 2003, pending which up to 1,600 metric tons of spent fuel will be stored near the facility. It has been agreed also that if reprocessing were to become "problematic", the spent fuel will be removed. (SF, 3/8. See also **Newsbrief** no. 41, pages 18 and 19.)

- **Russia** announced on 12 August that it intends to dispose of all remaining spent fuel from its 400 decommissioned nuclear submarines by the year 2005. A plant for processing liquid nuclear waste, financed by Norway and the US, is under construction near Murmansk but is expected soon to be too small. Supposedly, five times a year a special train fetches nuclear fuel for processing to the Mayak plant in the Chelyabinsk region, but according to one estimate it would take 50 years for all the spent fuel to be moved there: there are said to be 7,000 metric tons of liquid radioactive waste and 10,000 m³ of solid waste stored in the Murmansk area. Russia is planning to build a second railway to speed up the removal, with financial aid from Norway; Japan and the Netherlands will also make financial contributions. There had been reports that construction of a storage facility at Mayak would be financed by Scandinavian countries. However, since not all the fuel can be reprocessed, and rail transport is expensive, a Swedish firm participating in that scheme is understood to have proposed building dry storage facilities on the Kola peninsula.

The United States has also undertaken to contribute to the costs of transporting radioactive waste from submarines of Russia's Pacific Fleet to the Mayak plant. It is reported to have awarded contracts for the dismantling of nuclear submarines and it is understood that it will make substantial financial contributions for this purpose.

Meanwhile, plans to handle the spent fuel at the Andreyeva Bay itself submarine base seem to have run into trouble since formally this site still belongs to the Russian navy; as long as it is not transferred to the Ministry of Atomic Energy, western companies working on the clean-up are denied access.

A journalist working for a navy newspaper, Captain Grigory Pasko, who has written about the dumping of nuclear waste from the Russian Pacific Fleet, has been arrested on a charge of high treason.

(**Inter Press Service** [Moscow], 26/6; **Russian Public TV**, 4/7, in **BBC**, 10/7; **Interfax** [Moscow], 9/7, in **BBC**, 11/7; **AFP**, 6/8; **NF**, 24/8; **NW**, 27/8)

k. Miscellaneous

- **Russia/United States:** in a US Congressional hearing, a former Soviet intelligence officer has claimed that the tactical nuclear weapons (the 'suitcase bombs' of which Russian Gen. Lebed spoke in the past), which were reported missing have in fact been smuggled into the UK and the US, to be used in the case of conflict. The officer, who supposedly defected to the US in 1992 and now lives there, alleges that most of the devices are still in place and ready for use. (**ST**, 12/7; **Spiegel**, 24/8)
- Retired General Lebed, who is currently Governor of the Siberian province of Krasnoyarsk, is reported to have written an open letter to **Russia's** (then) Prime Minister Kiriyenko threatening to take over an army missile base, giving Krasnoyarsk the status of a nuclear territory along with India and Pakistan, if the federal government does not pay the soldiers.

The Russian government has announced that it intends to pay the back wages of nuclear industry workers. The funds made available are reported to amount to about half of the money the government owes the workers. Trade unions

are quoted as saying that failure to pay threatens the safety of Russia's nuclear centres.

(**AP**, 24/7, 9/9; **R**, 24/7; **FT**, 25/7; **LT**, 25/7)

- As the economic and political situation in **Russia** worsened, in early September, the Los Alamos National Laboratory, which cooperates with Russian laboratories to improve nuclear-materials security and prevent proliferation of fissionable material and of know-how, reportedly decided to suspend its activities in Russia and notified its personnel to put off travel and routine activities. Apparently informed of the decision while he accompanied the US President in Moscow, energy secretary Bill Richardson overturned the order. Advisories have also been sent to the other national laboratories active in Russia that in view of DoE's political assessment of the Russian situation, halting work in Russia at this point would be premature. (**NF**, 7/9)
- Members of parliament in the **United Kingdom** have criticised the secrecy with which the transfer of nuclear material from the research reactor at Tblisi, in Georgia, was handled, last April. While the government's decision to accept the material for processing at Dounreay was not queried, parliamentarians have called for greater transparency in the nuclear industry and better coordination between the various government bodies involved. (**NW**, 30/7. See also **Newsbrief** no. 42, page 3.)
- Also in the **United Kingdom**, the government has been accused of misleading Parliament when it repeatedly denied that no weapons-grade nuclear material had been sent from the Dounreay reprocessing plant to the UK weapons research establishment at Aldermaston. In fact, the then-President of the Board of Trade in August has revealed that transfers of weapons-grade material were made before 1973. In June, Prime Minister Blair had stated that no such material had been sent from Dounreay for use for UK weapons purposes. This statement is now said to have referred to the highly-enriched uranium which had recently been reported missing from Dounreay's accounts. (**I**, 5/8; **LT**, 5/8; **Scotsman**, 5/8)
- On 31 July, the **United States** Senate unanimously confirmed Bill Richardson, former US Ambassador to the UN, as Secretary of Energy. During confirmation hearings in the Senate Committee on Energy and Natural Resources two senators had demanded an undertaking by Richardson that the current spent fuel storage problem would be resolved. As reported, the confirmation vote came after the White House had assured senators that Richardson would be working on the matter with the Congress, but not until DoE had completed its viability assessment of the proposed nuclear-waste repository in Nevada. Utilities are getting increasingly concerned about the amount of spent fuel piling up at facilities and five major utility companies have gone to the US Court of Appeals for the District of Columbia to force DoE to begin disposing of spent fuel, as it should have started to do last January pursuant to the Nuclear Waste Policy Act of 1982. Thirty-six states have applied to the US Supreme Court to order DoE to act. Present prospects point to 2010 as the earliest date at which DoE could take civilian nuclear waste.

During the hearings, Richardson was quoted as saying that he supported a dual-option strategy for disposing of excess weapons plutonium, by vitrification and in MOX fuel. He

also promised that he would make progress cleaning up military nuclear waste.

A week after the confirmation of Richardson's nomination as Energy Secretary, Senator Murkowski, Chairman of the Energy and Natural Resources Committee asked the White House to put off his swearing-in until the Committee has made an investigation into the job offer he is said to have made to former White House intern Monica Lewinsky (allegedly, Richardson had given Ms. Lewinsky special treatment by offering to create an opening for her at the US Mission to the UN in New York; in fact, as it transpired, there were several vacant posts). A spokesman clarified that the investigation "[was] not about politics and this is not a witch hunt" [*sic*]. Murkowski has since let it be known that he was satisfied with Richardson's testimony. Swearing-in took place on 18 August. On 24 August, Mr. Richardson assumed his duties at DoE, but he also held the post of US Permanent Representative to the United Nations as long as the Senate had not confirmed Ambassador Richard Holbrooke's nomination for that post.

(NW, 2/7, 30/7, 6/8, 13/8, 20/8, 27/8; SF, 20/7, 27/7, 3/8, 10/8, 17/8; NF, 27/7, 10/8, 24/8; R, 4/8, in UINB, 98.32; FF, 24/8. See also Newsbrief no. 42, page 16.)

- The United States administration has announced that Ms. Rose E. Gottemoeller, the current director of the Office on Nonproliferation and National Security in DoE has been nominated to be Assistant Secretary for Nonproliferation and National Security in the same department. According to the announcement, the function is that of principal advisor on matters of non-proliferation and arms control, non-proliferation research and development programmes, emergency management policy, and the safeguards and security at the Department of Energy. (USIA, 21/9; SF, 28/9)
- Also in the United States, the Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction, a bipartisan body created in 1996 with the function of streamlining the efforts of 96 federal bodies dealing with the subject, has ceased functioning. The eight-member Commission, which had first met on 29 January 1998, had only just begun its work. It had been criticised by the Speaker of the House of Representatives, Newt Gingrich, and by a senior Republican Representative, Benjamin Gilman, who objected to some of the members nominated by the President. Gingrich is said to have deliberately held up a House decision on the further existence of the Commission, thereby effectively killing it. The situation is said to have caused surprise and criticism in both Houses of Congress and on both sides of the aisle. (NYT, 13/7; **direct information**)
- At a private meeting in Slovenia of European nuclear regulators, concern is said to have been raised about the potential of accidents resulting from the computer millennium bug. Potential problems were said to include disrupted power supplies, disabled safety systems and radiation leaks. In the UK, a potential problem is said to have been found in alarm systems at nuclear plants. (I, 23/7)

II. PPNN Activities

- PPNN will hold its twenty-fourth semi-annual meeting of its Core Group at the Pocantico Conference Center of the

Rockefeller Brothers Fund, Pocantico Hills, New York, from Thursday 29 October to Sunday 1 November 1998. The Core Group will have a dialogue on the consequences of the nuclear tests in India and Pakistan, involving senior diplomats and academics from both states. Its session will be followed by a workshop on issues at the 1999 session of the Preparatory Committee for the 2000 NPT review conference.

- PPNN now plans to hold its twenty-fifth Core Group meeting at the Chauncey Conference Center, near Princeton, New Jersey, during 11–15 March 1999. This will be combined with a briefing seminar for about 45 representatives attending the 1999 session of the Preparatory Committee.

III. Recent Publications

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IV. Documentation

a. Joint Ministerial Declaration: Towards a Nuclear-Weapons-Free World: The Need for a New Agenda, June 9

1. We, the Ministers for Foreign Affairs of Brazil, Egypt, Ireland, Mexico, New Zealand, Slovenia, South Africa and Sweden have considered the continued threat to humanity represented by the perspective of the indefinite possession of nuclear weapons by the nuclear weapon states, as well as by those three nuclear-weapon-capable states that have not acceded to the Non-Proliferation Treaty, and the attendant possibility of use of threat of use of nuclear weapons. The seriousness of this predicament has been further underscored by the recent nuclear tests conducted by India and Pakistan.

