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Programme for Promoting Nuclear Non-Proliferation, Newsbrief, Number 29

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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.

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PROGRAMME FOR PROMOTING NUCLEAR NON-PROLIFERATION

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NEWSBRIEF

1st Quarter 1995

Editorial Note

This issue of the **Newsbrief** refers to events relating to the non-proliferation of nuclear weapons that took place, or that came to the editor's attention, in the period from 1 January until 22 March 1995. The closing date of this issue — just over one week before the end of the Quarter — has been chosen so that it can be distributed before the start of the Review and Extension Conference of the Treaty on the Non-Proliferation of Nuclear Weapons, on 17 April 1995. For that reason, also, pride of place is given to the work of the Preparatory Committee, and the substantive part of this issue of the **Newsbrief** starts with the item **NPT Events**.

The Newsbrief is a quarterly publication of the Programme for Promoting Nuclear Non-Proliferation (PPNN) which disseminates information about issues related to the spread of nuclear weapons and about moves to prevent that spread. The contents of the Newsbrief are based on publicly available material selected and presented so as to give an accurate and balanced picture of pertinent developments, including events relating to the peaceful uses of nuclear energy.

The limited size of the **Newsbrief** makes it necessary to choose among items of information and to present them in condensed and simplified form. Subheadings serve to facilitate presentation and do not imply judgements on the events referred to; they are not necessarily always the same.

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

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.

Unless otherwise stated, sources referred to in this issue, and publications listed, date from 1995.

Topical Developments

a. NPT Events

• The Preparatory Committee for the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) held its fourth session at United Nations headquarters in New York on 23–27 January. The session was opened by the Chairman of the third session, Ambassador Isaac Ayewah of Nigeria, and chaired by Ambassador Pasi Patokallio of Finland. Hannelore Hoppe of the UN Centre for Disarmament Affairs was the Secretary. Representatives of 142 states parties to the NPT participated.

Eight states attended as observers. Two intergovernmental organisations sent observers. Representatives of 72 non-governmental organisations also attended the session.

At its fourth session, the Preparatory Committee continued its discussion on the draft rules of procedure for the Conference. As a result, the only item of the provisional rules of procedure that still needs to be finalised is rule 28.3, which deals with the manner of deciding upon the extension. It was agreed that the Chairman of the informal working group on the rules of procedure, Mr. Antti Sierla of Finland, would hold further informal consultations on this issue, on 14 and 15 April in New York.

Also at its fourth session, the Committee adopted the provisional agenda for the Conference; agreed on the proposed allocation of items to the Main Committees of the Conference; and agreed to defer to the Conference the decision on the question of its final document(s).

The Committee further agreed to recommend as Chairmen of the three Main Committees the following: Main Committee I, Mr. Isaac E. Ayewah of Nigeria; Main Committee II, Mr. André Erdös of Hungary; and Main Committee III, Mr. Jaap Ramaker of the Netherlands. It also agreed to recommend as Chairmen of, respectively, the Drafting and the Credentials Committee, Mr. Tadeusz Strulak of Poland and a representative of the Group of Non-Aligned and Other States.

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The main part of the final report of the Preparatory Committee, covering all four sessions, is reproduced in **Section IV. Documentation** together with the text of draft rule 28.3 and of rule 27, which is related to it, as they were initially presented to the Preparatory Committee, and with five proposals pertaining to rule 28.3, that will be considered by the informal working group when that discusses rule 28.3 on 14 and 15 April. Also reproduced are the provisional agenda and the proposed allocation of items, as adopted by the Committee.

(**Direct Information**; **Conference Document**

(Direct Information; Conference Document NPT/CONF.1995/1, 1/2; Basic Report, No. 42, 31/1; Nucleonics Week, 2/2)

- On 12 January, Algeria deposited its instrument of accession to the NPT in London, Moscow and Washington, D.C. (Reuter's, 12/1; Neue Zürcher Zeitung, 14/1; Enerpresse, 16/1)
- On 10 February, Argentina deposited its instrument of accession to the NPT in Washington, D.C. (Press Release, Embassy of Argentina, Washington, D.C., 10/2; USIA, European Wireless File, 10/2)
- It is now learned that Bosnia and Herzegovina deposited its instrument of accession to the NPT in Washington on 15 August 1994.
- The Marshall Islands deposited its instrument of accession to the NPT in Washington on 30 January.
- The **Principality of Monaco** deposited its instrument of accession to the NPT in Washington on 13 March.
- Tajikistan deposited its instrument of accession to the NPT in Moscow on 17 January.

[The total number of parties to the NPT now stands at 174. The minimum number of votes needed for a decision to extend the Treaty is 88 – Ed.]

Serious doubts have arisen about the support of Arab states for the indefinite or even long-term extension of the NPT, in the absence of Israel's early accession to the Treaty. For the past several months, Egypt which, according to press comments, is using the approach of the NPT review and extension conference to induce Israel to join the NPT has let it be known that it cannot support the Treaty's extension unless Israel makes meaningful concessions in divesting itself of its nuclear potential. A number of other Arab states, including Kuwait and Syria, have made similar statements. At a meeting in Damascus in early February foreign ministers of Arab states once again called on Israel to join the NPT. Later that month, Egypt submitted through the Secretariat of the Arab League a proposal for the immediate establishment in the Middle East of a nuclear-weapon-free zone and announced that it would not go along with the extension of the NPT unless Israel also joined. It rejected Israel's suggestion that it might join two years after the conclusion of peace treaties with all Arab countries and Iran. In early March the Egyptian proposal was formally adopted by the League of Arab States. The policy to be adopted with respect to the NPT extension, in the light of the Israeli position was expected to be discussed at the meeting of foreign ministers of Arab League states that was to start on 22 March. Meanwhile discussions were said to continue on possible compromises. (Kurier, 2/2; 24/2; Standard [Vienna] 2/2, 24/2; Middle East News Agency, 6/2, in FBIS-NES-95-025, 7/2; Washington Post, 17/2; Süddeutsche Zeitung, 17/2, 24/2; Neue Zürcher Zeitung, 18/2; Frankfurter Allgemeine Zeitung, 18/2, 24/2, 28/2; New York Times, 20/2, 24/2, 9/3; International Herald Tribune, 20/2; MEED [Cairo], 24/2; Independent, 24/2; Economist, 18/3)

b. Other Non-Proliferation Developments

• Belgium, France, Germany, Japan, Switzerland, the United Kingdom and the United States have reportedly agreed in principle to publish annually their inventories of civil-use plutonium. In January, these states plus China and the Russian Federation discussed international plutonium management; it was hoped that the first framework for international plutonium management could be mapped out before the start of the NPT Conference in April. (Nucleonics Week, 26/1)

c. Nuclear Disarmament and Arms Limitation

- Reactor operators in Canada are working with the US Department of Energy on a proposal to burn weaponsgrade plutonium from Russian and US warheads as mixed-oxide (MOX) fuel in Candu reactors. Canadian experts believe that this would not only be technically and economically feasible but that such fuel would be particularly suited for the Candu reactor, which is said to have great fuel-flexibility, and that since it would not be possible to chemically separate the plutonium from irradiated fuel, the scheme would have considerable non-proliferation significance. In the United States and in Europe, critics of the use of MOX fuel to burn surplus weapons-grade plutonium are said to be reconsidering their previous opposition. Several think tanks in Germany, as well as the nuclear industry are said to be giving more attention to the possibility of disposing of Russian plutonium in this manner and exploratory talks have apparently been held on the matter between Canadian and German officials. Several United States utility companies have also shown interest in using MOX fuel for the purpose of burning surplus plutonium. (NuclearFuel, 30/1, 27/2; Nucleonics Week, 16/2)
- Against initial expectations, United States Senator Jesse Helms, the new Republican Chairman of the Senate Foreign Relations Committee has expressed his support for ratification of START II.

President Clinton has ordered the immediate reduction of the government's stock of surplus weapons-grade fissile material by 200 tonnes. The greater part of this amount, which will be placed under IAEA safeguards, is reported to consist of highly enriched uranium. Only a few tens of tonnes is said to be plutonium.

Senate Foreign Relations Committee Chairman Helms has called for the integration with the Arms Control and Disarmament Agency (ACDA) of the US State Department. The move, ostensibly proposed in the interest of efficiency and cost-cutting, is opposed by the Administration which charges that it is in fact prompted by Helms' dislike of arms reductions. It is said to be supported by Senate Majority Leader Dole and House Speaker Newt Gingrich. It is noted in Washington that it comes at the very time when ACDA is attempting to lead a drive for the indefinite extension of the NPT.

(New York Times, 3/2, 5/2; Nucleonics Week, 23/2, NuclearFuel, 27/2, 13/3)

- The US Department of Defense has announced that a mutual on-site inspection of weapons dismantlement pursuant to the START I Treaty began on 1 March. As reported, in the initial stage of the exercise, in which inspectors from Belarus, Kazakhstan, the Russian Federation, Ukraine and the United States participated, warheads were to be counted at 38 sites in the United States and 65 sites in the former USSR. (Neue Zürcher Zeitung, 24/2; Nihonkeizai Shimbun, 20/2)
- There is said to be little progress in talks between Russia and the United States on the implementation of the agreement of June 1994 to shut down three dual-purpose Russian reactors. Moscow claims that as of 1 October it has stopped using plutonium produced by those reactors for nuclear weapons. Disagreement over verification seems to hold up the entry into force of the agreement. (See also Comments from Readers, p. 20) In general the implementation of the Nunn-Lugar programme for dismantling Russian nuclear weapons is said to be very slow and far behind schedule. (Arms Control Today, Jan/Feb; International Herald Tribune, 13/2)

d. Nuclear Testing

- British intelligence sources are said to expect China to recommence testing as soon as the winter snows melt at its Lop Nor testing site. UK authorities are concerned that a resumption of China's nuclear tests might give France a pretext to abandon its adherence to the current moratorium. Kazakhstan is still making efforts to persuade Beijing to stop testing on the ground that fallout from Lop Nor enters its territory. (Standard, 11/12/94; Associated Press, 12/12/94)
- At the former Soviet test site at Semipalatinsk, in **Kazakhstan**, Russian technicians are said to be trying to remove or deactivate a nuclear device stuck since 1991 in a shaft deep underground. The device is said to have a yield of 0.3–0.4 kilotonne. The attempt reportedly involves digging a diagonal tunnel through granite, at an average rate of 90 centimetres (3 feet) a day, to within 30 metres of the device. There is a further report that there are in fact three more unexploded nuclear devices at the site: one of 150 kilotonnes which is supposedly stuck in a horizontal tunnel, and two, of undisclosed power, in vertical shafts at a depth of 500 metres. (**Le Monde**, 23/2, citing **El Païs** and **Kazakhstanskaïa Pravda**)
- The United States Administration has decided not to insist, in the Geneva negotiations on a Comprehensive Test Ban Treaty (CTBT), on the right to withdraw from the treaty ten years after it enters into force. Reportedly, this decision was taken against the wishes of US military authorities. In the assumption that a CTBT will be signed before 30 September 1996, the President has further decided to extend the present moratorium on nuclear testing until the treaty enters into force. (Text of Statement by Anthony Lake, National Security Advisor, 30/1; Associated Press, 30/1; Guardian, 31/1; International Herald Tribune, 31/1; New York Times, 31/1; Frankfurter Allgemeine Zeitung, 1/2; Salzburger Nachrichten, 1/2; Nucleonics Week, 2/2)

