

PROGRAMME FOR PROMOTING NUCLEAR NON-PROLIFERATION

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Editorial Note

PPNN's resources are getting low and this issue of the Newsbrief may be the last one to be produced, at least for some time.

Every three months during the past thirteen years, the Newsbrief has presented information about the spread of nuclear weapons and their means of delivery and about moves to deter that spread, as well as about relevant developments regarding the peaceful uses of nuclear energy. Reference was also made to related events in the areas of nuclear disarmament and of missile proliferation. Starting in 1987 with a print-run of 500 copies, for the past ten years 3,500 copies were printed of each issue of the Newsbrief, of which 2,500 were distributed regularly to readers in over 150 countries; the rest were handed out at meetings and international conferences. The Newsbrief was also distributed electronically, with back issues being accessible on the Web. Since the start of publication, grants from several foundations have enabled PPNN to produce and distribute the Newsbrief free of charge. When it became clear, earlier this year, that some major donors were no longer interested in supporting this

activity, in the apparent assumption that there was no longer a demand for the Newsbrief or that those who wished to go on reading it should pay for it themselves, PPNN looked into the possibility of adopting a subscription system that might have enabled it to go on. It was soon realised, however, that this was not practical, since PPNN lacks the facilities to administer such a system, while creating one just for this purpose would add greatly to the cost. PPNN also does not have the funds to bridge the time it would take to set up a subscription system, and it is doubtful that enough paying subscribers could be found right away to cover the cost of continuing publication. Limiting distribution to electronic means would not bring enough savings to allow work to continue, since printing and distribution of hard copies are relatively minor items among total costs.

It remains to be seen whether funds still on hand will permit the production of one more Newsbrief issue. Efforts are being made to find financing for some further issues. There is no saying whether these will succeed and, if they do, when such further issues will appear and how many there would be.

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PPNN's Executive Chairman, Ben Sanders, has been editor of the Newsbrief since its inception. He has produced it and taken responsibility for its contents. His task has been greatly facilitated by the accessibility of many excellent sources of reliable information, both in printed form and on the Internet. It is difficult, if not impossible, to give individual thanks to each of the many people and organizations who have contributed information. It would be wrong however, not to express particular gratitude to the United Nations Department for Disarmament Affairs and to the Secretariat of the International Atomic Energy Agency, especially the Department of Safeguards, the Secretariat, Policy Making Organs, the Office of External Relations and Policy Co-ordination, the Division of Public Information and the Division of Conference and Document Services, all of whom, in various ways, have been immeasurably helpful to the Editor. Thanks are due further to the Executive Director of the Acronym Institute, Rebecca Johnson, who contributed summaries on NPT events when the editor was not in a position to prepare them, and most particularly also to Richard Guthrie who has been responsible for the production of the Newsbrief almost from the beginning.

Over the thirteen-year period of its existence, the Newsbrief has had the benefit, at one time or another, of financial contributions from the W. Alton Jones Foundation, the Barrow and Geraldine S. Cadbury Trust, the Compton Foundation, the Netherlands Ministry of Overseas Development, the Ford Foundation, the William and Flora Hewlett Foundation, the Japan Atomic Energy Relations, Organization, the Japan Atomic Industrial Forum, the John D. and Catherine T. MacArthur Foundation, the John Merck Fund, the Ploughshares Fund, the Prospect Hill Foundation, the Rockefeller Brothers Fund, the Rockefeller Family Office, the Rockefeller Foundation and the Simons Foundation. Profound gratitude is due to all.

Throughout the lifetime of the Newsbrief, individual readers, government officials and representatives of a range of organisations have encouraged the editor by expressing appreciation for the Newsbrief. The news of its likely demise has elicited many expressions of regret. This enduring moral support is valued more than words can express.

The current issue covers the period 6 October to 31 December. Unless otherwise indicated, dates (day/month) refer to 2000. Where reference is made to an uninterrupted series of items from a daily newspaper or a news agency, only the first and last dates of the series are noted. For example, "18-25/10" following the name or symbol of a particular publication means that use has been made of items appearing there on each day from 18 to 25 October 2000. Names of publications that are referred to often are abbreviated; a list is given on the back page.

I. Topical Developments

a. Nuclear Disarmament and Arms Limitation

- In opening the session of the First Committee (Disarmament and International Security) of the **United Nations General Assembly**, on 2 October, Chairman Mya Than of Myanmar described how, despite negative international developments and gloomy predictions for the outcome of the 2000 NPT Review Conference, "... a

full consensus had been achieved in the form of the Final Document, which would serve as a sound basis for making further progress in the nuclear field". He called it a remarkable achievement that the states parties had been able to agree on practical steps to advance nuclear disarmament and nuclear non-proliferation. The Conference had affirmed the Treaty's importance as the world's primary instrument for the pursuit of nuclear disarmament and non-proliferation and the achievement of consensus had underscored the vital importance of nuclear disarmament and its crucial substantive link to non-proliferation. The unequivocal undertaking by nuclear-weapon states to accomplish total elimination of their nuclear arsenals had strengthened their existing obligation, making explicit, for the first time, a firm commitment to this effect, albeit with no time frame indicated.

At the start of the general debate, Under-Secretary-General Jayantha Dhanapala spoke of a "world awash with arms": some 30,000 nuclear warheads and some 500 million small arms. Global military expenditure, he said, had started to rise for the first time since the end of the Cold War and in 1999 had stood at \$780 billion, while half of the world's population lived on less than \$2 per day. Listing positive developments in the area of disarmament during the past year, he mentioned the agreement achieved at the NPT Review Conference on practical steps to implement article VI of the Treaty, but he also pointed out that the failure of the Conference on Disarmament (CD) to agree on a substantive work agenda had frustrated the negotiation of new international legal norms, as seen in the inability of its members to reach consensus on terms for multilateral negotiations on nuclear disarmament, the prevention of an arms race in outer space and the fissile materials treaty. Concerning missile defence, he said that the world had welcomed the recent decision by the United States to postpone the deployment of a national missile defence system (NMD). He said that efforts had to continue to develop multilateral norms governing existing missile arsenals and the global missile proliferation threat, while preserving the Anti-Ballistic Missile (ABM) Treaty of 1972 as "the cornerstone of strategic stability".

In contrast to the gloom that characterised the debates in the First Committee during its previous session, with regard to virtually all issues before it, this year's proceedings reflected an atmosphere of positive expectation that was widely attributed to the encouraging outcome of the NPT Review Conference. As a result, and notwithstanding the realisation, expressed by many speakers in the General Debate, that there had been little concrete progress, of late, in nuclear disarmament and non-proliferation, the discussions proceeded more smoothly and with noticeably less acrimony than in past years.

The texts of a number of draft resolutions reflected the importance delegates attached to the outcomes of the NPT Review Conference. While most of these resolutions dealt with issues that were discussed in 1999, many of this year's resolutions incorporated language derived from the text of the Final Document of the 2000 NPT Review Conference, or referred to that Document. There were five resolutions that had not been submitted in 1999. One of these welcomed the results of the 2000 NPT Review Conference; one called on the CD to create an ad hoc

committee to negotiate a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices; one called for a UN study on disarmament and non-proliferation education; and one commemorated the twentieth anniversary of the United Nations Institute for Disarmament Research (UNIDIR).

Resolutions most closely related to subjects dealt with in the **Newsbrief** are referred to below in numerical order, together with the votes cast on them in the Plenary of the General Assembly, on 20 November. The texts of those resolutions are reproduced in full under **IV. Documentation**. The voting results cited here pertain only to the resolutions as a whole; votes cast on parts of resolutions are ignored. The numbers of the resolutions reproduced are those used in the pertinent General Assembly documents; at the time this issue of the **Newsbrief** was finalised, resolution numbers were not yet available.

- **55/30, Establishment of a nuclear-weapon-free zone in the region of the Middle East**, introduced by Egypt, was adopted without a vote;
- **55/31, Conclusion of effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons**, introduced by Pakistan, was adopted with 111 votes in favour, none against, and 54 abstentions;
- **55/32, Prevention of an arms race in outer space**, introduced by Egypt, was adopted with 163 votes in favour, none against and three abstentions: those of the delegations of Israel, Micronesia and the United States;
- **55/33 A, Missiles**, introduced by the Islamic Republic of Iran, was adopted with 97 votes in favour, none against and 65 abstentions. Among delegations voting in favour were those of China and the Russian Federation as well as of most developing states. Abstaining were Western states as well as several Latin American nations;
- **55/33 B, Preservation of and compliance with the Treaty on the Limitation of Anti-Ballistic Missile Systems**, introduced by the Russian Federation, was adopted with 88 votes in favour, five against and 66 abstentions;
- **55/33 C, Towards a nuclear-weapon-free world: the need for a new agenda**, introduced by Sweden on behalf of the members of the New Agenda Coalition, was adopted with 154 votes in favour, three against and eight abstentions. In 1999, 13 delegations voted against and there were 39 abstentions. This time, the no-votes came from India, Israel and Pakistan, while China (which had previously abstained), the UK and the US (which had voted against) voted in favour, together with all non-nuclear-weapon states, members of the North Atlantic Treaty Organization (NATO), who in 1999 had abstained. This year's abstainers were Bhutan, France, Kyrgyzstan, Mauritius, Monaco, the Russian Federation, Tajikistan and Uzbekistan;
- **55/33 D, 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons**, introduced by Algeria, was adopted with 163 votes in favour, one against (India), and three abstentions (Cuba, Israel and Pakistan);
- **55/33 E, United Nations study on disarmament and non-proliferation education**, introduced by Mexico, was adopted without a vote;
- **55/33 I, Nuclear-weapon-free southern hemisphere and adjacent areas**, introduced by Brazil, was adopted with 159 votes in favour, four against and five abstentions;
- **55/33 M, Convening of the fourth special session of the General Assembly devoted to disarmament**, introduced by South Africa on behalf of the states members of the Non-Aligned Movement, was again adopted without a vote;
- **55/33 N, Reducing nuclear danger**, introduced by India, was adopted with 110 votes in favour, 45 against and 14 abstentions. Among the opponents were all recognised nuclear-weapon states, except for China, which abstained. Western and East-European states generally voted against, some of the latter, as well as Japan and the Republic of Korea, abstained;
- **55/33 R, A path to the total elimination of nuclear weapons**, introduced by Japan, received 155 votes in favour, one against and 12 abstentions. The one vote against came from India. Abstentions were registered by, among others, China, Cuba, the Democratic People's Republic of Korea, Egypt, France, Israel, Pakistan and the Russian Federation;
- **55/33 S, Mongolia's international security and nuclear-weapon-free status**, introduced by Mongolia, was adopted without a vote. The resolution refers to a joint statement which United States Under Secretary of State for Arms Control and International Security John D. Holum delivered on 5 October on behalf of France, the People's Republic of China, the Russian Federation, the United Kingdom and the United States, regarding positive and negative security assurances to Mongolia. The text of the joint 'Statement on Security Assurances in Connection with Mongolia's Nuclear-Weapon-Free Status' is reproduced following that of Resolution 55/33 S;
- **55/33 T, Nuclear disarmament**, introduced by Myanmar, was approved with 109 votes in favour, 39 against, and 20 abstentions;
- **55/33 W, Establishment of a nuclear-weapon-free zone in Central Asia**, introduced by Uzbekistan, was adopted without a vote;
- **55/33 X, Follow-up to the advisory opinion of the International Court of Justice on the *Legality of the Threat or Use of Nuclear Weapons***, introduced by Malaysia, was adopted by 119 votes in favour, 28 against and 22 abstentions;
- **55/33 Y, The Conference on Disarmament decision (CD/1547) of 11 August 1998 to establish, under item 1 of its agenda entitled 'Cessation of the nuclear arms race and nuclear disarmament', an ad hoc committee to negotiate, on the basis of the report of the Special Coordinator (CD/1299) and the mandate contained therein, a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices'**, introduced by Canada, was adopted without a vote;

- **55/34 G, Convention on the Prohibition of the Use of Nuclear Weapons**, introduced by India, was adopted with 106 votes in favour, 43 against (including almost all Western nuclear- and non-nuclear-weapon states) and 16 abstentions, including China, Israel, Japan, the Republic of Korea, the Russian Federation and the newly-independent states;
 - **55/36, The risk of nuclear proliferation in the Middle East**, introduced by Egypt, received 137 votes in favour, three against (Israel, Micronesia and the United States) and eight abstentions: Australia, Canada, Ethiopia, India, Marshall Islands, Singapore, Tonga, and Trinidad and Tobago;
 - **55/35, Twentieth anniversary of the United Nations Institute for Disarmament Research**, introduced by France, was adopted with 161 votes in favour and none against. Bhutan, India, the Libyan Arab Jamahiriya, Mauritius, the Syrian Arab Republic and the United Republic of Tanzania abstained;
 - **55/39, Consolidation of the regime established by the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco)**, introduced by Mexico, was adopted without a vote; and
 - **55/41, Comprehensive Nuclear-Test-Ban Treaty**, introduced by Australia, was adopted with 169 votes in favour, none against and six abstentions, including India and several Arab countries.
- In October and November, representatives of the **Russian Federation** and the **United States** had two more rounds of discussions on issues of nuclear arms control and disarmament. At the first set of discussions, the Russian side was said to have presented views on the substance of a third Strategic Arms Reduction Treaty (START III), on which it urged once again that discussions should commence as soon as possible. It also reiterated its opposition to any amendments to the ABM. Views were exchanged, among other things, on the Russian proposals concerning the creation of a global missile control system. Russia also once again raised the possibility of convening an international conference on the prevention of militarisation of outer space.

On 11 December, in Geneva, representatives of **Belarus, Kazakhstan, the Russian Federation, Ukraine** and the **United States** signed a set of agreements providing for the two-phased elimination under the START I Treaty of the last SS-24 inter-continental ballistic missiles (ICBMs) remaining in Ukraine. Reportedly, 50 to 60 of those missiles, which are capable of carrying ten warheads each, still remain in Ukraine. US personnel are said to be on-site to assist with dismantling and work out ways of safe defuelling of the missiles. All nuclear warheads are said to have been removed from Ukraine. The ICBMs formerly deployed in Belarus and Kazakhstan (40 SS-25 mobile missiles and launchers in Belarus and 104 SS-18s in Kazakhstan) were returned to Russia and dismantled.

On 14 December, representatives of the same five states initialed an amendment to the Memorandum of Agreement on the Intermediate Range Nuclear Forces (INF) Treaty, which outlines “principles and procedures” for completing the continuous monitoring inspection regime. This will end the inspection regime under the INF Treaty

by 31 May, 2001. That regime provided for the continuous portal monitoring at the missile assembly plants at Magna, Utah, USA and Votkinsk, Udmurtia, Russia. Reportedly, however, American monitoring of the Votkinsk plant will continue pursuant to the START I Treaty.

On 16 December, in Brussels, Russia’s Foreign Minister Ivanov and US Secretary of State Albright signed a Memorandum of Understanding expanding the provision of START I that obliges parties to inform each other about launches of intercontinental- and submarine-launched ballistic missiles. The Memorandum of Understanding covers launches of shorter-range ballistic missiles, sounding and research rockets, and most space launch vehicles. It also allows (sic) each side to notify the other of objects leaving orbit or experiments that early warning systems might mistake for missiles. The new arrangement is intended to prevent inadvertent retaliation in response to a false warning of missile attack, thus, according to Foreign Minister Ivanov, strengthening strategic stability. Ivanov expressed the hope that it would eventually lead to a global system of control of ballistic missiles. According to Secretary of State Albright, other nations would be invited to join the notification system. A Joint Data Exchange Center will be set up in Moscow.

In the US, 19 retired flag officers have written to President Clinton protesting these arrangements as, according to them, they could impede development of US “space power” and would be incompatible with American long-term national security and economic interests. The Pentagon has pointed out, however, that, given concerns about the stability and effectiveness of the Russian early warning system, a joint early warning system would be in Washington’s interest in that it would reduce the risk of an accidental nuclear launch.

At the Asia-Pacific Economic Cooperation (APEC) summit in Brunei, in mid-November, President Putin of Russia had a meeting with US President Clinton, in which he proposed that both countries should make deep cuts in their nuclear arsenals, possibly beyond the 1,500-warhead limits hitherto proposed. Putin had previously said that reductions down to 1,500 warheads could be achieved by 2008, on condition that the US does not deploy an NMD system. In a subsequent interview, President Clinton stated that “it would be quite possible” to go down to a lower level of nuclear armaments; he also said that it would be irresponsible not to build NMD system if there was a high possibility that it could protect the US against missiles hitting it. Reportedly, in his talks with his US colleague, the Russian President continued to insist that the ABM Treaty should be left untouched. At the same time, there were said to be signals from Moscow of some flexibility on a possible change in the text or in the interpretation of the ABM Treaty. A potential new approach was mentioned by the Chief of Russian Strategic Missile Forces, General Yakovlev, who was said to have suggested, as a “counterbalance” to the US plan to modify the ABM Treaty, that the two countries might consider counting both defensive and offensive weapons as part of their strategic arsenals; if one category of weapons were to be increased the other would have to be cut. Washington reacted skeptically to Yakovlev’s remarks but expressed interest in a possible further deep reduction in nuclear warheads. In Moscow, the head of the Russian Foreign Ministry’s Department for Security and Disarmament, Yuri Kapralov, told reporters that the

general was entitled to his own opinion but there was “no softening” in Moscow’s position; Kapralov was quoted later as having said that Russia had the technological means to respond if the US deploys a missile-defence shield but did not wish to raise the level of confrontation between the two countries. The influential Moscow newspaper *Segodnya* claims that General Yakovlev’s statement was made in the assumption that George W. Bush would become President and there would be no stopping NMD. After the US elections, however, Russia’s Defence Minister, Igor Sergeyev, disavowed Yakovlev’s statement and confirmed that Moscow would not countenance any changes in the ABM Treaty. Yakovlev himself subsequently confirmed this.

In Moscow, Mr. Kapralov said that the Russian proposal for a radical cut in nuclear arsenals also stipulated negotiations on a pullout of US non-strategic nuclear weapons from Europe. Reportedly, while Russia possesses about 19,000 non-strategic nuclear warheads, the United States has deployed some 1,500 and has several thousand more in storage. One hundred and eighty American warheads are thought to be deployed abroad in seven countries.

According to the British press, President Putin has called on UK Prime Minister Blair to seek support in his opposition to the NMD system. The Prime Minister was reported to have said that he would be ready to help mediate between the new US President and President Putin. The senior security adviser to President-elect George W. Bush, Condoleezza Rice, (nominated to be security adviser in the new Administration) has said that while it was time to rethink US nuclear strategy, this should follow a US internal review and should not “be held hostage” to “some kind of deal with the Russians...”.

(Interview with Under Secretary of State John Holm, US Department of State, October (no day given), 11/12, 14/12; IT, 18/10, 13/11, 14/11, 8/12; R, 18/10, 11/11, 13/11, 15/11, 20/11, 5/12, 14/12, 16/12, 17/12; AP, 19/10, 13/11; Press Release from Russian Ministry of Foreign Affairs, 19/10; RFE/RL, 19/10, 15/11; AFP, 13/11, 14/11, 17/11, 11/12, 16/12; Segodnya, 14/11; WP, 14/11; NATO Notes, 15/11; NYT, 15/11, 27/12;; I, 21/11; LT, 21/11)

- The non-proliferation expert group of the G-8, the Group of Seven Most Highly Developed States and Russia, have met in Tokyo to discuss the financing of Russia’s programme for **the disposition of excess weapons-grade plutonium**. The cost of disposing of 34 MT of surplus plutonium is estimated at between \$1.7 and \$1.9 billion. Russia has said it will provide \$1 billion in kind, by making land and facilities available; the US has committed itself to provide \$400 million; the UK has promised \$100 million; and Japan is expected to contribute \$30-40 million. Reportedly, among subjects discussed were the plan to export the unfinished Siemens fuel fabrication plant at Hanau to Russia, and the “MOX-lease” concept. There was also talk about inviting countries outside the G-8 to participate.

It has been reported that by early October, the United States Enrichment Corporation (USEC) had received 100 MT or 20 per cent of the 500 MT of weapons-grade uranium that is to be blended down for use as reactor fuel and shipped to the United States over 20 years. So far,

USEC has paid \$1.7 billion and it is expected to spend another \$6.3 billion. The scheme has been attacked by Republican polls, organised labour, and the nuclear fuel industry as a threat to national security and American business. USEC has laid-off workers from its own plants and will close one of them down in early summer 2001.

There is a report from Russia that the Lawrence Livermore National Laboratory of the US has purchased from the Russian Research Institute of Nuclear Reactors a device for extracting salts from ceramic materials, which is to be used in the immobilisation of excess weapons-grade plutonium in the US. The device is said to use a simple, automated process, whereas the traditional US procedure involves several process steps and requires the presence of personnel.

An analysis of plutonium disposition made in the UK has concluded that immobilisation can provide a cost effective disposition as compared to recycling plutonium as mixed oxide (MOX) fuel. On the other hand, there is a report that trials began recently in the UK of a new type of fuel called “mag rox”, which is expected to add years to the lives of some of the old British Magnox power reactors. Mag rox is described as consisting of uranium in a ceramic oxide form rather than the metallic form currently used, which has to be reprocessed within a short time. Also, as opposed to Magnox fuel, it seems that mag rox can be retained in long-term storage.

The former head of the United Nations Special Commission for Iraq (UNSCOM), Swedish Ambassador Rolf Ekéus, has expressed the view that although the conversion of excess weapons-grade plutonium into MOX fuel is feasible, doing so would create a public relations nightmare for the nuclear industry, which already has enough problems with public perception. Ekéus stressed the need to keep a sharp division between peaceful use and weapons. He was also questioned if it would be possible to apply safeguards and verification so as to ensure the security of reprocessing and manufacture.

The general in charge of Russia’s Strategic Rocket Forces has said that about 250 ICBMs scheduled to be removed from service by 2009 would be available for conversion to take commercial payloads. General Vladimir Yakovlev has said that by 2010, some 1,500 satellites need to be placed in low orbit. Many of the missiles to be removed from service are of the SS-18/Stiletto type.

- **(Business Wire, 10/10; Paducah Sun, 11/10; BBC, 20/10; Japan Times, 25/10; SF, 30/10; R, 31/10; NW, 9/11, 23/11)**

b. Nuclear Testing

- An international panel of scientists convened by the London-based Verification Research Training & Information Centre (Vertic) has concluded that the Comprehensive Test Ban Treaty (CTBT) can be reliably verified with existing technology. The panel, consisting of experts from France, Germany, Israel, Japan, Russia, UK and US, found that the combination of international and national public and non-governmental resources made it virtually impossible to evade detection of an underground nuclear test.

The Comprehensive Test Ban Treaty Organization has given the American company Veridian a two-year

contract valued at more than \$4.5 million for the production, deployment and operation of a global sensor network to monitor atmospheric radioactivity. Veridian is described as a knowledge applications company which delivers solutions in the areas of national defence, critical infrastructure and essential business systems.