2. We fully share the conclusion expressed by the commissioners of the Canberra Commission in their Statement that "the proposition that nuclear weapons can be retained in perpetuity and never used — accidentally or by decision — defies credibility. The only complete defence is the elimination of nuclear weapons and assurance that they will never be produced again."

3. We recall that the General Assembly of the United Nations already in January 1946 — in its very first resolution — unanimously called for a commission to make proposals for "the elimination from national armaments of atomic weapons and all other major weapons adaptable to mass destruction." While we can rejoice at the achievement of the international community in concluding total and global prohibitions on chemical and biological weapons by the Conventions of 1972 and 1993, we equally deplore the fact that the countless resolutions and initiatives which have been guided by similar objectives in respect of nuclear weapons in the past half century remain unfulfilled.

4. We can no longer remain complacent at the reluctance of the nuclear-weapon states and the three nuclear-weapon-capable states to take that fundamental and requisite step, namely a clear commitment to the speedy, final and total elimination of their nuclear weapons and nuclear weapons capability and we urge them to take that step now.

5. The vast majority of the membership of the United Nations has entered into legally-binding commitments not to receive, manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices. These undertakings have been made in the context of the corresponding legally binding commitments by the nuclear-weapon states to the pursuit of nuclear disarmament. We are deeply concerned at the persistent reluctance of the nuclear-weapon states to approach their Treaty obligations as an urgent commitment to the total elimination of their nuclear weapons.

6. In this connection we recall the unanimous conclusion of the International Court of Justice in its 1996 Advisory Opinion that there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.

7. The international community must not enter the third millennium with the prospect that the maintenance of these weapons will be considered legitimate for the indefinite future, when the present juncture provides a unique opportunity to eradicate and prohibit them for all time. We therefore call on the governments of each of the nuclear-weapon states and the three nuclear-

weapons-capable states to commit themselves unequivocally to the elimination of their respective nuclear weapons and nuclear weapons capability and to agree to start work immediately on the practical steps and negotiations required for its achievement.

8. We agree that the measures resulting from such undertakings leading to the total elimination of nuclear weapons will begin with those states that have the largest arsenals. But we also stress the importance that they be joined in a seamless process by those with lesser arsenals at the appropriate juncture. The nuclear-weapon states should immediately begin to consider steps to be taken to this effect.

9. In this connection we welcome both the achievements to date and the future promise of the START process as an appropriate bilateral, and subsequently plurilateral mechanism including all the nuclear-weapon states, for the practical dismantlement and destruction of nuclear armaments undertaken in pursuit of the elimination of nuclear weapons.

10. The actual elimination of nuclear arsenals, and the development of requisite verification regimes, will of necessity require time. But there are a number of practical steps that the nuclear-weapon states can, and should, take immediately. We call on them to abandon present hair-trigger postures by proceeding to de-alerting and de-activating their weapons. They should also remove non-strategic nuclear weapons from deployed sites. Such measures will create beneficial conditions for continued disarmament efforts and help prevent inadvertent, accidental or unauthorized launches.

11. In order for the nuclear disarmament process to proceed, the three nuclear-weapon-capable states must clearly and urgently reverse the pursuit of their respective nuclear weapons development or deployment and refrain from any actions which could undermine the efforts of the international community towards nuclear disarmament. We call upon them, and all other states that have not yet done so, to adhere to the Non-Proliferation Treaty and take the necessary measures which flow from adherence to this instrument. We likewise call upon them to sign and ratify the Comprehensive Nuclear Test-Ban Treaty without delay and without conditions.

12. An international ban on the production of fissile material for nuclear weapons or other nuclear explosive devices (Cut-Off) would further underpin the process towards the total elimination of nuclear weapons. As agreed in 1995 by the States Parties to the Non-Proliferation Treaty, negotiations on such a convention should commence immediately.

13. Disarmament measures alone will not bring about a world free from nuclear weapons. Effective international cooperation to prevent the proliferation of these weapons is vital and must be enhanced through, inter alia, the extension of controls over all fissile material and other relevant components of nuclear weapons. The emergence of any new nuclear-weapon state, as well as any non-state entity in a position to produce or otherwise acquire such weapons, seriously jeopardises the process of eliminating nuclear weapons.

14. Other measures must also be taken pending the total elimination of nuclear arsenals. Legally binding instruments should be developed with respect to a joint no-first-use undertaking between the nuclear-weapon states and as regards non-use or threat of use of nuclear weapons against non-nuclear-weapon states, so called negative security assurances.

15. The conclusion of the Treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba, establishing nuclear-weapon-free zones as well as the Antarctic Treaty have steadily excluded nuclear weapons from entire regions of the world. The further pursuit, extension and establishment of such zones, especially in regions of tension, such as the Middle East and South Asia, represents a significant contribution to the goal of a nuclear-weapon-free world.

16. These measures all constitute essential elements which can and should be pursued in parallel: by the nuclear-weapon states among themselves; and by the nuclear-weapon states together with the non-nuclear-weapon states, thus providing a road map towards a nuclear-weapon-free world.

17. The maintenance of a world free of nuclear weapons will require the underpinnings of a universal and multilaterally

negotiated legally binding instrument or a framework encompassing a mutually reinforcing set of instruments.

18. We, on our part, will spare no efforts to pursue the objectives outlined above. We are jointly resolved to achieve the goal of a world free from nuclear weapons. We firmly hold that the determined and rapid preparation for the post-nuclear era must start now.

b. Extract from the final Communiqué of the Durban meeting of Heads of State or Government of the members of the Non-Aligned Movement

[This extract is limited to paragraphs pertaining to weapons of mass destruction — Ed.]

DISARMAMENT AND INTERNATIONAL SECURITY

113. The Heads of State or Government reiterated that with the end of the cold war, there is no justification for the maintenance of nuclear arsenals, or concepts of international security based on promoting and developing military alliances and policies of nuclear deterrence. They noted and welcomed the various international initiatives, which stress that with the end of the cold war the opportunity now exists for the international community to pursue nuclear disarmament as a matter of the highest priority. They also noted that the present situation whereby Nuclear Weapon States insist that nuclear weapons provide unique security benefits, and yet monopolise the right to own them, is highly discriminatory, unstable and cannot be sustained. These weapons continued to represent a threat to the survival of mankind. The Heads of State or Government recalled their principled positions on nuclear disarmament and the related issues of nuclear non-proliferation and nuclear tests. They expressed their concern at the slow pace of progress toward nuclear disarmament, which constitutes their primary disarmament objective. They noted the complexities arising from nuclear tests in South Asia, which underlined the need to work even harder to achieve their disarmament objectives, including elimination of nuclear weapons. They considered positively the commitment by the parties concerned in the region to exercise restraint, which contributes to regional security, to discontinue nuclear tests and not to transfer nuclear weapons-related material, equipment and technology. They further stressed the significance of universal adherence to the CTBT, including by all Nuclear Weapon States, and commencement of negotiations in the Conference on Disarmament on fissile materials (decision CD/1547), which, inter alia, should accelerate the process of nuclear disarmament. They also stressed their positions against unilateral, coercive or discriminatory measures which have been applied against Non-Aligned countries. They reiterated the need for bilateral dialogue to secure peaceful solutions on all outstanding issues and the promotion of confidence and security building measures and mutual trust. They recalled that the Cartagena Summit had called for the adoption of an action plan for the elimination of nuclear weapons within a time-bound framework. They once again called upon the international community to join them in negotiating and implementing universal, non-discriminatory disarmament measures and mutually agreed confidence-building measures. They called for an international conference, preferably in 1999, with the objective of arriving at an agreement, before the end of this millennium on a phased programme for the complete elimination of nuclear weapons with a specified framework of time to eliminate all nuclear weapons, to prohibit their development, production, acquisition, testing, stockpiling, transfer, use and threat of use, and to provide for their destruction.

114. The Heads of State or Government reiterated their call on the Conference on Disarmament to establish, as the highest priority, an ad hoc committee to start in 1998 negotiations on a phased programme for the complete elimination of nuclear weapons with a specified framework of time, including a Nuclear Weapons Convention. The Conference on Disarmament shall take into consideration all relevant views and proposals, regarding this issue that have been submitted to it. They also insisted on the need to conclude a universal and legally binding multilateral agreement committing all States to the complete elimination of nuclear weapons. In this context they regretted that some nuclear weapons states had adopted inflexible postures which prevented the Conference on Disarmament from commencing

these negotiations. They underscored the flexibility, which on the other hand has been demonstrated by the members of the Non-Aligned Movement, members of the Conference on Disarmament, in accepting the proposal to establish an ad hoc committee under item 1 of the Conference on Disarmament's agenda to negotiate a convention on the prohibition of the production of fissile material for nuclear weapons or other nuclear explosive devices. They emphasised that this flexibility should be reciprocated by others through their agreement on the establishment of an ad hoc committee on nuclear disarmament as well as during the course of the negotiations in the Conference on Disarmament on fissile materials (Decision CD/1547).

115. In this connection, the Heads of State or Government reiterated that a number of Non-Aligned Movement countries had taken collective initiatives at the United Nations General Assembly sessions to underscore the need for urgent action in the field of nuclear disarmament, as mandated by the Cartagena Summit. They recognised all of the constructive and useful proposals put forward by members of the Non-Aligned Movement in the Conference on Disarmament on the establishment of an Ad Hoc Committee on nuclear disarmament including the useful work done by Non-Aligned Movement members of the Conference on Disarmament in developing a Programme of Action for the Elimination of Nuclear Weapons within a time-bound framework. The Heads of State or Government took note of the Declaration issued on 9 June 1998 entitled — "Towards a World Free of Nuclear Weapons: Time for a New Agenda", supported and responded to by a number of States including by some members of the Non-Aligned Movement. They recognised that this declaration as well as all other initiatives which have consistently been proposed by the Movement and its members are contributions to the goal of the complete elimination of nuclear weapons and called upon the Nuclear Weapon States to react positively to these initiatives.