e. Nuclear Trade and International Cooperation

- While the meetings in January and February between Euratom and the United States were understood to have made some progress but not to have achieved any breakthrough, a meeting in Washington just before the time this issue of the Newsbrief went to press is said to have brought important progress. Most of the secondary issues are reportedly now resolved, but some major ones, such as what precisely is meant by the phrase 'alteration in form or content' are still said to be open. The European Commission has been exploring ways of narrowing the scope of the concept of 'consent'. Other issues about which there is still said to be disagreement are what constitutes storage — relevant because apparently it has a bearing on US consent rights with regard to the storage of weapons-usable nuclear material — and how new nuclear facilities will be affected by US programmatic approval procedures. One long-standing issue is that of the 'perpetuity' of consent rights, which it is reported the US insists on retaining with regard to US-origin materials, even after the expiration of the agreement. This matter is said to have caused particular misgivings in Europe. A recent report by Prof. William Walker of Sussex University [see bibliography] urges the European side to make some concessions in this regard, lest the entire agreement is put at risk. It is reported from Washington that officials there are of the view that the US has reached the legal limit of its flexibility; they are said to be confident, however, that the open issues can be resolved politically, at high levels of government. Even if an agreement can be reached in the relatively near future, however, there is now said to be little hope that it could take effect by the time the present agreement expires, at the end of the current year. No bridging mechanism exists to span a gap between the expiration of the present agreement and the entry into force of a new one. Germany is said to be most concerned about the effects of a lapse in the agreement and while there appears to exist a remarkable solidarity in views among the European partners, there has been a rumour that Bonn might be more inclined to accept US consent rights than some other European states. The German nuclear industry is reported to be stocking-up on a variety of American nuclear products such as UO2 fuel pellets and zircalloy for fuel cladding, against the possibility that in the absence of an agreement between Euratom and the United States next year such purchases will not be possible. (Nuclear-Fuel, 16/1, 30/1, 27/2, 13/3; SpentFUEL, 16/1, 23/1, 20/2, 27/2, 13/3, 20/3; Nucleonics Week, 16/3)
- India and the Russian Federation have signed an agreement providing for the supply of two VVER-1000 power reactors. Asked by western governments, members of the Nuclear Suppliers Group, how this could be reconciled with Russia's pledge, made in 1991, to require full-scope safeguards as a condition of nuclear supplies, Russian officials are reported to have said that the reactors would not be provided until India allows full-scope IAEA safeguards on all nuclear activities. (Nucleonics Week, 12/1, 2/2)
- China and Pakistan are said to be close to agreeing on the supply of a second 300-MW nuclear power plant to be constructed at Chasma. (Nucleonics Week, 12/1)
- The Republic of Korea has won an order from China to provide it with reactor pressure vessels and components

for one of the two 600-MW units for the Qinshan nuclear power station, near Shanghai. The project will be supported by Korean credits. (**NucNet News**, 16/2)

f. Peaceful Nuclear Developments

- It is reported that Armenia plans to restart the first or its VVER-440 power reactor at Metzamor in June or July. (Reuter's, 27/1)
- In Germany, two utility companies, RWE Energie AG and Hamburgische Elektrizitäts-Werke AG, have now cancelled their plans for the reprocessing of spent fuel after the year 2000. Other companies are also expected to cancel their reprocessing contracts. There seems to be a move among traditional foes of nuclear energy within the German Social Democratic Party to rethink their opposition. Just before the Socialist opposition and the pro-nuclear center-right government coalition were to resume negotiations, the chief negotiator for the opponents, while reconfirming his support for the 1986 resolution to terminate nuclear power generation in Germany, is said to have conceded that a phase out, which had been called for in ten years, was more likely to take thirty. The German utility companies are reported to have decided in principle to withdraw their support for the Siemens plutonium fuel fabrication complex at Hanau, effectively terminating work on plutonium fuel in the country. A major factor in the decision is understood to be the recent return to power in the State of Hesse of a coalition of 'Greens' and the anti-nuclear Social Democrats. It is not clear what will be done with the facility and its equipment, which so far have cost the equivalent of \$790-million. Reportedly, prior to the decision (which had not been publicly announced at the time this issue of the Newsbrief was completed) German utilities had made plans to manufacture mixed oxide (MOX) fuel in France and Britain. (Nucleonics Week, 5/1, 9/3; SpentFuel, 9/1, 13/3; Nucleonics Week Special and NuclearFuel Special, 17/3)
- The Director General of Indonesia's National Atomic Energy Agency, Djali Ahimsa, has said that about \$17.5billion needs to be invested to develop a nuclear power capacity of 7,000 MW. He is quoted as telling a parliamentary commission that it was hoped to build twelve nuclear power reactors on the Muria Mountain on the coast of north-central Java. (Antara News Agency, 4/2)
- In Japan, none of the nuclear facilities along the northern coastline was damaged or forced to stop operations when an earthquake registering 7.5 on the Richter scale struck that region in late December 1994. The earthquake of 7.2 on the Richter scale that devastated the Hanshin area, surrounding the port city of Kobe, on 17 January similarly caused no damage to any of the twenty power reactors located within 200 km of the epicentre. The nuclear power stations nearest to the event are those at Tsuruga, where 10 out of 15 reactors were operating at capacity and continued to do so. Five other plants, including the prototype fast-breeder reactor Monju, were not operating at the time. Nuclear industry sources in Japan have assured the public that both the Monju facility and the fuel cycle complex at Rokkasho have been constructed at the highest known level of aseismicity; their sites are not near known active faults. Japan's Power Reactor and Nuclear Fuel Development Corporation (PNC) has stated specifically that Monju

was constructed with all possible seismic precautions and would be able to withstand an extremely strong earthquake without suffering damage. Nevertheless, the Japanese Nuclear Safety Commission is said to have begun reviewing seismologic standards and regulations at nuclear facilities in the light of the experiences to be gained from what is now known as 'the Great Hanshin earthquake'. Anti-nuclear groups in Japan are using the event to demand a moratorium on the use of nuclear energy. (Atoms in Japan, January, February; Nucleonics Week, 5/1, 19/1, 26/1; NucNet News, 9/2)

- Russia says it plans to complete the reprocessing plant for VVER-1000 fuel at Zelenogorsk. (Reuter's, 3/3)
- Plans for the completion and upgrading of the two Russian-designed VVER-440 model 213 nuclear units of the Mochovce power station in **Slovakia**, with the assistance of the European Bank for Reconstruction and Development (EBRD), Euratom, and the European Investment Bank, continue to be subject to vehement opposition by politicians, anti-nuclear groups and the major national newspapers in neighbouring **Austria**. If the plans are approved and the EBRD agrees to provide the necessary funds, the work is to be carried out by *Electricité de France* in cooperation with Slovak companies.

Slovakia relies heavily on nuclear power for the production of electricity. The majority of its population is said to support the plans to finish the two reactors, of which one is reportedly 90 per cent complete and the other, 70 per cent. It had been understood to be the intention to shut down the two old VVER-440s at Bohunice one year after the new reactors had come on line. During a recent visit to Vienna, however, Slovak Prime Minister Meciar caused surprise by saying that Bohunice-1 and -2 would be shut down by the year 2005. The question whether Mochovce is to be completed is a subject of growing friction between Austria and Slovakia and is increasingly seen as a precedent for the further development of civil nuclear energy in Central and Eastern Europe. Austria, 12 per cent of whose electricity is said to be nuclear-generated abroad, seeks an end to the use of nuclear energy for power production in the entire region. Environmentalists in Hungary have also criticised Slovakia's plans.

All political parties in Austria, as well as the federal government itself, have expressed themselves against the plan, on a variety of stated grounds, such as that the Mochovce station would not comply with current health and safety requirements and that it would not be economical. One argument used is that the station is situated at a point where several busy commercial flight paths cross and is frequently overflown also by military aircraft, which would presumably greatly increase the risk of an accident; another is the novel assertion that Mochovce is on a fault line in a region prone to earthquakes. A massive Austrian press campaign against the completion of the station, supported by such environmentalist groups as Greenpeace and Global 2000, has been underway for well over a year. Support for the project expressed by a number of Austria's most qualified scientists is not given much prominence in the press and appears to be ignored by the Austrian government. [The press references listed below represent a minuscule part of the available sources-Ed.] Austrian groups that have

expressed opposition to the project range from the Conference of Bishops to owners of allotment gardens. Opponents of the plan have used all available means of exerting pressure on the EBRD not to finance the project. A non-binding emergency resolution adopted by the European Parliament has asked for the postponement of the decision on funding by the EBRD. The resolution followed an initiative of Austrian members of the Parliament, who originally sought a call by the Parliament for a stop to the completion of the reactors. The decision by the Strasbourg Parliament was nevertheless seen in Vienna as a victory and was widely considered as a major step towards a refusal by the EBRD to fund the project. Despite the Parliament's move, the European Commissioner for Foreign Affairs is said to be in favour of Euratom helping to finance the work. Austria's 'TEN', ·the opposition has been criticised by organisation of European nuclear workers, who maintain that it is quite feasible to upgrade the station to contemporary western safety standards. In a similar attempt as it has made in regard to the completion of the Czech power station at Temelin, where it has tried to persuade the US Administration and the Congress to keep the Export-Import Bank from providing funds, the Austrian government is also understood to have sought American support in persuading the EBRD not to assist the project. The Bank's decision was initially expected around the time this issue of the **Newsbrief** went to press, but seems to have been postponed at the last moment to permit members to consider some additional information. The Austrian parliament has called on the federal government to consider leaving the EBRD if this should decide in favour of the project. Slovak authorities have repeatedly stated that if the EBRD does not provide the necessary financing, the station will be completed with Russian funds; reportedly, contingency planning for that event had already started. Austrian sources, however, have expressed doubt that Russia would be in a position to provide the necessary funds. The Russian plan was said to provide for reprocessing of Slovak irradiated fuel and the return of the extracted plutonium, possibly as mixed-oxide fuel. The Russian scheme would reportedly cost only about \$140-million as against the \$950-million foreseen in Western plans of which the EBRD would provide about half, the difference being apparently due mainly to the fact that the Russian plan did not include the safety features that form part of the upgrading foreseen in the plan of Electricité de France - a consideration that is expected to be an important factor in the Bank's decision. During his Vienna visit, however, the Slovak Prime Minister said that if the EBRD refused to provide financing, his country would complete the station by its own means, with Russia providing only engineering services and possibly fuel services.