(R, 30/10; Veridian Press Release, 1/11)

- The Foreign Minister of **Pakistan**, Abdus Sattar, said at a press conference on 28 October that signing the CTBT would be of benefit to the country, both economically and diplomatically. The Foreign Minister's remark followed reports that the US had urged Islamabad that if it desired a resumption of "full ties" it should make progress on the CTBT. (**Hindu**, 28/10)
- Two underground subcritical nuclear tests took place on Novaya Zemlya, **Russian Federation** on 20 and 27 October, respectively. The tests followed three that were held in August and September. (**Bellona**, 3/11, 13/11; **Moscow Times**, 4/11)
- In the **United States**, according to a recent article in the *New York Times*, questions are being raised about the ability of the 'nuclear stockpile stewardship program' to ensure the safety and security of the nation's nuclear stockpile and the maintenance of existing weapons, without carrying out explosive tests. Some scientists at Los Alamos National Laboratory are quoted as expressing concern that some weapons might become unreliable and are quoted as saying that the vast majority of weapons designers "would say there are questions you can answer relatively definitively with nuclear testing that would be very difficult to answer without nuclear testing". There is also said to be apprehension about the aging of the materials involved but senior laboratory officials have said that they do not see a need at present to recommend a return to underground testing. Others, however, are quoted as insisting that even with an extensive array of simulation devices, "crucial questions about the performance of aging bombs must still be answered directly by data from old tests. (**NYT**, 28/11)

c. Nuclear Trade, International Cooperation and Nuclear Export Issues

- Cuba and the **Russian Federation** have agreed to abandon the completion of the two VVER-440-230 power reactors at Jurugua. The reason for the decision, announced during a visit by President Putin to the island, was said to be lack of funds. (**NYT**, 18/12)
- The Minister for Atomic Energy of the **Russian Federation**, Yevgeny Adamov, has said that his country intends to supply more power reactors to **India**, in addition to two units it has agreed to provide for the Koodankulam nuclear power station. Russia has argued that the Koodankulam deal had been worked out before the Nuclear Suppliers' Group (NSG) adopted the rule that such supplies could be made only to states that had accepted full-scope safeguards and, asked in an interview by the Indian daily newspaper *The Hindu* how Russia would be able to supply additional reactors, Mr. Adamov is reported to have said that the NSG might be persuaded to ease export restrictions. He was also quoted as saying that the NSG rules went counter to NPT articles III and

IV and that their enforcement amounted to imposing sanctions on India and harming Russian commercial interests. (**Hindu**, 16/12)

- The US Administration is being criticised by Republican politicians for a deal Vice President Al Gore struck in 1995 with **Russia** regarding the latter's sale of nuclear equipment to **Iran**. Apparently a letter from then-Prime Minister Chernomyrdin to the Vice President, not released to the US Congress, confirmed an understanding that Moscow's assistance to Iran would be limited to training technicians in Russia and to the supply of nuclear fuel for the Bushehr power plant. The US State Department has assured the Congress that the arrangement was fully consistent with US law but Republican politicians have made a strong effort to use the issue for political purposes during the closing stages of the election campaign. Several subcommittees of the Senate Foreign Relations committee have held a joint hearing to determine whether the understanding violated the law and whether it was legitimate not to inform the Congress. A group of ten senior Republican Senators have ordered the State Department to turn over "all the relevant documents" and have threatened to subpoena the documents if the Administration does not hand them over voluntarily. At the same time, the Clinton Administration has been faced with the Russian decision to withdraw from an understanding reached between Messrs. Gore and Chernomyrdin limiting Russian sales of advanced conventional weapons and other military hardware to Teheran. Washington has warned Moscow that if new sales of such items are made, economic sanctions might have to be imposed and there have been reports in Washington that the Administration is particularly concerned about the sales because they occur at the time when Teheran is seen to be advancing its production of weapons of mass destruction and of its medium- and long-range ballistic missiles. In apparent reference to the letter to the US Secretary of State, in which Russia's Foreign Minister is supposed to have announced the decision to rescind the understanding, Moscow has said that it will not comment on confidential documents. Russian press organs allege that the Russian government feels that by leaking the secret memorandum of 1995 on nuclear trade, the US has in fact violated it. At the same time, there are indications that Moscow feels it has incurred substantial economic losses by refraining from making the exports in question, and has concluded that any negative effects from US sanctions will be offset by profits from military exports.

In what is thought to be a reference to international nuclear non-proliferation agreements, Russia's Defence Minister Igor Sergeev has said that "Russia will not contravene international agreements" nor will it be "to the prejudice of any third country". He stressed that deliveries to Iran will not include material that can be used to create or deliver weapons of mass destruction. He has also stated that the sales would pertain only to "defensive weapons". Reportedly, a great part of the Russian supplies would be to service and maintain old Soviet equipment. A US delegation traveled to Russia in December in hopes of persuading that country to adhere to its earlier undertakings regarding sales to Iran. The issue is seen in Washington as a negative factor in relations between the Russian Federation and the US.

Defense Minister Sergeyev visited Teheran on 27–29 December, to negotiate military cooperation projects said to be worth several billion dollars. On arriving, he said that neither Russia nor Iran would allow any third country to stand in the way of their expanding relations. In reporting on the visit, Moscow sources repeated that the 1995 commitment not to sell weapons to Iran was no longer in force.

Russia's Ministry of Atomic Energy (Minatom) has announced that Teheran has asked it to arrange for the construction of the second reactor unit at the Bushehr Power Station in Iran. Minatom has said that building the second unit will be more profitable than the first. The cost of constructing the first unit has not been revealed, but is thought to be around \$1 billion.

(**AP**, 17/10, 24/11, 27/12; **WT**, 17/10, 25/10, 30/10; **AFP**, 18/10, 1/12, 15/12; **R**, 18/10, 27/10, 28/11, 6/12, 27/12; **IT**, 24/11, 6/12; **NYT**, 26/10, 23/11; **RFE/RL**, 27/10, 27/11, 1/12, 5/12, 7/12, 8/12; **Vedomosti**, 1/12; **Moscow Times**, 13/12)

d. Peaceful Nuclear Developments

- The Prime Minister of **Bulgaria** has said that the VVER-440/230 reactors Kosloduy-3 and -4 should continue to operate until 2008-2010. This is apparently two years longer than the European Commission (EC) had wanted. Reportedly, the Western European Nuclear Regulators Association (Wenra) has said that Bulgaria's four VVER-440/230 units have not reached an acceptable level of safety. (**NW**, 16/11)
- In the **Czech Republic**, the Temelin-1 VVER-1000 power reactor started up on 9 October and began a course of pre-commercial testing at 12 per cent of power. After a brief shut-down caused by a false computer signal, it had been the plan in December to raise output to 30 per cent of the reactor's 981 MW capacity and start electricity supply, reaching full capacity in March 2001. Completion of Temelin-2 should follow six months later. The Czech utility CEZ said that it would also upgrade the instrumentation and control systems of its four VVER 440-213 units at Dukovany, with equipment manufactured in France. Wenra was reported to have found the safety improvement programmes for Temelin-1 and -2 to be the most comprehensive ones ever applied to a VVER-1000 reactor and has said that, once a few outstanding safety issues were resolved, the two units at Temelin should reach a safety level comparable to that of currently operating Western European reactors.

The schedule may be delayed as the result of incessant Austrian maneuverings. The government in Vienna, and various anti-nuclear civil organisations it is using for the purpose, have long vituperated against the start-up of Temelin. Since September, groups of protestors, with the open backing of provincial and federal Austrian authorities and church dignitaries, have blocked border crossings between the two countries. The Czech government has appealed to the EC to intervene and make Austria stop the blockade. The Vienna authorities have repeatedly intervened with various organs of the European Union (EU), alleging that the Soviet-designed Temelin reactors, which are being completed with Western technology, are unsafe. The Czech authorities, citing Wenra, which has said that Temelin is essentially

at a modern Western safety level, maintain that all possible safety measures have been taken.

Relations between the two countries have deteriorated. In mid-October, right-wing politician Haider claimed that nuclear plants in the Czech Republic and Slovenia did not meet Western safety standards and those countries "would not enter the EU" as long as those plants were in operation. Austria's Vice Chancellor, who is the nominal head of Haider's Freedom [*sic*] Party, said that Austria would not sign the energy chapter needed for Czech entry into the EU as long as Temelin was in operation and in November, Austria duly blocked the EU negotiations with the Czech Republic on that issue. Bilateral discussions at ministerial level in late October did not bring a solution, but in December, at a meeting between the two Prime Ministers, in which the European Commissioner for Enlargement participated, the Czech Republic agreed to allow a trilateral expert mission to evaluate the plant for safety and environmental effects. Meanwhile, it was agreed that Temelin would not be operated commercially or supply electricity and Austria promised to work towards an end of the blockades, although reportedly there was some doubt about the effect this would have on the protesters, given subsequent utterances from the environmental groups involved rejecting the agreement. The most important element of the agreement, reportedly, was the recognition by the Austrian government of the need for the EU to continue negotiations with the Czech Republic on the energy chapter of its accession and its commitment to constructive support on the talks. This is generally interpreted as meaning that Vienna no longer stands in the way of the accession to the EU of the Czech Republic.

(**I**, 10/10; **NYT**, 10/10, 19/10, 1/11, 19/11, 14/12; **NW**, 12/10, 19/10, 26/10, 9/11, 16/11, 23/11, 14/12, 21/12; **UIC Weekly**, 13/10; **IHT**, 14-15/10, 16/10)

- **Germany's** second-oldest power reactor, the 672-MW Stade PWR, will be shut down by 31 December 2003. Stade went on-line in 1972. The operating company has said that the station is "no longer economically competitive in Germany's liberalised power market".

While the German government has now given permission for eight transports of irradiated fuel to the reprocessing plant at La Hague, France, the French government has said it would not accept additional spent fuel shipments until Germany undertakes to take back reprocessed waste currently stored at La Hague. Reportedly, La Hague has a backlog of 168 casks of reprocessed waste, of which the return will require 15 shipments. German utilities have said that given the limits on the amount of waste that may be stored on-site, they do not have enough space to take the reprocessed material back; there is fear that if the transports cannot be restarted soon some reactors may run out of storage capacity and face a possible shut-down. The German government announced in November that up to six storage containers could be shipped back to the Gorleben interim storage site. This raised the question whether this would suffice to overcome France's refusal. The two countries have set up a working group to produce a compromise solution by late December. It is noted that the definitive storage site at Gorleben is not expected to be ready until early 2001. An interim storage site at Lippe-Ems is still in the planning stages.

(NW, 12/10; SF, 23/10, 20/11; direct information)

- Sources at the IAEA are quoted as saying that the Department of Atomic Energy and the Nuclear Power Corp. of **India** refuse to allow IAEA experts to make detailed safety examinations of Indian nuclear power facilities to allay questions about their safety. Supposedly, because the results would not be kept classified but be available to third parties, India has refused the Agency access to any of its power reactors. As reported, earlier IAEA proposals for peer reviews in India have been systematically refused although in 1996 a confidential peer review of the pressurised heavy-water reactor at Kakrapar was allowed. That report was kept secret. Questions about the safety of India's nuclear facilities continue to be raised, both within the country and outside. (NW, 26/10)

- **Japan** has announced plans for the restart of the Monju fast-breeder reactor to operate for at least 20 years. Monju was shut down in 1995, after a leak of sodium coolant. Approvals by the prefectural authorities are required and it is expected to take at least three years before the facility can be restarted.

The sixth shipment from France to Japan of high-level vitrified waste left Cherbourg on 19 December, aboard the BNFL vessel *Pacific Swan*, bound for Rokkasho-mura. The trip was expected to take six weeks.

(SF, 27/11, 18/12)

- **Russia** is reported to be working on the development and construction of a new generation, inherently-safe reactor that will work on low-enriched uranium. The work is done under the auspices of Minatom at a new nuclear technology centre at Nizhniy Novgorod. The US, which is promoting its own technology for a next generation of power reactors, has boycotted a meeting on the new Russian project, held under IAEA auspices, and is reported to have told the Agency that its initiative to coordinate the development of future reactors and fuel cycles is unwelcome, partly in view of Russia's nuclear cooperation with Iran, and in part because it sees the effort as an attempt to get funds for Russia's own fast-reactor project. Washington is said to consider that project as related to President Putin's call at the UN Millennium Summit, for a nuclear system that avoids the use of proliferation-prone nuclear material. The IAEA's Director General had lauded the Russian initiative, which was endorsed by last September's General Conference. (Russian Public TV, 15/11; NW, 7/12)

- The International Energy Agency (IEA) of the Organization for Economic Cooperation and Development (OECD) has warned the government of **Sweden** that it should clarify its policy on nuclear energy and should consider allowing its nuclear plants to be phased out on the basis of the economic life of existing reactors. The IEA report says that criteria for replacing the power now generated by Swedish reactors are so limited that no further nuclear plant closures are likely within the next ten years. In Parliament no compromise appears to be in sight on the decommissioning issue. The government has said that since there is no replacement power source, the Barsebäck-2 plant, which was supposed to be shut down in 2001, will have to continue operating until 2003; the Greens are said to call for immediate closure; while the

opposition Liberal Party has said Barsebäck-1 should be started up again. Following a recommendation by the Parliamentary Committee on Industry and Commerce, Sweden's Parliament voted on 14 December to support the government's decision to postpone decommissioning of Barsebäck-2 to the end of 2003. (NW, 26/10, 16/11, 14/12)

- **Taiwan's** anti-nuclear President Chen Shui-biang announced on 27 October that construction of the \$5.4 billion Lungmen nuclear power station at Kungliao would cease. The decision had been expected and was said to have been based on the consideration that the plant was unnecessary and would create unacceptable environmental and safety hazards. The plant was more than one-third complete and had so far cost \$1.4 billion; abandoning the project is estimated to cost the government around \$3 billion. The previous administration had considered it essential for the islands economic development and its termination has set off a Parliamentary struggle, with the main opposition party, the Kuomintang (KMT), claiming that the President's decree is unconstitutional. The KMT has started impeachment proceedings against President Chen and his Vice President but these are not expected to come to much. (NW, 19/10; NW (Extra), 27/10; NYT, 28/10, 5/12; AFP, 30/10)

- The government of **Ukraine** had pledged to shut down Chernobyl-3 by mid-December, in the assumption that it would get Western assistance in the upgrading and completion of the Khmel'nitski-2 (K-2) and Rovno-4 (R-4) reactor units, whose output would have to make up for the energy Chernobyl previously provided. On 7 December, after deliberating for almost four years, the European Bank for Reconstruction & Development (EBRD) approved a loan of \$215 million for this purpose. Austria, Hungary and the Netherlands voted against the decision, Germany abstained and Sweden said it would not pronounce itself on the issue at this stage. Among conditions set by the EBRD were the demands that the shut-down is permanent; the Monetary Fund resumes its loans to Ukraine; the safety of K-2 and R-4 is assured; an independent regulatory body is set up to supervise reactor safety; and other institutions and governments together supply the total sum of \$1.48 billion needed. Of this, the EC has approved a loan of \$585 million; export credit agencies are expected to advance \$348 million, and Russia almost \$124 million. Ukraine itself is expected to make up the difference. K-2 should be finished in 2004 and R-4 in 2006. Kiev has said that it has started meeting the EBRD's requirements. Ukraine's President Kuchma has complained at the tardiness of the international community in meeting its commitments in the matter

As for Chernobyl-3, in November there was a report that the available fuel supply might not allow the reactor to operate at full power until the agreed closing date of 15 December. In late November, the reactor was shut down when an ice storm short-circuited transmission lines. After restarting on 2 December, the reactor was briefly shut down again four days later, for repairs to a steam pipe. After restart, it was again down on 14 December, during a visit by Ukraine's President Kuchma, briefly restarted once more and formally shut down on 15 December. The final closure, in a harsh early winter with recurring power shortages, is reported to have led to widespread criticism

and to have further weakened the position of President Kuchma, who is already under fire for alleged unethical political actions. The shut-down will leave thousands of people without employment and will have negative repercussions in the entire area. The Ukraine parliament had called on the government to delay the shut-down until it could provide written confirmation of the various commitments made by Western governments and institutions. Russia's Ministry for Atomic Energy (Minatom) has said once again that the plant could have been upgraded and that a good opportunity had been missed. The Director General of the IAEA expressed satisfaction with the decision of Ukraine's government to close the plant down.

(NW, 9/11, 16/11, 23/11, 7/12, 14/12, 21/12; NYT, 28/11, 6/12, 15/12; G, 6/12; IHT, 7/12; R, 12/12, 14/12; IAEA Press Release 2000/29, 14/12)

- It has been announced in the **United Kingdom** that the decommissioning of the fast reactor and the reprocessing plant at Dounreay, as well as the three shut down nuclear reactors at the site and a range of fuel cycle facilities, will take 50-60 years. Reportedly, the process will involve construction of a number of new processing and waste treatment plants, as well as extensive storage facilities. Initial estimates set the cost at about £4 billion (approximately \$6 billion). Decisions still appear to be outstanding with respect to management and disposition of plutonium-bearing fuels from the fast reactor and to the way in which intermediate and high-level wastes will be stored. It has been pointed out in the UK that new-generation PWRs could help the country meet its carbon-dioxide emission reduction targets but in order to do so, nuclear industry should demonstrate that it is going ahead promptly with the decommissioning of old reactors rather than putting this off as long as possible.

With UK regulators having accepted the action taken by British Nuclear Fuels plc (BNFL) on 15 recommendations arising from the investigations into data falsification at BNFL's MOX Demonstration Facility at Sellafield, the company has announced that it is recommissioning that facility as a step towards the eventual commissioning of the Sellafield MOX plant.

Concern about global warming has worsened in the UK as a result of recent severe flooding and the nuclear industry has taken this opportunity to fan newly regained interest in the use of nuclear energy for power production. In November, the House of Commons held a debate on the subject.

(I, 10/10; LT, 10/10; NW, 12/10, 2/11, 9/11; SF, 16/10, 25/12)

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

- In early October, the Republican-dominated US House of Representatives passed legislation requiring the President to employ economic sanctions against Russia for selling supersonic 'Moskit' anti-ship cruise missiles to the **People's Republic of China (PRC)**. The US Administration, for its part, was reported to be making strong efforts to persuade China to stop supplying missile technology to Iran, Pakistan and other countries. While officially, Chinese spokespersons have denied that these exports are taking place and have called reports to that

effect "rumours with ulterior motives", the issue is said to have been discussed between Presidents Clinton and Xiang Jemin at the mid-November APEC summit in Brunei. The discussions between the two Presidents as well as between US Secretary of State Albright and the PRC's Foreign Minister Tang Jiaxuan were said to have strengthened understandings between the two countries, although the Chinese side expressed concern about the way the US was dealing with the issue of Taiwan.

On 21 November, China's Foreign Ministry released a statement which contained a promise not to sell missiles or missile components to countries developing nuclear weapons. Specifically, the Ministry said that China would not assist any country in the development of ballistic missiles "capable of delivering a payload of at least 500 kg to a distance of at least 300 km"; it also said that China would "...further improve and reinforce its export control system, including by publishing a comprehensive export control list of missile-related items including dual use items... [t]his control list will include equipment, materials and technology that can be directly used in missiles, as well as missile-related dual use items." The statement was publicly acknowledged by the US State Department, which called it a development that could strengthen cooperation between the two states. In response, the US announced that "[I]n consideration of China's commitment to strengthen its missile-related export control system, we have decided to waive economic sanctions required by US law for past assistance by Chinese entities to missile programs in Pakistan and Iran." Given China's previous record, some officials said, it was not clear what the consequences of the new undertaking would be. US observers, both within and outside the Administration, expressed the view that in making its concession Beijing had not given up much, since missile sales were becoming less lucrative than launching American satellites, which it was now in a position to undertake. These observers also pointed out that Pakistan had become a less attractive missile market for China, since the DPRK had become a major supplier. Nevertheless, observers in Washington saw the likelihood of China joining the Missile Technology Control Regime (MTCR) as low.

A new agreement between China and the Russian Federation is said to cover the supply of sophisticated weaponry to Beijing, which might give it military superiority over Taiwan. Concern has been raised in Washington by the presentation at a recent Chinese air show of a new supersonic anti-ship and anti-radar missile, which is seen as a potential threat to Taiwan's defence. Chinese military sources claim that plans are underway to counter US military intervention, which they expect if they should attack Taiwan; some Chinese security experts consider such an attack to be inevitable. However, diplomatic observers in Beijing claim to see greater flexibility in the attitude there towards Taiwan.

As to relations between Mainland China and Taiwan, officials of the latter have continued their advances to Beijing, proposing direct trade, transport and mail links between Taiwan-held offshore islands and Mainland cities. The PRC had long rejected these overtures as "word games", which it said were used to hide resistance to the main issue of unification, but on 28 December it accepted Taipei's proposals in an apparent concession, seen in Taipei as a possible opening to better relations.

Beijing took the occasion to repeat its assurance that it seeks a peaceful solution of the Taiwan issue but will not tolerate that island's independence; it demanded once again that Taiwan's President Chen Shui-bian should commit himself to unification. The Chairman of Taiwan's ruling party is quoted as having said that Taiwan might have to accept the 'One China' principle and Taiwanese business leaders have urged President Chen to accept the PRC's interpretation of that principle.

Chinese news media reflect official concern that the election of George W. Bush as President of the US will change America's attitude, which they currently see as relatively cooperative, to one of hostility and rivalry, and they fear that the US will decide to strengthen Taiwan's defence capabilities and provide it with a Theater Missile Defense (TMD) system, thus raising the risk of a cross-straits war. The National People's Congress of the PRC has expressed strong opposition to a Republican-sponsored "sense of the Congress" resolution supporting Taiwan's participation in the UN and other international organizations, which Beijing sees as "wanton interference" in China's internal affairs. The PRC has also sharply criticised the Congress for having adopted trade legislation that includes provisions which it considers to be anti-Chinese.

A report by the US Department of Defense (DOD) on the way in which, in accordance with US legislation, it is supplying Taiwan with sufficient defensive weaponry maintains that the US lacks adequate knowledge of the military balance between Mainland China and Taiwan. The report stresses that it is "the overarching US goal ... to avoid any use or threat of force to resolve differences in the Taiwan Strait". At the same time, it states as the country's policy "to consider any effort to determine the future of Taiwan by other than peaceful means, including by boycotts or embargoes, a threat to the peace and security of the Western Pacific area and of grave concern to the United States; to provide Taiwan with arms of a defensive character; and to maintain the capacity of the United States to resist any resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people of Taiwan." At the same time, the DoD has revealed that in November and December the PRC conducted flight tests of its road-mobile long-range DF-31 missile. The timing of the test, during a visit by the Chairman of the US Joint Chiefs of Staff, is seen as a signal to the US and to Taiwan of China's intention to deter American support for Taiwan. The DF-31 is said to have a range of 5,000 miles (8,000 km). US press sources quote in this context that a new Chinese White Paper on defence reflects a view of the US as a potential threat.