116. The Heads of State or Government expressed concern over the failure of the Nuclear Weapon States to demonstrate a genuine commitment with regard to complete nuclear disarmament, and to provide universal, unconditional, and legally binding negative security assurances to all Non-Nuclear Weapon States, and urged the Nuclear Weapon States to immediately commence and conclude without delay negotiations on these assurances.

117. The Heads of State or Government noted the establishment of an Ad Hoc Committee on effective international arrangements to assure Non-Nuclear Weapon States against the use or the threat of use of nuclear weapons in the Conference on Disarmament to negotiate universal, unconditional and legally binding assurances to all Non-Nuclear Weapon States. In this context, they expressed their conviction that efforts for the conclusion of a universal, unconditional and legally binding instrument on security assurances to Non-Nuclear-Weapon States should be pursued as a matter of priority by the members of the Non-Aligned Movement.

118. The Heads of State or Government commend the establishment in the Conference on Disarmament of an Ad Hoc Committee, under agenda item 1 entitled "the cessation of the nuclear arms race and nuclear disarmament", to negotiate a convention on the prohibition of the production of fissile material for nuclear weapons or other nuclear explosive devices and believe that the proposed convention must constitute a nuclear disarmament measure and not only a non-proliferation measure, and must be an integral step leading to the total elimination of nuclear weapons. The treaty should also promote international cooperation in the peaceful uses of nuclear energy and should not hinder access to nuclear technology, equipment and material for peaceful purposes by developing countries.

119. The Heads of State or Government reiterated their conviction of the validity of the unanimous conclusion of the Advisory Opinion of the International Court of Justice that "There exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control", and recognised that the unanimous conclusion contained in the International Court of Justice's Advisory Opinion has identified existing international law obligations. In this connection, they reiterated their

call upon all States to immediately fulfill that obligation by commencing multilateral negotiations leading to an early conclusion of a nuclear weapons convention prohibiting the development, production, testing, deployment, stockpiling, transfer, threat or use of threat of nuclear weapons and providing for their elimination.

120. The Heads of State or Government noted with concern that undue restrictions on exports to developing countries of material, equipment and technology, for peaceful purposes persist. They emphasised that proliferation concerns are best addressed through multilaterally negotiated, universal, comprehensive and non-discriminatory agreements. Non-proliferation control arrangements should be transparent and open to participation by all States, and should ensure that they do not impose restrictions on access to material, equipment and technology for peaceful purposes required by developing countries for their continued development. In this regard they also expressed their strong rejection of attempts by any member States to use the International Atomic Energy Agency's (IAEA) technical cooperation programme as a tool for political purposes in violation of the IAEA's Statute.

121. Consistent with the decisions taken by the 1995 Review and Extension Conference of Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Heads of State or Government of States party to the NPT called upon all States party, particularly the Nuclear Weapon States, to fulfill their commitments, particularly those related to Article VI of the Treaty. They also emphasised the need to ensure and facilitate the exercise of the inalienable right of all States to develop, produce and use nuclear energy for peaceful purposes without discrimination under IAEA safeguards. Undertakings to facilitate participation in the fullest possible exchange of equipment, material and scientific and technological information for the peaceful uses of nuclear energy should be fully implemented.

122. The Heads of State or Government of States party to the NPT took note with regret at the outcome of the deliberations of the Second Preparatory Committee held in Geneva from 27 April to 8 May, 1998. They further regretted that the Committee could not achieve a substantive result due to the insistence of one delegation to support the nuclear policies of a non-party to the NPT. They called upon the Preparatory Committees up to and including the 2000 Review Conference of the NPT to engage immediately, in good faith, in substantive work for the speedy and meaningful implementation of the obligations under the Treaty and the commitments in the 1995 Principles and Objectives document, and the resolution on Middle East. In this respect they further called upon the Preparatory Committee to make specific time available at its future sessions to deliberate on the practical steps for systematic and progressive efforts to eliminate nuclear weapons and for the 2000 NPT Review Conference to establish a subsidiary body to its Main Committee to deliberate on the practical steps for systematic and progressive efforts to eliminate nuclear weapons. The Heads of State or Government parties to the NPT, called for the establishment of a subsidiary body to its Main Committee II to consider and recommend proposals on the implementation of the resolution on the Middle East adopted by the 1995 Review and Extension Conference of the NPT.

123. The Heads of State or Government Parties to the Treaty on the Non-Proliferation of Nuclear Weapons also called for the creation of an open-ended standing committee which would work intersessionally, to follow up recommendations concerning the implementation of the Treaty on the Non-Proliferation of Nuclear Weapons which would be agreed to at the Treaty's 2000 Review Conference.

124. The Heads of State or Government of States signatory to the Comprehensive Nuclear Test-Ban Treaty expressed their satisfaction that 139 States have signed the Treaty and 14 States have ratified it thus far. They further expressed their general satisfaction at the progress of establishing the international verification system thus far. They agreed that if the objectives of the Treaty were to be fully realised, the continued commitment of all State signatories, especially the Nuclear Weapon States, to nuclear disarmament would be essential.

125. The Heads of State or Government reaffirmed the inviolability of peaceful nuclear activities and that any attack or threat of attack against peaceful nuclear facilities — operational or under construction — poses a great danger to human beings and the environment, and constitutes a grave violation of international law, principles and purposes of the United Nations Charter and regulations of the International Atomic Energy Agency. They recognised the need for a comprehensive multilaterally negotiated instrument, prohibiting attacks, or threat of attacks on nuclear facilities devoted to peaceful uses of nuclear energy.

126. The Heads of State or Government of the States party to the Chemical Weapons Convention welcomed the increasing number of ratifications of the Convention and invited all States who have still not ratified it to do so as soon as possible with the view to its universality. They also underlined the urgency of satisfactorily resolving the unresolved issues in the framework of the Organisation of the Prohibition of Chemical Weapons (OPCW) with a view to paving the ground for the effective, full and non-discriminatory implementation of the Convention. In this context, they reiterated their call on the developed countries to promote international cooperation through the transfer of technology, material and equipment for peaceful purposes in the chemical field and the removal of all and any discriminatory restrictions that are contrary to the letter and spirit of the Convention.

127. The Heads of State or Government of the States party to the Chemical Weapons Convention, while stressing the importance of the full implementation of the Convention, and in this context, the provisions of Article X on Assistance, expressed their concern at the small number of responses received from the States Parties to the Voluntary Fund on Assistance established by the OPCW and called upon all States Parties to the Convention that had not yet acted in accordance with Article X, to reply to the OPCW and contribute to redress this situation.

128. While asserting that the Biological and Toxin Weapons Convention inherently precludes the use of biological weapons, the Heads of State or Government reiterated the decision by the BWC Review Conference that the use by the States parties, in any way and under any circumstances, of microbial or other biological agents or toxins, that is not consistent with prophylactic, protective or other peaceful purposes, is effectively a violation of Article I of the Convention. In this connection they noted that the Islamic Republic of Iran has formally presented a proposal to amend Article I of the Convention to include the prohibition of use of biological weapons and urged an early reply from the States parties to the inquiries by the depositaries on this proposal. They noted the progress achieved so far negotiating a Protocol to strengthen the BWC and reaffirmed the decision of the Fourth Review Conference urging the conclusion of the negotiations by the Ad Hoc Group as soon as possible before the commencement of the Fifth Review Conference and for it to submit its report, which shall be adopted by consensus, to the States parties, to be considered at a Special Conference. Therefore, artificial deadlines should be avoided. They also expressed their concern at any attempts to reduce the scope and importance of issues related to Article X of the Convention. Ensured access for peaceful purposes to the relevant materials, equipment and technology is essential to safeguard the economic interests of developing countries. Substantive progress in strengthening the application and full operationalisation of Article X is thus crucial for the conclusion of a universally acceptable and legally binding instrument designed to strengthen the Convention

...

136. The Heads of State or Government considered the establishment of nuclear-weapon free zones (NWFZ) as a positive step towards attaining the objective of global nuclear disarmament. They urged States to conclude agreements with a view to creating nuclear-weapon-free zones in regions where they do not exist, in accordance with the provisions of the Final Document of the Special Session of the General Assembly Devoted to Disarmament (SSOD-1). In this context, they welcomed the establishment of nuclear-weapon-free zones established by the Treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba. The Heads of State or Government considered the question of the establishment

of nuclear-weapon free zones in other parts of the world and agreed that this should be on the basis of arrangements freely arrived at among States of the region concerned and in conformity with the provisions of the Final Document of SSOD-1. They concurred that in the context of nuclear-weapon-free zones, it is essential that Nuclear Weapon States should provide unconditional assurances against the use or threat of use of nuclear weapons to all States of the zone.

137. The Heads of State or Government welcomed and supported Mongolia's policy to institutionalise its single State nuclear-weapon-free status.

138. The Heads of State or Government reiterated their support for the establishment in the Middle East of a zone free of all weapons of mass destruction. To this end, they reaffirmed the need for the speedy establishment of a nuclear-weapon-free zone in the Middle East in accordance with Security Council resolutions 487 (1981) and 687 (1991) and the relevant General Assembly resolutions adopted by consensus. They called upon all parties concerned to take urgent and practical steps towards the establishment of such a zone and, pending its establishment, they called on Israel, the only country in the region that has not joined the NPT nor declared its intention to do so, to renounce possession of nuclear weapons, to accede to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) without delay, and to place promptly all its nuclear facilities under IAEA full-scope safeguards. They expressed great concern over the acquisition of nuclear capability by Israel which poses a serious and continuing threat to the security of neighbouring and other States and they condemned Israel for continuing to develop and stockpile nuclear arsenals. They are of the view that stability cannot be achieved in a region where massive imbalances in military capabilities are maintained particularly through the possession of nuclear weapons which allow one party to threaten its neighbours and the region. They further welcomed the initiative by H.E. Mohammed Hosni Mubarak, President of the Arab Republic of Egypt, on the establishment of a zone free from weapons of mass destruction in the Middle East. They stressed that necessary steps should be taken in different international fora for the establishment of this zone. They also called for the total and complete prohibition of the transfer of all nuclear-related equipment, information, material and facilities, resources or devices and the extension of assistance in the nuclear-related scientific or technological fields to Israel.