(Salzburger Nachrichten, 20/12/94, 7/1, 12/1, 14/1, 19/1, 30/1, 5/2; Die Presse, 20/12/94, 3/1, 12/1, 18/1, 20/1, 7/2, 10/2, 14/2, 16/2, 17/2, 23/2; Standard [Vienna], 2/1, 12/1, 30/1, 1/2, 2/2, 3/2, 10/2, 17/2, 23/2; Kurier, 4/1, 14/1, 17/1, 21/1, 24/1, 2/2, 7/2, 10/2, 16/2, 18/2, 23/2; NucNet News, 11/1, 18/1, 20/1, 25/1, 20/2, 1/3, 2/3, 9/3; Nuclear Scientist, 14/1; Profil, 16/1; Reuter's, 17/1; Nucleonics Week, 19/1, 9/2, 16/2, 23/2, 2/3, 16/3; Frankfurter Allgemeine Zeitung, 21/1; Le Monde, 27/1; Financial Times, 11-12/2; Times [London], 21/1, 13/2, 16/2, 17/2; Süddeutsche Zeitung, 17/2; Economist, 18/2; Neue Zürcher Zeitung, 19/2; Enerpresse, 20/2; New York Times, 12/3)

- South Africa has decided to stop enriching uranium. The decision is said to be based on economic grounds: the country will be able to obtain enriched uranium on the world market at lower cost than if it continued operating its 'Z' plant. (NucNet News, 27/1; Reuter's, 27/1; Süddeutsche Zeitung, 27/1)
- have reportedly expressed opposition to phasing out nuclear power by the year 2010. The plans for a phase-out were based on a 1980 advisory referendum followed by a parliamentary decision. There is now thought to be a good chance that a new referendum will be held and that the previous decision will be overturned. Sweden's Minister for Energy has said, however, that the country could phase out nuclear power without the backup from the planned Nordic electricity market, but added that if there were greater demands things might become more difficult. (Neue Zürcher Zeitung, 28/1; Nucleonics Week, 2/2, 16/3; NucNet News, 8/2; Enerpresse, 9/2)
- Turkey is said to again consider starting a nuclear power plant construction programme of 2000 MW of installed nuclear capacity by the year 2010. The programme would provide for the construction of a nuclear power station at Akkuyu, on the Mediterranean coast. The Turkish electricity generating company has engaged the Korea Atomic Energy Research Institute to function as consultants on the matter. (NucNet News, 30/12/1994; ENS Nucleus, January)
- A deputy chairman of the Ukraine State Committee for Utilization of Nuclear Power (Goskomatom) is quoted as stating that there are no plans to close the Chernobyl plant in the near future. However, a team of experts from the European Commission was in Kiev in mid-March to discuss a shut-down of the plant and finalise an action plan for closure of the two currently operating units and a choice of options for a more permanent sarcophagus over the ruins of Chernobyl-4. This has meanwhile been reenforced and is apparently considered operable for another ten years. The shut-down of Chernobyl is also said to have been discussed during a visit of the German Finance Minister Waigel to Kiev in January. According to the Goskomatom official referred to earlier, the commissioning of the three new units at Zaporozhe, Rovno and Khmelnitski will not compensate for a shut-down of the two operating Chernobyl units, whose output is said to be needed in any case. The same official has said that Ukraine would consider decommissioning Chernobyl only if it got help in building an entirely new two-unit nuclear power plant near Slavutich; in that case it would be prepared not to complete Khmelnitski-3 and 4, and use the funds for the new facility. Notwithstanding all funding problems, Ukraine's nuclear authorities have decided to Zaporozhe-6 without western help; under a presidential decree funds have already been allocated for this purpose. The plant, which is now said to be about 95 per cent complete, is currently undergoing cold testing and there reportedly is hope that it can still go on line in the current year. The station as a whole - which, with six VVER-1000 units will be the largest nuclear power station in Europe — is said to be in bad shape. Once unit 6 starts operating, each year one of the other units will be closed down for safety upgrades. At the same time,

however, Goskomatom is understood to have advised Ukraine's President Kuchma that due to lack of resources its personnel will accept no responsibility for the quality of work done at Ukraine's nuclear plants during outages. A lack of revenue, understood to result largely from the non-payment of electricity bills by consumers, the increase of fuel prices and the inability to officially set prices to cover costs, is said to have a negative effect on maintenance and repair. A study by Westinghouse and several partner companies, including a local engineering firm, carried out at the invitation of Goskomatom, has found that the cheapest option for increasing the country's electric generating capability would be to upgrade and complete the three unfinished VVER-1000 units at Khmelnitski. The outcome of the study is compared to a similar conclusion reached with respect to the reactors at Temelin, in the Czech Republic. Reportedly, nuclear energy accounts for more than 34 per cent of the total generation of electric power in (Nuclear Engineering International, Ukraine. December 1994; Nucleonics Week, 5/1, 12/1, 2/3, 9/3, 16/3; NucNet News, 10/1, 19/1, 14/3; Reuter's, 27/1)

g. Weapons-related Developments in Nuclear-Weapon States

- There have been numerous reports in the European news media that the launch of a scientific research rocket in Norway, on 25 January, monitored in Russia, led to a full-scale missile alert in that country and prompted President Yeltsin to use his emergency link to the commanders of his armed forces to call for a high-level military alert. The President later praised the army and the Russian Interfax News Agency for their prompt handling of the incident. There are reports, however, that Norway had duly notified the Russian authorities of the impending launch and that the Russian military overreacted, apparently as a result of false information or wrong interpretation of available data. (Telegraph, 26/1; Independent, 26/1; Die Welt, 27/1; Frankfurter Allgemeine Zeitung, 27/1; Standard [Vienna], 27/1; Die Presse, 27/1; Corriere Della Sera, 27/1; International Herald Tribune, 27/1)
- It has been announced in the **United Kingdom** that with the completion of the Trident nuclear submarine programme one of plants involved in the production of nuclear weapons will be closed, while over the next four years activities at other facilities will be reduced. A total of 850 jobs will be eliminated. (**Daily Telegraph**, 21/1; **Guardian**, 21/1; **Financial Times**, 21/1)
- The United States House of Representatives has rejected by a narrow margin a Republican proposal to oblige the Administration to develop a theatre ballistic missile defense system at the earliest possible date. China has warned the United States that developing an advanced ballistic missile defense system that could be deployed in Asia could raise the risk of nuclear war. Washington had previously notified Russia that it would start testing a tactical missile defense system even though its negotiations with Moscow on how to reconcile such a system with the Anti-Ballistic Missile Treaty (ABM) had not been completed. Reportedly, the US Administration is about to start tests of its Theatre High Altitude Area Defense system (THAAD) and hopes to obtain Russian concurrence that its deployment should not be seen as violating the ABM Treaty.

The US Administration has asked for an additional \$50million as part of the 1996 budget of the Department of Energy (DoE) to begin developing a new facility to produce tritium. Since safety considerations forced the shut-down of the old reactors at Savannah River, the country no longer has a facility dedicated to the production of tritium. Tritium has a 5.5 per cent annual decay rate and if the country wishes to maintain its present nuclear arsenal it is expected by the end of the decade to need a new source of that material. A study on the best means for the production of tritium will consider both reactors and nuclear accelerators as a source; there is speculation in DoE that for cost reasons the latter means will be preferred and that Savannah River will be chosen as the site. The fact that with the additional costs for this project proposed DoE spending for nuclear weapons would increase by 8.5 per cent while the budget for clean-up of radioactive waste would decrease by 9.2 per cent prompts environmental activists to resist the move as defaulting on legally binding clean-up commitments.

About 9,000 people, including children and newborn babies, are reported to have been used in 154 radiation tests carried out by the US Atomic Energy Commission. While initially it was reported that injections with radioactive substances carried out at the University of Rochester in the 1940s involved only patients with fatal illnesses, the Advisory Committee on Human Radiation Experiments, which was set up to evaluate whether such experiments were medically and scientifically justified, is said to have found evidence that by no means every one of the persons concerned suffered chronic or terminal illnesses.

It has also been revealed that the United States military knew that ground tests of nuclear bombs at the Nevada test site near Las Vegas in the early 1950s involved serious health risks from radioactive fallout, but went ahead anyway. Reportedly, plans to evacuate civilians from the area near ground zero were cancelled so as to avoid creating a public panic.

(New York Times, 10/1, 19/1, 6/2, 16/2, 15/3; International Herald Tribune, 12/1, 18/2, 19/2; Reuter's, 18/1; Associated Press, 19/1; Washington Post, 5/2; Times of India, 17/2)

h. Nuclear Proliferation Issues

The Agreed Framework between the Democratic People's Republic of Korea and the United States of America has run into criticism in the US Congress, especially from its newly elected Republican majority. There is considerable doubt that the DPRK will honour its commitments. The Administration is censured for having accepted a delay in the full application of safeguards pursuant to the agreement between the DPRK and the IAEA. Most of all, the fact that the North has been promised a power station and other items of assistance in return for its compliance with the NPT is seen as setting a bad precedent for America's future nonproliferation policy. At hearings before several Senate committees, the Administration was reproached for accepting an arrangement that obliges the US to make a number of concessions, including the provision of fuel oil, liberalisation of trade, the establishment of liaison offices and the supply of a \$4-billion nuclear power station, while many of the actions the DPRK is expected to take are put off to a future date. Administration

officials who defended the deal made with the DPRK described at length how they had arrived at the policy decisions that led to the negotiations on the Agreed Framework. Reportedly, among policies considered and rejected was an airstrike against the North's nuclear installations. Initial reactions from the Congress indicate that while members may call on the Administration to extract more or earlier concessions from the DPRK before the funds needed for its implementation are approved, they are not likely to go so far as rejecting the Agreed Framework altogether. Members of both Houses see that instrument as imperfect, but probably the most that could be achieved under the circumstances.

In early February, the Administration said it was seeking \$22-million in the 1996 request for the State Department in connection with the Agreed Framework. Part of that sum was needed to cover shipments of heavy oil to the North. The first oil shipments, totalling 50,000 tonnes, were made in January. Reportedly, the DPRK has diverted a small portion of the shipment, which was intended for heating purposes and the production of electricity, to industrial use - some say it may have been used for a military purpose. The US Administration has asked for clarification how the oil has been used, but it has not been revealed if Pyongyang has responded, or, if so, how. Critics in Washington take the incident as demonstrating one of many weaknesses in the Agreed Framework which, they say, is not sufficiently specific and not enforceable like a formal treaty. Under the Agreed Framework, Washington is held to supply the DPRK with a total of 150,000 tonnes of heavy oil in 1995 and 500,000 tonnes annually thereafter until the reactors are completed, in 2003.