(**WT**, 28/9, 5/10, 12/12, 13/12, 15/12, 18/12; **AFP**, 2/10, 17/10, 18/10, 23/10, 6/11, 7/11, 13/11, 15/11, 19/11, 21/11, 26-28/11, 30/11, 13-15/12, 20/12; **R**, 2/10, 10/10, 17/10, 20/10, 30/10, 17/11, 22/11, 27/11, 29/11-1/12, 14/12; **LAT**, 5/10; **AP**, 13/10, 18/10, 23/10, 4/11, 7/11, 21/11, 29/11, 6/12, 18/12; **WP**, 18/10, 19/10, 15/11, 25/11; **China Daily**, 27/10, 30/10, 16/11, 17/11, 24/11; **LT**, 4/11; **People's Daily**, 16/11, 22/11; **US Department of State**, 21/11, 20/12; **NYT**, 25/11, 28/12; **JDW**, 6/12; **Taipei Times**, 20/12)

- The Minister of Defence of the **Russian Federation** has expressed the view that the currently-planned reductions

of Russia's armed forces will allow the country to preserve its nuclear parity with the United States. The Commander-in-Chief of Russia's strategic missile forces has said that before the end of the current year, six regiments of Topol-M ballistic missiles will be put on active duty. So far this year, three Topol-M test flights were completed successfully. Russia is said to plan extending the service life of the Topol RS-12M missile by at least one further year.

On 1 November, an RS-18 ICBM was test-launched from the Kazakhstan missile base at Baikonur. The 25-year old RS-18 missile is known in the West as SS-19 or Stiletto. It can carry up to six warheads and is supposed to be decommissioned under START II.

(**Rossiyskaya Gazeta** [Moscow], 13/10; **AP**, 2/11; **Russia Journal**, 9/12; **AFP**, 15/12)

- During the presidential election campaign in the **United States**, the topic of National Missile Defense (NMD) turned out to play a less important role than had been expected, but once it became obvious that the Republican candidate, George W. Bush, would be the next President, the debate was renewed. Bush's argument during the campaign had been that the Democratic Administration had willfully left the country "undefended against missile attacks". In the Congress, conservative politicians pilloried President Clinton for his decision to put off deployment of an NMD system. They quote among reasons for NMD the presumed threats from the People's Republic of China, both against the US mainland and against Taiwan.

A number of nominees for cabinet positions in the Bush Administration have made statements in favour of the deployment of an NMD system. General Colin L. Powell, nominee for Secretary of State, has underlined the commitment by the President-elect to NMD and has said that this is an essential part of the US overall strategic force posture. He has proposed discussing the matter with nations that possess strategic offensive weapons "and don't yet understand our thinking with respect to national missile defense". Vice President-elect Dick Cheney, a former Secretary of Defense, has said that the technology has to be reviewed and has confirmed that the US "really do want to deploy defenses". The nomination of Cheney's close associate, Donald H. Rumsfeld, another former Defense Secretary, considered by the American press as a foreign policy hawk and far-right conservative, is seen as a clear sign that the new Administration will give high priority to NMD. In 1998, Rumsfeld headed a study group which concluded that missile development by several "rogue states" constituted a threat to the US and should be countered by anti-missile defence systems.

A large number of strategic think tanks and individual researchers have used the transition phase between two Administrations to make a case for missile defence. Some advocate the early deployment of a navy-based boost-phase system with elements of both a theatre-wide and (US) national defence mission. There are also suggestions for a combination of boost-phase naval-based anti-missile devices with fixed, land-based NMD technology. Virtually all proposals take for granted the eventual acceptance by America's allies of NMD deployment and see the ABM Treaty as no longer relevant. With increasing frequency, the argument is also heard that the

Treaty is in any case null and void, since one Treaty partner, the USSR, no longer exists. Much attention is paid in these discussions to a study by the Center for Strategic and International Studies in Washington, which calls for an urgent increase of spending on NMD development and testing and for the initial deployment of NMD at Grand Forks, North Dakota, as soon as practical, to be followed by an expansion of the system with “at least” three to five sites for a total of several hundred interceptors. More than 15 such sites have been under discussion. An Environmental Impact Statement prepared by DoD lists a range of potential sites but sees as the “Preferred Alternative” the deployment of 100 ground-based interceptor silos and command and control facilities at Fort Greely, Alaska, and an ex-band radar station on the Alaskan island of Shemya. The system would make use of existing early warning radars, suitably upgraded, as well as the existing space-based detection system.

Against an earlier estimate by the conservative Heritage Foundation, which said that the current Navy Theatre Wide System (NTWS) could be modified within four years at a cost of no more than \$3 billion to function as a sea-based NMD system, a senior Pentagon official has stated that such a system would not be ready until 2010 or 2012. It would have to include a new interceptor missile, new ship radar, and perhaps new ships. A subsequent DoD study is supposed to indicate that the system would cost up to \$19 billion and would be able to achieve initial capability by 2014 and full capability by 2020. In October, a report from the Council for a Livable World said that it could cost up to \$36 billion to establish a “limited” sea-based NMD or \$43 billion with added Aegis ships. According to this report, a Navy sea-based NMD using upgraded theater missile defense technologies could not be deployed before 2014. The system would pose numerous technical challenges and might even turn out not to be feasible. Reportedly, the limited discrimination capabilities and light weight of the kill vehicle in the NTWS as currently conceived are inadequate for a strategic role and the launch tubes it uses might not be able to accommodate strategic interceptors.

Owing to problems met during ground-testing and the failure in flight of an intercept missile manufactured by the Raytheon Co., that company, which is the principal contractor for the NTWS, has been docked part of its annual bonus. The Navy ordered 80 of the missiles to be supplied in batches of 20, beginning in 2005.

Just before the US Presidential elections, China’s Foreign Ministry urged the next US President to drop any plans for NMD or TMD and preserve and respect the ABM Treaty. Russian senior spokespersons have repeated the government’s determination to abrogate disarmament agreements and to strengthen the country’s nuclear strike capability, should the US back away from the ABM Treaty. During a visit to Canada, Russia’s President Putin is reported to have sought support from that country’s Prime Minister against US NMD plans. Prime Minister Chretien agreed that the ABM Treaty should be preserved and strengthened and said that Canada did not want anything to happen to destabilise the situation. He stopped short of expressing opposition to the US plans, pending answers to questions “whether the missile defense system will work and how the incoming Administration... will proceed on the matter...”

(**Defense Daily**, 12/10; **Defense Weekly**, 16/10; **Inside Missile Defense**, 18/10; **Council for a Livable World**, 27/10; **AFP**, 2/11; **Bloomberg**, 12/12; **R**, 13/12; **Aerospace Daily**, 15/12; **LT**, 15/12, 18/12; **WT**, 15/12; **ABC News Show: This Week**, 17/12; **NYT**, 17/12, 19/12, 29/12; **Defense Week**, 18/12; **DoD**, 19/12; **Carnegie**, 21/12; **IT**, 21/12; **AP**, 18/12; **WP**, 18/12)

- Republican members of the **United States** Senate have sponsored an addition to the FY 2001 Defense Authorization Bill that authorises the Departments of Defense and Energy to undertake research on a new generation of nuclear weapons, including low-yield devices (nuclear devices with a yield of 5 kilotons or less) to be used against ‘hardened’ targets, such as missile silos and buried weapons stockpiles. Opponents fear that the developments of such weapons would blur the threshold between nuclear and conventional weapons and would make the use in conflict of nuclear devices more likely. There is also concern that the development of such devices would necessitate explosive testing, which, according to a statement issued by Senate Democrats, would decrease national security and undermine non-proliferation efforts. In a compromise, it has been agreed that the research and development is authorized only until 1 July 2001, after which the respective Secretaries must report to the Congress. No money has been specifically allocated for the study. Furthermore, if the study does recommend building low-yield devices, additional legislation will be needed to do so.

The idea of establishing a flexible US nuclear arsenal of conventional and nuclear weapons of high and low yields is advocated in particular by the Associate Director of Los Alamos National Laboratory, who heads its nuclear weapons programme. Reportedly, this would involve a drastic reduction in the nuclear stockpile, of which at present the greater part is made up of high-yield missile warheads that would not be suitable for use against small nuclear powers and thus are not thought to be an effective deterrent against such states. Rather, the reasoning goes, the US would have to be equipped with more precision-guided conventional explosives as well as with low-yield nuclear devices for use in highly accurate missiles that could be deployed against specific hardened targets. These would, it is suggested, use highly-enriched uranium of a well-tried design, which presumably need no testing. A relatively small number of high-yield warheads would be retained to deter a full-scale nuclear strike by China or Russia.

The FY 2001 Defense Authorization Bill also calls for a comprehensive Nuclear Posture Review that would set the role of American nuclear forces for the next five to ten years. The results of this Review are to be submitted to the Congress in December 2001, together with the Quadrennial Defense Review, which is due then.

(**Inside the Pentagon**, 12/10; **Philadelphia Inquirer**, 16/10; **WP**, 24/10)

- Also in the **United States**, a new first-stage rocket motor has been tested for the Minuteman 3 intercontinental ballistic missile. The US Air Force maintains a Propulsion Replacement Program (PRP) under which the motors of all three stages of this missile are being remanufactured in order, reportedly, to maintain its alert readiness status until 2020. Russian officials have expressed concern that

Minuteman 3 stages that had been replaced are not being destroyed. They claim that these stages could be used in the American Hera missile that is used as a target for testing the US Theater High Altitude Area Defense (THAAD) system together with stages removed from Minuteman 2 intercontinental ballistic missiles and from Pershing-2 systems to bring the operational range of Hera to 3,000 miles (5,000 km), which they say would run counter to the INF Treaty of 1987. (TRW Press Release, 31/10; IT, 27/11)

- On 5 December, the Defence Planning Committee and Nuclear Planning Group of **NATO** met in Ministerial Session. Paragraphs 7 to 12 of the of the session deals with nuclear matter. The Final Communiqué is reproduced under **IV. Documentation**.

f. Nuclear and Missile Proliferation

- In the period under review, the international press reported extensively on events involving the **Democratic People's Republic of Korea (DPRK)**. Relations between the DPRK and a number of Western countries were seen to be improving appreciably. Italy's Foreign Minister, who had for some time been calling for closer cooperation of Western countries with the DPRK (see **Newsbrief** no. 49, page 13), said that he had noticed a great difference in the Northern attitude to international contact, but warned that time was needed for this process to mature. Following Germany's announcement that it was considering establishing diplomatic ties with the DPRK "soon", that country's State Secretary for Foreign Affairs said that, like other European states, Berlin had three conditions for the establishment of full diplomatic ties: military disarmament, inter-Korean reconciliation, and a favourable diplomatic environment, including improvement of human rights in the North. In November, the German Foreign Minister reaffirmed his country's intention to establish diplomatic relations with the DPRK. Belgium, and the Netherlands have made similar statements; on 12 December the British Foreign Secretary announced that the UK and the DPRK had agreed, with immediate effect, to establish diplomatic relations; Australia, Canada and Italy have already done so and Spain has announced its intention to do the same. The UK's decision not to condition the move on the settlement of human rights and missile problems is seen as a demonstration that London seeks a leadership role in Europe in dealing with Korean problems. Britain's Ambassador to the Republic of Korea (RoK) has expressed the hope that other European nations will follow suit. Sweden's Prime Minister has expressed the hope to visit Pyongyang next year for talks with Kim Jong-il. Some Western European politicians have cautioned against rushing into formal relations and several Western governments have called on Pyongyang first to adhere to the CTBT. Conversely, DPRK press organs claim that since relations with member states of the EU will help guarantee peace and security in the region, the first thing to be done is to establish formal ties.

A statement from Pyongyang in early October, which spoke of potential unification based on a "lower stage of federation", in which the two countries would coordinate their relationship while retaining their respective authorities and functions, including political defence and foreign affairs, was welcomed in Seoul. Diplomatic

observers in the RoK, saw unification as still very far in the future. RoK President Kim Dae-jung once again proposed replacing the armistice of the 1950s by a peace treaty and urged holding another four-party meeting, including China and the US. The latter two states were said to support the move. There was a report that the DPRK had advised the PRC that it, too, favoured the resumption of four-way talks. Economic relations between the DPRK and the RoK were developing slowly, however. While inter-Korean contacts intensified since last June's Summit Meeting, implementation of the basic understandings reached there was seen as making little progress. In November, a series of minor agreements were initiated that should facilitate inter-Korean trade and investment. Regarding longer-term plans, according to Chinese sources, the DPRK's leader, Kim Jong-il, has told China's Prime Minister that he would like to create an economic development zone jointly with the RoK around the 38th parallel. Meanwhile the South Korean government was criticised in heated discussions in the National Assembly in Seoul, for its rapprochement to Pyongyang and for the size of the economic aid given to the DPRK.

DPRK negotiators were said to be angered when told by their RoK counterparts that there was a perception in Seoul that Pyongyang was not improving relations as quickly as promised. Bilateral discussions continued at ministerial as well as working levels but were reported to have been troubled by political controversies. In Seoul, officials expressed the view that the apparent slow-down in the follow-up to the Summit Meeting was a result of the strain put on the DPRK's civil service by recent developments. American experts commented that some Northern officials seemed to have difficulty adjusting to the sudden shift in the country's external policies. RoK officials were said to grow concerned that Pyongyang seemed to avoid talking with Seoul on strategic and military issues; there was an impression that the North reserved such issues for discussion with Washington, since, apparently, it saw the normalisation of ties with the US as its current priority. In general, however, according to South Korean reports, inter-Korean rapprochement "remain[ed] on track".

Talks on further family reunions resulted in agreement to have another such event from 30 November until 2 December, again involving 100 persons from each side, but further talks were postponed and it turned out not to be practical to stage a third reunion during the current year. Inter-Korean working level military talks continued on the rehabilitation of the cross-border railway and there was said to have been working-level agreement on administrative matters. The two Koreas were also reported to be setting up an economic cooperation panel for the discussion of economic and industrial issues including further rail and road links. Russia and the DPRK have discussed the possibility of linking this stretch of rail to the Siberian railway.

There have been reports about discussions between the two Koreas on a request by the DPRK that the RoK should provide it with conventional power plants capable of producing a total of 2 million kilowatts, starting with a 500,000 kilowatt thermal plant. In response, the RoK was said to be considering providing the DPRK with some of its surplus electricity through a new power line to be built across the border zone. Some South Korean sources

contended that it was the DPRK that had asked for electricity supplies rather than plants. The issue was said to have been discussed again at the opening session of the joint economic panel in Pyongyang in late December. The RoK government has denied allegations from the opposition that an agreement on electricity supplies had already been concluded in secret.

In mid-November, the DPRK's official news agency reported that four RoK patrol boats had penetrated deep into Northern waters. It accused Seoul of trying to sabotage improved relations. Seoul denied the charge and said that vessels from both sides had confronted each other for several hours, but neither had crossed the Northern Limit Line. In early December, RoK sources reported that the North had strengthened its defences along the Demilitarised Zone (DMZ) and had deployed a substantial part of its military strength in forward positions. Altogether, according to a South Korean White Paper, the DPRK had greatly added to its conventional forces, which were now much stronger than those of the South. The RoK's Defence Ministry also claimed that if war broke out in the Korean Peninsula, the US would deploy a force there consisting of 690,000 troops, 160 navy vessels and 1,600 airplanes.

According to reports in the Tokyo press, the 11th round of the 'normalisation talks' between the DPRK and Japan, which was held in Beijing on the last two days of October, ended without results and without a date being set for a new meeting. Reportedly, as in the two previous rounds held this year, the DPRK demanded compensation for Japan's 35-year rule over the Korean Peninsula while Tokyo remained opposed to the payment of compensation, at least before other outstanding issues were settled. Pyongyang said it had refused the normalisation plan Japan had submitted. For its part, Japan was said to have insisted on a solution to the issue of ten Japanese nationals supposedly abducted to the North. Another contentious issue was the continued presence in the DPRK of some Japanese students who in 1970 hijacked a Japanese Airlines passenger plane. Both sides have said they would meet again when they were ready, and Japan has expressed the hope that the talks could resume in early 2001, but the hostility to Japan evinced in the Northern press has led observers to doubt whether an early resumption would be successful. In Tokyo, opposition from both the ruling and the opposition parties to the government's approach to the talks is said to be growing. The abduction issue seems to have added to criticism of Prime Minister Mori in the Japanese Diet, for the suggestion he is reported to have made to the DPRK that it might solve the issue without losing face by freeing the abducted Japanese individuals in a third country and pretending that they had been found there.

Much attention has been focused during the past three months on the DPRK's relations with the US. In working-level talks held in New York from 29 September until 3 October, progress was said to have been made on the subject of the DPRK's missile programme and the removal of that country from the American list of states sponsoring terrorism. The meeting ended with a joint statement in which the sides agreed that terrorism was a threat to global security and peace. According to the (North) Korean Central News Agency, the US had expressed willingness to delist [*sic*] the DPRK as a 'state sponsor of terrorism'. While US officials said this did not

signify that conditions had been met, they conceded that the US government would "work to remove" the DPRK from the list once it had satisfactorily addressed the American requirements. Reports from Seoul indicated that the RoK was eager to have the DPRK removed from the US list since this would contribute to economic development and the expansion of inter-Korean trade. It would also allow the US Export-Import Bank to support US companies doing business with the DPRK and cooperate with RoK firms. As pointed out in the British press, plans of the UK and other European countries to establish diplomatic relations with Pyongyang had made it more difficult for the US to continue treating the DPRK as a "state of concern".

In early October, the Vice Chairman of the DPRK's National Defence Commission, Vice-Marshal Jo Myong-rok, special envoy of Chairman Kim Jong-il of the DPRK, arrived in Washington where he was said to have delivered a message from the DPRK's leader. Marshal Jo was received by the US President and met other high-level US officials, including the Secretaries of State and of Defense. He was reported to have formally proposed a scheme to abandon the DPRK's long-range Taepodong [see **Newsbrief** 51, p. 20] missile development against the provision of financial assistance to launch satellites in a third country. Allegedly, initial reactions from the US side were favourable. The Marshal also submitted further proposals for the reduction of tensions in the Korean region. A communiqué issued at the end of the visit reaffirmed, among other things, the principles of the Agreed Framework and the DPRK's undertaking not to launch long-range missiles of any kind while talks on the missile issue continue. The two sides expressed a determination to improve bilateral relations and agreed that Secretary of State Madeleine Albright would visit the DPRK in order to convey President Clinton's views to Kim Jong-il and perhaps prepare for a visit by the President.

Secretary of State Albright visited Pyongyang on 23 and 24 October, where she was greeted by spectacular displays of welcome. In two meetings with Chairman Kim Jong-il, she was said to have discussed the subject of missiles, terrorism, nuclear weapons, and the opening of a liaison office. Reportedly, Kim Jong-il affirmed that Pyongyang would refrain from further long-range missile launches. The subject of the DPRK's ballistic missile programme was left for further discussions among experts and a decision on a presidential visit to Pyongyang was left to await the results of Mrs. Albright's visit and of subsequent negotiations. At first, reports that President Clinton might visit the DPRK as part of a trip to Asia in November were contradicted in Washington. A government spokesman said that although there had been substantial progress in the discussions on the DPRK's missile programme, there still were "gaps" which had made it impossible to go forward with a Presidential visit right away. There appeared to be different views in Washington as to the desirability of such a visit taking place in the near future. Some experts were said to be concerned about premature rapprochement and others warned against letting a highly symbolic opportunity go by. RoK President Kim Dae-jung said that direct talks between President Clinton and DPRK's Chairman Kim "would be the only way to successfully carry out negotiations on various issues, including missiles".

The DPRK's ballistic-missile programme is seen to be for that country both a strategic and an economic issue, since missiles constitute an important item in its exports. Reportedly, Jacques Santer, former President of the European Commission was told in Seoul that missile exports constitute 35 per cent of the DPRK's total exports. The issue of missile exports appears to be considered by the US as basic to its relations with the DPRK. Three days of discussion held in Kuala Lumpur, Malaysia, in early November, did not lead to an accord on the issue but were said to have served to clarify areas explored in Pyongyang by the US Secretary of State. In a press statement after the Kuala Lumpur talks, the US said that the talks had been detailed, constructive and very substantive, and had covered "the full range of missile issues under consideration by the two countries, including the North's missile-related exports and its indigenous missile programme. The delegations [had] also explored in depth the idea of exchanging launches of DPRK satellites for serious missile restraint by the DPRK" and had "continued to expand areas of common ground, although significant issues remained to be explored and resolved". According to press reports, the US side had called for the shut-down of the DPRK's research, development and testing of missiles with a range over 1,000 km (600 miles), and for an end to all missile exports, in exchange for some form of compensation that would include the launching of the North's satellites by an international consortium. No date was set for a further meeting. Republican critics of the proposal that the US Administration might compensate the DPRK for a moratorium on missile tests by launching its satellites asserted that this was likely to lead to the transfer of sensitive technology to Pyongyang. They saw such an arrangement as similar to the Agreed Framework, which involved training nuclear technicians. According to these critics, the two projects together would help the North construct a nuclear-armed intercontinental ballistic missile.

At the end of the year, there were again suggestions that Mr. Clinton might go to Pyongyang. Reportedly, the US Administration felt it was on the verge of a deal to curb the DPRK's missile programme and believed that this might be with Mr. Clinton in person. In late December, the President himself was said to be undecided, as the success of a visit was not assured. The North, on the other hand, was thought to hope President Clinton would still come, as it was concerned that his successor was less likely to accept its conditions for a deal. Reportedly, the DPRK's conditions for a cessation of missile exports included financial compensation and the commitment to launch each year, free of charge, three DPRK satellites. Some presumptive senior members of the next Administration were said to have ridiculed the idea of Mr. Clinton going to Pyongyang so near to the end of his time in office, but publicly the President-elect said he would not oppose the trip. Some US officials warned that, while agreement on the missile issue might seem near, negotiations had not been completed. They pointed out that even if the old Administration was able to work out a framework agreement with the North, it would saddle the next President — assuming that he did not repudiate the instrument altogether — with the job of working out a difficult and complicated set of commitments. According to a report from Seoul, the Clinton Administration was thinking of proposing the creation of an international consortium similar to the Korean Peninsula Economic Development

Organization (KEDO) that would raise funds to compensate the DPRK for the suspension of its ballistic missile programmes. In the RoK, the need to make a financial contribution to this effort seemed to be taken for granted. The uncertainty about President Clinton's plans was settled on 29 December, with the announcement from the White House that the President felt that he did not have sufficient time to put together a deal that would end the DPRK's missile programme. It was thought, moreover, that the Cabinet appointments proposed by President-elect Bush were so obviously preparing the ground for a forceful anti-ballistic-missile policy that any last-minute arrangements with the DPRK were likely to be considered with suspicion in the new Administration and prone to be renegotiated, if not rejected altogether.