139. The Heads State or Government welcomed the initiative by H.E. Mohammed Hosni Mubarak, President of the Arab Republic of Egypt, in June 1998, to achieve a world free from all weapons of mass destruction, in particular nuclear weapons and to convene as soon as possible an international conference to consider this issue

...

141. The Heads of State or Government stated that in order to enhance international security and stability, all States parties to non-proliferation, arms limitations and disarmament treaties should comply with and implement all provisions of such treaties. They emphasised that questions of non-compliance by States Parties should be resolved in a manner consistent with such treaties. They further emphasised that any deviation from the role envisaged for the Security Council under the United Nations Charter or in certain circumstances under relevant provisions of multilateral treaties on non-proliferation, arms limitation and disarmament would undermine the provisions of these treaties and conventions, including the inherent mechanisms for securing redress of violations of their provisions. Such deviations would also call into question the value of painstaking multilateral negotiations on disarmament and arms control treaties in the Conference on Disarmament. They underlined that circumventing or undermining the provisions of existing treaties will seriously prejudice the role of the Conference. In this context, they also underlined that they were opposed to the assumption of a role by the United Nations Security Council inconsistent with the United Nations Charter, also as this concerns non-proliferation.

142. The Heads of State or Government reaffirmed that global and regional approaches to disarmament are complementary and could be pursued simultaneously. They urged States in various regions of the world to negotiate agreements to promote greater

balance in conventional armaments and, where necessary, for their progressive and balanced reduction, with a view to enhancing international and regional peace and security. They stressed that the peaceful resolution of regional and inter-State disputes is essential for the creation of conditions which would enable States to divert their resources from armaments to economic growth and development. Regional disarmament initiatives, to be practical, needed to take into account the special characteristics of each region and enhance the security of every State of the region concerned. The question of the accumulation of conventional weapons beyond the legitimate requirements of the States for self-defence should also be addressed, taking into account the special characteristics of each region.

143. The Heads of State or Government took note of the relevant paragraphs of the United Nations General Assembly resolutions 52/12A & B on international peace, security and disarmament, and insisted on the need that its [sic] implementation respects fully the principles of sovereignty, territorial integrity and non-intervention in the internal affairs of States.

144. The Heads of State or Government continued to stress their hope that the decision to re-establish at the United Nations Secretariat, the Department on Disarmament, headed by an Under-Secretary-General from a Non-Aligned country should contribute to greater disarmament efforts towards achieving general and complete disarmament in conformity with priorities set out in SSOD-1 and relevant provisions of General Assembly resolution 52/220.

145. The Heads or State and Government expressed once again their support for the convening of the Fourth Special Session of the United Nations General Assembly devoted to Disarmament. They welcomed the adoption by the General Assembly, by consensus, of the resolution on the Convening of the IV [sic] Special Session of the General Assembly Devoted to Disarmament. They took note of the deliberations on the matter held by the United Nations Disarmament Commission and directed the Coordinating Bureau to entrust the Non-Aligned Movement Working Group on Disarmament with the task of pursuing further the holding of the Fourth Special Session and the related coordination during the preparatory process. In this context, they reaffirmed the need to continue to press for further steps leading to its convening with the participation of all member States of the United Nations as well as the need for SSOD IV to review and assess the implementation of SSOD I.

146. The Heads of State or Government welcomed the decision adopted by the General Assembly on maintaining and revitalising the three Regional Centres for Peace and Disarmament in Nepal, Peru and Togo.

147. The Heads of State or Government expressed their satisfaction with the work of the Non-Aligned Working Group on Disarmament under the coordination of Indonesia and encouraged delegations to continue their active work in this regard.

INDIAN OCEAN

148. The Heads of State or Government reaffirmed the validity of the objectives of the Declaration of the Indian Ocean as a Zone of Peace. They reaffirmed the importance of international cooperation to ensure peace, security and stability in the Indian Ocean region. They noted that greater efforts and more time were required to facilitate a focussed discussion on practical measures to ensure conditions of peace, security and stability in the region. They also noted that in the light of UNGA Resolution 52/44, the Chairman of the Ad Hoc Committee on the Indian Ocean will continue his informal consultations on the future work of the Committee.

c. Security Council resolution 1194 (1998) on the situation between Iraq and Kuwait. Adopted by the Security Council on 9 September 1998

The Security Council,

Recalling all its previous relevant resolutions, and in particular its resolutions 687 (1991) of 3 April 1991, 707 (1991) of 15 August 1991, 715 (1991) of 11 October 1991, 1060 (1996) of 12 June 1996, 1115 (1997) of 21 June 1997 and 1154 (1998) of 2 March 1998,

Noting the announcement by Iraq on 5 August 1998 that it had decided to suspend cooperation with the United Nations Special Commission and the International Atomic Energy Agency (IAEA) on all disarmament activities and restrict ongoing monitoring and verification activities at declared sites, and/or actions implementing the above decision,

Stressing that the necessary conditions do not exist for the modification of the measures referred to in section F of resolution 687 (1991),

Recalling the letter from the Executive Chairman of the Special Commission to the President of the Security Council of 12 August 1998 (S/1998/767), which reported to the Council that Iraq had halted all disarmament activities of the Special Commission and placed limitations on the rights of the Commission to conduct its monitoring operations,

Recalling also the letter from the Director General of the IAEA to the President of the Security Council of 11 August 1998 (S/1998/766) which reported the refusal by Iraq to cooperate in any activity involving investigation of its clandestine nuclear programme and other restrictions of access placed by Iraq on the ongoing monitoring and verification programme of the IAEA,

Noting the letters of 18 August 1998 from the President of the Security Council to the Executive Chairman of the Special Commission and the Director General of the IAEA (S/1998/769, S/1998/768), which expressed the full support of the Security Council for those organizations in the implementation of the full range of their mandated activities, including inspections,

Recalling the Memorandum of Understanding signed by the Deputy Prime Minister of Iraq and the Secretary-General on 23 February 1998 (S/1998/166), in which Iraq reiterated its undertaking to cooperate fully with the Special Commission and the IAEA,

Noting that the announcement by Iraq of 5 August 1998 followed a period of increased cooperation and some tangible progress achieved since the signing of the Memorandum of Understanding,

Reiterating its intention to respond favourably to future progress made in the disarmament process and *reaffirming* its commitment to comprehensive implementation of its resolutions, in particular resolution 687 (1991),

Determined to ensure full compliance by Iraq with its obligations under all previous resolutions, in particular resolutions 687 (1991), 707 (1991), 715 (1991), 1060 (1996), 1115 (1997) and 1154 (1998), to permit immediate, unconditional and unrestricted access to the Special Commission and the IAEA to all sites which they wish to inspect, and to provide the Special Commission and the IAEA with all the cooperation necessary for them to fulfil their mandates under those resolutions,

Stressing the unacceptability of any attempts by Iraq to deny access to any sites or to refuse to provide the necessary cooperation,

Expressing its readiness to consider, in a comprehensive review, Iraq's compliance with its obligations under all relevant resolutions once Iraq has rescinded its above-mentioned decision and demonstrated that it is prepared to fulfil all its obligations, including, in particular on disarmament issues, by resuming full cooperation with the Special Commission and the IAEA consistent with the Memorandum of Understanding, as endorsed by the Council in resolution 1154 (1998), and to that end *welcoming* the proposal of the Secretary-General for such a comprehensive review and *inviting* the Secretary-General to provide his views in that regard,

Reiterating the commitment of all Member States to the sovereignty, territorial integrity and political independence of Kuwait and Iraq,

Acting under Chapter VII of the Charter of the United Nations,

1. *Condemns* the decision by Iraq of 5 August 1998 to suspend cooperation with the Special Commission and the IAEA, which constitutes a totally unacceptable contravention of its obligations under resolutions 687 (1991), 707 (1991), 715 (1991), 1060 (1996), 1115 (1997) and 1154 (1998), and the Memorandum of Understanding signed by the Deputy Prime Minister of Iraq and the Secretary-General on 23 February 1998;

2. *Demands* that Iraq rescind its above-mentioned decision and cooperate fully with the Special Commission and the IAEA in

accordance with its obligations under the relevant resolutions and the Memorandum of Understanding as well as resume dialogue with the Special Commission and the IAEA immediately;

3. *Decides* not to conduct the review scheduled for October 1998 provided for in paragraphs 21 and 28 of resolution 687 (1991), and not to conduct any further such reviews until Iraq rescinds its above-mentioned decision of 5 August 1998 and the Special Commission and the IAEA report to the Council that they are satisfied that they have been able to exercise the full range of activities provided for in their mandates, including inspections;

4. *Reaffirms* its full support for the Special Commission and the IAEA in their efforts to ensure the implementation of their mandates under the relevant resolutions of the Council;

5. *Reaffirms* its full support for the Secretary-General in his efforts to urge Iraq to rescind its above-mentioned decision;

6. *Reaffirms* its intention to act in accordance with the relevant provisions of resolution 687 (1991) on the duration of the prohibitions referred to in that resolution and notes that by its failure so far to comply with its relevant obligations Iraq has delayed the moment when the Council can do so;

7. *Decides* to remain seized of the matter.

d. Extract from the Message of the UN Secretary-General to the IAEA General Conference

This session of the General Conference takes place against the backdrop of a most regrettable setback in hitherto successful global efforts to prevent the proliferation of nuclear weapons. Lest we have forgotten, or have become complacent on account of notable achievements, this setback is a powerful reminder that the genie cannot be put back in the bottle, that we must focus on the driving forces behind the acquisition of nuclear weapons, that we must work not only on weapons capabilities but equally on real and perceived insecurities. We must also reaffirm our course of action: no nuclear tests; no new weaponization or deployment of nuclear weapons; a working system of global and regional security; and nuclear disarmament at the earliest possible date.