At the beginning of the year, Washington announced that it would ease some restrictions on trade with the DPRK. As part of the relaxation it would allow direct telephone calls, the use of credit cards by travellers to the North and the importation of certain North Korean minerals for which there is a pressing American demand. This news followed Pyongyang's announcement that it would end its ban on trade and financial transactions with the United States, among other things allowing American ships into its ports. Representatives of US business have already visited the DPRK to discuss possible ventures in a free-trade zone which Pyongyang intends to create near the border with China and Russia. Less progress seems to be made with respect to the establishment of diplomatic ties between the DPRK and the United States. The US Administration links the possible establishment of liaison offices, which would be a first step towards full diplomatic recognition, with the resumption of political dialogue between Pyongyang and Seoul. The Republic of Korea has called for contact at the vice-ministerial level. This Pyongyang has rejected, repeating its assertion that it will not enter into a political dialogue until South Korea officially apologises for the insult which the DPRK feels it suffered when the South Korean president called on his people not to express regret over the death of the DPRK's Head of State, Kim Il Sung. On its part, Pyongyang has called for a conference involving political parties from both countries, on the occasion of the fiftieth anniversary of Korea's independence from Japan. This, the South has rejected as a mere political mass demonstration.

Giving further effect to the Agreed Framework, the US Administration is seeking \$10-million for the safe storage of 8,000 corroding spent fuel rods from the 5-MW graphite reactor, by reprogramming funds from the Department of Energy. The fuel rods are to be put initially in special stainless steel cans that will be sealed by the IAEA and returned to the fuel pond, of which the water would be chemically treated against the further growth of algae which now threaten to block the drains and hasten the corrosion process. At a discussion in Pyongyang, in January, agreement had been reached on long-term storage of the fuel rods in dry concrete. Approval for the reprogramming of the pertinent funds, already granted in the US Senate, has been delayed in the House of Representatives for unknown reasons.

The choice of the country of origin of the two 1000-MW light water reactors which would be provided to the DPRK under the Agreed Framework, has become a contentious issue. The US Administration has repeatedly advised the DPRK that its acceptance of South Korean power reactors was considered an integral part of the deal. During talks between the DPRK and the US in Berlin in early January the former already expressed opposition to South Korea providing the reactors. Apparently, on that occasion Pyongyang made inquiries in Germany about the possibility of Siemens AG providing the reactors. In subsequent exchanges, the DPRK has repeatedly threatened to revoke the Agreed Framework if the US persisted in its demands that South Korea should supply the reactors. While Washington has not so far given indications of a willingness to depart from its stated position in this regard, there is some speculation that it might consider accepting Russia as the prime contractor, as long as a large portion of the work would be done by South Korea. The persistent intransigence of the DPRK negotiators on this matter does not appear to surprise or disturb the American side overmuch; the reaction heard in Washington is that as long as Pyonyang adheres to its commitment to freeze the production of the two large graphite-moderated natural uranium reactors, and does not refuel the experimental reactor at Yongbyon, the dialogue will continue. If, however, the DPRK steps back from these undertakings, America might have to take the matter to the Security Council once again. In what is seen as an attempt to put pressure on the United States with regard to the choice of reactors, a foreign ministry spokesman in Pyongyang said on 21 March that unless agreement was reached on this issue within a month, the DPRK would resume the operation of some of its nuclear facilities. Bilateral talks on the provision of the reactors were to be resumed in Berlin, on 25 March.

South Korea is said to have made it a condition for its participation in, and its financial contribution to the international consortium, the Korean Development Organization (KEDO), which is to provide the approximately \$4-billion for the two light-water reactors, that it should be substantially involved in the supply of the facility. The agreement to establish KEDO was signed in New York on 9 March between Japan, the Republic of Korea and the United States, following a meeting also attended by representatives of seventeen other countries, whom the US Administration hopes to persuade to provide funds, goods or services, and that would also become members of KEDO. Australia has already pledged \$5-million and New Zealand \$325,000;

these two states and Canada — which is said to have promised to contribute funds at a level which so far is undisclosed — have applied for membership in KEDO. The United Kingdom has also stated that it would be willing to participate. South Korea would reportedly fund the major part of the \$4-billion and Japan has promised to pay a significant portion as well, but exact figures have not been established. Critics in the Congress question the share which the US will have to pay towards KEDO's operations. One point to be settled is whether the DPRK or KEDO will own the reactors. The DPRK has also reportedly asked for a number of add-ons, including new power lines and extensive training facilities, all of which would considerably increase the cost of the project. The first reaction of US officials was to term the additional demands 'outrageous'.

There is a report that the DPRK refuses to let the IAEA reconstruct the history of fissile material production at Yongbyon, the site of the 'radiochemical laboratory'. As reported, an IAEA delegation would go to Pyongyang to try and resolve the differences over inspector access. It is said that the Agency is only given information on current and future positions of nuclear material, but none about past fissile material production. Reportedly, for that purpose the IAEA would need to take samples of fuel from the 5-MW reactor and also have access to data from the radiochemical laboratory (reprocessing plant) but currently the IAEA is only given an opportunity to monitor the perimeter of the site of the latter and has no access to the facility itself. Under the circumstances it is said that the IAEA does not know if there is any plutonium separation taking place within the facility. Another problem seems to be that the DPRK does not seem to be willing to give visas to an adequate number of IAEA inspectors.

In February, reports that the annual American/South Korean 'Team Spirit' exercises would be resumed led to sharp protests in Pyongyang, where the daily Rodong Sinmun threatened that if he exercises would indeed be held the DPRK might renounce the Agreed Framework. Initial reports, that the field operations part of the exercises might be dropped were denied in Seoul, which announced that in fact US and South Korean troops were proceeding with preparations for the exercise but that a final decision whether to stage the war games this year had not been reached. One South Korean spokesman said that if the DPRK would resume its dialogue with Seoul the maneuvers might be reduced in scope or even omitted altogether. Subsequently, however, it was announced that the United States and South Korea had agreed once again to cancel the 'Team Spirit' maneuvers, but US sources have stressed that other maneuvers and training would continue in South Korea.

In a new development, DPRK forces are said to have expelled seven Polish armistice observers from the demarcation zone at Panmunjyon. Reportedly, the move is seen in Seoul as another attempt on the part of the North to seek direct talks with the United States over a peace agreement.

(New York Times, 6/1, 9/1, 11/1, 20/1, 21/1, 25/1, 9/2, 13/2, 4/3, 24/2, 26/2, 3/3, 4/3, 9/3, 10/3, 16/3; Daily Telegraph, 7/1, 10/1; Reuter's, 9/1, 17/1, 21/1; Associated Press, 11/1, 12/1, 17/1, 28/1; Economist, 14/1, 11/2, 18/3; Financial Times, 17/1, 2/2, 17/2;

NuclearFuel, 16/1, 30/1, 13/2, 27/2, 13/3; Frankfurter Allgemeine Zeitung, 18/1, 6/2, 16/2, 23/2, 27/2; United Press International, 20/1; International Herald Tribune, 21/1, 16/2, 23/2, 27/2, 22/3; Neue Zürcher Zeitung, 22/1, 31/1, 28/2; Nuclear Energy Institute, 23/1; Süddeutsche Zeitung, 23/1, 26/1, 6/2, 9/2; Washington Post, 25/1, 7/2, 8/2, 18/2; Nucleonics Week, 26/1, 2/2, 2/3, 9/3; Le Monde, 22-23/1; Salzburger Nachrichten, 23/2; Nuclear Engineering International, 30/1: Sankei Shimbun, Kathmandu Post, 17/2; Rising Nepal, 19/2; USIS European Wireless File, 9/2: Die Welt, 6/2: Enerpresse, 7/2; Statement by Secretary of State Warren Christopher before the Senate Foreign Relations Committee, US Department of State, 24/1; Agreement on the Establishment of the Korean Peninsula Energy Development Organization; 9/3; **Defense News**, 20-26/3)

Western, and particularly US, media are persisting in their allegations that Iran has an active nuclear weapon programme. The International Atomic Energy Agency has said that it could not substantiate claims made by Israeli and American officials at the beginning of the current year, that Iran would be able to build a nuclear weapon within seven to fifteen years. Subsequently, there has been a large variety of estimates of the time it would take Iran to make a nuclear weapon, ranging from 'less than five years' to 'many years', depending on the sources quoted. One report, ascribed to a 'Middle East intelligence source', says that Iran could have all the components of a nuclear weapon in two years. A recent article in the New York Times alleges that the Iranian government uses 'dozens of transit points', including a small airport at Hartenholm, near Hamburg, to collect and dispatch weapons parts and advanced technology to Iran for use in developing nuclear weapons.

Special concern about developments in Iran is expressed by Israeli officials. Reportedly, in the aftermath of the failure of Tel Aviv's intelligence services to discover Iraq's nuclear-weapon programme, Israel is determined not to be caught napping a second time. The chief of the planning staff of the Israeli army has been quoted as telling a conference at Tel Aviv University that his country must 'observe, develop counter-measures and prepare for decisions aimed at removing this threat'. In response, a communiqué of the Iranian Permanent Mission to the United Nations has threatened reprisals if Israel were to take action against Iranian installations; the Iranian newspaper Jomhourieh — islami has reportedly spoken of the annihilation of Israel.

In line with the earlier estimates, a senior Israeli intelligence officer was quoted as saying in the beginning of March that Iran would be capable of producing nuclear weapons within three years if it could import the needed equipment and materials, and in five to ten years if it had to produce the components on its own. On the same occasion another senior intelligence official reportedly said that there was not enough information available to allow an reliable estimate to be made as to the time it would take Iran to develop nuclear weapons. Ambassador Thomas Graham, Special US Representative for Non-Proliferation, is quoted in the specialised US publication *Nucleonics Week* as saying that Iran has made a decision to develop a nuclear weapons capability but that it had 'no current program'

for the production of weapons-grade fissile material. The same publication quotes a senior official from the Russian Foreign Ministry as stating for the record that in the Ministry's view, Iran's nuclear programme is wholly peaceful. The head of the ecological safety committee of Russia's Security Council, on the other hand, is quoted by *Reuter's News Agency* as saying that his country's assistance to Iran will help that state get nuclear weapons, because the relevant agreement provides for the return of the plutonium that will be extracted from the reprocessed fuel irradiated in Iran. Reports that Iran might have obtained several nuclear warheads from the former Soviet Union also keep surfacing.

The United States recently stepped up its efforts to discourage China and Russia from assisting the Iranian nuclear programme. According to the international media, however, Iran and Russia have already finalised their agreement. Reportedly, this provides that in the first stage of cooperation Russia will help Iran complete one of the partially completed light-water reactors at Bushehr as a 1,000-MW VVER-type unit; construction is planned to take four years. Until the Iran-Iraq war, Siemens of Germany had been engaged in the construction of two light-water reactors at Bushehr. One of these appears to have been 80 per cent complete and the other 65 per cent, before both were damaged in a raid by the Iraqi air force. The new cooperation agreement is also said to provide that Russia may assist Iran with the construction of one more 1,000-MW reactor and may supply two additional 440 MW units. The Russian authorities have not released details about the financing of the project. One hundred and fifty Russians are understood to be already working at Bushehr.