In Washington, some senior persons in the Bush transition team were proposing renegotiating the Agreed Framework of 1994 and to call for the substitution of non-nuclear facilities for the two nuclear power reactors foreseen under the deal. Earlier reports had indicated that the increasing costs to the US of supplying heavy fuel oil to the DPRK until the promised nuclear power plant could generate electricity, and the delays and likely cost overruns in its construction, had prompted some officials to suggest replacing at least one of the two reactors by a fossil-fueled plant that could be on-line more quickly. It was realised, however, that this might give the DPRK grounds not to provide the information on its previous nuclear programme, which the Agreed Framework obliges it to supply. There was also a suggestion that South Korea might provide electric power, but the DPRK was said to be opposed to such a scheme, which would make it dependent for electricity on its Southern neighbour. At the same time, the realisation was taking hold that the inadequacy of the North's electric grid could make any of these proposals moot. This fact was itself seen as a possible obstacle to the efficient realisation of the Agreed Framework, but both KEDO officials and the management of the main RoK contractor for the reactors stated that it was up to the North to upgrade its electric grid, and reportedly the DPRK recently gave the Swedish company ABB a contract to improve its grid and upgrade its control system. Some observers in Washington saw the problems facing the project as confirmation that the Agreed Framework, under which the DPRK stopped its nuclear-weapons programme in exchange for the provision of two nuclear power reactors, had been conceived as a stop-gap measure predicated on the assumption that the DPRK and the RoK would soon merge — an assumption since recognised as premature.

Further problems arose with the announcement in early November by the General Electric company that it would withdraw from the project unless the governments concerned could assume liability in case of accidents, for which the DPRK was not expected to have the means. This raised concern that if GE would not supply the turbine equipment, construction costs could rise sharply, because a switch to equipment from other producers might necessitate extensive redesign. There was been a report from Tokyo that KEDO was considering asking Hitachi and Toshiba if they were in a position to supply the equipment, should GE indeed refuse to do so. At the same time it was reported from Washington that officials from the various US government departments involved were considering what formal authorisation would be

called for to permit the export of reactor technology required in the next stage of construction.

It has been reported that the EU may double its financial contribution to KEDO, to 30 million Euro (approximately \$25.5 million) for each of the next five years. Japan had decided in early December to ask the EU to increase its contribution, but observers have pointed out that this may be difficult, given the anti-nuclear stance of a number of European governments.

Pyongyang has once again denounced the US for the “deliberate” delays in the construction of the nuclear power plant, which it says causes a loss of badly needed electricity. It has threatened to take “corresponding measures”.

During her visit to Pyongyang, US Secretary of State Albright was heard to say that it was absolutely essential for bilateral relations that the DPRK should disclose details of its nuclear-weapon capabilities. There has been a report in the US nuclear trade press that the IAEA has been able to obtain access to some operating records and other documentation related to DPRK facilities, including the 5-MW graphite-moderated natural uranium-fuel reactor and the plutonium-separation plant. According to this report, however, the Agency fears that Pyongyang may never allow it to inspect the sites that are believed to have an inventory of high-level reprocessing waste, because this could confirm the suspicion that undeclared reprocessing had taken place and the initial inventory of nuclear materials supplied by the DPRK in 1992 had been falsified. In response, the DPRK said it had no intention of allowing the Agency to inspect its nuclear programme; since it did not have the ability to develop nuclear weapons, it said, there was no place for “nuclear suspicion”. In a subsequent statement at the Pacific Basin Nuclear Conference, in Seoul, the Agency’s Director General, Dr Mohamed ElBaradei, said that compliance by the DPRK with IAEA safeguards would help facilitate its rapprochement with the RoK. Dr ElBaradei expressed the hope that the DPRK’s discussions with the US could resolve amicably the issues relating to Pyongyang’s nuclear and missile programmes. In his annual statement to the UN General Assembly on 6 November, the Director General expressed the hope that with the recent positive developments in the Korean Peninsula, the DPRK would soon be ready to commence active co-operation with the IAEA since the Agency would need three to four years for a full assessment that all nuclear material in the country subject to safeguards had been declared, which was a condition for the supply of major components for the light-water reactor project. Australia’s Foreign Minister is said to have raised the matter during a visit to the DPRK in November, where he also offered to provide training and technical assistance on nuclear safeguards.

According to a senior advisor to US Vice President Gore, the Clinton Administration in 1994 had considered using force to terminate the DPRK’s nuclear-weapons programme, as constituting a threat to the security of America’s allies and to its own security.

A report in the Japanese daily *Sankei Shimbun* quoted in the South Korean press, claims that, according to Hwang Jang-yop, a senior advisor to the DPRK’s Kim Jong-il, who in early 1997 defected to the South [see *Newsbrief* no. 37, p. 9], in 1994 Pyongyang was working on plans for an underground nuclear test. The article also quotes

Hwang as saying that currently, with the help of a “Middle Eastern partner”, the DPRK is developing a uranium-enrichment capability.

RoK experts expect that until next year’s harvest is due, the DPRK will suffer a shortage of 3.8 million tons of various food crops, on a total demand of 6.2 million tons. Food production in the North is said to have decreased by 1 million tons over the past year and the UN resident coordinator in the country has said that the food shortage is the worst since 1996-97. A senior official of the Food and Agricultural Organization has said that as a result of drought and floods, of the 12.3 million hectares (30.75 acres) of the country’s territory, only 2 million hectares (5 million acres) are now suitable for agricultural use. The World Food Programme has launched an inter-agency appeal for aid to the DPRK, which is aimed at the supply of 600,000 tons of grain. Implementation has begun of Japan’s earlier plans to send 500,000 tons of rice to the DPRK. The RoK has called on the DPRK to allow inspectors to monitor the distribution of food supplies it has provided. News agencies also report acute shortages of medicines and other medical supplies.

(**AP**, 30/9, 3/10, 6/10, 11/10, 13/10, 18/10, 20/10, 23-25/10, 27/10, 1/11, 5-9/11, 11/11, 14/11, 18/11, 26/11, 28/11, 29/11, 6/12, 11-13/12, 15/12, 21/12; **AFP**, 1/10, 5-8/10, 12/10, 17-20/10, 23/10, 25/10, 30/10-2/11, 5/11, 7/11, 10/11, 11/11, 17/11, 27/11, 29/11, 4/12, 8/12, 11/12, 12/12, 15/12; **KH**, 1/10, 4-6/10, 9/10, 16-18/10, 25/10, 27/10, 30/10, 31/10, 2/11, 3/11, 7-10/11, 13/11, 14/11, 17/11, 20-22/11, 27/11, 29/11, 7/12, 11-15/12, 18/12, 19/20, 23/12; **R**, 1/10, 12/10, 17/10, 22-24/10, 31/10, 2/11, 3/11, 9/11, 17/11, 29/11, 1/12, 6-8/12, 13/12, 16/12, 18/12, 21/12; **WT**, 3/10, 3/11; **ChI**, 10/10, 16/10, 19/10, 23/10, 24/10, 26/10, 30/10, 1-3/11, 7/11, 14/11, 20/11, 26/11, 15/12, 21/12; **KT**, 10/10, 18/10, 20/10, 21/10, 2/11, 11/11, 13/11, 14/11, 22/11, 25/11, 14/12, 15/12; **NYT**, 10/10, 11/10, 20/10, 22-26/10, 31/10, 4/11, 2/12, 6/12, 13/12, 16/12, 20/12, 29/12; **Aerospace Daily**, 11/10; **IHT**, 11/10, 13/10, 16/10, 26/10, 4/11; **WP**, 11/10, 23/10, 24/10, 26/10, 27/10, 29/10, 31/10, 1/11, 4/11, 13/11, 14/11; **IT**, 12/10; **USA Today**, 12/10, 25/10, 27/10, 6/11; **US Department of State**, 12/10, 20/10, 23/10, 24/10, 3/11, 9/11; **China Daily**, 13/10, 28/10, 2/11, 18/12; **People’s Daily**, 13/10, 6/11; **NF**, 16/10; **Daily Yomiuri**, 17/10, 27/10, 27/11; **JAI**, 18/10, 19/10, 26/10, 30/10, 31/10; **NW**, 19/10, 26/30, 2/11, 9/11, 30/11, 21/12; **Carnegie**, 20/10; **G**, 20/10; **YOS**, 20/10, 4/11, 9/11; **DJ**, 24/10, 7/12; **KCNA**, 24/10; **LAT**, 24/10, 1/11, 16/11; **WSJ**, 24/10, 2/11, 8/12, 19/12; **Hankook Ilbo** [Seoul], 25/10, 26/10; **Y**, 25/10; **YOS**, 25/10, 3/12; **Japan Times**, 26/10, 20/11, 7/12; **US News and World Report**, 30/10; **MSNBC on-line**, 31/10; **IAEA Press Release** 2000/27, 6/11; **ASS**, 9/11, 5/12, 14/12; **BBC**, 14/11, 4/12; **Philadelphia Inquirer**, 13/12; **Jiefang Daily**, 19/12; letter to KEDO from **Nonproliferation Policy Education Center**, 19/12; **Sankei Shimbun**, 19/12)

- An estimate of the inventory of fissile material in nuclear weapons, at the end of 1999, of **India** (and Pakistan, see below), by the Institute for Science and International Security (ISIS) puts the amount of weapon-grade plutonium produced by India at between 240 and 395 kg, with a median of 310 kg. According to ISIS, this would serve for the production of between 45 and 95 nuclear weapons, with a median of 65. No figures are given for

the production of weapons-grade uranium. India is said to operate a small enrichment plant that can, in theory, make HEU but the amount produced so far is unknown.

The chairman of the Atomic Energy Commission of India, R. Chidambaram, has told scientists at the Bhabha Atomic Research Centre (BARC) in Bombay, that the nuclear weapons tests conducted in 1998 were “completely successful” and enabled India to design and fabricate weapons from low-yield to around 200 kilotons. The day after this statement, A. N. Prasad, a former director at BARC said that India would not be able to convince its armed forces of its striking [*sic*] capability unless it carried out more tests; he urged the government to keep its testing options open. Similar opinions had been voiced previously by two former chairmen of BARC [see **News-brief** no. 50, p. 27]. The convener of India’s National Security Council Advisory Board, K. Subrahmanyam, has said that to adequately deter China and Pakistan the country needs about 150 nuclear warheads deliverable by missiles and bomber air craft.

India’s Defence Minister as announced that the intermediate-range ballistic missile Agni-3, which has a range of 2,500 miles (4,000 km), will be test-fired “sooner than expected”.

In December, India and Pakistan took measures to defuse tensions in Kashmir. India’s Prime Minister A.B. Vajpayee announced that the cease fire previously proclaimed unilaterally on the occasion of Ramadan would be extended for another month, and that he was starting to take exploratory steps to rejuvenate talks with Pakistan. Shortly afterwards, Pakistan announced a “partial” troop withdrawal from the Line of Control.

(**JDW**, 3/10; **ISIS Report**, 11/10; **NYT**, 31/10, 21/12; **Telegraph** [India], 31/10; **Hindu**, 10/11; **BBC**, 21/12)

- During naval maneuvers in the Persian Gulf in October, **Iran** is said to have tested a modified Chinese-made anti-ship missile.

In response to concern expressed by the Foreign Minister of Japan, about the similarity between Iran’s ballistic missiles and those of the DPRK, Iran’s Foreign Minister has assured his counterpart that his country was developing its own missiles and did not need help from North Korea.

(**AP**, 23/10, 1/11)

- Following reports that **Iraq** had moved large military forces to its borders, US Defence Secretary William Cohen warned Baghdad against trying to take advantage of tensions in the area. Reportedly, many of the troops have since been pulled back.

The number of flights to Baghdad from other Arab countries made without notification to the UN has greatly increased. Iraq announced in October that it would resume regular domestic flights by fixed-wing aircraft and heli-copter. Although the UK and the US have expressed no objection to these flights but only to military flights, Iraq’s Foreign Minister has said that the aim is to “destroy the American-British criminal act of imposing the no-flight zones”. France and Russia also have sent planes to Baghdad, after notifying the UN sanctions committee. Reputedly in reaction to the outbreak of violence between Israel and Palestine, Arab airlines have reinstated a

number of regular civilian flights and visits from foreign dignitaries have increased drastically. The international press sees indications that the sanctions regime against Iraq is in danger of collapse. In late November, in defiance of the international prohibition, Iraq’s Deputy Prime Minister Tariq Aziz flew to Syria, claiming that civil aviation travel was not banned.

On 11 October, the Director General of the International Atomic Energy Agency (IAEA) submitted his six-monthly consolidated progress report on the Agency verification activities in Iraq, to the Security Council. In the report, the Director General states once again that since 16 December 1998, the Agency has not been in a position to implement its mandate in Iraq under the relevant Security Council resolutions and was thus unable to provide any measure of assurance with regard to Iraq’s compliance with its obligations under those resolutions. The report mentions the destruction, in Jordan, of equipment Iraq obtained for use in its clandestine uranium enrichment gas centrifuge programme. The equipment had been stored in Jordan since July 1999. The report further refers to an enhanced analysis made of Iraqi documentation, which it says has confirmed the validity of the Agency’s technically coherent picture of Iraq’s past clandestine nuclear programme. It expresses the Agency’s readiness to resume verification activities in Iraq at short notice.

Kidhir Hamza, an Iraqi nuclear scientist who held a senior position in his country’s weapons programme and defected to the West in 1994, has said that at the time of the Kuwait invasion, Iraq was within a few months of completing a nuclear weapon. Hamza has claimed that his work was greatly facilitated by the presence of the report on the Manhattan Project. He was quoted as saying in a statement of 2 November at the Carnegie Endowment for International Peace, that Iraq probably had a crude, 2-3 kT atomic bomb and could conceivably begin limited bomb production within two to three years if international sanctions are lifted. Reportedly, the CIA does not agree, saying that it does not believe that Iraq has the required fissile material.

In late December, in Jordan, Salman Yassin Zweir, a design engineer who reportedly had been employed by the Iraqi Atomic Energy Commission for 13 years, said that Iraq’s nuclear-weapons programme was revived two years ago. Zweir claimed he was arrested and tortured after refusing to go back to the programme, where he had been working on the gas-centrifuge enrichment of uranium. Zweir’s allegations are apparently taken very seriously by Western intelligence agencies. American intelligence officials were said to plan to debriefing Zweir and the IAEA was reported to be preparing an investigation into his claims.

Western intelligence sources are also quoted as saying that Iraq has again amassed large amounts of chemical and biological weapons, including 610 tons of precursor chemicals for the production of the VX nerve agent. These materials, which are said to be in the charge of Iraq’s Republican Guard, are thought to be periodically moved to different sites.

In mid-November UN Secretary-General Kofi Annan had discussions in Baghdad on Iraq’s relations with the UN, “and to find ways and means to break the current deadlock”. Russia’s Foreign Minister Igor Ivanov who,

like the UN Secretary-General, was in Baghdad for a meeting of the Organization of the Islamic Conference, was reported to have urged Iraq to cooperate with the UN on the issue of arms inspections so that sanctions could be lifted expeditiously. Later that same month, after talks in Moscow where Foreign Minister Ivanov was said to have repeated his call for the resumption of inspections, Iraq's Deputy Prime Minister reaffirmed that his country would not accept inspectors from the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC). UNMOVIC, meanwhile, had let it be known that it was ready to assume its responsibilities in Iraq [see **Newsbrief** no. 51, p. 23], and the UN Secretary-General proposed to go to Baghdad early in the new year to discuss the issue. Iraq said it would decide on a convenient time.

The former Executive Chairman of the United Nations Special Commission for Iraq (UNSCOM), Sweden's Ambassador Rolf Ekéus, has said that UNMOVIC's inspectors should remain firm about their methods and not promise a softer approach in order to open doors. Ekéus is quoted as saying that it would be very dangerous to indicate that inspectors will not take a hard line because it would give Iraq more leverage.

General Colin L. Powell, the designated Secretary of State in the Bush cabinet, has said that the new Administration will "re-energize" the sanctions against Iraq.

On 1 December, it was announced that Iraq halted its oil exports, claiming that the UN had rejected a request for an increase in the price of crude oil. Baghdad had previously threatened to halt supplies unless buyers paid a \$.50 surcharge per barrel into an Iraqi bank account. This would be in violation of UN sanctions. Two days later Baghdad rescinded its decision, claiming it had never been official policy. On 5 December, the Security Council agreed on a six-month renewal of the oil-for-food programme, and stipulated that Iraq could use \$525 million for repairs to its oil facilities. It also agreed to extend the list of items Iraq could buy without specific Security Council consent.

(**IHT**, 16/10; **GOV/INF/2000/23**, 17/10; **NYT**, 19/10, 31/10, 1/11, 8/11, 14/11, 2/12, 4/12, 6/12, 18/12; **Ha'aretz**, 1/11; **AP**, 3/11, 13/11; **G**, 5/11, 6/11; **R**, 5/11, 25/11, 30/11; **WP**, 5/11; **Sunday Telegraph**, 19/11; **Carnegie**, 21/11; **NW**, 23/11; **BBC**, 30/11, 1/12; **ST**, 24/12)

- **Israel's** army announced on 17 October that its anti-ballistic-missile rocket, the Arrow-2, which in September hit a Scud-like ballistic target, was ready for action. Arrow-2 is said to be intended as a defence against missiles from Iran, Iraq and Syria. In September, Iran tested its solid-fueled Shahab-3D, which has an 800 mile (1,250 km) range. Around the same time, Syria tested the Scud D, presumably supplied by the DPRK. Scud D has a range of 450 miles (720 km). Syria is reported to try and equip Scud D with multiple warheads. (**Miami Herald**, 17/10; **R**, 17/10; **PIR Letter**, 26/10)
- It has been reported in **Pakistan** that serial production has started on the solid-fueled Shaheen-1 intermediate-range ballistic missile. The scientist largely responsible for Pakistan's nuclear-weapons achievements, Dr. Abdul Q. Kahn, has said that the country is in a position to hit almost

all major Indian cities and has a stockpile of missiles and atomic bombs.

Pakistan's military ruler, General Musharraf, in an interview with a Russian newspaper, is supposed to have said that he did not know how many nuclear warheads his country has nor how many missiles it needed for minimal deterrence. In fact, according to the ISIS Report referred to under India, above, Pakistan may have produced between 585 and 800 kg of weapon-grade uranium, with a median of 690 kg, and could have produced and reprocessed between 1.7 and 13 kg of weapon-grade plutonium, with a median of 5.5 kg. These amounts would serve for the production of between 30 and 52 nuclear weapons, with a median of 39.

(**JDW**, 3/10; **ISIS Report**, 11/10; **Hindu**, 1/11)

g. Nuclear Material Trafficking, Physical Security and Related Incidents

- According to a report from Moscow, **Afghanistan** has tried to recruit "at least one" Russian nuclear weapons expert. (**RFE/RL**, 9/10)
- The IAEA has published an account of the fatal accident that occurred in **Thailand** in February, when workers at a scrap yard stole and opened a cobalt-60 source. Meeting in Bangkok, in November, foreign ministers of nine Asian countries, reportedly concerned by the consequences of public ignorance and the absence of a nuclear infrastructure pointed up by the event, established the Forum for Nuclear Cooperation in Asia (FNCA), with the task of coordinating activities in nuclear research, waste management, safety and public acceptance. (**NW**, 12/10, 7/12. See also **Newsbrief** no. 50, p. 29.)
- Three anti-nuclear protestors who damaged a **United Kingdom** laboratory that was doing research for the Trident nuclear submarine programme have been tried in the high court of Scotland. In an earlier trial they had maintained that they acted to prevent a greater crime by disarming illegal weapons of mass destruction. The lower court acquitted them because they were taken to be acting without criminal intent. In the subsequent action, as reported, the high court was to decide whether evidence about international law can be given in a Scottish criminal prosecution; whether any rule of international law justifies damaging or destroying property because of an objection to nuclear weapons; whether defendants' belief that their actions were justified constitutes a defence; and whether the fact that an offence was committed to prevent a crime by another person is a general defence to a criminal charge. (**G**, 9/10)
- The Ministry of Defence (MoD) of the **United Kingdom** has said its entire fleet of 12 Trafalgar and Swiftsure-class nuclear submarines will have to undergo safety checks. In May, the submarine *Tireless* developed a fault while sailing in the Mediterranean and docked in Gibraltar for repairs, for which the concurrence of local authorities and the Spanish nuclear safety council had been obtained. Subsequently, however, a visual inspection had established that a welding crack in the primary cooling system of the vessel's reactor, reportedly at the base of the steam generators, was larger than expected. The British newspaper *Guardian* has alleged that the defect, which it claims is a generic problem inherent in the design of the

system, could have led to a catastrophe. A citizens' group in Gibraltar has asked the local government not to allow the British submarine to be repaired in the harbour, claiming that the new information invalidated the preliminary report on the damage, which was the basis for the decision to allow the *Tireless* to be repaired at Gibraltar. The issue is said to have overshadowed a meeting in Spain between the Prime Ministers of the two countries. (EFE [Madrid], 18/10; R, 24/10; G, 28/10; ITN, 7/11)

- In the **United States**, Secretary of Energy Bill Richardson has decided to retain the University of California as the organization responsible for security at the national nuclear weapons laboratories. Earlier in the year, after two computer hard drives containing nuclear information disappeared from a vault at Los Alamos National Laboratory and reappeared two months later, there had been questions about the qualification of the University to retain this function. Richardson's decision calls for the appointment of a new University Vice President who will have oversight over the laboratories, including their security.

In the three months covered by this issue of the **Newsbrief**, government investigators had ten meetings with Dr. Wen Ho Lee [see **Newsbrief** no. 51, pp. 24–26], the former Los Alamos National Laboratory employee who pleaded guilty to the charge of having improperly downloaded classified government material onto an insecure computer. Reportedly, Dr. Lee told his interrogators that he disposed of the computer tapes on which he is accused of having copied secret information on nuclear weapons, in his rubbish bin. In November, the FBI started a search of the Los Alamos landfill [tip] in an attempt to find the tapes, both to preserve them and keep them from falling into the wrong hands. They found several tape-recorder cassettes but a preliminary analysis is said not to have revealed any connection with Dr. Lee. The search was suspended on 10 December, ostensibly to allow the agents to rest, but there was also an unconfirmed report that some tapes had been found with nuclear data.

Although Dr. Lee has never been formally arraigned for espionage, he was originally suspected as a possible source of the design information that was supposed to have been the basis for China's development of up-to-date nuclear warheads. US intelligence agencies, however, are now said to have concluded that Chinese espionage has gathered more US missile technology than nuclear weapons secrets. Officials have said that it is more likely that this information came from employees of defence establishments or contractors than from American nuclear weapons laboratories.

(AP, 18/10; **Chicago Sun Times**, 18/10; WP, 19/10; R, 11/12; NYT, 14/12)

h. Environmental Issues

- In **Russia** Minatom denied on 24 October reports that it was prepared to start importing irradiated nuclear fuel from the Kozloduy nuclear power plant in Bulgaria for storage.

On 21 December, the Russian State Duma adopted in a first reading, by a vote of 319 to 38 and 6 abstentions, an amendment of the environmental legislation that prevents the import of spent nuclear fuel for long-term storage. The

amendment was proposed by Minatom so as to permit the import and long-term storage of spent fuel from abroad, which it sees as a potentially important source of revenue. It is also deemed necessary to enable the sale of fresh fuel in Western Europe, where utilities, reportedly, do not wish to buy fuel without making sure that they can dispose of it once used. Russian officials have said they expect to earn up to \$21 billion over ten years from storage arrangements they hope to make with China, Germany, Japan, Spain, Switzerland and Taiwan.