Against that background looms large the relevance of the nuclear non-proliferation regime, accompanied by credible IAEA safeguards and verifications. I welcome the significant progress made in strengthening the safeguards system through the Additional Protocols to existing safeguards agreements. It is encouraging that Additional Protocols have been concluded or are being finalized by several countries, and I urge all Member States to do so.

An essential complement to the Non-Proliferation Treaty is the landmark agreement on the Comprehensive Test Ban Treaty. I reiterate my call to all countries to sign and ratify the CTBT, and I welcome the steady progress being made to the provisional technical secretariat of the preparatory commission for the CTBTO in fully assuming its tasks.

e. Extract from the Statement of the Director General to the IAEA General Conference

Introduction

We live in times of change, uncertainty and opportunity — and this has an impact on every aspect of the work of this organization. The urgent need to evolve sustainable development strategies requires that objective consideration be given to the role of nuclear energy in these strategies. The imperative to ensure a high level of safety for all nuclear facilities around the world requires the development and management of a comprehensive and legally binding safety regime supported by an enhanced safety culture. The realistic possibility, with the end of the cold war, to curb nuclear weapons proliferation and to move towards nuclear disarmament, depends critically on the availability of an effective system of verification. And the need to raise the standard of living of the world's poorest requires the efficient transfer of technology, including nuclear technology.

The IAEA was established 41 years ago to be the focal point for international co-operation in the use of nuclear energy for peace and development. Our role as an objective institution that serves as a centre for standard setting, independent analysis, expert advice, technology transfer and impartial oversight and verifica-

tion is more relevant than ever. In these remarks, my intention is to highlight the role of the Agency in four areas: energy, safety, verification and technology transfer. I will then turn briefly to the process of programme and management review which I have initiated to ensure that the Agency maintains and enhances its record as an effective and efficient organization.

III. NUCLEAR VERIFICATION AND THE SECURITY OF MATERIAL

The hopes for a safer and more secure world rest crucially on advancing the agenda for nuclear arms reduction and their eventual elimination. An effective verification system is indispensable to the realization of these hopes.

Over 180 States have committed themselves to IAEA comprehensive safeguards. In 1997, safeguards were applied to over 900 facilities involving more than 10,000 days of inspection. On the basis of these activities, the Agency Safeguards Statement for 1997 concluded that, in fulfilling its safeguards obligations, the Secretariat did not find any indication that nuclear material and facilities which had been declared and placed under safeguards had been diverted for non-peaceful ends, or that safeguarded facilities, equipment or non-nuclear material were being misused.

The Strengthened Safeguards System

Since 1991, and as a result of the Agency's experience in Iraq, it has become clear that effective safeguards must provide assurance not only about nuclear activities declared by a State but also about the absence of any undeclared activities. Efforts since that time have aimed at developing a cost effective system that deals with both declared and possible undeclared activities.

The Model Additional Protocol

With the approval by the Board of Governors last year of the Model Additional Protocol to the safeguards agreements, the Agency has obtained the legal authority to implement a more effective safeguards system that affords the Agency a vantage point from which to develop a more comprehensive picture than before of all nuclear activities in a State and to detect and verify possible non-peaceful activities at an early stage. The challenge now is to ensure that all States conclude and implement Additional Protocols. The strengthened safeguards system is a fundamental condition for an effective non-proliferation regime.

I am pleased to be able to report that good progress is being made in the conclusion of these Protocols. With the ten Additional Protocols already signed, and the Additional Protocols for twenty-two States approved by the Board which we expect to be signed in the coming days, a considerable portion of the world's nuclear fuel cycle which is under comprehensive safeguards will be subject to strengthened safeguards. But that is not enough.

One of the main purposes of the strengthened safeguards system is to provide assurance about the absence of any undeclared nuclear activities in States with legally binding non-proliferation commitments which can be better achieved with global adherence. I would therefore urge all States with outstanding safeguards agreements to conclude them and I would also urge all States to accelerate their consideration of the Model Additional Protocol and enter into consultations with the Agency at the earliest possible opportunity. We should work together to ensure that by the year 2000 all States have concluded outstanding safeguards agreements and also the Additional Protocol.

In implementing the strengthened safeguards system, the Agency's objective is to achieve optimum effectiveness and efficiency by meshing fully the traditional nuclear material accountancy system with the new system. In keeping with the commitment to overall cost neutrality, work is in progress on integrated safeguards implementation. In addition to already completed guidelines for the preparation and submission of declarations pursuant to the Additional Protocol, guidelines are being prepared with regard to the implementation of the complementary access provisions of the Model Protocol. The organizational structure for evaluating safeguards-relevant information has been strengthened and steady progress is being made in performing State-wide evaluations. Valuable experience with complementary access is being gained under the Australian Additional Protocol.

Verification information from digital surveillance cameras, electronic seals and other monitoring devices installed in Switzerland, South Africa, Japan and Canada in different types of facilities, is being transmitted via authenticated and encrypted communication links to IAEA headquarters. We expect remote monitoring to be introduced on a routine basis early next year.

Future Prospects

In my statement to the Board of Governors in June this year, in the context of the nuclear weapons tests conducted in May, I pointed to the widespread concern at the possible erosion of the basic norm of the non-proliferation regime, namely that, "pending nuclear disarmament, world security is better served with fewer rather than more nuclear weapons and nuclear weapon States"; I also underscored the need to accelerate the process of nuclear disarmament. In addition to a complete ban on nuclear testing, two actions have always been identified as indispensable: freezing the production of fissile materials for weapon purposes and the gradual reduction of stockpiles of such materials, either unilaterally or through disarmament agreements. I am pleased to note that steps are being taken in both directions.

Fissile Material Treaty (FMT)

Last month the Conference on Disarmament finally agreed to commence negotiation of a treaty prohibiting the production of fissile material for nuclear weapons or other nuclear explosive devices (FMT). The issues in developing such a treaty are complex and the negotiations are likely to be lengthy but we have to begin to confront these issues head-on. In furtherance of a resolution of the United Nations General Assembly Resolution (A/RES/48/75 of 16 December 1993), I wrote to the President of the Conference on Disarmament on 28 August to offer the assistance of the Agency in developing the technical verification arrangements for such a treaty.

Nuclear Material Released from the Military Sector

You will recall that over the past two years the Agency has been involved in discussions with the Russian Federation and the United States of America to develop the technical, legal and financial arrangements and modalities for possible IAEA verification in the USA and the Russian Federation that nuclear material transferred from the military sector to the peaceful sector, notably fissile material from dismantled nuclear weapons, remained peacefully stored or was rendered unusable for weapons purposes. Some progress has been made but many issues still need to be resolved. Minister Adamov of the Russian Federation, Secretary Richardson of the USA and I will meet this week to review progress and set goals for future work.

I also welcome the recent decision of the UK, as a result of its Strategic Defence Review, to be the first nuclear weapon State to declare the total size of its stocks of nuclear material in both the civilian and military sectors. In connection with this Review, the UK has also determined that substantial amounts of fissile material are now surplus to its military programme and that these will be available for IAEA safeguards under the Voluntary Offer Safeguards Agreement between the UK and the Agency.

The Agency stands ready to contribute its verification and safeguards expertise and experience to the full realization of the prospects for nuclear arms reduction and elimination. An important issue that must be faced urgently, if the Agency is to respond positively to these and other initiatives, is the question of financing. In my view, the establishment of a Nuclear Arms Control Verification Fund based on an agreed scheme of assessed contributions, which could finance the verification of nuclear arms control and reduction measures, is one option which should be given serious consideration. I was asked by the Board of Governors last week to prepare an options paper on the question of financing. I hope that this could speed up the process of agreement on this important matter.

Middle East

Pursuant to the mandate of the General Conference (resolution GC(41)/RES/25 of 3 October 1997), I have, as stated in my report (GOV/1998/45-GC(42)/15), started consultations which build upon the work of my predecessor with States of the Middle East region to obtain additional and more detailed views on the early

application of full-scope Agency safeguards to all nuclear activities in the region, as well as about the kind of material obligations which might eventually feature in a Middle East nuclear weapon free zone (NWFZ) agreement. As has been stated in successive reports on the subject, greater clarity and specificity on the latter issue is important to the preparation of the model verification agreements foreseen in General Conference resolutions.

As my report makes it clear, although commitment to nuclear non-proliferation continues to be voiced by all the parties concerned, views still differ with regard to the modalities and timing of applying full-scope safeguards to all nuclear activities in the region, and to the establishment of an NWFZ in the Middle East.

Democratic People's Republic of Korea (DPRK)

In the DPRK, the Agency continues to assert its right to perform inspections under the NPT safeguards agreement, which remains in force. At the same time, we are verifying a freeze of the DPRK nuclear programme at the request of the Security Council and reporting periodically to the Council and the Board of Governors.

I regret to have to report that the measure of co-operation which we receive from the DPRK has not increased. Three rounds of technical discussions have taken place since the previous General Conference with no progress noted on any of the outstanding issues associated with eventually assessing the extent of the DPRK's compliance with the safeguards agreement. This includes the preservation of information which must remain available to enable the Agency to verify in the future the accuracy and completeness of the DPRK's initial declaration.

Iraq

The Agency's inspection and verification activities in Iraq have resulted in the development of a technically coherent picture of Iraq's clandestine nuclear programme. However, as with all other Agency verification activities, a degree of uncertainty remains as to the completeness of this picture. Such uncertainty is inherent in any countrywide verification process that seeks to prove the absence of readily concealable objects or activities. Iraq's lack of full transparency with regard to the provision of certain information regarding the few remaining questions relevant to the clandestine programme brings additional uncertainty into the picture.

Nonetheless, this uncertainty does not prevent the full implementation of the IAEA's plan for the ongoing monitoring and verification (OMV) of Iraq's compliance with its obligations under the relevant Security Council resolutions. Indeed, as stated in document GC(42)/14, this uncertainty is factored into the OMV plan, which takes into account the extensive technological expertise developed by Iraq in the course of its clandestine nuclear programme, particularly regarding weaponization and the production of weapon-usable nuclear material.