High-level diplomatic efforts by the United States to persuade Russia to cancel the deal are understood not to have had the intended results and Russian officials have let it be known that, although they agree that the acquisition by Iran of a nuclear-weapon potential would be a threat to world security, they do not share the view that assistance in the construction of a light-water reactor power station would help Iran develop a nuclear-weapon programme; Moscow has publicly assured Teheran that it will not give in to American pressure in this matter. The issue is rapidly becoming a major irritant in US-Russian relations. Republican members of the US Congress are calling for a cut-off of aid to Russia unless it renounces the agreement with Iran. Reportedly, the situation has already held up progress in the construction at former Soviet weapon-production sites of facilities for the storage of fissionable material from dismantled warheads, for which assistance was to be provided under the Nunn-Lugar plan. The Czech Republic has announced that it will not allow the firm of Skoda to re-export equipment for VVERs to Iran through Russia.

(International Herald Tribune, 1/1, 25/2; New York Times, 5/1, 8/1, 10/1, 15/1, 21/2, 25/1, 23/2, 25/2, 26/2, 15/3; Times [London], 6/1; Libération, 9/1; Washington Post, 9/1, 11/2; Le Monde, 10/1; Reuter's, 10/1, 15/2, 25/2; Die Presse, 10/1, 27/2; NucNet News, 12/1; Sunday Telegraph, 15/1; Nucleonics Week, 19/1, 2/2, 9/2, 9/3; Jane's Defence Weekly, 21/1; Arms Control Today, Jan/Feb; Mainichi Shimbun, 14/2; Salzburger Nachrichten, 15/2; Süddeutsche Zeitung, 16/2; Enerpresse, 21/2; USIA, European Wireless File, 23/2; United Press International, 24/2; NuclearFuel, 13/3)

- Discussions are proceeding in the United Nations Security Council as well as outside it, about the desirability of maintaining sanctions against Iraq. Reportedly, France and Russia, supported by China, are of the view that Iraq is close to full compliance with the demands of the Security Council that it should eliminate all its programmes for the production of weapons of mass destruction, and that sanctions should be lifted. The United States claims to have evidence that Iraq is still not in full compliance with the relevant Security Council resolutions and, if it were again to sell its oil, would soon be able to resume its weapon production programmes. The UN Special Commission also reports that Iraq has concealed evidence of a biological weapons programme. The Security Council will discuss the matter on 10 April. On that occasion the United States plans to oppose an end to the embargo; it maintains that it is supported in this by ten other members of the Council. France's decision to reopen a diplomatic mission in Baghdad has met with criticism in London and Washington. (Times [London], 7/1; Le Monde, 13/1, 1/2; Guardian, 13/1; Washington Post, 13/1; New York Times, 13/1, 5/3; Independent, 14/1)
- Reports from South Africa cited in a British TV documentary allege that right wing opponents to the present government are in possession of five neutron bombs and one hydrogen bomb, stored in the northern Transvaal province. Another report speaks of two nuclear devices. Government spokespersons dismiss the report as nonsense. There have been no further media reports giving support to the allegation. (Reuter's, 15/2)

i. Illicit Nuclear Trafficking

- At a seminar held in London in February by Medical Action For Global Security, the claim was made that finds of illicitly traded nuclear materials were only a small part of the material actually smuggled, through Central Asia and other borders of the former Soviet Union. At the request of the UN Secretary-General, Jacques Attali, former head of the European Bank for Reconstruction and Development, is making a study on trafficking of nuclear materials and components in the former Soviet Union. Russian officials have begun to acknowledge that security at many of their nuclear facilities is inadequate. It was announced in January that the United States has promised to give Russia an additional \$20-million to help upgrade physical security at nuclear installations. The major part of this assistance was expected to be used for measuring and surveillance equipment. It is not known whether the current disagreement between Moscow and Washington over the former's nuclear assistance to Iran will affect the provision of this assistance. (New York Times, 25/1; Economist Foreign Report, 9/2; Guardian, 15/2; **International Herald Tribune**, 25-26/2)
- There seem to be indications that the 2.7 kgs of highly-enriched uranium (HEU) seized last December in the Czech Republic is identical to, and has come from the same stockpile as the 800 mg of HEU that were seized earlier at Landshut in Germany. (See Newsbrief No. 28, page 18). There is speculation that more of this material is still at large in the Czech Republic. The material is said to be 87.7 per cent U-235, mixed with several other isotopes of uranium. Some European analysts believe that at least part of it is re-enriched

uranium recovered from reprocessed spent fuel; this view does not seem to be shared by American experts. There are suggestions that it may have come from a stockpile of Russian fuel for naval propulsion reactors or research reactors. There are said to be links between the Czech national who is the main suspect in the smuggling of the enriched uranium impounded in Prague and the Pole who was arrested at Landshut in the summer of 1994. Allegedly, Russian authorities have not responded to a Czech request for assistance in tracing the origin of the material beyond a denial that the material came from Russia. (NuclearFuel, 13/2; International Herald Tribune, 13/2; Nucleonics Week, 16/2)

- In Lithuania, 8 kgs of uranium pellets have been confiscated. There is speculation that the pellets may have come from a fuel element which has been missing since mid-1992. (See Newsbrief No. 28, page 18.) Because, apparently, information has not yet been released about the enrichment level of the pellets, it has not been possible to confirm this; some reports seem to indicate that they are five per cent enriched uranium, which would mean that they do not come from a fuel element of the Ignalina RBMK power plant. The missing fuel element has still not been recovered. (Nucleonics Week, 12/1, 26/1)
- Prosecutors in Germany appear to be uncertain what charges they should bring against Alfred Jaekle, the former auto mechanic on whose premises police in Germany, in May of 1994 found a vial containing 60 grammes of radioactive powder, including six grammes of very pure Pu-239. Jaekle denies any attempt to smuggle plutonium. A co-defendant in the counterfeiting case in which he is involved now alleges that Jaekle had meant to sell a larger quantity of plutonium. This has not been substantiated. The source of the material is still unclear. (Nucleonics Week, 26/1)

j. Environmental Issues

A shipment of 28 canisters of vitrified high-level nuclear waste (HLW) from reprocessed Japanese nuclear fuel left France on 23 February, on board the British ship Pacific Pintail, bound for the interim storage facility at Rokkasho-Mura, Japan; it is scheduled to reach the port of Mutsu-Ogaware sometime in April. The ship's route has not been announced. Reportedly, both France and the UK insisted on keeping the itinerary confidential; Japan initially said it had hoped to give more publicity to the operation, following the outcry over the secrecy that characterised the transport of plutonium to that country from Europe in 1993. More recently, however, it was reported from Tokyo that for the approximately two dozen HLW shipments planned over the next twenty years, only the sailing dates and the names of the vessels will be revealed, but not the routes. One reason given in the media was the security of the transport; another was that nuclear opponents might obstruct the ships' progress. Japan's nuclear industry is said to be concerned that this policy of secrecy may once again have a negative effect on public opinion.

The current shipment has caused commotion among environmentalist organisations world-wide. *Greenpeace*, which claims that the steel of the canisters is defective, and which had asked that the shipment be postponed until independent verification could establish that it was

corrosion-free, attempted to disrupt the sailing, although it had been enjoined by a French court not to interfere. That injunction, reportedly, pertained to French territory and its territorial waters; the request by British Nuclear Fuels plc (BNFL) and its subsidiary Pacific Nuclear Transport Limited (PNTL) to forbid *Greenpeace* coming within five nautical miles of the transport vessel was not granted. BNFL claims that the specially-designed flasks containing the canisters comply with all pertinent national and international regulations. The *Greenpeace* vessel *Solo* is attempting to shadow *Pacific Pintail* on its passage to Japan.

Expecting that the ship might pass through the Panama Canal, Greenpeace has conducted a campaign among governments of states in the area of the Caribbean aimed at preventing it from passing through their territorial waters; the thirteen-nation group of Caribbean states, Caricom, as well as several other countries in the region, and representatives of United States overseas territories — the Virgin Islands, American Samoa, Puerto Rico and Guam — have expressed objections to the ship's passage through their area and have asked the governments of France, Japan and the UK to prevent it from doing so. Greenpeace has claimed that despite a warning from Brazil not to do so, Pacific Pintail has crossed that country's territorial waters. Apparently, the vessel in fact has chosen to sail around Cape Horn, thus avoiding the Panama Canal. Obviously with this possibility in mind, the government of Chile has prohibited the vessel from entering its coastal waters. New Zealand has also expressed concern over the possibility that the vessel might pass through the Tasmanian Sea and the Philippines government had earlier said that it would not allow the ship to pass through its territorial waters. In response to inquiries in Washington by Caribbean governments about the safety of the shipment, the US Secretary of State has said that his country had no legal authority in the matter but was satisfied that the transport would be accomplished safely. (Asahi Shimbun, 13/1, 3/2; Associated Press, 14/1; Reuter's, 19/1, 30/1, 7/3; Le Monde, 31/1; NucNet News (BNFL Statement), 3/2; SpentFUEL, 16/1, 6/2, 20/2, 27/2; Atoms in Japan, February; NuclearFuel, 13/2; Financial Times, 21/2, 22/2, 17/3; Nucleonics Week, 23/2, 16/3; Guardian, 24/2; Independent, 24/2)

In an international symposium held in Brussels in January, new details emerged about the problems of the **Russian Federation** in decommissioning its obsolete nuclear submarines and disposing of the reactors and irradiated fuel. It is expected that by the year 2000 at least 150 ships will have to be decommissioned, involving reportedly at least 190 and possibly more than 270 reactors. Decommissioning of all these reactors is reportedly estimated to cost between \$230 and \$270 billion and would take at least 50 years. It was also revealed that attempts in 1994 to seal the wreck of the Soviet submarine *Komsomoletz*, which sank in 1989 about 300 miles from Norway, have not been able to prevent further escapes of radionuclides. (See also **Newsbrief** No. 26, page 20)

The conclusion of an agreement between **Japan** and **Russia** under which the latter would provide funds and engineering assistance for the construction of a floating low-level radioactive waste (LLW) storage facility near Vladivostok, intended particularly to handle waste from

nuclear submarines, has reportedly been delayed by fresh Russian demands. No date has been set for a resumption of the discussions but reportedly, Russia has promised to refrain from dumping LLW into the ocean. The Russian officials involved are said to have told the Japanese that their plans to scrap two to four obsolete submarines each year is hindered by domestic problems.

American scientists are reported to have found radioactive debris from former Soviet spy satellites floating in space. While supposedly not posing a risk to humans, droplets of radioactive coolant leaking from reactors that were used to power these satellites are said to endanger other objects in space. Reportedly, 33 nuclear-powered spy satellites were launched into orbits about 150 miles above the earth. Once they stopped working, usually after a few months, the old reactors are said to have been boosted into parking orbits about 600 miles up, preventing their early reentry into the atmosphere. The last of these ceased operation in 1988. (Nucleonics Week, 19/1; Reuter's, 24/1; Die Welt, 26/1; New York Times, 26/2)

In the United States, the new Republican majority in the Congress are said to be planning changes in the Federal programme for clean-up of the country's nuclear dump sites. Republicans are said to be opposed, in particular, to the provision in the present legislation which makes polluters liable for the clean-up no matter how long ago the pollution was caused. They are also said to advocate transferring supervision of clean-ups from the federal government to the states, who would have discretion in setting standards of cleanliness.