Environmental groups in Russia have expressed strong opposition to the storage of foreign nuclear waste in their country and resisted the proposed amendment in the law. Earlier, they had collected 2.5 million signatures in support of a referendum on the matter, but the Central Elections Commission rejected more than one fifth of that number on technical inaccuracies, leaving fewer than the 2 million needed. The organisations had announced they would fight the decision. Minatom is reported to have set up its own non-governmental organisation (NGO), the Ecological Forum, with which it intends to counter the actions of environmentalists who oppose nuclear waste imports. The Ecological Forum promotes the use of nuclear energy avowedly to replace the use of fossil fuels and thus reduce the greenhouse effect. The new NGO also claims that proceeds from the storage of spent nuclear fuel in Russia can be used to help solve its environmental problems.

Minatom has denied reports that it is planning to build a nuclear waste reprocessing plant at Sarov, near Nizhnyovgorod, 270 miles (450 km) east of Moscow. It has also vehemently rejected allegations by environmentalists that foreign nuclear waste would be stored at Sarov.

(RFE/RL, 25/10; **Bellona**, 22/11, 27/11; NW, 30/11, 7/12; R, 30/11; **St. Petersburg Times**, 1/12; LT, 5/12; AFP, 6/12; NYT, 22/12; SF, 25/12; **PIR Center Moscow**, December)

- In the **Russian Federation**, a nuclear waste processing plant constructed with \$17 million of American funds was opened on 22 October. The plant is intended to process low-level radioactive waste generated in the dismantling of nuclear-powered submarines. In the past, such waste, which is said to constitute about 15 per cent of total radioactive material inside a submarine, would be disposed of at sea, but since 1992 it has been stored in a variety of locations. Two more facilities for the processing of low-level waste are to be commissioned later.

The Murmansk maritime shipping line has agreed to assist the Russian navy in shipping spent nuclear fuel from nuclear submarines.

Norway is reported to have donated to Russia four railway carriages especially constructed to transport spent naval fuel to the non-operational Mayak reprocessing plant where the material is to be stored in containers.

(R, 22/10; IT, 14/11)

- Also in **Russia**, a team of Russian and American radiation experts who visited the nuclear weapons complex at Seversk, near Tomsk, in Western Siberia, have reported encountering radiation levels in rivers vastly exceeding

accepted safety standards. Thus, for example strontium-90 was found in plant life along the Romashka river at 10,000 Pico curies per litre, while levels above eight Pico curies per litre are outlawed in US drinking water. Much of the radiation is said to originate from caesium and strontium-90 produced in processing weapons-grade plutonium. Special concern has been raised by the disclosure that plant life in the rivers contained high levels of phosphorous-32, which decays within weeks, indicating that the radioactive effluent was of very recent origin. The group, which reportedly was not granted access to the plutonium plant at Seversk, has warned that the area of Tomsk is showing signs of an approaching ecological catastrophe. According to the US news agency *Associated Press*, the researchers link the radioactivity to the former secret cities of Tomsk-7 or Seversk, but they argue that the levels of radioactivity are so high that they cannot come from a nuclear power plant or from normal reprocessing but suggest the possible presence of “an unacknowledged nuclear weapons-grade reactor or a giant nuclear accelerator”. Russian federation and regional officials have denied the charges. Rejecting as “baseless” the claim made in the report that the Tom river is the most radioactively polluted river in the world, a senior official of Russia’s Natural Resources Ministry has said that there are only “pockets” of radioactive residue. The management of the Seversk facility has threatened to sue the British *Guardian* newspaper for printing news of the survey.

There has also been a report of excessive radioactive contamination of the Don River, in the area of Rostov and at the Novovoronezh nuclear power plant, which consists of five reactors of which two have been shut down. Novovoronezh is situated near the Don River.

(*AP*, 2/11; *G*, 3/11; *RFE/RL*, 3/11, 7/11; *St. Petersburg Times*, 7/11; *IT*, 6/12; *Moscow Times*, 6/12; *R*, 6/12)

- DoE is reported to have come to the conclusion that in the **United States**, the amount of plutonium and other radioactive elements released into soil or stored in inadequate containers in the first 40 years of nuclear weapons production is ten times larger than previously estimated. A study by the private Institute for Energy and Environmental Research asserts that the material spreads through soil far more readily than had been believed. An environmental group in the state of Idaho has said that the Snake River aquifer lies 590 feet below the surface. Plutonium buried 20 feet below the surface has been found 240 feet down and is estimated to take 25 years to reach the aquifer. The original estimate by the US Atomic Energy Commission was 800,000 years.

At the Savannah River Site (SRS) in South Carolina where weapons-grade plutonium used to be processed, and where plutonium pits are disassembled in preparation for disposition and for blending into mixed-oxide reactor fuel, radioactive pollution is said to be particularly egregious. One estimate puts the cost of clean-up at upwards of \$40 billion. There is concern in the state of Georgia, on the other side of the Savannah River facing SRS, that radioactive tritium which used to be produced there, might seep into their groundwater. This concern is aggravated by the news that DoE is planning to construct a new Tritium Extraction Facility at the site, and by the possibility that if no civil reactors are chosen for this

purpose, DoE will also construct a major new reactor there for the production of tritium.

(*NYT*, 21/10; *Atlanta Journal-Constitution*, 26/11)

i. Miscellaneous

- The Tokyo daily *Asahi Shimbun* has reported that newly declassified official papers show that in 1970 Prime Minister Yasuhiro Nakasone, then chief of **Japan’s** Defence Agency gave the **United States** permission to bring nuclear weapons into the country. Yasuhiro is quoted as having told the American Secretary of Defense of that time, Melvin Laird, that as long as the US deterrence was in place, Japan need not develop its own nuclear weapons, and the US side is shown to have stated that it would deploy all types of weapons to help defend Japan in accordance with the bilateral security arrangements. (*AFP*, 20/12)
- The **United States** Congress has included in the defence authorisation bill for 2001 a provision to compensate workers in the DoE nuclear weapons complex for ill health due to exposure to radiation. Under the plan the President has until mid-March to submit a proposal specifying the compensation and procedures for obtaining it. If the Congress does not act by 31 July, each injured individual could claim \$150,000 lump sum plus medical care. Affected uranium mine workers who now receive less will be paid additional compensation out of a newly created compensation fund. (*NW*, 12/10)

II. PPNN Activities

- PPNN’s Core Group held its held its Twenty-Eighth semi-annual meeting at the Chilworth Conference Centre of the University of Southampton, United Kingdom, from 12 to 15 October. Present were Raja A.A.R. Adnan, Jiri Beranek, Grigori Berdennikov, Lewis Dunn, Rolf Ekéus, Camille Grand, Akira Hayashi, Martine Letts, Sverre Lodgaard, Harald Müller, Ben Sanders, John Simpson, and Iftekhar Zaman. Former Core Group members Benson Agu, David Fischer, Yoshio Okawa, Jan Murray and Lawrence Scheinman also participated in the discussions, while Ambassador Henrik Salander, representative of Sweden at the Conference on Disarmament, was an invited speaker.

The issue which dominated this meeting was the future of PPNN, given its uncertain financial position after the end of 2000. In addition, members engaged in an initial survey of the ‘Action Plan’ agreed at the 2000 NPT Review Conference, which included the presentation by Ambassador Salinger on the changing nature of the caucus groups at NPT conferences. They also discussed nuclear non-proliferation and disarmament developments since the last Core Group meeting.

On the future of PPNN, those present were unanimous in the conviction that there was a continued strong demand for the kind of services PPNN was capable of providing and that there were areas where there was a clear need for its wide knowledge and experience; and that as a consequence, everything possible should be done to enable it to go on operating. Members strongly emphasised the importance of sustaining the international basis of the Core Group and its ability to act as a conduit to project ideas into government circles on nuclear disarma-

ment and all other aspects of the nuclear non-proliferation regime. In the immediate future, this meant seeking to clarify and define the specific meanings of the forward-looking elements of the 2000 Final Document, and identify and analyse options for their implementation, as well as sustaining its information function, and more especially its **Newsbrief**. It was recognised, however, that the extent of PPNN's future work would have to be determined by the availability of funds.

In the discussion on the 2000 "Action Plan", it was pointed out that the process through which agreement had been reached had sidelined many significant issues, and the language used to reach agreement lacked clarity. It seemed inevitable that each nuclear-weapon state (NWS) would emphasise different interpretations of the 'Action Plan', and place differing priorities on the elements within it. Also, some of the language that had been agreed was ambiguous. The 'Action Plan' could be viewed both as a "stand-alone" document, offering a broad vision of how the nuclear disarmament process might evolve, or as an integral element of the enhanced review process. In the latter context, it was argued that the first session of the Preparatory Committee, in 2002, might include a dialogue on the elements of the Plan, their possible interpretations, and the ways in which each of those interpretation might be implemented.

Ambassador Henrik Salander introduced the discussion on Caucus Groups with a presentation of the situation as viewed from the perspective of one of the founder-members of the New Agenda Coalition (NAC). It was suggested that the traditional Caucus Groups [the Eastern Group, the Western European and Others (WEOG) and Non-Aligned Movement (NAM)] seemed now to have become largely irrelevant at NPT Conferences: they no longer co-ordinated national policies, and the role of those that continued to meet [i.e., the WEOG and the NAM] had become largely one of exchanging information about national positions. By contrast, the legal obligation placed upon the EU states to co-ordinate policy at international gatherings had made it a key player at the Conference, and much of its language had been used in the Final Document. However, it was pointed out that it was handicapped by having no authorised negotiator and difficulties in reacting to events. The NAC had two significant characteristics: its core issue and interest was nuclear disarmament and it cut across all the traditional groupings. But it contained states with differing views and priorities, which mean that its cohesion might always be at some risk arising from differences over specific regional questions and over issues such as compliance and non-compliance. Moreover, it was observed that if the NAC wanted to move from declaratory policy to practical measures, the military will become central to any dialogue between it and the NWS, as for the latter disarmament was a security issue, rather than a diplomatic one.

III. Recent Publications

Books

David Albright and Kevin O'Neill, editors, *Solving the North Korean Nuclear Puzzle*, ISIS Press, 324 pp.

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IV. Documentation

a. General Assembly Resolutions

55/30 — Establishment of a nuclear-weapon-free zone in the region of the Middle East

The General Assembly,

Recalling its resolutions 3263 (XXIX) of 9 December 1974, 3474 (XXX) of 11 December 1975, 31/71 of 10 December 1976, 32/82 of 12 December 1977, 33/64 of 14 December 1978, 34/77 of 11 December 1979, 35/147 of 12 December 1980, 36/87 A and B of 9 December 1981, 37/75 of 9 December 1982, 38/64 of 15 December 1983, 39/54 of 12 December 1984, 40/82 of 12 December 1985, 41/48 of 3 December 1986, 42/28 of 30 November 1987, 43/65 of 7 December 1988, 44/108 of 15 December 1989, 45/52 of 4 December 1990, 46/30 of 6 December 1991, 47/48 of 9 December 1992, 48/71 of 16 December 1993, 49/71 of 15 December 1994, 50/66 of 12 December 1995, 51/41 of 10 December 1996, 52/34 of 9 December 1997, 53/74 of 4 December 1998 and 54/51 of 1 December 1999 on the establishment of a nuclear-weapon-free zone in the region of the Middle East,

Recalling also the recommendations for the establishment of such a zone in the Middle East consistent with paragraphs 60 to 63, and in particular paragraph 63 (d), of the Final Document of the Tenth Special Session of the General Assembly,

Emphasizing the basic provisions of the above-mentioned resolutions, which call upon all parties directly concerned to consider taking the practical and urgent steps required for the implementation of the proposal to establish a nuclear-weapon-free zone in the region of the Middle East and, pending and during the establishment of such a zone, to declare solemnly that they will refrain, on a reciprocal basis, from producing, acquiring or in any other way possessing nuclear weapons and nuclear explosive devices and from permitting the stationing of nuclear weapons on their territory by any third party, to agree

to place their nuclear facilities under International Atomic Energy Agency safeguards and to declare their support for the establishment of the zone and to deposit such declarations with the Security Council for consideration, as appropriate,

Reaffirming the inalienable right of all States to acquire and develop nuclear energy for peaceful purposes,

Emphasizing the need for appropriate measures on the question of the prohibition of military attacks on nuclear facilities,

Bearing in mind the consensus reached by the General Assembly since its thirty-fifth session that the establishment of a nuclear-weapon-free zone in the Middle East would greatly enhance international peace and security,

Desirous of building on that consensus so that substantial progress can be made towards establishing a nuclear-weapon-free zone in the Middle East,

Welcoming all initiatives leading to general and complete disarmament, including in the region of the Middle East, and in particular on the establishment therein of a zone free of weapons of mass destruction, including nuclear weapons,

Noting the peace negotiations in the Middle East, which should be of a comprehensive nature and represent an appropriate framework for the peaceful settlement of contentious issues in the region,

Recognizing the importance of credible regional security, including the establishment of a mutually verifiable nuclear-weapon-free zone,

Emphasizing the essential role of the United Nations in the establishment of a mutually verifiable nuclear-weapon-free zone,

Having examined the report of the Secretary-General on the implementation of General Assembly resolution 54/51,

1. *Urges* all parties directly concerned to consider seriously taking the practical and urgent steps required for the implementation of the proposal to establish a nuclear-weapon-free zone in the region of the Middle East in accordance with the relevant resolutions of the General Assembly, and, as a means of promoting this objective, invites the countries concerned to adhere to the Treaty on the Non-Proliferation of Nuclear Weapons;

2. *Calls upon* all countries of the region that have not done so, pending the establishment of the zone, to agree to place all their nuclear activities under International Atomic Energy Agency safeguards;

3. *Takes note* of resolution GC(44)RES/28, adopted on 22 September 2000 by the General Conference of the International Atomic Energy Agency at its forty-fourth regular session, concerning the application of Agency safeguards in the Middle East;

4. *Notes* the importance of the ongoing bilateral Middle East peace negotiations and the activities of the multilateral Working Group on Arms Control and Regional Security in promoting mutual confidence and security in the Middle East, including the establishment of a nuclear-weapon-free zone;

5. *Invites* all countries of the region, pending the establishment of a nuclear-weapon-free zone in the region of the Middle East, to declare their support for establishing such a zone, consistent with paragraph 63 (d) of the Final Document of the Tenth Special Session of the General Assembly, and to deposit those declarations with the Security Council;

6. *Also invites* those countries, pending the establishment of the zone, not to develop, produce, test or otherwise acquire nuclear weapons or permit the stationing on their territories, or territories under their control, of nuclear weapons or nuclear explosive devices;

7. *Invites* the nuclear-weapon States and all other States to render their assistance in the establishment of the zone and at the same time to refrain from any action that runs counter to both the letter and the spirit of the present resolution;

8. *Takes note* of the report of the Secretary-General;

9. *Invites* all parties to consider the appropriate means that may contribute towards the goal of general and complete disarmament and the establishment of a zone free of weapons of mass destruction in the region of the Middle East;

10. *Requests* the Secretary-General to continue to pursue consultations with the States of the region and other concerned States, in accordance with paragraph 7 of resolution 46/30 and

taking into account the evolving situation in the region, and to seek from those States their views on the measures outlined in chapters III and IV of the study annexed to his report or other relevant measures, in order to move towards the establishment of a nuclear-weapon-free zone in the Middle East;

11. *Also requests* the Secretary-General to submit to the General Assembly at its fifty-sixth session a report on the implementation of the present resolution;

12. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled "Establishment of a nuclear-weapon-free zone in the region of the Middle East".

55/31 — Conclusion of effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons

The General Assembly,

Bearing in mind the need to allay the legitimate concern of the States of the world with regard to ensuring lasting security for their peoples,

Convinced that nuclear weapons pose the greatest threat to mankind and to the survival of civilization,

Welcoming the progress achieved in recent years in both nuclear and conventional disarmament,

Noting that, despite recent progress in the field of nuclear disarmament, further efforts are necessary towards the achievement of general and complete disarmament under effective international control,

Convinced that nuclear disarmament and the complete elimination of nuclear weapons are essential to remove the danger of nuclear war,

Determined to abide strictly by the relevant provisions of the Charter of the United Nations on the non-use of force or threat of force,

Recognizing that the independence, territorial integrity and sovereignty of non-nuclear-weapon States need to be safeguarded against the use or threat of use of force, including the use or threat of use of nuclear weapons,

Considering that, until nuclear disarmament is achieved on a universal basis, it is imperative for the international community to develop effective measures and arrangements to ensure the security of non-nuclear-weapon States against the use or threat of use of nuclear weapons from any quarter,

Recognizing that effective measures and arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons can contribute positively to the prevention of the spread of nuclear weapons,

Bearing in mind paragraph 59 of the Final Document of the Tenth Special Session of the General Assembly, the first special session devoted to disarmament, in which it urged the nuclear-weapon States to pursue efforts to conclude, as appropriate, effective arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons, and desirous of promoting the implementation of the relevant provisions of the Final Document,

Recalling the relevant parts of the special report of the Committee on Disarmament submitted to the General Assembly at its twelfth special session, the second special session devoted to disarmament, and of the special report of the Conference on Disarmament submitted to the Assembly at its fifteenth special session, the third special session devoted to disarmament, as well as the report of the Conference on its 1992 session,

Recalling also paragraph 12 of the Declaration of the 1980s as the Second Disarmament Decade, contained in the annex to its resolution 35/46 of 3 December 1980, which states, inter alia, that all efforts should be exerted by the Committee on Disarmament urgently to negotiate with a view to reaching agreement on effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons,

Noting the in-depth negotiations undertaken in the Conference on Disarmament and its Ad Hoc Committee on Effective International Arrangements to Assure Non-Nuclear-Weapon States against the Use or Threat of Use of Nuclear Weapons, with a view to reaching agreement on this question,

Taking note of the proposals submitted under the item in the Conference on Disarmament, including the drafts of an international convention,

Taking note also of the relevant decision of the Twelfth Conference of Heads of State or Government of Non-Aligned Countries, held at Durban, South Africa, from 29 August to 3 September 1998, as well as the relevant recommendations of the Organization of the Islamic Conference,

Taking note further of the unilateral declarations made by all the nuclear-weapon States on their policies of non-use or non-threat of use of nuclear weapons against the non-nuclear-weapon States,

Noting the support expressed in the Conference on Disarmament and in the General Assembly for the elaboration of an international convention to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons, as well as the difficulties pointed out in evolving a common approach acceptable to all,

Taking note of Security Council resolution 984 (1995) of 11 April 1995 and the views expressed on it,

Recalling its relevant resolutions adopted in previous years, in particular resolutions 45/54 of 4 December 1990, 46/32 of 6 December 1991, 47/50 of 9 December 1992, 48/73 of 16 December 1993, 49/73 of 15 December 1994, 50/68 of 12 December 1995, 51/43 of 10 December 1996, 52/36 of 9 December 1997, 53/75 of 4 December 1998 and 54/52 of 1 December 1999,

1. *Reaffirms* the urgent need to reach an early agreement on effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons;

2. *Notes with satisfaction* that in the Conference on Disarmament there is no objection, in principle, to the idea of an international convention to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons, although the difficulties with regard to evolving a common approach acceptable to all have also been pointed out;

3. *Appeals* to all States, especially the nuclear-weapon States, to work actively towards an early agreement on a common approach and, in particular, on a common formula that could be included in an international instrument of a legally binding character;

4. *Recommends* that further intensive efforts be devoted to the search for such a common approach or common formula and that the various alternative approaches, including, in particular, those considered in the Conference on Disarmament, be further explored in order to overcome the difficulties;

5. *Recommends also* that the Conference on Disarmament actively continue intensive negotiations with a view to reaching early agreement and concluding effective international arrangements to assure the non-nuclear-weapon States against the use or threat of use of nuclear weapons, taking into account the widespread support for the conclusion of an international convention and giving consideration to any other proposals designed to secure the same objective;

6. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled "Conclusion of effective international arrangements to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons".

55/32 — Prevention of an arms race in outer space

The General Assembly,

Recognizing the common interest of all mankind in the exploration and use of outer space for peaceful purposes,

Reaffirming the will of all States that the exploration and use of outer space, including the Moon and other celestial bodies, shall be for peaceful purposes and shall be carried out for the benefit and in the interest of all countries, irrespective of their degree of economic or scientific development,

Reaffirming also the provisions of articles III and IV of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies,

Recalling the obligation of all States to observe the provisions of the Charter of the United Nations regarding the use or threat

of use of force in their international relations, including in their space activities,

Reaffirming paragraph 80 of the Final Document of the Tenth Special Session of the General Assembly, in which it is stated that in order to prevent an arms race in outer space further measures should be taken and appropriate international negotiations held in accordance with the spirit of the Treaty,

Recalling its previous resolutions on this issue, and taking note of the proposals submitted to the General Assembly at its tenth special session and at its regular sessions, and of the recommendations made to the competent organs of the United Nations and to the Conference on Disarmament,

Recognizing that prevention of an arms race in outer space would avert a grave danger for international peace and security,

Emphasizing the paramount importance of strict compliance with existing arms limitation and disarmament agreements relevant to outer space, including bilateral agreements, and with the existing legal regime concerning the use of outer space,

Considering that wide participation in the legal regime applicable to outer space could contribute to enhancing its effectiveness,

Noting that the Ad Hoc Committee on the Prevention of an Arms Race in Outer Space, taking into account its previous efforts since its establishment in 1985 and seeking to enhance its functioning in qualitative terms, continued the examination and identification of various issues, existing agreements and existing proposals, as well as future initiatives relevant to the prevention of an arms race in outer space, and that this contributed to a better understanding of a number of problems and to a clearer perception of the various positions,

Noting also that there were no objections in principle in the Conference on Disarmament to the re-establishment of the Ad Hoc Committee, subject to re-examination of the mandate contained in the decision of the Conference on Disarmament of 13 February 1992,

Emphasizing the mutually complementary nature of bilateral and multilateral efforts in the field of preventing an arms race in outer space, and hoping that concrete results will emerge from those efforts as soon as possible,

Convinced that further measures should be examined in the search for effective and verifiable bilateral and multilateral agreements in order to prevent an arms race in outer space, including the weaponization of outer space,

Stressing that the growing use of outer space increases the need for greater transparency and better information on the part of the international community,

Recalling in this context its previous resolutions, in particular resolutions 45/55 B of 4 December 1990, 47/51 of 9 December 1992 and 48/74 A of 16 December 1993, in which, inter alia, it reaffirmed the importance of confidence-building measures as means conducive to ensuring the attainment of the objective of the prevention of an arms race in outer space,

Conscious of the benefits of confidence- and security-building measures in the military field,

Recognizing that negotiations for the conclusion of an international agreement or agreements to prevent an arms race in outer space remain a priority task of the Ad Hoc Committee and that the concrete proposals on confidence-building measures could form an integral part of such agreements,

1. *Reaffirms* the importance and urgency of preventing an arms race in outer space and the readiness of all States to contribute to that common objective, in conformity with the provisions of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies;

2. *Reaffirms its recognition*, as stated in the report of the Ad Hoc Committee on the Prevention of an Arms Race in Outer Space, that the legal regime applicable to outer space by itself does not guarantee the prevention of an arms race in outer space, that this legal regime plays a significant role in the prevention of an arms race in that environment, that there is a need to consolidate and reinforce that regime and enhance its effectiveness, and that it is important to comply strictly with existing agreements, both bilateral and multilateral;

3. *Emphasizes* the necessity of further measures with appropriate and effective provisions for verification to prevent an arms race in outer space;

4. *Calls upon* all States, in particular those with major space capabilities, to contribute actively to the objective of the peaceful use of outer space and of the prevention of an arms race in outer space and to refrain from actions contrary to that objective and to the relevant existing treaties in the interest of maintaining international peace and security and promoting international cooperation;

5. *Reiterates* that the Conference on Disarmament, as the single multilateral disarmament negotiating forum, has the primary role in the negotiation of a multilateral agreement or agreements, as appropriate, on the prevention of an arms race in outer space in all its aspects;

6. *Invites* the Conference on Disarmament to complete the examination and updating of the mandate contained in its decision of 13 February 1992, and to establish an ad hoc committee as early as possible during the 2001 session of the Conference;

7. *Recognizes*, in this respect, the growing convergence of views on the elaboration of measures designed to strengthen transparency, confidence and security in the peaceful uses of outer space;

8. *Urges* States conducting activities in outer space, as well as States interested in conducting such activities, to keep the Conference on Disarmament informed of the progress of bilateral and multilateral negotiations on the matter, if any, so as to facilitate its work;

9. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled "Prevention of an arms race in outer space".