The Agency continues to focus most of its resources on the implementation and technical strengthening of its OMV plan. As part of its OMV activities, the IAEA will continue to exercise its right to investigate further any aspect of Iraq's clandestine nuclear programme through the follow-up of any new information that becomes available.

Since 5 August, Iraq has suspended its co-operation with the IAEA and the UN Special Commission and has provided access only to "declared sites". As a result, the Agency is not able to inspect any new locations or investigate the few remaining questions and concerns regarding Iraq's clandestine nuclear programme. Under these circumstances, the IAEA is not able to fully implement its OMV plan — particularly the measures needed to ensure that the past programme will not be revived. Ongoing monitoring and verification constitutes an integral whole and the assurances derived depend on the implementation of *all* the measures. At present, the level of assurance regarding Iraq's compliance with its obligations is significantly reduced.

On 9 September the UN Security Council unanimously adopted resolution 1194 which, among other things, called for Iraq to rescind its decision of 5 August and to co-operate fully with the IAEA and the Special Commission. To date there has been no formal response from Iraq.

Illicit Trafficking

I would conclude this review of verification and safeguards priorities by referring to the potential for nuclear weapons proliferation and for threats to public safety from illicit trafficking in nuclear material and other radioactive sources. The Agency's Illicit Trafficking Database Programme has recorded continued incidents of illicit movement of nuclear material and other radioactive sources. In each of the past two years over 30 such incidents were reported. Since last September, there have been 15 incidents involving nuclear material and 20 involving other radioactive sources.

The Secretariat is continuing its activities to assist Member States in their efforts to prevent, detect and respond to theft, diversion and other unauthorized uses of nuclear material and other radioactive sources. The Agency's Security of Material programme covers a wide range of activities including information exchange through, for example, establishing and maintaining the database, and through international conferences, training, technical assistance and other support services. Details of this programme have been provided to Member States in document GC(42)/17. Also, at the request of the United Nations General Assembly, the Agency is continuing to contribute to the ongoing work of the Ad Hoc Committee established by the General Assembly to deal with international terrorism. This Committee is elaborating a draft convention on the suppression of acts of nuclear terrorism and we must ensure that the new Convention will build upon, and not overlap with, the Convention on the Physical Protection of Nuclear Material.

f. International Atomic Energy Agency General Conference Resolutions adopted September 1998

GC(42)/23 — Participation of Palestine in the Work of the International Atomic Energy Agency

The General Conference,

Recalling General Assembly resolution 3237 (XXIX) of 22 November 1974, in which the General Assembly granted observer status to the Palestine Liberation Organization,

Recalling General Conference resolution GC(XX)RES/334 of 23 September 1976, in which it granted observer status to the Palestine Liberation Organization within the International Atomic Energy Agency,

Aware that Palestine is a full member of the League of Arab States, the Non-Aligned Movement, the Organization of the Islamic Conference and the Group of 77,

Recalling General Conference decision (XXXIII)/DEC/16 of 29 September 1989, in which it decided that "Palestine" should be used instead of the "Palestine Liberation Organization", and

Recalling General Assembly resolution 52/250 of 7 July 1998, in which the General Assembly granted additional rights and privileges of participation to Palestine,

Decides to confer upon Palestine in its capacity as observer, and as set forth in the Annex to the present resolution, additional rights and privileges of participation in the work of the Agency;

Requests the Director General to inform the General Conference about the implementation of the present resolution.

ANNEX

The additional rights and privileges of participation of Palestine shall be effected through the following modalities, without prejudice to the existing rights and privileges:

1. The right to participate in the General debate, and the sessions of the IAEA General Conference and the International Conferences convened under the auspices of the IAEA.

2. Without prejudice to the priority of Member States, Palestine shall have the right of inscription on the list of speakers under agenda items other than Palestinian and Middle East issues, at any meeting of the plenary; after the last Member State inscribed on the list of that meeting.

3. The right to reply.

4. The right to raise points of order related to the proceedings on Palestinian and Middle East issues, provided that the right to raise such a point of order shall not include the right to challenge the decision of the presiding officer.

5. The right to co-sponsor draft resolutions and decisions on Palestinian and Middle East issues. Such draft resolutions and decisions shall only be put to a vote upon request from a Member State.

6. The right to make interventions, with a precursory explanation or the recall of relevant IAEA resolutions and decisions being made only once by the President at the start of each session.

7. Seating for Palestine shall be arranged immediately after Non-Member States and before the other Observers, with allocation of seats similar to Member States.

8. Palestine shall not have the right to vote or to put forward candidates.

GC(42)/24 — Application of IAEA Safeguards in the Middle East

The General Conference,

(a) *Recognizing* the importance of the non-proliferation of nuclear weapons — both globally and regionally — in enhancing international peace and security,

(b) *Mindful* of the usefulness of the Agency's safeguards system as a reliable means of verification of the peaceful uses of nuclear energy,

(c) *Concerned* by the grave consequences, endangering peace and security, of the presence in the Middle East region of nuclear activities not wholly devoted to peaceful purposes,

(d) *Welcoming* the initiatives regarding the establishment of a zone free of all weapons of mass destruction, including nuclear weapons, in the Middle East and recent initiatives regarding arms control in the region,

(e) *Recognizing* that full realization of these objectives would be promoted by participation of all States of the region,

(f) *Commending* the efforts of the Agency concerning the application of safeguards in the Middle East, and the positive response of some States in concluding a full-scope safeguards agreement, and

(g) *Recalling* its resolution GC(41)/RES/25,

Takes note of the Director General's report in document GOV/1998/39-GC(42)/2;

Affirms the urgent need for all States in the Middle East to forthwith accept the application of full-scope Agency safeguards to all their nuclear activities as an important confidence-building measure among all States in the region and as a step in enhancing peace and security in the context of the establishment of a nuclear-weapon-free zone (NWFZ);

Calls upon all parties directly concerned to consider seriously taking the practical and appropriate steps required for the implementation of the proposal to establish a mutually and effectively verifiable NWFZ in the region, and invites the countries concerned to adhere to international non-proliferation regimes, including the Treaty on the Non-Proliferation of Nuclear Weapons, as a means of complementing participation in a zone free of all weapons of mass destruction in the Middle East and of strengthening peace and security in the region;

Takes note of the importance of the ongoing bilateral Middle East peace negotiations and the activities of the multilateral working group on Arms Control and Regional Security in promoting mutual confidence and security in the Middle East, including establishment of a NWFZ, and calls on the Director General, as requested by the participants, to render all necessary assistance to the working group in promoting that objective;

Requests the Director General to continue consultations with the States of the Middle East to facilitate the early application of full-scope Agency safeguards to all nuclear activities in the region as relevant to the preparation of model agreements, as a necessary step towards the establishment of a NWFZ in the region, referred to in resolution GC(XXXVII)/RES/627;

Calls upon all States in the region to extend their fullest cooperation to the Director General in the fulfillment of the tasks entrusted to him in the preceding paragraph;

Further calls upon all States in the region to take measures, including confidence-building and verification measures, aimed at establishing a NWFZ in the Middle East;

Calls upon all other States, especially those with a special responsibility for the maintenance of international peace and

security, to render all assistance to the Director General by facilitating the implementation of this resolution; and

Requests the Director General to submit to the General Conference at its forty-third regular session a report on the implementation of this resolution and to include in the provisional agenda for that session an item entitled "Application of IAEA safeguards in the Middle East".

GC(42)/26/Rev.1/Mod.1 — Nuclear Testing

The General Conference,

(a) *Recalling* its resolution GC(39)/RES/23, which expressed inter alia grave concern at the resumption and the continuation of nuclear testing, and the expectation that the negotiations then under way for a Comprehensive Nuclear-Test-Ban Treaty would be completed and the Treaty signed in 1996,

(b) *Welcoming* the adoption of the Comprehensive Nuclear-Test-Ban Treaty by the United Nations General Assembly, in its resolution 50/245 of 10 September 1996,

(c) *Recalling* resolution 52/11 on the Report of the Agency, adopted by the United Nations General Assembly on 12 November 1997,

(d) *Also recalling* resolution 1172 (1998) adopted by the Security Council of the United Nations on 5 June 1998,

(e) *Noting* that the States concerned have both imposed moratoria on further testing and have said that they are willing to enter into legal commitments not to conduct any further nuclear tests, and *reiterating* the need for such commitments to be expressed in legal form by signing and moving to ratify the Comprehensive Nuclear-Test-Ban Treaty,

(f) *Recalling* the important mandate and role of the International Atomic Energy Agency in promoting non-proliferation, and that in particular Article III.B.1 of the Statute requires that "the Agency shall conduct its activities in accordance with the purposes and principles of the United Nations to promote peace and international co-operation, and in conformity with policies of the United Nations furthering the establishment of safeguarded worldwide disarmament and in conformity with any international agreements entered into pursuant to such policies",

(g) *Reaffirming* the crucial importance of the Treaty on the Non-Proliferation of Nuclear Weapons and the Comprehensive Nuclear-Test-Ban Treaty as the cornerstones of the international regime on the non-proliferation of nuclear weapons and as essential foundations for the pursuit of nuclear disarmament, and the importance of all States adhering to these treaties, as well as to the other elements of the international non-proliferation regime, among which are the Agency's safeguards system, including the Model Additional Protocol INFCIRC/540), and

(h) *Welcoming* the consensus in the Conference on Disarmament on establishment of an ad hoc committee to negotiate a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices, and *welcoming* the confirmation by the Director General to the President of the Conference on Disarmament of the readiness of the Agency to provide assistance in accordance with United Nations General Assembly resolution 48/75 L of 16 December 1993, for examination of verification arrangements for such a treaty as required,

Expresses grave concern over and strongly deplors the nuclear tests conducted in South Asia in May 1998;

Calls upon the States concerned to implement resolution 1172 (1998) of the Security Council of the United Nations;

Calls upon the States concerned to conclude promptly, consistent with their safeguards commitments and pending their adherence to the Treaty on the Non-Proliferation of Nuclear Weapons, the additional protocols as called for by resolution GC(41)/RES/16;

Urges all States that have not yet done so, particularly those States that operate unsafeguarded nuclear facilities, to become Parties to the Treaty on the Non-Proliferation of Nuclear Weapons and place all their nuclear material and facilities under comprehensive Agency safeguards as required by that Treaty, and to become Parties to the Comprehensive Nuclear-Test-Ban Treaty, without delay and without conditions;

Urges all States, especially those with the capability to produce fissile material, to support the negotiations for a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices with a view to completing those negotiations as quickly as possible;

Affirms the need to continue to move with determination towards the full realization and effective implementation of all the provisions of the Treaty on the Non-Proliferation of Nuclear Weapons, *urges* the five nuclear-weapon States to fulfil their commitments relating to nuclear disarmament under Article VI of that Treaty, and to intensify their efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons in accordance with that article; and

Remains seized of future developments pertinent to this resolution with a view to the further promotion of nuclear non-proliferation objectives consistent with the provisions of Articles II and III.B.1 of the Statute.