A federal judge in the State of South Carolina has confirmed an earlier ruling blocking the further importation of irradiated nuclear fuel rods of US origin from Europe, until the Department of Energy (DoE) can submit a full-scale environmental impact statement. The US Administration sees the return after use of highly-enriched research-reactor fuel as an important non-proliferation measure. The material was to have been stored at DoE's Savannah River Site. The court's decision is said to cause serious problems for many European operators of research reactors whose temporary storage facilities are not adequate. An appeal by DoE against the decision, in which several overseas operators have joined, is pending.

DoE is being criticised for delays in consolidating work at the proposed waste repository at Yucca Mountain in the state of Nevada. Meanwhile, opponents of nuclear power have launched a campaign against federal legislation to develop a centralised interim spent fuel storage at Yucca mountain. They claim that this will result in the transit of spent fuel through 43 states, and are questioning transportation safety, the security of containers and the availability of emergency response teams. Following a thesis elaborated by scientists at Los Alamos National Laboratory that the plutonium in the planned repository might explode and scatter radioactivity in the atmosphere and in ground water, there has been a call in the US Senate for an independent federal investigation. Other scientists at Los Alamos and elsewhere have meanwhile disputed that thesis as lacking any technical merit and having been constructed on faulty hypotheses. The credibility of the proponents of the thesis is said to be weakened by the fact that they are working on 'rival' methods of waste disposal.

In a referendum on 31 January, the Mescalero Apache tribe in New Mexico rejected by a vote of 490 to 362 a tribal council plan, made in cooperation with a consortium of 33 nuclear utilities with a total of 94 nuclear units, to build a commercial monitored retrievable storage facility for nuclear waste on tribal land. Following a call for a second referendum by members of the Mescalero Apache tribe who claimed that the first was held before they had had time to digest the relevant information, the initial decision was reversed on 9 March, in a vote of 593 to 372. The facility is meant to store radioactive waste for thirty or forty years, until a permanent depository is available, possibly at Yucca Mountain. The new decision is criticised by environmentalists and may run into opposition from the State of New Mexico. It is not known how many of the utilities in the consortium will actually participate, given the current uncertainty about its execution. An appeal in the tribal court is planned, but is not expected to overturn the decision. The tribe hopes to receive \$250-million in direct and indirect benefits from the project. The facility is badly needed because many utilities are running out of space for storage of irradiated fuel; following a ruling by a Federal court of appeals, operators of more than 70 nuclear power stations in the country are now preparing to store their irradiated fuel indefinitely in on-site repositories, without environmental assessments and public hearings. Thirty thousand tonnes of irradiated reactor fuel are said to have accumulated so far in the United States. A number of studies are being undertaken on methods for disposing of irradiated fuel, plutonium and other nuclear waste but the current lack of funding is said to make it doubtful that solutions will be found soon.

A report prepared for the Senate Energy Committee says that the tripartite agreement between the Department of Energy, the Environmental Protection Agency and the State of Washington to clean up the Hanford nuclear reservation was impossible to carry out, and would not be able to achieve its goals under any conceivable budget or timetable. Members of the Committee are said to plan a change in the relevant laws. Plans to scrap the programme are expected to run into strong opposition, not only from Washington State but also from other states where costly nuclear clean-ups had been planned. (Associated Press, 27/1; New York Times, 1/31, 15/2. 5/3, 7/3, 8/3, 11/3, 14/3, 15/3; NucNet News, 1/2; Nucleonics Week, 2/2, 2/3, 16/3; Energy Daily, 8/2; Financial Times, 3/2; USA Today, 3/2; SpentFUEL, 6/2, 6/3, 13/3; **NEI Nuclear Energy Overview**, 13/2; NuclearFuel, 13/3)

k. Miscellaneous

- According to the periodical *Nucleonics Week*, at the time of the unification of **Germany** the government in Bonn took over 529.2 metric tonnes (MT) of enriched uranium and 2.9 MT of plutonium from what was the nuclear material inventory of the German Democratic Republic. (Nucleonics Week, 12/1)
- It is reported that none of the nuclear installations in the areas in Europe (Belgium, France, Germany and the Netherlands) affected by the recent floods have suffered any damage. (Nucleonics Week, 9/2)
- Reports from Sweden say that underwater sounds monitored off the coast for several decades, which were as-

cribed to intruding Soviet submarines and led to repeated diplomatic protests in Moscow and to extended antisubmarine hunts, may well have been made by minks or other small marine mammals. (New York Times, 12/2)

- There has been further discussion in the United States about the way in which the Enola Gay, the B-29 aircraft from which the first atomic bomb was dropped on Hiroshima, should be displayed at the Smithsonian Institution in Washington (see Newsbrief No. 28, page 5). Following interventions by conservative members of the US Congress and by veteran organisations, who felt that the planned display, geared to the commemoration of the fiftieth anniversary of the event and presenting it in the context of subsequent nuclear developments, was overly solicitous of Japan and ignored the American point of view, it was decided in the end to exhibit only the bomber's fuselage, along with a commemorative plaque. The issue has triggered sharp controversies between historians who emphasised the suffering caused by the bombing and question the military need for it, and those who defend it as having shortened World War II and in the end having saved many lives. Discussion on the question why, even if the atomic bombing of Hiroshima was seen as necessary, a second bomb was dropped, on Nagasaki, goes on unabated. The decision to scale back the exhibit has led to negative comments in Japan (where Prime Minister Murayama and other senior officials publicly expressed regret) as well as elsewhere; many US observers see it as a capitulation to right-wing censorship. The cities of Hiroshima and Nagasaki are planning to respond with a campaign in the US media and possibly a travelling exhibition stressing the suffering caused by the use of nuclear weapons in 1945. (USA Today, 31/1; New York Times, 31/1, 5/2, 25/2; Economist, 4/2; International Herald Tribune, 18-18/2, 20/2, 25/2)
- According to the United States General Accounting Office, that country's ability to keep track of nuclear material of American origin abroad is limited. The Department of Energy's Nuclear Materials Management and Safeguards System (NMMSS) must rely on information provided by states with which it has nuclear cooperation agreements. Its data are said to differ sometimes with those kept by the states concerned, in particular, because the latter need not report on domestically extracted plutonium, but only on that reprocessed abroad and retransferred. The report also points out that since physical protection is seen as the responsibility of the states concerned, the United States must rely in that respect on countries' commitments to comply with voluntary guidelines. (SpentFUEL, 13/2)
- The chairman of the United States Nuclear Regulatory Commission, Ivan Selin, is resigning from the NRC in order to sell gas-fuelled power plants in Asia. Unless new members are appointed soon, his departure will leave the Commission with only one member. The NRC's nominal membership is five; the quorum to transact business and formulate policy is three. (New York Times, 15/3; Nucleonics Week, 16/3)

II. PPNN Activities

• The PPNN Core Group held its 17th semi-annual meeting at the Arden House Conference Centre, Harriman, New York from 9–12 March 1995. All members

of the Core Group were present, with the exception of Ambassador Fan Guoxiang and Dr. Harald Müller.

- The Core Group meeting itself took place on Thursday 9 and Friday 10 March. Among the subjects discussed were a number of substantive issues, in particular matters relating to the 1995 NPT Conference, and future roles for PPNN and needs in could fulfil after 1995.
- From Friday 10 to Sunday 12 March the Core Group convened an international briefing seminar for senior diplomats assigned to national missions to the UN in New York on Issues at the 1995 NPT Conference. This was attended by 37 participants and observers from 34 states and representatives of the Secretariats of the United Nations, and the International Atomic Energy Agency (IAEA). A representative of the Japan Atomic Industrial Forum (JAIF) also took part as an observer.

The seminar was chaired by Ben Sanders, Executive Chairman of PPNN, and opened by Jayantha Dhanapala, Ambassador of Sri Lanka to the United States and President Elect of the 1995 NPT Conference with a keynote address on Nuclear Non-Proliferation: The Current Context (CGII/117). After the initial plenary presentation on The 1995 NPT Conference: A Preliminary Review of the Issues (CGII/118) by John Simpson, the participants split into small working groups. During these working group sessions, short presentations were made on four sets of issues, followed by discussion among members of the group. The issues were clustered as follows:

Issue Cluster A: The Extension of the Treaty chaired by James Leonard, with presentations from Ben Sanders (Preparations for the Conference) [CGII/119] and George Bunn (Procedural Issues — The Nature of the Review/Extension Conference: Implications for the Extension Decision) [CGII/120]

Issue Cluster B: The Review of the Treaty — Security Questions chaired by Davidson Hepburn, with presentations by Lewis Dunn (The Obligations of Parties (Articles I and II) [CGII/121], Jozef Goldblat (Nuclear Disarmament — (Article VI) [CGII/122], and Olu Adeniji (Security Assurances and Nuclear-Weapon-Free Zones) [CGII/123].

Issue Cluster C: The Review of the Treaty — Peaceful Uses and Verification chaired by Jan Murray, with presentations by Djali Ahimsa (Peaceful Uses (Articles IV and V)[CGII/124], David Fischer (Verification (National and International Monitoring, including IAEA Safeguards, and Action in the Event of Non-Compliance)[CGII/125] and Jiri Beranek (Export Controls (Article III.2).

Issue Cluster D: The Review of the Treaty — Regional Issues chaired by Oleg Grinevsky, with presentations by Mohamed Shaker (The Middle East, Israel and Iraq)[CGII/126], Yoshio Okawa (North Korea After Kim Il Sung) [CGII/127], and Roland Timerbaev (The States of the Former Soviet Union) [CGII/128].

The seminar concluded with a Plenary Session, chaired by Ben Sanders. A Panel, comprised of the Working Group Chairmen, Thérèse Delpech and Adolfo Taylhardat, commented on the main issues emerging from the discussions within the working groups.

- PPNN has produced new editions of both Volumes of the PPNN Briefing Book — Volume I: The Evolution of the Nuclear Non-Proliferation Regime and Volume II: Treaties, Agreements and other Relevant Documents. These will be available to delegations at the NPT Conference. In addition, it is hoped to distribute Issue Review No.4, The NPT Review Process; Issue Review No.5, A Regional Track for the Last Three NPT Holdouts; and PPNN Study 6, Issues at the 1995 NPT Conference during April.
- Copies of papers presented at the Arden House meeting and other PPNN publications can be obtained from the Southampton Office of PPNN.

III. Recent Publications

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Darryl Howlett and John Simpson, *PPNN Briefing Book - Volume I: The Evolution of the Nuclear Non-Proliferation Regime*, (Southampton, UK: Mountbatten Centre for International Studies for PPNN, Second Edition), 72 pp.

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IV. Documentation

Final Report of the Preparatory Committee for the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons [extract]

I. Terms of Reference and Organization of Work

 At its forty-seventh session, the General Assembly, in resolution 47/52 A of 9 December 1992, took note of the decision of the parties to the Treaty on the Non-Proliferation of Nuclear Weapons, following appropriate consultations, to form a preparatory committee for a conference to review the operation of the Treaty and to decide on its extension, as called for in article X, paragraph 2, and also as provided for in article VIII, paragraph 3, of the Treaty.