55/33A — Missiles

The General Assembly,

Recalling its resolution 54/54 F of 1 December 1999,

Reaffirming the role of the United Nations in the field of arms regulation and disarmament and the commitment of Member States to take concrete steps to strengthen that role,

Realizing the need to promote regional and international peace and security in a world free from the scourge of war and the burden of armaments,

Convinced of the need for a comprehensive approach towards missiles, in a balanced and non-discriminatory manner, as a contribution to international peace and security,

Bearing in mind that the security concerns of Member States at the international and regional levels should be taken into consideration in addressing the issue of missiles,

Underlining the complexities involved in considering the issue of missiles in the conventional context,

Expressing its support for the international efforts against the development and proliferation of all weapons of mass destruction,

1. *Takes note with appreciation* of the report of the Secretary-General, submitted pursuant to resolution 54/54 F of 1 December 1999;

2. *Requests* the Secretary-General further to seek the views of Member States on the issue of missiles in all its aspects and to submit a report to the General Assembly at its fifty-sixth session;

3. *Also requests* the Secretary-General, with the assistance of a panel of governmental experts to be established in 2001 on the basis of equitable geographical distribution, to prepare a report for the consideration of the General Assembly at its fifty-seventh session on the issue of missiles in all its aspects;

4. *Decides* to include in the provisional agenda of its fifty-sixth session an item entitled "Missiles".

55/33B – Preservation of and compliance with the Treaty on the Limitation of Anti-Ballistic Missile Systems

The General Assembly,

Recalling its resolutions 50/60 of 12 December 1995 and 52/30 of 9 December 1997 on compliance with arms limitation

and disarmament and non-proliferation agreements and its resolution 54/54 A of 1 December 1999 on preservation of and compliance with the Treaty on the Limitation of Anti-Ballistic Missile Systems,

Recognizing the historical role of the Treaty on the Limitation of Anti-Ballistic Missile Systems of 26 May 1972 between the United States of America and the Union of Soviet Socialist Republics as a cornerstone for maintaining global peace and security and strategic stability, and reaffirming its continued validity and relevance, especially in the current international situation,

Stressing the paramount importance of full and strict compliance with the Treaty by the parties,

Recalling that the provisions of the Treaty are intended as a contribution to the creation of more favourable conditions for further negotiations on limiting strategic arms,

Mindful of the obligations of the parties to the Treaty under article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,

Concerned that the implementation of any measures undermining the purposes and provisions of the Treaty affects not only the security interests of the parties, but also those of the whole international community,

Recalling the widespread concern about the proliferation of weapons of mass destruction and their means of delivery,

1. *Calls* for continued efforts to strengthen the Treaty on the Limitation of Anti-Ballistic Missile Systems and to preserve its integrity and validity so that it remains a cornerstone in maintaining global strategic stability and world peace and in promoting further strategic nuclear arms reductions;

2. *Calls also* for renewed efforts by each of the States parties to preserve and strengthen the Treaty through full and strict compliance;

3. *Calls upon* the parties to the Treaty, in accordance with their obligations under the Treaty, to limit the deployment of anti-ballistic missile systems, to refrain from the deployment of anti-ballistic missile systems for the defence of the territory of their country, not to provide a base for such a defence and not to transfer to other States or deploy outside their national territory anti-ballistic missile systems or their components limited by the Treaty;

4. *Considers* that the implementation of any measure undermining the purposes and the provisions of the Treaty also undermines global strategic stability and world peace and the promotion of further strategic nuclear arms reductions;

5. *Urges* all Member States to support efforts aimed at stemming the proliferation of weapons of mass destruction and their means of delivery;

6. *Supports* further efforts by the international community, in the light of emerging developments, towards safeguarding the inviolability and integrity of the Treaty, which is in the strongest interest of the international community;

7. *Welcomes* the decision taken by the United States of America on 1 September 2000 not to authorize deployment of a national missile defence at this time, and considers that it constitutes a positive step for the preservation of strategic stability and security;

8. *Decides* to include in the provisional agenda of its fifty-sixth session an item entitled "Preservation of and compliance with the Treaty on the Limitation of Anti-Ballistic Missile Systems".

55/33C — Towards a nuclear-weapon-free world: the need for a new agenda

The General Assembly,

Noting its resolutions 53/77 Y of 4 December 1998 and 54/54 G of 1 December 1999,

Expressing its deep concern at the continued risk for humanity represented by the possibility that nuclear weapons could be used,

Noting the advisory opinion of the International Court of Justice, on the *Legality of the Threat or Use of Nuclear Weapons*, issued at The Hague on 8 July 1996,

Noting also that three States continue to operate unsafeguarded nuclear facilities and have not acceded to the Treaty on the Non-Proliferation of Nuclear Weapons, and concerned at the continued retention of the nuclear-weapons option by those three States,

Declaring that nuclear test explosions carried out in 1998 by two of the States that have not renounced the nuclear-weapons option do not in any way confer a nuclear-weapon State status or any special status whatsoever,

Noting that, despite achievements in bilateral and unilateral arms reductions, the total number of nuclear weapons deployed and stockpiled still amount to many thousands,

Welcoming the significant progress achieved in nuclear weapon reductions made unilaterally or bilaterally under the Strategic Arms Reduction Treaty (START) process, as a step towards nuclear disarmament,

Welcoming also the ratification of the Treaty on Further Reduction and Limitation of Strategic Offensive Arms (START II) by the Russian Federation as an important step in the efforts to reduce strategic offensive weapons, and noting that completion of ratification of START II by the United States of America remains a priority,

Concerned that negotiations on nuclear arms reductions are not actively under way,

Welcoming the significant unilateral reduction measures taken by other nuclear-weapon States, including the closing down and dismantling of nuclear-weapon-related facilities,

Welcoming also the efforts of several States to cooperate in making nuclear disarmament measures irreversible, in particular through the adoption of initiatives on the verification, management and disposition of fissile material declared excess to military purposes,

Noting the declaration by the nuclear-weapon States that none of their nuclear weapons are targeted at any State,

Underlining the necessity of strict compliance by all parties with their obligations under the Treaty on the Non-Proliferation of Nuclear Weapons,

Noting the United Nations Millennium Declaration, in which the heads of State and Government resolved to strive for the elimination of weapons of mass destruction, in particular nuclear weapons, and to keep all options open for achieving this aim, including the possibility of convening an international conference to identify ways of eliminating nuclear dangers,

Welcoming the Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,

Taking into consideration the unequivocal undertaking by the nuclear-weapon States, in the Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament, to which all States parties to the Treaty are committed under article VI of the Treaty,

Underlining the need for action to achieve a world free from nuclear weapons,

Determined to pursue practical steps for systematic and progressive efforts to implement article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and paragraphs 3 and 4 (c) of the decision on principles and objectives for nuclear non-proliferation and disarmament of the 1995 Review and Extension Conference of the Parties to the Treaty,

1. *Agrees* on the importance and urgency of signatures and ratifications, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty;

2. *Calls* for the upholding of a moratorium on nuclear-weapon-test explosions or any other nuclear explosions pending entry into force of the above-mentioned Treaty;

3. *Agrees* on the necessity for negotiations in the Conference on Disarmament on a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices, in accordance with the report of the Special Coordinator of 1995 and the mandate contained therein,

taking into consideration both nuclear disarmament and nuclear non-proliferation objectives, and urges the Conference on Disarmament to agree on a programme of work which includes the immediate commencement of negotiations on such a treaty, with a view to their conclusion within five years;

4. *Agrees also* on the necessity of establishing within the context of the Conference on Disarmament an appropriate subsidiary body with a mandate to deal with nuclear disarmament, and urges the Conference to agree on a programme of work which includes the immediate establishment of such a body;

5. *Calls* for the principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures;

6. *Calls also* for the early entry into force and full implementation of the Treaty on Further Reduction and Limitation of Strategic Offensive Arms (START II) and the conclusion of START III as soon as possible, while preserving and strengthening the Treaty on the Limitation of Anti-Ballistic Missile Systems as a cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with the provisions of that Treaty;

7. *Calls further* for the completion and implementation of the Trilateral Initiative between the United States of America, the Russian Federation and the International Atomic Energy Agency;

8. *Calls* for steps to be taken by all nuclear-weapon States that would lead to nuclear disarmament in a way that promotes international stability and, based upon the principle of undiminished security for all, for:

(a) Further efforts to be made by the nuclear-weapon States to reduce their nuclear arsenals unilaterally;

(b) Increased transparency by the nuclear-weapon States with regard to nuclear weapons capabilities, and the implementation of agreements pursuant to article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and as a voluntary confidence-building measure to support further progress on nuclear disarmament;

(c) The further reduction of non-strategic nuclear weapons, based on unilateral initiatives and as an integral part of the nuclear arms reduction and disarmament process;

(d) Concrete agreed measures to reduce further the operational status of nuclear weapons systems;

(e) A diminishing role for nuclear weapons in security policies so as to minimize the risk that these weapons will ever be used and to facilitate the process of their total elimination;

(f) The engagement, as soon as appropriate, of all the nuclear-weapon States in the process leading to the total elimination of their nuclear weapons;

9. *Calls also* for arrangements by all nuclear-weapon States to place, as soon as practicable, the fissile material designated by each of them as no longer required for military purposes under the International Atomic Energy Agency or other relevant international verification arrangements for the disposition of such material for peaceful purposes in order to ensure that such material remains permanently outside military programmes;

10. *Reaffirms* that the ultimate objective of the efforts of States in the disarmament process is general and complete disarmament under effective international control;

11. *Calls* for regular reports, within the framework of the strengthened review process for the Non-Proliferation Treaty, by all States parties on the implementation of article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and paragraph 4 (c) of the decision on principles and objectives for nuclear non-proliferation and disarmament of the 1995 Review and Extension Conference of the Parties to the Treaty, and, in this regard, recalls the advisory opinion of the International Court of Justice of 8 July 1996;

12. *Agrees* to pursue the further development of the verification capabilities that will be required to provide assurance of compliance with nuclear disarmament agreements for the achievement and maintenance of a nuclear-weapon-free world;

13. *Calls upon* all States not yet party to the Treaty on the Non-Proliferation of Nuclear Weapons to accede to the Treaty as non-nuclear-weapon States, promptly and without condition,

in particular those States that operate unsafeguarded nuclear facilities, and also calls upon those States to bring into force the required comprehensive safeguards agreements, together with additional protocols, consistent with the Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards approved by the Board of Governors of the International Atomic Energy Agency on 15 May 1997, for ensuring nuclear non-proliferation, and to reverse clearly and urgently any policies to pursue any nuclear weapons development or deployment and refrain from any action that could undermine regional and international peace and security and the efforts of the international community towards nuclear disarmament and the prevention of nuclear weapons proliferation;

14. *Calls upon* those States that have not yet done so to conclude full-scope safeguards agreements with the International Atomic Energy Agency and to conclude additional protocols to their safeguards agreement on the basis of the Model Protocol;

15. *Notes* the paramount importance of effective physical protection of all nuclear material, and calls upon all States to maintain the highest possible standards of security and physical protection of nuclear materials;

16. *Notes also* that the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons agreed that legally binding security assurances by the five nuclear-weapon States to the non-nuclear-weapon States parties to the Treaty strengthen the nuclear non-proliferation regime, and that it called upon its Preparatory Committee to make recommendations on this issue to the 2005 Review Conference;

17. *Reaffirms* the conviction that the establishment of internationally recognized nuclear-weapon-free zones on the basis of arrangements freely arrived at among the States of the region concerned enhances global and regional peace and security, strengthens the nuclear non-proliferation regime and contributes towards realizing the objective of nuclear disarmament, and supports proposals for the establishment of nuclear-weapon-free zones where they do not yet exist, such as in the Middle East and South Asia;

18. *Affirms* that a nuclear-weapon-free world will ultimately require the underpinning of a universal and multilaterally negotiated legally binding instrument or a framework encompassing a mutually reinforcing set of instruments;

19. *Acknowledges* the report of the Secretary-General on the implementation of General Assembly resolution 54/54 G, and requests him, within existing resources, to prepare a report on the implementation of the present resolution;

20. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled "Towards a nuclear-weapon-free world: the need for a new agenda", and to review the implementation of the present resolution at that session.

55/33D — 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

The General Assembly,

Recalling the decision on strengthening the review process for the Treaty on the Non-Proliferation of Nuclear Weapons of the 1995 Review and Extension Conference of the Parties to the Treaty, in which it was agreed that Review Conferences should continue to be held every five years and that, accordingly, the next Review Conference should be held in the year 2000,

Recalling also its resolutions 50/70 Q of 12 December 1995 and 51/45 A of 10 December 1996,

Recalling further that the parties to the Non-Proliferation Treaty met in New York from 24 April to 19 May 2000 to review the operation of the Treaty, as provided for in its article VIII, paragraph 3, taking into account the decisions and the resolution adopted by the 1995 Review and Extension Conference,

Welcomes the adoption by consensus on 19 May 2000 of the Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, including in particular the documents entitled "Review of the operation of the Treaty, taking into account the decisions and the resolution adopted by the 1995 Review and Extension

Conference" and "Improving the effectiveness of the strengthened review process for the Treaty".

55/33E — United Nations study on disarmament and non-proliferation education

The General Assembly,

Desirous of stressing the urgency of promoting concerted international efforts at disarmament and non-proliferation, especially in the field of nuclear weapons and other weapons of mass destruction and their delivery systems, with a view to strengthening international security and enhancing sustainable economic and social development,

Conscious of the need, more than a decade after the end of the cold war and at the start of the twenty-first century, to combat the negative effects of cultures of violence and complacency in the face of current dangers in this field through long-term programmes of education and training,

1. *Requests* the Secretary-General to prepare, with the assistance of a group of qualified governmental experts, a study on disarmament and non-proliferation, that would have the following aims:

(a) To define contemporary disarmament and non-proliferation education and training, taking into account the need to promote a culture of non-violence and peace;

(b) To assess the current situation of disarmament and non-proliferation education and training at the primary, secondary, university and postgraduate levels of education, in all regions of the world;

(c) To recommend ways to promote education and training in disarmament and non-proliferation at all levels of formal and informal education, in particular the training of educators, parliamentarians, municipal leaders, military officers and government officials;

(d) To examine ways to utilize more fully evolving pedagogic methods, particularly the revolution in information and communications technology, including distance learning, to enhance efforts in disarmament education and training at all levels, in the developed and the developing world;

(e) To recommend ways in which organizations of the United Nations system with special competence in disarmament or education or both can harmonize and coordinate their efforts in disarmament and non-proliferation education;

(f) To devise ways to introduce disarmament and non-proliferation education into post-conflict situations as a contribution to peace-building;

and considers that the group of experts should invite representatives of organizations of the United Nations system with special competence in disarmament or education or both to participate in its work, and should also invite university educators, disarmament and peace-related institutes and non-governmental organizations that have special qualifications in education and training or in the field of disarmament and non-proliferation to make written and oral presentations to it;

2. Also requests the Secretary-General to report to the General Assembly at its fifty-seventh session on this question.

55/33I — Nuclear-weapon-free southern hemisphere and adjacent areas

The General Assembly,

Recalling its resolutions 51/45 B of 10 December 1996, 52/38 N of 9 December 1997, 53/77 Q of 4 December 1998 and 54/54 L of 1 December 1999,

Welcoming the adoption by the Disarmament Commission at its 1999 substantive session of a text entitled "Establishment of nuclear-weapon-free zones on the basis of arrangements freely arrived at among the States of the region concerned",

Determined to pursue the total elimination of nuclear weapons,

Determined also to continue to contribute to the prevention of the proliferation of nuclear weapons in all its aspects and to the process of general and complete disarmament under strict and effective international control, in particular in the field of nuclear weapons and other weapons of mass destruction, with a

view to strengthening international peace and security, in accordance with the purposes and principles of the Charter of the United Nations,

Recalling the provisions on nuclear-weapon-free zones of the Final Document of the Tenth Special Session of the General Assembly, the first special session devoted to disarmament,

Stressing the importance of the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba, establishing nuclear-weapon-free zones, as well as the Antarctic Treaty, to, inter alia, achieve a world entirely free of nuclear weapons,

Underlining the value of enhancing cooperation among the nuclear-weapon-free zone treaty members by means of mechanisms such as joint meetings of States parties, signatories and observers to those treaties,

Recalling the applicable principles and rules of international law relating to the freedom of the high seas and the rights of passage through maritime space, including those of the United Nations Convention on the Law of the Sea,

1. *Welcomes* the continued contribution that the Antarctic Treaty and the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba are making towards freeing the southern hemisphere and adjacent areas covered by those treaties from nuclear weapons;

2. *Calls* for the ratification of the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba by all States of the region, and calls upon all concerned States to continue to work together in order to facilitate adherence to the protocols to nuclear-weapon-free zone treaties by all relevant States that have not yet done so;

3. *Welcomes* the steps taken to conclude further nuclear-weapon-free zone treaties on the basis of arrangements freely arrived at among the States of the region concerned, and calls upon all States to consider all relevant proposals, including those reflected in its resolutions on the establishment of nuclear-weapon-free zones in the Middle East and South Asia;

4. *Convinced* of the important role of nuclear-weapon-free zones in strengthening the nuclear non-proliferation regime and in extending the areas of the world that are nuclear-weapon-free, and, with particular reference to the responsibilities of the nuclear-weapon States, calls upon all States to support the process of nuclear disarmament and to work for the total elimination of all nuclear weapons;

5. *Calls upon* the States parties and signatories to the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba, in order to pursue the common goals envisaged in those treaties and to promote the nuclear-weapon-free status of the southern hemisphere and adjacent areas, to explore and implement further ways and means of cooperation among themselves and their treaty agencies;

6. *Welcomes* the vigorous efforts being made among States parties and signatories to those treaties to promote their common objectives, and considers that an international conference of States parties and signatories to the nuclear-weapon-free zone treaties might be held to support the common goals envisaged in those treaties;

7. *Encourages* the competent authorities of the nuclear-weapon-free zone treaties to provide assistance to the States parties and signatories to such treaties so as to facilitate the accomplishment of these goals;

8. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled "Nuclear-weapon-free southern hemisphere and adjacent areas".

55/33M — Convening of the fourth special session of the General Assembly devoted to disarmament

The General Assembly,

Recalling its resolutions 49/75 I of 15 December 1994, 50/70 F of 12 December 1995, 51/45 C of 10 December 1996, 52/38 F of 9 December 1997, 53/77 AA of 4 December 1998 and 54/54/ U of 1 December 1999,

Recalling also that, there being a consensus to do so in each case, three special sessions of the General Assembly devoted to disarmament were held in 1978, 1982 and 1988, respectively,

Bearing in mind the Final Document of the Tenth Special Session of the General Assembly, adopted by consensus at the first special session devoted to disarmament, which included the Declaration, the Programme of Action and the Machinery for disarmament,

Bearing in mind also the objective of general and complete disarmament under effective international control,

Taking note of paragraph 145 of the Final Document of the Twelfth Conference of Heads of State or Government of Non-Aligned Countries, held at Durban, South Africa, from 29 August to 3 September 1998, which supported the convening of the fourth special session of the General Assembly devoted to disarmament, which would offer an opportunity to review, from a perspective more in tune with the current international situation, the most critical aspects of the process of disarmament and to mobilize the international community and public opinion in favour of the elimination of nuclear and other weapons of mass destruction and of the control and reduction of conventional weapons,

Taking note also of the report of the 1999 substantive session of the Disarmament Commission and of the fact that no consensus was reached on the item entitled "Fourth special session of the General Assembly devoted to disarmament",

Desiring to build upon the substantive exchange of views on the fourth special session of the General Assembly devoted to disarmament during the 1999 substantive session of the Disarmament Commission,

Reiterating its conviction that a special session of the General Assembly devoted to disarmament can set the future course of action in the field of disarmament, arms control and related international security matters,

Emphasizing the importance of multilateralism in the process of disarmament, arms control and related international security matters,

Noting that, with the recent accomplishments made by the international community in the field of weapons of mass destruction as well as conventional arms, the following years would be opportune for the international community to start the process of reviewing the state of affairs in the entire field of disarmament and arms control in the post-cold-war era,

Taking note of the report of the Secretary-General regarding the views of States Members of the United Nations on the objectives, agenda and timing of the fourth special session of the General Assembly devoted to disarmament,

1. *Decides*, subject to the emergence of a consensus on its objectives and agenda, to convene the fourth special session of the General Assembly devoted to disarmament;

2. *Requests* the Secretary-General to seek the views of States Members of the United Nations on the objectives, agenda and timing of the special session and to report to the General Assembly at its fifty-sixth session;

Decides to include in the provisional agenda of its fifty-sixth session the item entitled "Convening of the fourth special session of the General Assembly devoted to disarmament".