GC(42)/29 — Implementation of the United Nations Security Council Resolutions Relating to Iraq

The General Conference,

(a) *Recalling* United Nations Security Council resolutions 687, 707, 715, 1051, 1060, 1115, 1154 and 1194,

(b) *Recalling further* the resolutions of the thirty-fifth (1991), thirty-sixth (1992), thirty-seventh (1993), thirty-eighth (1994), thirty-ninth (1995), fortieth (1996) and forty-first (1997) General Conferences (GC(XXXV)/RES/568, GC(XXXVI)/RES/579, GC(XXXVII)/RES/626, GC(XXXVIII)/RES/19, GC(39)/RES/5, GC(40)/RES/21 and GC(41)/RES/23.

(c) *Taking note* of the Director General's report contained in document GC(42)/14, his introductory statement to the forty-second General Conference, his fourth and fifth consolidated six-monthly reports to the Security Council (GOV/INF/827 and GOV/INF/13), his Interim Status Report (GOV/INF/1998/16) and his report to the Board of Governors (GOV/1998/44),

(d) *Reaffirming* the need for full implementation by Iraq of Security Council resolutions 687, 707, 715, 1051, 1060, 1115, 1154 and 1194,

(e) *Noting with concern* that the limited activities currently undertaken by the IAEA in Iraq, under the restrictions imposed by Iraq, fall far short of full implementation of the OMV plan and result in a significantly reduced level of assurance than would be provided through full implementation of the plan,

(f) *Recalling* Iraq's declared intention to adopt, by October 1998, the necessary measures to implement its obligations under resolutions 687 and 707, and other relevant Security Council resolutions and the IAEA's OMV plan,

(g) *Noting* that the IAEA judges the summary of Iraq's technical achievements provided by Iraq to be consistent with the technically coherent picture of that programme, stressing however, the continuing uncertainty regarding the completeness of that picture, and

(h) *Noting* that the OMV plan does not foreclose the IAEA's right to investigate further any aspect of Iraq's clandestine nuclear programme and that, as part of its OMV activities, the IAEA, while focussing most of its resources on the implementation and technical strengthening of its OMV plan, will continue to implement that right, through the follow-up of any new information that comes to its knowledge and will destroy, remove or render harmless any prohibited items that may be discovered through such investigations,

1. *Commends* the Director General and the Agency's Action Team for their strenuous efforts to implement Security Council resolutions 687, 707, 715, 1051, 1060, 1115, 1154 and 1194;

2. *Condemns* the decision by Iraq of 5 August 1998 to suspend co-operation with the IAEA, which constitutes a totally unacceptable contravention of its obligations under the relevant Security Council resolutions and the Memorandum of Understanding signed by the Deputy Prime Minister of Iraq and the Secretary-General of the United Nations on 23 February 1998;

3. *Stresses* that greater transparency by Iraq in its dealings with the IAEA would contribute greatly to the resolution of remaining questions and concerns;

4. *Demands* that Iraq rescind its above-mentioned decision and co-operate fully with the IAEA in accordance with its obligations

under the relevant resolutions and Memorandum of Understanding as well as resume dialogue with the IAEA immediately;

5. *Stresses* that the Agency's Action Team should continue to exercise its right to investigate further any aspects of Iraq's nuclear programme, in particular as regards any further relevant information which Iraq may still be withholding from the Agency;

6. *Welcomes* the continued operation of the import/export monitoring mechanism called for under Security Council resolution 1051; and

7. *Requests* the Director General to report the views of the General Conference to the Secretary-General of the United Nations and to report to the Board of Governors and to the forty-third regular session of the General Conference on his efforts to implement Security Council resolutions 687, 707, 715, 1051, 1060, 1115, 1154 and 1194 and decides to remain seized of this issue.

GC(42)/30 — Implementation of the Agreement Between the Agency and the Democratic People's Republic of Korea for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons

The General Conference,

(a) *Recalling* the Board of Governors' resolutions GOV/2436 of 25 February 1993, GOV/2639 of 18 March 1993, GOV/2645 of 1 April 1993, GOV/2692 of 23 September 1993, GOV/2711 of 21 March 1994 and GOV/2742 of 10 June 1994 and General Conference resolutions GC(XXXVII)/RES/624 of 1 October 1993, GC(XXXVIII)/RES/16 of 23 September 1994, of 22 September 1995, of 20 September 1996 and GC(41)/RES/22 of 3 October 1997,

(b) *Noting* with concern a series of new developments described in the Director General's report contained in document GC(42)/16,

(c) *Recalling further* resolution 825 (1993) adopted by the Security Council of the United Nations on 11 May 1993 and the 31 March 1994, 30 May 1994 and 4 November 1994 statements by the President of the United Nations Security Council, particularly the request to take all steps the Agency may deem necessary to verify full compliance by the Democratic People's Republic of Korea (DPRK) with its safeguards agreement with the Agency,

(d) *Noting* that the DPRK has decided to remain a party to the Treaty on the Non-Proliferation of Nuclear Weapons and *reaffirming* that the IAEA-DPRK safeguards agreement (INF-CIRC/403) under the Treaty remains binding and in force,

(e) *Noting also* the stated intention of the DPRK to come into full compliance with the safeguards agreement and the continuing IAEA-DPRK discussions on outstanding safeguards issues,

(f) *Noting* with regret that in these discussions no progress has been made on important issues such as the preservation of information, and

(g) *Regretting* the withdrawal of the DPRK from the Agency and *expressing the hope* that the DPRK will rejoin,

Strongly endorses actions taken by the Board of Governors and commends the Director General and the Secretariat for their impartial efforts to implement the IAEA-DPRK safeguards agreement;

Recognizes the important role of the IAEA in monitoring the freeze of nuclear facilities in the DPRK and *commends* the Secretariat for its continuous efforts to monitor the freeze of specified facilities in the DPRK as requested by the United Nations Security Council;

Expresses deep concern over the continuing non-compliance of the DPRK with the IAEA-DPRK safeguards agreement and *calls upon* the DPRK to comply fully with that safeguards agreement;

Urges the DPRK to co-operate fully with the Agency in the implementation of the safeguards agreement and to take all steps the Agency may deem necessary to preserve all information relevant to verifying the accuracy and completeness of the DPRK's initial report on the inventory of nuclear material subject to safeguards until the DPRK comes into full compliance with its safeguards agreement; and

Decides to remain seized of this matter and include in the agenda for its forty-third regular session an item entitled "Im-

plementation of the agreement between the Agency and the Democratic People's Republic of Korea for the application of safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons".

GC(42)/34 — Measures against Illicit Trafficking in Nuclear Materials and other Radioactive Sources

The General Conference,

(a) *Recalling* its resolutions GC(XXXVIII)/RES/15, GC(39)/RES/18, GC(40)/RES/17 and GC(41)/RES/17 on measures against illicit trafficking in nuclear materials and other radioactive sources,

(b) *Noting* the programme for preventing and combating illicit trafficking in nuclear material agreed upon by the participants in the Moscow Nuclear Summit of April 1996 contained in document INFCIRC/509,

(c) *Welcoming* the confirmation of participants at the Denver Summit of June 1997 on their commitment to implement the "Programme for Prevention and Combating Illicit Trafficking in Nuclear Materials",

(d) *Noting also* that a meeting of the "International Conference on Physical Protection of Nuclear Materials: Experience in Regulation, Implementation and Operations", took place in Vienna from 10 to 14 November 1997,

(e) *Noting further* that the Agency, together with the European Commission, the World Customs Organization and the International Criminal Police Organization (Interpol), organized the "International Conference on the Safety of Radiation Sources and the Security of Radioactive Materials" in Dijon, France, from 14 to 18 September 1998, and

(f) *Noting* that the UN General Assembly has undertaken the elaboration of an international convention on the suppression of acts of nuclear terrorism (UNGA resolution 51/210 of 17 December 1996),

Takes note of the progress report submitted by the Secretariat in document;

Welcomes the activities in the fields of prevention, response, training and information exchange undertaken by the Secretariat in support of efforts against illicit trafficking;

Also welcomes the completion of the development phase of the database on illicit trafficking;

Invites the Director General to submit a report to the Board of Governors on possibilities of enhancing co-operation in this field;

Also invites the Director General to continue working during the coming year in accordance with the relevant conclusions of the Board of Governors;

Requests the Director General to submit a report to the General Conference at its next regular session on activities undertaken by the Agency in the intervening period; and

Requests the Director General to bring the present resolution to the attention of the UN General Assembly and *invites* the UN General Assembly, in elaborating the above-mentioned convention, to bear in mind the Agency's activities in preventing and combating illicit trafficking in nuclear material and other radioactive sources.