- The General Assembly also noted that the Preparatory Committee would be open to all parties to the Treaty and, if the Preparatory Committee so decided at the outset of its first session, to States not parties, as observers.
- The Committee held four sessions: the first in New York, from 10 to 14 May 1993, the second in New York from 17 to 21 January 1994, the third in Geneva from 12 to 16 September 1994 and the fourth in New York from 23 to 27 January 1995. Progress reports covering the first three sessions of the Committee were issued, respectively, as documents NPT/CONF.1995/PC.II/2, NPT/CONF.1995/PC.II/3 and NPT/CONF.1995/PC.III/15.
- At its first session, the Preparatory Committee elected Mr. Jan Hoekema (Netherlands) to serve as Chairman of the first session. It also decided that Mr André Erdös (Hungary) would be Chairman of the second session. The Committee was informed that the Group of Non-Aligned States had nominated Nigeria to serve as Vice-Chairman of the first session and Chairman of a future session. It was further decided that the persons elected, when not serving as Chairmen, would serve as Vice-Chairmen. At its second session, the Committee elected Mr Isaac E. Ayewah (Nigeria) to serve as Chairman of the third session. Further, at its third session the Committee was informed that Mr. Hoekema had been elected to his country's legislative assembly and had been succeeded by Mr. Jaap Ramaker. At its fourth session, the Committee elected Mr. Pasi Patokallio (Finland) to serve as Chairman of that session. The Committee authorized its Bureau and the President-elect to handle technical and other matters in the period before the Conference. Furthermore, the Committee decided that the Chairman of the fourth session should open the Conference
- Mr. Prvoslav Davinic, Director, Centre for Disarmament Affairs. represented the Secretary-General of the United Nations, Ms Silvana F. da Silva, Senior Political Affairs Officer, served as Secretary of the Committee's first session, and Mrs. Hannelore Hoppe, Political Affairs Officer, Centre for Disarmament Affairs, served as Secretary of the second, third and fourth sessions. Mr. Mohamed Elbaradei, Assistant Director General for External Relations, International Atomic Energy Agency (IAEA), Mr. Berhanykun Andemicael, Representative of the Director General of IAEA to the United Nations in New York, Mr. Paulo Barretto, Director, Division of Technical Cooperation Programmes, Mr. Richard Hooper, Director, IAEA Safeguards Department, Ms. Merle Opelz, Head of the IAEA Office at Geneva, and Ms. Jan Priest, Head, Safeguards and Non-Proliferation Policy Section, Division of External Relations, IAEA, represented the Agency.
- 6. Delegations of the following 154 States parties participated in one or more sessions of the Preparatory Committee:
 - Afghanistan, Albania, Algeria, Antigua and Barbuda, Armenia, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brunei Darussalam, Bulgaria, Burkina Faso, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, China, Colombia, Costa Rica. Côte d'Ivoire, Croatia, Cyprus, Czech Republic, Democratic People's Republic of Korea, Denmark, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Estonia, Ethiopia, Fiji, Finland, France, Gabon, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Holy See, Honduras, Hungary, Iceland, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Rwanda, Saint Lucia, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, South Africa, Spain, Sri Lanka, Sudan, Suriname, Sweden,

- Switzerland, Syrian Arab Republic, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Uruguay, Uzbekistan, Venezuela, Viet Nam, Yemen, Zambia and Zimbabwe.
- 7. At its second session, the Committee decided that representatives of States not parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) should be allowed, upon request, to attend as observers the meetings of the Committee other than those designated closed meetings, to be seated in the Committee behind their countries' nameplates and to receive documents of the Committee. They should also be entitled, at their own expense, to submit documents to the participants in the Committee. Accordingly, representatives of the following States not parties to the Treaty attended meetings of the Committee as observers: Argentina, Brazil, Chile, Cuba, Israel, Oman, Pakistan and United Arab Emirates.
- 8. With regard to the participation of representatives of intergovernmental organizations, the Committee decided, at its third session, that they should be allowed, upon request, to attend as observers the meetings of the Committee other than those designated closed meetings, to be seated in the Committee behind their organizations' nameplates and to receive documents of the Committee. They should also be entitled, at their own expense, to submit documents to the participants in the Committee. The following intergovernmental organizations were represented as observers at meetings of the Committee: Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL), European Community and League of Arab States.
- 9. Furthermore, the Committee decided at its second session that representatives of non-governmental organizations (NGOs) should be allowed, upon request, to attend the meetings of the Committee other than those designated closed, to be seated in the public gallery, to receive documents of the Committee and, at their own expense, to make written material available to the participants in the Committee. They should also be given an opportunity, during the third session of the Preparatory Committee, to hold a briefing for those [interested] on the margins of the Committee's deliberations and at no additional expense to the latter. Representatives of 91 NGOs attended meetings of the Committee.
- 10. At its second session, the Committee decided to make every effort to adopt its decisions by consensus. In the event that consensus could not be reached, it would then take decisions in accordance with the rules of procedure of the Fourth Review Conference of the parties to the NPT.
- At its first session, the Committee decided that its working languages would be Arabic, Chinese, English, French, Russian and Spanish.
- 12. In accordance with the Committee's decision at its first session, summary records were provided for the meetings of the fourth session
- 13. The Committee also decided that press releases should be issued at United Nations Headquarters in New York and at the United Nations Office in Geneva at the conclusion of each session of the Preparatory Committee.
- 14. At the first, second and third sessions of the Committee, an exchange of views was held on substantive issues related to the NPT and its 1995 Conference under the item 'Other business'. At its second session, the Committee heard presentations by IAEA on the Agency's Safeguards System and its technical cooperation activities. At its fourth session, the Committee decided to amend the programme of work by adding an item entitled 'Exchange of views'.
- 15. In addition to the background papers prepared by the Secretariat, IAEA, OPANAL and the South Pacific Forum (documents NPT/CONF.1995/PC.III/2-11), a number of documents were submitted by delegations during the Committee's sessions. ...

II. Organization of the Work of the Conference

- 16. In the course of its session, the Committee considered the following questions relating to the organization and work of the Conference:
 - (a) Dates and venue of the Conference;

- (b) Draft rules of procedure of the Conference;
- (c) Provisional agenda of the Conference;
- (d) Organization of Committees;
- (e) Financing of the Conference;
- (f) Background documentation for the Conference;
- (g) Final document(s) of the Conference.

(a) Dates and venue of the Conference.

17. At its first session, the Committee decided that the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons would take place in New York from 17 April to 12 May 1995.

(b) Rules of procedure

18. At its second, third and fourth sessions, the Committee considered in depth the draft rules of procedure for the Conference and established an informal working group for that purpose. At its fourth session, the Committee agreed that, in order to finalize the provisional rules of procedure, the Chairman of the informal working group on the rules of procedure would hold further informal consultations on rule 28.3. Those consultations would be held in New York on 14 and 15 April. ... [Rules 27 and 28.3 as well as the five proposals pertaining to rule 28.3 that are before the informal working group on the rules of procedure are reproduced hereafter.]

(c) Agenda for the Conference

 At its fourth session, the Committee adopted the provisional agenda as contained in annex IV to the present report.

(d) Organization of Committees

 The Committee agreed to the proposed allocation of items to the Main Committees of the Conference as contained in annex V to the present report.

(e) Financing of the Conference

21. At its fourth session, the Committee decided to accept the revised statement of estimated costs prepared by the secretariat on the estimated cost of the 1995 Conference, including the sessions of the Preparatory Committee contained in document NPT/CONF.1995/PC.IV/2. The Committee agreed to the schedule of division of costs

(f) Background documentation

- 22. At its second session, the Preparatory Committee decided to invite the Secretary-General to prepare five papers, dealing with the overall implementation of the tenth preambular paragraph of the NPT; articles I and II; article VI; and article VII; and negative and positive security assurances. The papers should cover developments within the United Nations, the Conference on Disarmament and other multilateral and bilateral forums. The Preparatory Committee also invited the Director General of IAEA to prepare comprehensive background documentation on the implementation of articles III, IV and V. It also invited the Secretary General of OPANAL and the secretariat of the South Pacific Forum to prepare background papers dealing with their respective activities. The Committee requested that the papers be submitted to its third session.
- 23. It was also decided that the following general approaches should apply to the proposed papers: all papers must give balanced, objective and factual descriptions of relevant developments, be as short as possible and be easily readable. They must refrain from presenting value judgements. Rather than presenting collections of statements, they should reflect agreements reached, actual unilateral and multilateral measures taken, understandings adopted, formal proposals for agreements made and important political developments directly relevant to any of the foregoing. The papers should focus on the period since the Fourth Review Conference. In order to make them self-contained, references to earlier developments should be included as appropriate.

24. Specifically:

(a) The paper on the tenth preambular paragraph (comprehensive nuclear test ban) should reflect developments in the Conference on Disarmament; developments within the framework of the United Nations; the amendment conference for the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water (partial test-ban treaty); and outside developments;

- (b) The paper on articles I and II should draw largely on the relevant discussions and results of the First to Fourth Review Conferences and take account of recent and current developments in the area of nuclear non-proliferation. To the extent necessary, the paper would include cross-references to matters discussed in the paper by IAEA on article III;
- (c) The paper on article VI should cover developments regarding cessation of the nuclear arms race, nuclear disarmament and general and complete disarmament;
- (d) The paper on article VII should deal with the issue of nuclear-weapon-free zones and contain a brief description of the issue of zones of peace;
- (e) The paper on security assurances should deal with both positive and negative security assurances and reflect developments in the Conference on Disarmament and the United Nations and proposals within the ambit of the NPT and elsewhere.
- 25. In response to the Committee's request at its second session, a number of background papers were submitted for the third session by the Secretariat of the United Nations, and the secretariats of IAEA, OPANAL and the South Pacific Forum. At its third session, the Committee requested the respective secretariats to amend the relevant background papers in the light of comments made in the course of the discussions, to update them to take account of current events in conformity with the general approach adopted at the second session and to submit them to the Conference. In that context, the provisional Secretary-General informed the Committee of the status of updating and amending those papers (NPT/CONF.1995/SR.8).

(g) Final document(s) of the Conference

26. The Committee agreed to defer to the Conference a decision on the question of the final document(s) of the Conference.

III. Officers of the Conference

- 27. At its first session, the Committee was informed about two candidatures for the position of President of the 1995 Conference. At its second session, the Committee was informed that Poland, as the candidate of the Eastern European Group of States, was withdrawing in favour of Mr. Jayantha Dhanapala of Sri Lanka, the candidate endorsed by the Movement of Non-Aligned countries. The gesture by Poland was warmly recognized by a number of States parties, which also expressed the wish that Poland be accorded a significant role at the 1995 Conference. The Committee then unanimously endorsed the candidacy of Mr. Dhanapala for the presidency of the 1995 Conference.
- 28. At the fourth session, the Committee agreed to recommend as Chairmen of the three Main Committees the following:

 Main Committee I Mr Isaac E. Ayewah (Nigeria)

Main Committee I Mr Isaac E. Ayewah (Nigeria)
Main Committee II Mr André Erdös (Hungary)
Main Committee III Mr Jaap Ramaker (Netherlands)

29. The Committee also agreed to recommend as Chairman of the Drafting Committee Mr Tadeusz Strulak (Poland) and as Chairman of the Credentials Committee a representative of the Group of Non-Aligned and Other States.