55/33N — Reducing nuclear danger

The General Assembly,

Bearing in mind that the use of nuclear weapons poses the most serious threat to mankind and to the survival of civilization,

Reaffirming that any use or threat of use of nuclear weapons would constitute a violation of the Charter of the United Nations,

Convinced that the proliferation of nuclear weapons in all its aspects would seriously enhance the danger of nuclear war,

Convinced also that nuclear disarmament and the complete elimination of nuclear weapons are essential to remove the danger of nuclear war,

Considering that, until nuclear weapons cease to exist, it is imperative on the part of the nuclear-weapon States to adopt measures that assure non-nuclear-weapon States against the use or threat of use of nuclear weapons,

Considering also that the hair-trigger alert of nuclear weapons carries unacceptable risks of unintentional or accidental use of nuclear weapons, which would have catastrophic consequences for all mankind,

Emphasizing the imperative need to adopt measures to avoid accidental, unauthorized or unexplained incidents arising from computer anomaly or other technical malfunctions,

Conscious that limited steps relating to detargeting have been taken by the nuclear-weapon States and that further practical, realistic and mutually reinforcing steps are necessary to contribute to the improvement in the international climate for negotiations leading to the elimination of nuclear weapons,

Mindful that reduction of tensions brought about by a change in nuclear doctrines would positively impact on international peace and security and improve the conditions for the further reduction and the elimination of nuclear weapons,

Reiterating the highest priority accorded to nuclear disarmament in the Final Document of the Tenth Special Session of the General Assembly and by the international community,

Recalling that in the advisory opinion of the International Court of Justice on the *Legality of the Threat or Use of Nuclear Weapons* it is stated that there exists an obligation for all States to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control,

Welcoming the call in the United Nations Millennium Declaration to seek to eliminate the dangers posed by weapons of mass destruction and the resolve to strive for the elimination of weapons of mass destruction, particularly nuclear weapons, including the possibility of convening an international conference to identify ways of eliminating nuclear dangers,

1. *Calls* for a review of nuclear doctrines and, in this context, immediate and urgent steps to reduce the risks of unintentional and accidental use of nuclear weapons;

2. *Requests* the five nuclear-weapon States to take measures towards the implementation of paragraph 1 of the present resolution;

3. *Calls upon* Member States to take the necessary measures to prevent the proliferation of nuclear weapons in all its aspects and to promote nuclear disarmament, with the objective of eliminating nuclear weapons;

4. *Takes note* of the report prepared by the Advisory Board on Disarmament Matters and submitted by the Secretary-General in pursuance of paragraph 4 of General Assembly resolution 54/54 K of 1 December 1999, including the need for the Board to continue its discussions on the subject;

5. *Requests* the Secretary-General, within existing resources, to continue to seek inputs from the Advisory Board on Disarmament Matters on information with regard to specific measures that would significantly reduce the risk of nuclear war, including the proposal contained in the United Nations Millennium Declaration for convening an international conference to identify ways of eliminating nuclear dangers, and to report thereon to the General Assembly at its fifty-sixth session;

6. *Decides* to include in the provisional agenda of the fifty-sixth session the item entitled "Reducing nuclear danger".

55/33R — A path to the total elimination of nuclear weapons

The General Assembly,

Recalling its resolutions 49/75 H of 15 December 1994, 50/70 C of 12 December 1995, 51/45 G of 10 December 1996, 52/38 K of 9 December 1997, 53/77 U of 4 December 1998 and 54/54 D of 1 December 1999,

Recognizing that the enhancement of international peace and security and the promotion of nuclear disarmament mutually complement and strengthen each other,

Reaffirming the crucial importance of the Treaty on the Non-Proliferation of Nuclear Weapons as the cornerstone of the international regime for nuclear non-proliferation and as an essential foundation for the pursuit of nuclear disarmament,

Recalling the progress made by the nuclear-weapon States in the reduction of their nuclear weapons unilaterally or through negotiation, and the efforts made towards nuclear disarmament and non-proliferation by the international community,

Reaffirming the conviction that further advancement in nuclear disarmament will contribute to consolidating the international regime for nuclear non-proliferation, ensuring international peace and security,

Bearing in mind the recent nuclear tests, as well as the regional situations, which pose a challenge to international efforts to strengthen the global regime of non-proliferation of nuclear weapons,

Taking note of the report of the Tokyo Forum for Nuclear Non-Proliferation and Disarmament, bearing in mind the various views of Member States on the report,

Welcoming the successful adoption of the Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, which contains, inter alia, an unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals, leading to nuclear disarmament to which all States parties are committed under article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,

1. *Reaffirms* the importance of achieving the universality of the Treaty on the Non-Proliferation of Nuclear Weapons, and calls upon States not parties to the Treaty to accede to it as non-nuclear-weapon States without delay and without conditions;

2. *Also reaffirms* the importance for all States parties to the Treaty on the Non-Proliferation of Nuclear Weapons, to fulfil their obligations under the Treaty;

3. *Stresses* the central importance of taking the following practical steps for the systematic and progressive effort to implement article VI of the Treaty on the Non-Proliferation of Nuclear Weapons, and paragraphs 3 and 4 (c) of the decision on principles and objectives for nuclear non-proliferation and disarmament of the 1995 Review and Extension Conference of the Parties to the Treaty:

(a) The early signature and ratification of the Comprehensive Nuclear-Test-Ban Treaty by all States, especially by those States whose ratification is required for its entry into force, with a view to its early entry into force before 2003, as well as a moratorium on nuclear-weapon-test explosions or any other nuclear explosions pending its entry into force;

(b) The immediate commencement of negotiations in the Conference on Disarmament and the conclusion as early as possible before 2005 of a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices, in accordance with the report of the Special Coordinator of 1995 and the mandate contained therein, taking into consideration both nuclear disarmament and non-proliferation objectives and, pending its entry into force, a moratorium on the production of fissile material for nuclear weapons;

(c) The establishment of an appropriate subsidiary body of the Conference on Disarmament in the context of establishing a programme of work, with a mandate to deal with nuclear disarmament;

(d) The inclusion of the principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures;

(e) The early entry into force and full implementation of the Treaty on Further Reduction and Limitation of Strategic Offensive Arms (START II) and the conclusion of START III as soon as possible, while preserving and strengthening the Treaty on the Limitation of Anti-Ballistic Missile Systems of 26 May 1972 between the United States of America and the Union of Soviet Socialist Republics as a cornerstone of strategic stability and as a basis for further reductions of strategic offensive weapons, in accordance with its provisions;

(f) Steps by all nuclear-weapon States leading to nuclear disarmament in a way that promotes international stability, and based on the principle of undiminished security for all:

(i) Further efforts by all nuclear-weapon States to continue to reduce their nuclear arsenals, unilaterally or through negotiation;

(ii) Increased transparency by the nuclear-weapon States with regard to the nuclear weapons capabilities and the implementation of agreements pursuant to article VI of the Treaty on the Non-Proliferation of Nuclear Weapons and as voluntary confidence-building measures to support further progress in nuclear disarmament;

- (iii) The further reduction of non-strategic nuclear weapons, based on unilateral initiatives and as an integral part of the nuclear arms reduction and disarmament process;
- (iv) Concrete agreed measures to further reduce the operational status of nuclear weapons systems;
- (v) A diminishing role for nuclear weapons in security policies so as to minimize the risk that these weapons will ever be used and to facilitate the process of their total elimination;
- (vi) The engagement, as soon as appropriate, of all nuclear-weapon States in the process leading to the total elimination of their nuclear weapons;

4. *Recognizes* that the realization of a world free of nuclear weapons will require further steps by the nuclear-weapon States, including:

- (a) The continuation of the nuclear disarmament process beyond START III;
- (b) Deeper reductions by all nuclear-weapon States, unilaterally or through negotiation, in nuclear weapons in the process of working towards their elimination;

5. *Invites* the nuclear-weapon States to keep the States Members of the United Nations duly informed of the progress or efforts made towards nuclear disarmament;

6. *Welcomes* the ongoing efforts in the dismantlement of nuclear weapons, notes the importance of the safe and effective management of the resultant fissile materials and calls for arrangements by all nuclear-weapon States to place, as soon as practicable, the fissile material designated by each of them as no longer required for military purposes under the International Atomic Energy Agency or other relevant international verification arrangements for the disposition of such material for peaceful purposes in order to ensure that such material remains permanently outside military programmes;

7. *Stresses* the importance of further development of the verification capabilities, including International Atomic Energy Agency safeguards, that will be required to provide assurance of compliance with nuclear disarmament agreements for the achievement and maintenance of a nuclear-weapon-free world;

8. *Calls upon* all States to redouble their efforts to prevent the proliferation of nuclear and other weapons of mass destruction, including their means of delivery, confirming and strengthening, if necessary, their policies not to transfer equipment, materials or technology that could contribute to the proliferation of those weapons;

9. *Also calls upon* all States to maintain the highest possible standards of security, safe custody, effective control and physical protection of all materials that could contribute to the proliferation of weapons of mass destruction;

10. *Stresses* the importance of the Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards with a view to enhancing nuclear non-proliferation, and encourages all States which have not done so to conclude an additional protocol with the International Atomic Energy Agency as soon as possible;

11. *Welcomes* the adoption by the General Conference of the International Atomic Energy Agency on 22 September 2000 of resolution GC(44)/RES/19, which contains elements of a plan of action to promote and facilitate the conclusion and entry into force of safeguards agreements and additional protocols, and calls for the early and full implementation of that resolution;

12. *Encourages* the constructive role played by civil society in promoting nuclear non-proliferation and nuclear disarmament.

55/33S — Mongolia's international security and nuclear-weapon-free status

The General Assembly,

Recalling its resolution 53/77 D of 4 December 1998,

Recalling also the purposes and principles of the Charter of the United Nations as well as the Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations,

Bearing in mind its resolution 49/31 of 9 December 1994 on the protection and security of small States,

Proceeding from the fact that nuclear-weapon-free status is one of the means of ensuring the national security of States,

Convinced that the internationally recognized status of Mongolia will contribute to enhancing stability and confidence-building in the region as well as promote Mongolia's security by strengthening its independence, sovereignty and territorial integrity, the inviolability of its borders and the preservation of its ecological balance,

Welcoming the measures taken to implement resolution 53/77 D at the national and international levels,

Recalling that in the Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, held at United Nations Headquarters from 24 April to 19 May 2000, the Conference welcomed the declaration by Mongolia of its nuclear-weapon-free status and took note of the adoption by the Mongolian parliament of legislation defining and regulating that status,

Taking note of the efforts undertaken by the five nuclear-weapon States and Mongolia to implement the provision of the resolution concerning Mongolia's nuclear-weapon-free status,

Taking note of the joint statement of the five nuclear-weapon States made on 5 October 2000 on security assurances in connection with Mongolia's nuclear-weapon-free status, including their commitment to Mongolia to cooperate in the implementation of General Assembly resolution 53/77 D with respect to Mongolia's nuclear-weapon-free status, in accordance with the principles of the Charter,

Noting that the joint statement has been transmitted to the Security Council by the five nuclear-weapon States,

Welcoming Mongolia's active and positive role in developing peaceful, friendly and mutually beneficial relations with the States of the region and other States,

Having considered the report of the Secretary-General on the implementation of resolution 53/77 D,

1. *Takes note* of the report of the Secretary-General on the implementation of resolution 53/77 D entitled "Mongolia's international security and nuclear-weapon-free status";

2. *Takes note also* of the adoption by the Mongolian parliament of legislation defining and regulating its nuclear-weapon-free status as a concrete step towards promoting the aims of nuclear non-proliferation;

3. *Welcomes* the joint statement of the five nuclear-weapon States providing security assurances to Mongolia in connection with its nuclear-weapon-free status as a contribution to implementing resolution 53/77 D;

4. *Endorses and supports* Mongolia's good-neighbourly and balanced relationship with its neighbours as an important element of strengthening regional peace, security and stability;

5. *Invites* Member States to continue to cooperate with Mongolia in taking the necessary measures to consolidate and strengthen Mongolia's independence, sovereignty and territorial integrity, the inviolability of its borders, its economic security, its ecological balance and its nuclear-weapon-free status, as well as its independent foreign policy;

6. *Appeals* to the Member States of the Asia and Pacific region to support Mongolia's efforts to join the relevant regional security and economic arrangements;

7. *Requests* the Secretary-General and relevant United Nations bodies to continue to provide assistance to Mongolia in taking the necessary measures mentioned in paragraph 5 above;

8. *Requests* the Secretary-General to report to the General Assembly at its fifty-seventh session on the implementation of the present resolution;

9. *Decides* to include in the provisional agenda of its fifty-seventh session an item entitled "Mongolia's international security and nuclear-weapon-free status".

Statement on Security Assurances in Connection with Mongolia's Nuclear-Weapon-Free Status

France, the People's Republic of China, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America,

Welcoming the declaration by Mongolia of its nuclear-weapon-free status,

Taking into account Mongolia's status as a non-nuclear-weapon state party to the Treaty on the Non-Proliferation of Nuclear Weapons, as well as its unique geographic status,

Welcoming Mongolia's policies of developing peaceful, friendly and mutually beneficial relations with the States of the region and other States,

Confirm the following:

1. France, the People's Republic of China, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America reaffirm their commitment to Mongolia to cooperate in the implementation of UN General Assembly resolution 53/77D of December 4, 1998 with respect to Mongolia's Nuclear-Weapon-Free Status, in accordance with the principles of the Charter of the United Nations.

2. France, the People's Republic of China, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America reaffirm their commitment to seek immediate United Nations Security Council action to provide assistance to Mongolia, as a non-nuclear-weapon state party to the Treaty on the Non-Proliferation of Nuclear Weapons, in accordance with the provisions of UN Security Council resolution 984 of April 11, 1995, if Mongolia should become a victim of an act of aggression or an object of a threat of aggression in which nuclear weapons are used.

3. France, the People's Republic of China, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, and the United States of America reaffirm, in the case of Mongolia, their respective unilateral negative security assurances as stated in their declarations issued 5 and 6 April 1995 and referred to in UN Security Council resolution 984 of April 11, 1995.

4. The People's Republic of China and the Russian Federation recall and confirm the legally-binding commitments undertaken by them with respect to Mongolia through the conclusion of bilateral treaties with Mongolia regarding these matters.

55/33T — Nuclear disarmament

The General Assembly,

Recalling its resolution 49/75 E of 15 December 1994 on a step-by-step reduction of the nuclear threat, and its resolutions 50/70 P of 12 December 1995, 51/45 O of 10 December 1996, 52/38 L of 9 December 1997, 53/77 X of 4 December 1998 and 54/54 P of 1 December 1999 on nuclear disarmament,

Reaffirming the commitment of the international community to the goal of the total elimination of nuclear weapons and the establishment of a nuclear-weapon-free world,

Bearing in mind that the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction of 1972 and the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction of 1993 have already established legal regimes on the complete prohibition of biological and chemical weapons, respectively, and determined to achieve a nuclear weapons convention on the prohibition of the development, testing, production, stockpiling, loan, transfer, use and threat of use of nuclear weapons and on their destruction, and to conclude such an international convention at an early date,

Recognizing that there now exist conditions for the establishment of a world free of nuclear weapons;

Bearing in mind paragraph 50 of the Final Document of the Tenth Special Session of the General Assembly, the first special session devoted to disarmament, calling for the urgent negotiation of agreements for the cessation of the qualitative improvement and development of nuclear-weapon systems, and for a comprehensive and phased programme with agreed time-frames, wherever feasible, for the progressive and balanced reduction of nuclear weapons and their means of delivery, leading to their ultimate and complete elimination at the earliest possible time,

Noting the reiteration by the States parties to the Treaty on the Non-Proliferation of Nuclear Weapons of their conviction that the Treaty is a cornerstone of nuclear non-proliferation and nuclear disarmament and the reaffirmation by the States parties of the importance of the decision on strengthening the review process for the Treaty, the decision on principles and objectives for nuclear non-proliferation and disarmament, the decision on the extension of the Treaty and the resolution on the Middle East, adopted by the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,

Reiterating the highest priority accorded to nuclear disarmament in the Final Document of the Tenth Special Session of the General Assembly and by the international community,

Recognizing that the Comprehensive Nuclear-Test-Ban Treaty and any proposed treaty on fissile material for nuclear weapons or other nuclear explosive devices must constitute disarmament measures, and not only non-proliferation measures,

Welcoming the entry into force of the Treaty on the Reduction and Limitation of Strategic Offensive Arms (START I), to which Belarus, Kazakhstan, the Russian Federation, Ukraine and the United States of America are States parties,

Welcoming also the ratification of the Treaty on Further Reduction and Limitation of Strategic Offensive Arms (START II) by the Russian Federation and looking forward to its early entry into force and its full implementation and to an early commencement of START III negotiations,

Noting with appreciation the unilateral measures by the nuclear-weapon States for nuclear arms limitation, and encouraging them to take further such measures,

Recognizing the complementarity of bilateral, plurilateral and multilateral negotiations on nuclear disarmament, and that bilateral negotiations can never replace multilateral negotiations in this respect,

Noting the support expressed in the Conference on Disarmament and in the General Assembly for the elaboration of an international convention to assure non-nuclear-weapon States against the use or threat of use of nuclear weapons, and the multilateral efforts in the Conference on Disarmament to reach agreement on such an international convention at an early date,

Recalling the advisory opinion of the International Court of Justice on the *Legality of the Threat or Use of Nuclear Weapons*, issued on 8 July 1996, and welcoming the unanimous reaffirmation by all Judges of the Court that there exists an obligation for all States to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control,

Mindful of paragraph 114 and other relevant recommendations in the Final Document of the Twelfth Conference of Heads of State or Government of the Non-Aligned Countries, held at Durban, South Africa, from 29 August to 3 September 1998, calling upon the Conference on Disarmament to establish, on a priority basis, an ad hoc committee to commence negotiations in 1998 on a phased programme of nuclear disarmament and for the eventual elimination of nuclear weapons with a specified framework of time,

Recalling paragraph 72 of the Final Document of the Thirteenth Ministerial Conference of the Movement of Non-Aligned Countries, held at Cartagena on 8 and 9 April 2000,

1. *Recognizes* that, in view of recent political developments, the time is now opportune for all the nuclear-weapon States to take effective disarmament measures with a view to the elimination of these weapons;

2. *Also recognizes* that there is a genuine need to diminish the role of nuclear weapons in security policies to minimize the risk that these weapons will ever be used and to facilitate the process of their total elimination;

3. *Urges* the nuclear-weapon States to stop immediately the qualitative improvement, development, production and stockpiling of nuclear warheads and their delivery systems;

4. *Also urges* the nuclear-weapon States, as an interim measure, to de-alert and deactivate immediately their nuclear

weapons and to take other concrete measures to further reduce the operational status of their nuclear weapon systems;

5. *Reiterates its call upon* the nuclear-weapon States to undertake the step-by-step reduction of the nuclear threat and to carry out effective nuclear disarmament measures with a view to the total elimination of these weapons;

6. *Calls upon* the nuclear-weapon States, pending the achievement of the total elimination of nuclear weapons, to agree on an internationally and legally binding instrument on the joint undertaking not to be the first to use nuclear weapons, and calls upon all States to conclude an internationally and legally binding instrument on security assurances of non-use and non-threat of use of nuclear weapons against non-nuclear-weapon States;

7. *Urges* the nuclear-weapon States to commence plurilateral negotiations among themselves at an appropriate stage on further deep reductions of nuclear weapons as an effective measure of nuclear disarmament;

8. *Underlines* the importance of applying the principle of irreversibility to the process of nuclear disarmament, nuclear and other related arms control and reduction measures;

9. *Welcomes* the positive outcome of the 2000 Review Conference of the States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons and the unequivocal undertaking by the nuclear-weapon States, in the Final Document of the Conference, to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament, to which all States parties are committed under article VI of the Treaty, and the reaffirmation by the States parties that the total elimination of nuclear weapons is the only absolute guarantee against the use or threat of use of nuclear weapons, and calls for the full and effective implementation of the steps set out in the Final Document;

10. *Calls* for the immediate commencement of negotiations in the Conference on Disarmament, on a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices on the basis of the report of the Special Coordinator and the mandate contained therein;

11. *Urges* the Conference on Disarmament to agree on a programme of work which includes the immediate commencement of negotiations on such a treaty with a view to their conclusion within five years;

12. *Calls* for the conclusion of an international legal instrument or instruments on adequate security assurances to non-nuclear-weapon States;

13. *Calls* for the early entry into force and strict observance of the Comprehensive Nuclear-Test-Ban Treaty;

14. *Expresses its regret* that the Conference on Disarmament was unable to establish an ad hoc committee on nuclear disarmament at its 2000 session, as called for in General Assembly resolution 54/54 P;

15. *Reiterates its call upon* the Conference on Disarmament to establish, on a priority basis, an ad hoc committee to deal with nuclear disarmament early in 2001 and to commence negotiations on a phased programme of nuclear disarmament leading to the eventual elimination of nuclear weapons;

16. *Calls* for the convening of an international conference on nuclear disarmament in all its aspects at an early date to identify and deal with concrete measures of nuclear disarmament;

17. *Requests* the Secretary-General to submit to the General Assembly at its fifty-sixth session a report on the implementation of the present resolution;

18. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled "Nuclear disarmament".

55/33W — Establishment of a nuclear-weapon-free zone in Central Asia

The General Assembly,

Recalling its resolutions 52/38 S of 9 December 1997 and 53/77 A of 4 December 1998 and its decision 54/417 of 1 December 1999,

Recalling also paragraphs 60, 61, 62 and 64 of the Final Document of the Tenth Special Session of the General Assembly and the provisions of the Treaty on the Non-Proliferation of Nuclear Weapons, and recalling further the relevant paragraphs of the Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons and of the report of its Main Committee II related to the establishment of a nuclear-weapon-free zone in Central Asia,

Convinced that the establishment of nuclear-weapon-free zones is conducive to the achievement of general and complete disarmament,

Emphasizing the importance of internationally recognized agreements on the establishment of nuclear-weapon-free zones in various parts of the world and on the strengthening of the non-proliferation regime,

Welcoming the adoption by the Disarmament Commission at its 1999 substantive session of principles and guidelines for the establishment of nuclear-weapon-free zones on the basis of arrangements freely arrived at among the States of the region concerned,

Believing that the establishment of a nuclear-weapon-free zone in Central Asia on the basis of arrangements freely arrived at among the States of the region, and bearing in mind the specific characteristics of the region, can enhance the security of the States involved and strengthen global and regional peace and security,

Recalling the Almaty Declaration of the heads of State of the Central Asian States of 28 February 1997 on the establishment of a nuclear-weapon-free zone in Central Asia, the statement issued at Tashkent on 15 September 1997 by the Ministers for Foreign Affairs of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan on the establishment of a nuclear-weapon-free zone in Central Asia and the Communiqué of the Consultative Meeting of Experts of the Central Asian Countries, the Nuclear-Weapon States and the United Nations, held at Bishkek on 9 and 10 July 1998, on the elaboration of acceptable ways and means of establishing a nuclear-weapon-free zone in Central Asia,

Reaffirming the universally recognized role of the United Nations in the establishment of nuclear-weapon-free zones,

1. *Notes with appreciation* the support of all States for the initiative to establish a nuclear-weapon-free zone in Central Asia;

2. *Welcomes* the desire of all five States of the Central Asian region to finalize work on the establishment of a nuclear-weapon-free zone in Central Asia and the concrete steps that they have taken to that end to prepare the legal groundwork for the initiative and the progress that they have achieved in this regard;

3. *Calls upon* all five Central Asian States to continue their dialogue with the five nuclear-weapon States on the establishment of a nuclear-weapon-free zone in Central Asia;

4. *Requests* the Secretary-General, within existing resources, to continue to provide assistance to the Central Asian States in the elaboration of an agreement on the establishment of a nuclear-weapon-free zone in Central Asia;

5. *Decides* to continue its consideration of the question of the establishment of a nuclear-weapon-free zone in Central Asia at its fifty-sixth session under the agenda item entitled "General and complete disarmament".