GC(42)/37 — Strengthening the Effectiveness and Improving the Efficiency of the Safeguards System and Application of the Model Protocol

The General Conference,

(a) *Recalling* resolution GC(41)/RES/16,

(b) *Convinced* that the Agency's safeguards can promote greater confidence among States and thus contribute to strengthening their collective security,

(c) *Considering* the Treaty on the Non-Proliferation of Nuclear Weapons, the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, the South Pacific Nuclear Free Zone Treaty, the Treaty establishing the African Nuclear-Weapon-Free Zone and the Treaty on the Southeast Asia Nuclear-Weapon-Free Zone and the Agency's essential role in applying safeguards in accordance with the relevant articles of these treaties, and *noting* the outcome of the 1995 Review and Extension Conference on the Treaty on the Non-Proliferation of Nuclear Weapons,

(d) *Noting* that decisions adopted by the Board of Governors aimed at further strengthening the effectiveness of Agency safeguards should be supported and implemented and that the Agency's capability to detect undeclared nuclear activities should be increased,

(e) *Stressing* the importance of the Model Additional Protocol approved on 15 May 1997 by the Board of Governors aimed at strengthening the effectiveness and improving the efficiency of the safeguards system,

(f) *Welcoming* the fact that, as of 24 September 1998, 32 States and other Parties to safeguards agreements have signed additional protocols, 7 of which have entered into force or are being provisionally applied pending entry into force, and

(g) *Stressing* that the strengthening of the safeguards system should not entail any decrease in the resources available for technical assistance and co-operation and that it should be compatible with the Agency's function of encouraging and assisting the development and practical application of atomic energy for peaceful uses and with adequate technology transfer,

Requests the Secretariat to pursue the implementation of Part 1 measures of Programme 93+2 as well as the additional protocols without delay as far as available resources permit;

Requests the Secretariat to continue its efforts to conceptualize and develop an integrated and cost-effective safeguards system;

Recalls the need for all concerned States and other Parties to safeguards agreements with the Agency to supply the Agency with all the information required under Part 1 of Programme 93+2;

Stresses the need for effective safeguards in order to prevent the use of nuclear energy for prohibited purposes in contravention of safeguards agreements, and underlines the vital importance of effective safeguards for facilitating co-operation in the field of peaceful uses of nuclear energy;

Affirms that strengthening the effectiveness and improving the efficiency of the safeguards system with a view to detecting undeclared nuclear activities must be implemented rapidly and universally by all concerned States and other Parties in compliance with their respective international commitments;

Supports the Board's decision to request the Director General to use the Model Additional Protocol as the standard for additional protocols that are to be concluded by States and other Parties to comprehensive safeguards agreements with the Agency, which should contain all of the measures in the Model Additional Protocol;

Supports the Board's decision to request the Director General to negotiate additional protocols or other legally binding agreements with nuclear-weapon States incorporating those measures provided for in the Model Additional Protocol that each nuclear-weapon State has identified as capable of contributing to the non-proliferation and efficiency aims of the Protocol, when implemented with regard to that State, and as consistent with that State's obligations under Article 1 of the NPT;

Supports the Board's decision to request the Director General to negotiate additional protocols with other States that are prepared to accept measures provided for in the Model Additional Protocol in pursuance of safeguards effectiveness and efficiency objectives;

Requests all concerned States and other Parties to safeguards agreements which have not yet done so to sign additional protocols promptly;

Requests States and other Parties to safeguards agreements having signed additional protocols to ratify or accept them as soon as possible; and

Requests the Director General to report on the implementation of this resolution to the General Conference at its forty-third regular session.

GC(42)/32 — Measures to Strengthen International Co-operation in Nuclear, Radiation and Waste Safety (C) Study of the Radiological Situation at the Atolls of Mururoa and Fangataufa

The General Conference,

(a) *Recalling* that on 22 September 1995, in resolution GC(39)/RES/23 entitled "Nuclear Testing", it called on all States concerned "to fulfil their responsibilities to ensure that sites

where nuclear tests have been conducted are monitored scrupulously and to take appropriate steps to avoid adverse impacts on health, safety and the environment as a consequence of such nuclear testing",

(b) *Taking note* document GC(42)/INF/3, which reports on the recently completed Study of the Radiological Situation at the Atolls of Mururoa and Fangataufa (the Study) undertaken by the Secretariat at the request of the Government of France, and particularly of the Executive Summary of the Main Report on the Study, of the discussion in the Board of Governors on the Study, and of the "Conclusions and Closing Remarks" of the President of the Conference organized by the Agency on the Study and held in Vienna from 30 June to 3 July 1998,

(c) *Noting with appreciation* that the Government of France requested the Study and supported it unreservedly throughout, and

(d) *Recalling* that the South Pacific Forum and Member States of the Agency had called for such a study to be carried out and *taking note* of the views expressed in August 1998 in the communique issued in Pohnpei at the twenty-ninth meeting of the South Pacific Forum,

Expresses appreciation of the effort put into the Study by the Chair and members of the International Advisory Committee, by experts and laboratories of numerous States, by the Secretariat of the Agency and by other international organizations;

Welcomes the Study's conclusions that (i) there will be no radiation health effects attributable to the residual radioactive material at the two atolls which could be either medically diagnosed in an individual or epidemiologically discerned in a group of people, (ii) the expected radiation dose rates and modes of exposure at the atolls are such that no effects on biota population groups could arise, (iii) no remedial action at the atolls is needed on radiological protection grounds, either now or in the future, (iv) no further environmental monitoring at the atolls is needed for purposes of radiological protection and (v) a scientific programme, supplemented by some monitoring of radionuclide levels in the biosphere, might be useful in assuring the public about the continuing radiological safety of the atolls;

Emphasizes that those conclusions should not be used in justifying the development and testing of nuclear weapons; and

Requests the Director General to report to it, as appropriate, on apposite developments in this area.

Annex — Abbreviations of Sources

AFP:	<i>Agence France Presse</i>	LM:	<i>Le Monde</i>
AP:	<i>Associated Press</i>	LP:	<i>La Prensa</i>
ASS:	<i>Asahi Shimbun</i>	LT:	<i>London Times</i>
BBC:	<i>BBC Monitoring Summary of World Broadcasts</i>	N:	<i>Nature</i>
Carnegie:	<i>Proliferation Brief of the Carnegie Endowment for International Peace</i>	NEI:	<i>Nuclear Engineering International</i>
CdS:	<i>Corriere della Sera [Italy]</i>	NF:	<i>NuclearFuel</i>
ChI:	<i>Chosun Ilbo</i>	NG:	<i>Nezavisimaya gazeta</i>
CN:	<i>La Correspondance Nucléaire</i>	NN:	<i>Nuclear News</i>
CNN:	<i>Cable News Network</i>	NNN:	<i>NucNet News</i>
CSM:	<i>Christian Science Monitor</i>	NPR:	<i>National Public Radio News</i>
DJ:	<i>Dow Jones Newswires</i>	NW:	<i>Nucleonics Week</i>
DP:	<i>Die Presse</i>	NYT:	<i>New York Times</i>
DS:	<i>Der Spiegel</i>	NZZ:	<i>Neue Zürcher Zeitung</i>
DT:	<i>Daily Telegraph</i>	O:	<i>Observer</i>
DW:	<i>Die Welt</i>	PBS:	<i>Public Broadcasting System News Hour (TV)</i>
E:	<i>Economist</i>	R:	<i>Reuters</i>
EP:	<i>El Pais</i>	SDZ:	<i>Süddeutsche Zeitung</i>
FAZ:	<i>Frankfurter Allgemeine Zeitung</i>	SF:	<i>SpentFUEL</i>
fF:	<i>freshFUEL</i>	SG-Sp:	<i>Secretary-General's Spokesman Daily Press Briefing</i>
FT:	<i>Financial Times</i>	SN:	<i>Salzburger Nachrichten</i>
G:	<i>Guardian</i>	ST:	<i>Sunday Times [London]</i>
IHT:	<i>International Herald Tribune</i>	StL:	<i>Standard [London]</i>
Izv:	<i>Izvestia</i>	StV:	<i>Standard [Vienna]</i>
JDW:	<i>Jane's Defence Weekly</i>	UINB:	<i>Uranium Institute News Briefing</i>
JFR:	<i>Jane's Foreign Report</i>	UPI:	<i>United Press International</i>
JoC:	<i>Journal of Commerce</i>	USIA:	<i>United States Information Agency Transcript</i>
JP:	<i>Jerusalem Post</i>	Ux:	<i>Ux Weekly</i>
KCNA:	<i>Korean Central News Agency [Pyongyang]</i>	VoA:	<i>Voice of America</i>
KH:	<i>Korea Herald</i>	WP:	<i>Washington Post</i>
KT:	<i>Korea Times</i>	WP/NWE:	<i>Washington Post National Weekly Edition</i>
KV:	<i>Kurier [Vienna]</i>	WSJ:	<i>Wall Street Journal</i>
LAT:	<i>Los Angeles Times</i>	WT:	<i>Washington Times</i>
Lib:	<i>Libération</i>	YOS:	<i>Yomiuri Shimbun</i>

The Programme for Promoting Nuclear Non-Proliferation and the Newsbrief

The *Newsbrief* is part of the outreach effort which constitutes a major element of the Programme for Promoting Nuclear Non-Proliferation (PPNN). It is addressed to an audience interested in the subject of nuclear (non-)proliferation, to inform and help them alert their respective environments to the issue of nuclear non-proliferation.

The *Newsbrief* is published on behalf of PPNN by the Mountbatten Centre for International Studies, Department of Politics, University of Southampton. Communications relating to its content and other editorial matters should be addressed to Ben Sanders at 240 East 27th Street, New York, New York

10016, USA (Tel. 1 (212) 532-3153; Fax. 1 (212) 532 9847). Those relating to production and distribution should be addressed to John Simpson, Mountbatten Centre for International Studies, University of Southampton, Southampton, SO17 1BJ, United Kingdom (Tel. 01703 592522; Fax. 01703 593533; international code +44/1703).

Web site: <http://www.soton.ac.uk/~ppnn/>

Production by Richard Guthrie. Printed by Autoprint.

ISSN 0965-1667