IV. Appointment of the Secretary-General of the Conference

30. At its first session, the Committee decided to invite the Secretary-General of the United Nations, in consultation with the members of the Preparatory Committee, to nominate an official to act as provisional Secretary-General of the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, a nomination to be confirmed by the Conference itself. At its second session, the Committee was informed that, in response to that request, the Secretary-General of the United Nations, following consultations with the members of the Preparatory Committee, had nominated Mr. Prvoslav Davinic, Centre for Disarmament Affairs, as provisional Secretary-General of the Conference. The Committee took note of that nomination.

V. Participation at the Conference

31. The Committee also decided that invitations to States which, in accordance with the decision on participation, were entitled to participate in the Conference, as well as to the Secretary-General of the United Nations and Director General of IAEA, should be issued by the Chairman of the fourth session of the Preparatory Committee

VI. Adoption of the Final Report

 The Preparatory Committee adopted its final report at its last meeting, on 27 January 1995.

Annex III DRAFT RULES OF PROCEDURE

Reconsideration of Proposals

Rule 27

Proposals adopted by consensus and a decision taken in accordance with rule 28.3 may not be reconsidered unless the Conference reaches a consensus on such reconsideration. A proposal other than a proposal under rule 28.3 that has been adopted or rejected by a majority or two-thirds vote may be reconsidered if the Conference, by a two-thirds majority, so decides. Permission to speak on a motion to reconsider shall be accorded only to two speakers opposing the motion, after which it shall be immediately put to the vote.

Adoption of Decisions

Rule 28

3. The extension

- (a) The requirements of paragraph 2 of article X of the Treaty shall be considered met when there is a consensus in support of a proposal made in accordance with that paragraph, provided that the Conference is quorate as defined in rule 13.
- (b) If, notwithstanding the best efforts of delegates to achieve a consensus decision on extension, a proposal or proposals come up for voting, the President shall defer the vote for forty-eight hours and during this period of deferment shall make every effort, with the assistance of the General Committee, to facilitate the achievement of general agreement, and shall report to the Conference prior to the end of the period.
- (c) If by the end of the period of deferment the Conference has not reached a consensus decision on the extension, voting shall take place and the decision shall be taken by a majority of the Parties to the Treaty, in accordance with paragraph 2 of article X.
- (d) The Conference may be closed only when the decision required by paragraph 2 of article X of the Treaty has been reached.

APPENDIX 2

Proposals on Rule 28.3

The following five proposals on rule 28.3 were submitted to the Informal Working Group on the Rules of Procedure during the fourth session of the Preparatory Committee. These proposals will be taken up in the informal consultations of the Group to be held 14 and 15 April 1995 in New York.

1. Proposal by Mexico

- (a) Add the following new paragraph after rule 28.3 (a): In order to achieve the decision on the extension of the Treaty, the President shall conduct consultations from the outset of the Conference and keep the General Committee informed in this regard.
- (b) Renumber the remaining paragraphs accordingly.

2. Proposal by the non-aligned countries

- (a) Replace the existing rule $2\overline{8}.3$ (c) by the following:
 - (c) If by the end of the period of deferment the Conference has not reached a consensus decision on the extension, voting shall take place.
 - (d) All extension proposals shall be put to a vote simultaneously and on a single ballot. The proposal receiving the highest number of votes shall be the final

decision of the Conference on the extension of the Treaty, provided that the decision is supported by a majority of Parties to the Treaty in accordance with article X.2.

- (e) If no proposal receives the required majority, the proposal having received the smallest number of votes will be eliminated and successive ballot(s) between proposals with the highest number of votes will be conducted until the majority in accordance with article X.2 is reached.
- (b) Renumber existing paragraph 3 (d) as 3 (f).

3. Proposal by the United Kingdom

- (a) After paragraph 28.3 (c) add
 - (d) The order of submission of proposals shall not determine the order in which they are considered.
 - (e) Any amendment to a proposal shall be considered a new proposal, although the sponsor of a proposal may revise his own proposal at any time before a decision on it has been taken.
- (b) Renumber existing subparagraph (d) as (f).

4. Proposal by Indonesia

Paragraph 28.3 (d) should read

The Conference may be closed only for a maximum period of one year when the decision required by paragraph 2 of article X of the Treaty has not been reached.

5. Proposal by the Russian Federation

Paragraph 28.3 (d) should read

The Conference cannot be closed nor suspended or recessed unless and until the decision required by paragraph 2 of article X of the Treaty has been reached.

Annex IV PROVISIONAL AGENDA

- Opening of the Conference by the Chairman of the fourth session of the Preparatory Committee.
- 2. Election of the President of the Conference.
- 3. Statement by the President of the Conference.
- 4. Address by the Secretary-General of the United Nations.
- 5. Address by the Director General of the International Atomic Energy Agency.
- 6. Submission of the final report of the Preparatory Committee.
- 7. Adoption of the rules of procedure.
- Election of Chairman and Vice-Chairman of the Main Committees, the Drafting Committee and the Credentials Committee.
- 9. Election of Vice-Presidents.
- 10. Credentials of representatives to the Conference:
 - (a) Appointment of the Credentials Committee;
 - (b) Report of the Credentials Committee.
- 11. Confirmation of the nomination of the Secretary-General.
- 12. Adoption of the agenda.
- 13. Programme of work.
- Adoption of arrangements for meeting the costs of the Conference.
- 15. General debate.
- 16. Review of the operation of the Treaty as provided for in its article VIII, paragraph 3:
 - (a) Implementation of the provisions of the Treaty relating to non-proliferation of nuclear weapons, disarmament and international peace and security:
 - (i) Articles I and II and preambular paragraph 1 to 3;
 - (ii) Article VI and preambular paragraphs 8 to 12;
 - (iii) Article VII with specific reference to the main issues in(a) and (b);
 - (b) Security assurances:
 - (i) United Nations Security Council resolution 255 (1968);
 - (ii) Effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons;
 - (c) Implementation of the provisions of the Treaty relating to non-proliferation of nuclear weapons, safeguards and nuclear-weapon-free zones:
 - (i) Article III and preambular paragraphs 4 and 5, especially in their relationship to article IV and preambular paragraphs 6 and 7;

(ii) Articles I and II and preambular paragraphs 1 to 3 in their relationship to articles III and IV;

(iii) Article VII;

- (d) Implementation of the provisions of the Treaty relating to the inalienable right of all Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II:
 - (i) Articles III (3) and IV, preambular paragraphs 6 and 7, especially in their relationship to article III (1), (2) and (4) and preambular paragraphs 4 and 5;

(ii) Article V.

(e) Other provisions of the Treaty.

- 17. Role of the Treaty in the promotion of non-proliferation of nuclear weapons and of nuclear disarmament in strengthening international peace and security and measures aimed at promoting wider acceptance of the Treaty.
- 18. Reports of the Main Committees.
- Decision on the extension of the Treaty as provided for in article X, paragraph 2.
- 20. Consideration and adoption of Final Document(s).
- 21. Any other business.

Annex V PROPOSED ALLOCATION OF ITEMS TO THE MAIN COMMITTEES OF THE CONFERENCE.

- The Preparatory Committee agreed to recommend for consideration by the Conference the following allocation of items to the three Main Committees, with the understanding that the remaining items would be considered in the Plenary.
- It is understood that all articles, preambular paragraphs and agenda items allocated to the Main Committees shall be reviewed in their interrelationship. Main Committee I is entrusted with the task of assessing the extent to which obligations of articles I, II and VI are being met.

1. Main Committee I

Item 16. Review of the operation of the Treaty as provided for in its article VIII, paragraph 3:

- (a) Implementation of the provisions of the Treaty relating to nonproliferation of nuclear weapons, disarmament and international peace and security;
 - (i) Articles I and II and preambular paragraphs 1 to 3;
 - (ii) Article VI and preambular paragraphs 8 to 12;
 - (iii) Article VII, with specific reference to the main issues considered in this Committee;
- (b) Security assurances:
 - (i) United Nations Security Council resolution 255 (1968);
 - (ii) Effective international arrangements to assure nonnuclear-weapon States against the use or threat of use of nuclear weapons.

2. Main Committee II

Item 16. Review of the operation of the Treaty as provided for in its article VIII, paragraph 3:

(c) Implementation of the provisions of the Treaty relating to nonproliferation of nuclear weapons, safeguards and nuclearweapon-free zones:

- (i) Article III and preambular paragraphs 4 and 5, especially in their relationship to article IV and preambular paragraphs 6 and 7;
- (ii) Articles I and II and preambular paragraphs 1 to 3 in their relationship to articles III and IV;
- (iii) Article VII.
- (e) Other provisions of the Treaty.

Item 17. Role of the Treaty in the promotion of non-proliferation of nuclear weapons and of nuclear disarmament in strengthening international peace and security and measures aimed at promoting wider acceptance of the Treaty.

3. Main Committee III

Item 16. Review of the operation of the Treaty as provided for in its article VIII, paragraph 3:

- (d) Implementation of the provisions of the Treaty relating to the inalienable right of all Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with articles I and II:
 - (i) Articles III (3) and IV, preambular paragraphs 6 and 7, especially in their relationship to article III (1), (2), (4) and preambular paragraphs 4 and 5;
 - (ii) Article V.

Item 17. Role of the Treaty in the promotion of non-proliferation of nuclear weapons and of nuclear disarmament in strengthening international peace and security and measures aimed at promoting wider acceptance of the Treaty.

V. Comments From Readers

In a letter dated January 31, 1994, Dr. Dan Fenstermacher, of the United States Arms Control and Disarmament Agency in Washington D.C., writes:

In reference to PPNN Newsbrief No. 28, p. 15, which discusses the U.S.-Russian agreement signed last June on the shutdown of plutonium production reactors, one point needs to be clarified. The statement that 'plutonium production [at the three operating 2,000-MW(th) reactors at Tomsk-7 and Krasnoyarsk-26] ceased on 1 October [1994]' is not correct. It was apparently misquoted from a Russian statement, first made in late November by Minatom officials, that 'as of October 1, Russia ceased using newly produced plutonium in nuclear weapons.' Note that this makes no claim about shutdown of the reactors or reprocessing facilities, whereas the agreement requires that the reactors permanently be shut down by the year 2000 and that procedures be developed to assure that newly produced plutonium is not used for nuclear weapons. Negotiations with Minatom to develop these procedures have been ongoing. [The letter also notes that the Newsbrief gave the power of the reactors as 200MW; this should have read 2,000MW.]

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.

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