55/33X — Follow-up to the advisory opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons

The General Assembly,

Recalling its resolutions 49/75 K of 15 December 1994, 51/45 M of 10 December 1996, 52/38 O of 9 December 1997, 53/77 W of 4 December 1998 and 54/54 Q of 1 December 1999,

Convinced that the continuing existence of nuclear weapons poses a threat to all humanity and that their use would have catastrophic consequences for all life on Earth, and recognizing that the only defence against a nuclear catastrophe is the total elimination of nuclear weapons and the certainty that they will never be produced again,

Reaffirming the commitment of the international community to the goal of the total elimination of nuclear weapons and the creation of a nuclear-weapon-free world,

Mindful of the solemn obligations of States parties, undertaken in article VI of the Treaty on the Non-Proliferation of Nuclear Weapons, particularly to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament,

Recalling the principles and objectives for nuclear non-proliferation and disarmament adopted at the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons,

Welcoming the unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament,

Recalling also the adoption of the Comprehensive Nuclear-Test-Ban Treaty in its resolution 50/245 of 10 September 1996, and expressing its satisfaction at the increasing number of States that have signed and ratified the Treaty,

Recognizing with satisfaction that the Antarctic Treaty and the treaties of Tlatelolco, Rarotonga, Bangkok and Pelindaba are gradually freeing the entire southern hemisphere and adjacent areas covered by those treaties from nuclear weapons,

Noting the efforts by the States possessing the largest inventories of nuclear weapons to reduce their stockpiles of such weapons through bilateral agreements or arrangements and unilateral decisions, and calling for the intensification of such efforts to accelerate the significant reduction of nuclear-weapon arsenals,

Recognizing the need for a multilaterally negotiated and legally binding instrument to assure non-nuclear-weapon States against the threat or use of nuclear weapons,

Reaffirming the central role of the Conference on Disarmament as the single multilateral disarmament negotiating forum, and regretting the lack of progress in disarmament negotiations, particularly nuclear disarmament, in the Conference on Disarmament during its 2000 session,

Emphasizing the need for the Conference on Disarmament to commence negotiations on a phased programme for the complete elimination of nuclear weapons with a specified framework of time,

Desiring to achieve the objective of a legally binding prohibition of the development, production, testing, deployment, stockpiling, threat or use of nuclear weapons and their destruction under effective international control,

Recalling the advisory opinion of the International Court of Justice on the *Legality of the Threat or Use of Nuclear Weapons*, issued on 8 July 1996,

Taking note of the relevant portions of the note by the Secretary-General relating to the implementation of resolution 54/54 Q,

1. *Underlines once again* the unanimous conclusion of the International Court of Justice that there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control;

2. *Calls once again upon* all States immediately to fulfil that obligation by commencing multilateral negotiations in 2001 leading to an early conclusion of a nuclear weapons convention prohibiting the development, production, testing, deployment, stockpiling, transfer, threat or use of nuclear weapons and providing for their elimination;

3. *Requests* all States to inform the Secretary-General of the efforts and measures they have taken on the implementation of the present resolution and nuclear disarmament, and requests the Secretary-General to apprise the General Assembly of that information at its fifty-sixth session;

4. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled "Follow-up to the advisory opinion of the International Court of Justice on the *Legality of the Threat or Use of Nuclear Weapons*".

55/33Y — The Conference on Disarmament decision (CD/1547) of 11 August 1998 to establish, under item 1

of its agenda entitled "Cessation of the nuclear arms race and nuclear disarmament", an ad hoc committee to negotiate, on the basis of the report of the Special Coordinator (CD/1299) and the mandate contained therein, a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices

The General Assembly,

Recalling its resolutions 48/75 L of 16 December 1993 and 53/77 I of 4 December 1998,

Convinced that a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices would be a significant contribution to nuclear disarmament and nuclear non-proliferation,

Recalling the 1998 report of the Conference on Disarmament, in which, inter alia, the Conference records that, in proceeding to take a decision on this matter, that decision is without prejudice to any further decisions on the establishment of further subsidiary bodies under agenda item 1 and that intensive consultations will be pursued to seek the views of the members of the Conference on Disarmament on appropriate methods and approaches for dealing with agenda item 1, taking into consideration all proposals and views in that respect,

1. *Recalls* the decision by the Conference on Disarmament to establish, under item 1 of its agenda entitled "Cessation of the nuclear arms race and nuclear disarmament", an ad hoc committee which shall negotiate, on the basis of the report of the Special Coordinator and the mandate contained therein, a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices;

2. *Urges* the Conference on Disarmament to agree on a programme of work that includes the immediate commencement of negotiations on such a treaty.

55/34G — Convention on the Prohibition of the Use of Nuclear Weapons

The General Assembly,

Convinced that the use of nuclear weapons poses the most serious threat to the survival of mankind,

Bearing in mind the advisory opinion of the International Court of Justice of 8 July 1996 on the *Legality of the Threat or Use of Nuclear Weapons*,

Convinced that a multilateral, universal and binding agreement prohibiting the use or threat of use of nuclear weapons would contribute to the elimination of the nuclear threat and to the climate for negotiations leading to the ultimate elimination of nuclear weapons, thereby strengthening international peace and security,

Conscious that some steps taken by the Russian Federation and the United States of America towards a reduction of their nuclear weapons and the improvement in the international climate can contribute towards the goal of the complete elimination of nuclear weapons,

Recalling that, in paragraph 58 of the Final Document of the Tenth Special Session of the General Assembly, it is stated that all States should actively participate in efforts to bring about conditions in international relations among States in which a code of peaceful conduct of nations in international affairs could be agreed upon and that would preclude the use or threat of use of nuclear weapons,

Reaffirming that any use of nuclear weapons would be a violation of the Charter of the United Nations and a crime against humanity, as declared in its resolutions 1653 (XVI) of 24 November 1961, 33/71 B of 14 December 1978, 34/83 G of 11 December 1979, 35/152 D of 12 December 1980 and 36/92 I of 9 December 1981,

Determined to achieve an international convention prohibiting the development, production, stockpiling and use of nuclear weapons, leading to their ultimate destruction,

Stressing that an international convention on the prohibition of the use of nuclear weapons would be an important step in a phased programme towards the complete elimination of nuclear weapons, with a specified framework of time,

Noting with regret that the Conference on Disarmament, during its 2000 session, was unable to undertake negotiations on this subject as called for in General Assembly resolution 54/55 D of 1 December 1999,

1. *Reiterates its request* to the Conference on Disarmament to commence negotiations in order to reach agreement on an international convention prohibiting the use or threat of use of nuclear weapons under any circumstances;

2. *Requests* the Conference on Disarmament to report to the General Assembly on the results of those negotiations.

55/35 — Twentieth anniversary of the United Nations Institute for Disarmament Research

The General Assembly,

Recalling its resolution 34/83 M of 11 December 1979, in which it requested the Secretary-General to establish the United Nations Institute for Disarmament Research on the basis of the recommendations contained in the report of the Secretary-General,

Reaffirming its resolution 39/148 H of 17 December 1984, in which it approved the statute of the United Nations Institute for Disarmament Research, renewed the invitation to Governments to consider making voluntary contributions to the Institute and requested the Secretary-General to continue to give the Institute administrative and other support,

Recalling its resolution 45/62 G of 4 December 1990 on the occasion of the tenth anniversary of the Institute,

Considering the continuing need for the international community to have access to independent and in-depth research on security issues and prospects for disarmament, taking note of the report of the Office of Internal Oversight Services on the in-depth evaluation of the disarmament programme, in which the Office indicated the erosion of the value of the United Nations subvention to the Institute in real terms and recommended the development of proposals for alleviating difficulties regarding the current financial and organizational arrangements adopted in implementation of the statute of the Institute and that those proposals be submitted to the General Assembly for consideration at its fifty-fifth session, and having considered the annual report of the Director of the Institute and report of the Advisory Board on Disarmament Matters in its capacity as the Board of Trustees of the Institute, in which hope was expressed that the United Nations subvention to the Institute would be restored to its pre-1996 level and adjusted for inflation,

1. *Welcomes* the twentieth anniversary of the establishment of the United Nations Institute for Disarmament Research;

2. *Recognizes* the importance and high quality of the work of the United Nations Institute for Disarmament Research;

3. *Reiterates* its conviction that the Institute should continue to conduct independent research on problems relating to disarmament and security and to undertake specialized research requiring a high degree of expertise;

4. *Requests* all Member States to consider making financial contributions to the Institute in order to ensure its viability and the quality of its work over the long term;

5. *Recommends* that the Secretary-General seek ways to increase the funding of the Institute, within existing resources.

55/36 — The risk of nuclear proliferation in the Middle East

The General Assembly,

Bearing in mind its relevant resolutions,

Taking note of the relevant resolutions adopted by the General Conference of the International Atomic Energy Agency, the latest of which is resolution GC(44)RES/28, adopted on 22 September 2000,

Cognizant that the proliferation of nuclear weapons in the region of the Middle East would pose a serious threat to international peace and security,

Mindful of the immediate need for placing all nuclear facilities in the region of the Middle East under full-scope safeguards of the International Atomic Energy Agency,

Recalling the decision on principles and objectives for nuclear non-proliferation and disarmament adopted by the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons of 11 May 1995, in which the Conference urged universal adherence to the Treaty as an urgent priority and called upon all States not yet parties to the Treaty to accede to it at the earliest date, particularly those States that operate unsafeguarded nuclear facilities,

Recognizing with satisfaction that, in the Final Document of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, the Conference undertook to make determined efforts towards the achievement of the goal of universality of the Treaty on the Non-Proliferation of Nuclear Weapons, and called upon those remaining States not parties to the Treaty to accede to it, thereby accepting an international legally binding commitment not to acquire nuclear weapons or nuclear explosive devices and to accept International Atomic Energy Agency safeguards on all their nuclear activities, and underlined the necessity of universal adherence to the Treaty and of strict compliance by all parties with their obligations under the Treaty,

Recalling the resolution on the Middle East adopted by the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons on 11 May 1995, in which the Conference noted with concern the continued existence in the Middle East of unsafeguarded nuclear facilities, reaffirmed the importance of the early realization of universal adherence to the Treaty and called upon all States in the Middle East that had not yet done so, without exception, to accede to the Treaty as soon as possible and to place all their nuclear facilities under full-scope International Atomic Energy Agency safeguards,

Noting that Israel remains the only State in the Middle East that has not yet become party to the Treaty on the Non-Proliferation of Nuclear Weapons,

Concerned about the threats posed by the proliferation of nuclear weapons to the security and stability of the Middle East region,

Stressing the importance of taking confidence-building measures, in particular the establishment of a nuclear-weapon-free zone in the Middle East, in order to enhance peace and security in the region and to consolidate the global non-proliferation regime,

Emphasizing the need for all parties directly concerned to consider seriously taking the practical and urgent steps required for the implementation of the proposal to establish a nuclear-weapon-free zone in the region of the Middle East in accordance with the relevant resolutions of the General Assembly and, as a means of promoting this objective, inviting the countries concerned to adhere to the Treaty on the Non-Proliferation of Nuclear Weapons, and pending the establishment of the zone, to agree to place all their nuclear activities under International Atomic Energy Agency safeguards,

Noting that one hundred and sixty States have signed the Comprehensive Nuclear-Test-Ban Treaty, including a number of States in the region,

1. *Welcomes* the conclusions on the Middle East of the 2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons;

2. *Reaffirms* the importance of Israel's accession to the Treaty on the Non-Proliferation of Nuclear Weapons and placement of all its nuclear facilities under comprehensive International Atomic Energy Agency safeguards, in realizing the goal of universal adherence to the Treaty in the Middle East;

3. *Calls upon* that State to accede to the Treaty on the Non-Proliferation of Nuclear Weapons without further delay and not to develop, produce, test or otherwise acquire nuclear weapons, and to renounce possession of nuclear weapons, and to place all its unsafeguarded nuclear facilities under full-scope International Atomic Energy Agency safeguards as an important confidence-building measure among all States of the region and as a step towards enhancing peace and security;

4. *Requests* the Secretary-General to report to the General Assembly at its fifty-sixth session on the implementation of the present resolution;

5. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled “The risk of nuclear proliferation in the Middle East”.

55/39 — Consolidation of the regime established by the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco)

The General Assembly,

Recalling that, in its resolution 1911 (XVIII) of 27 November 1963, it expressed the hope that the States of Latin America would take appropriate measures to conclude a treaty that would prohibit nuclear weapons in Latin America,

Recalling also that, in the same resolution, it voiced its confidence that, once such a treaty was concluded, all States, and in particular the nuclear-weapon States, would lend it their full cooperation for the effective realization of its peaceful aims,

Considering that, in its resolution 2028 (XX) of 19 November 1965, it established the principle of an acceptable balance of mutual responsibilities and obligations between nuclear-weapon States and those that do not possess such weapons,

Recalling that the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco) was opened for signature at Mexico City on 14 February 1967,

Noting with satisfaction the holding on 14 February 1997 of the eleventh special session of the General Conference of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean in commemoration of the thirtieth anniversary of the opening for signature of the Treaty of Tlatelolco,

Recalling that, in its preamble, the Treaty of Tlatelolco states that military denuclearized zones are not an end in themselves but rather a means for achieving general and complete disarmament at a later stage,

Recalling also that, in its resolution 2286 (XXII) of 5 December 1967, it welcomed with special satisfaction the Treaty of Tlatelolco as an event of historic significance in the efforts to prevent the proliferation of nuclear weapons and to promote international peace and security,

Recalling further that in 1990, 1991 and 1992 the General Conference of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean approved and opened for signature a set of amendments to the Treaty of Tlatelolco, with the aim of enabling the full entry into force of that instrument,

Recalling resolution C/E/RES.27 of the Council of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, in which the Council called for the promotion of cooperation and consultations with other nuclear-weapon-free zones,

Noting with satisfaction that the Treaty of Tlatelolco is now in force for thirty-two sovereign States of the region,

Also noting with satisfaction that on 8 November 1999 Nicaragua deposited its instrument of ratification of the amendment to the Treaty of Tlatelolco approved by the General Conference of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean in its resolution 290 (E-VII) of 26 August 1992; that on 8 August 2000 Panama deposited its instrument of accession to the amendments to the Treaty of Tlatelolco approved by the General Conference in its resolutions 267 (E-V) of 3 July 1990, 268 (XII) of 10 May 1991 and 290 (E-VII); and that on 30 August 2000 Ecuador deposited its instrument of ratification of the amendments to the Treaty of Tlatelolco approved by the General Conference in its resolutions 268 (XII) and 290 (E-VII),

Further noting with satisfaction that the amended Treaty of Tlatelolco is fully in force for Argentina, Barbados, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guyana, Jamaica, Mexico, Panama, Paraguay, Peru, Suriname, Uruguay and Venezuela,

1. *Welcomes* the concrete steps taken by some countries of the region during the past year for the consolidation of the regime of military denuclearization established by the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco);

2. *Urges* the countries of the region that have not yet done so to deposit their instruments of ratification of the amendments to the Treaty of Tlatelolco approved by the General Conference of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean in its resolutions 267 (E-V), 268 (XII) and 290 (E-VII);

3. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled ‘Consolidation of the regime established by the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco)’.

55/41 — Comprehensive Nuclear-Test-Ban Treaty

The General Assembly,

Recalling that the Comprehensive Nuclear-Test-Ban Treaty was adopted by its resolution 50/245 of 10 September 1996 and opened for signature on 24 September 1996,

Noting that, by its resolution 54/63 of 1 December 1999, it decided to include in the provisional agenda of its fifty-fifth session the item entitled “Comprehensive Nuclear-Test-Ban Treaty”,

Encouraged by the signing of the Treaty by one hundred and sixty States, including forty-one of the forty-four needed for its entry into force, and welcoming also the ratification of sixty-five States, including thirty of the forty-four needed for its entry into force,

Recalling its endorsement, in resolution 54/63, of the Final Declaration of the Conference on Facilitating the Entry into Force of the Comprehensive Nuclear-Test-Ban Treaty, held at Vienna from 6 to 8 October 1999 to promote the entry into force of the Treaty at the earliest possible date,

1. *Stresses* the importance and urgency of signature and ratification, without delay and without conditions and in accordance with constitutional processes, to achieve the early entry into force of the Comprehensive Nuclear-Test-Ban Treaty;

2. *Welcomes* the contributions by the States signatories to the work of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization, in particular to its efforts to ensure that the Treaty’s verification regime will be capable of meeting the verification requirements of the Treaty upon its entry into force, in accordance with article IV of the Treaty;

3. *Urges* States to maintain their moratoria on nuclear weapons test explosions or any other nuclear explosions, pending the entry into force of the Treaty;

4. *Calls upon* all States that have not yet signed the Treaty to sign and ratify it as soon as possible and to refrain from acts that would defeat its object and purpose in the meanwhile;

5. *Calls upon* all States that have signed but not yet ratified the Treaty, in particular those whose ratification is needed for its entry into force, to accelerate their ratification processes with a view to their early successful conclusion;

6. *Urges* all States to remain seized of the issue at the highest political level;

7. *Decides* to include in the provisional agenda of its fifty-sixth session the item entitled “Comprehensive Nuclear-Test-Ban Treaty”.

b. Final Communiqué Ministerial meeting of the Defence Planning Committee and the Nuclear Planning Group on 5 December 2000

1. The Defence Planning Committee and Nuclear Planning Group of the North Atlantic Treaty Organisation met in Ministerial Session in Brussels on 5th December 2000.

2. Collective defence planning remains the cornerstone of the Alliance’s ability to provide for the defence and security of its members. Today we reviewed the national defence plans of

Allies for the period 2001-2005 and beyond and have adopted a five-year force plan which addresses the requirements of the future security environment.

3. In reviewing Allies' plans, we paid particular attention to the progress of implementation of the Defence Capabilities Initiative (DCI), launched by Alliance Heads of State and Government at Washington last year. We concluded that the DCI has significantly influenced the future force plans of Allies and we welcomed the efforts underway to improve Alliance capabilities in key capability areas such as provision of strategic sea and airlift, precision guided munitions and further progress in consultation, command and control capabilities. We recognised, however, that it will be some time before Allies have fully developed many of the capabilities highlighted in the DCI, partly reflecting resource constraints. In this context, we also took stock of Allies' defence expenditure plans. We noted that, this year, more Allies project real increases in defence expenditure than was the case last year and that greater emphasis is being put on improvements in the management of defence resources and the potential benefits of multinational, joint and common funding projects as ways to ensure greater cost-effectiveness in providing the military capabilities the Alliance needs. On the other hand, we realise that, in many cases, additional funds appear necessary to achieve the required capability improvements set out in the DCI.

4. We agreed on the need to continue to pursue greater efficiency in defence spending and to ensure that defence spending priorities match identified Alliance requirements. We also agreed to continue to seek the necessary resources to ensure that our forces are properly equipped, manned, trained and supported for the full range of Alliance missions. We will continue to review the success of our efforts, based on a number of important indicators, as part of our regular force planning work.

5. As part of this year's annual defence review we also noted the planned contributions by many Allies to support the European Union Headline Goal, which were announced at the Capabilities Commitment Conference. We expect that the objectives of the Headline Goal and DCI will be mutually reinforcing and will give further impetus to the development of the military capabilities of the countries concerned. Such enhanced capabilities would also strengthen the ability of the Alliance to contribute to ensuring security and stability. For each nation, there is only one set of forces and resources. The possible overlapping of NATO and EU requirements should be addressed and coordinated by the two organisations in a coherent, transparent and consistent way, in order to harmonise those requirements and to review progress in meeting them. In any event the autonomy of NATO and EU institutional decision-making should be fully respected. We will, therefore, continue to take account of commitments made by Allies concerned to other organisations, to the extent that they have consequences for NATO force planning.

6. Against this background, we approved new Ministerial Guidance to provide the framework for NATO and national defence planning in the period until 2008 and beyond. The actions the Alliance had to undertake last year to end the humanitarian crisis in Kosovo, and the instability that still exists in this and other regions, provide a stark reminder of the need for the Alliance to have substantial and robust forces able to react rapidly to emerging crises. The ability and determination of the Alliance to respond to non-Article 5 crises which threaten Euro-Atlantic security are closely linked to its ability and resolve to continue to deter and defend against aggression directed at Allies. The new Ministerial Guidance, therefore,

emphasises the importance of having sufficient forces with the required capabilities for all likely missions, able to deploy quickly and to sustain themselves for as long as required, able to carry out their tasks and protect themselves effectively, and able to operate together effectively with the forces of other nations engaged in the same operations.

7. At our Nuclear Planning Group meeting, we reviewed the status of NATO's nuclear forces and other related issues and activities. We received with appreciation presentations by the United States Secretary of Defense which included further information on U.S.-Russian efforts to establish a Joint Data Exchange Center in Moscow to share information from early warning systems regarding missile launches.

8. We affirmed the continuing validity of the fundamentally political purpose and the principles underpinning the nuclear forces of the Allies as set out in the Alliance's 1999 Strategic Concept. NATO's nuclear forces are a credible and effective element of the Alliance's strategy of preventing war, and they are maintained at the minimum level of sufficiency to preserve peace and stability, and under conditions that meet the highest standards of safety and security. Nuclear forces based in Europe and committed to NATO continue to provide an essential political and military link between the European and North American members of the Alliance.

9. We reaffirmed the continued importance attached by Allies to full implementation of and compliance with international nuclear disarmament and non-proliferation regimes. We confirmed our commitments made at this year's Review Conference on the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and will contribute to carrying forward the conclusions reached there. NATO Allies continue to support the ratification, early entry into force, and full implementation of the Comprehensive Nuclear Test Ban Treaty (CTBT), and remain committed to the immediate commencement and rapid conclusion of negotiations on a non-discriminatory, multilateral and internationally and effectively verifiable and universal Fissile Material Cut-Off Treaty (FMCT).

10. We expressed our full support to the United States and the Russian Federation for an early implementation of START II and for future negotiations on the basis of an agreed START III framework to reduce significantly the number of deployed strategic nuclear warheads of both countries. We also recalled the drastic reductions of NATO's nuclear forces in the new security environment, and renewed our call on Russia to complete the reductions in its non-strategic nuclear weapons stockpile, as pledged in 1991 and 1992 for implementation by the end of the year 2000.

11. We welcomed the resumption of exchanges with the Russian Federation on a range of nuclear weapons issues, under the auspices of the NATO-Russia Permanent Joint Council, and we look forward to further exchanges in the spirit of improved transparency and full reciprocity.

12. At the 1999 Washington Summit, the Alliance agreed to consider options for confidence and security building measures, verification, non-proliferation and arms control and disarmament in the light of overall strategic developments and the reduced salience of nuclear weapons. We received a comprehensive final report on the nuclear elements of this work and endorsed its conclusions, in particular proposals made in the area of confidence and security building measures and increased transparency as a basis for enhanced understanding, trust and cooperation. We commend the High Level Group for this valuable contribution to the overall Alliance work in fulfilling the Summit remit.

ANNEX — Abbreviations of Sources

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

The Programme for Promoting Nuclear Non-Proliferation and the Newsbrief

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

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New York 10016, USA (Tel. 1 (212) 532-3153; Fax. 1 (212) 532 9847) e-mail: bsppnn@bway.net. Those relating to production and distribution should be addressed to John Simpson, Mountbatten Centre for International Studies, University of Southampton, Southampton, SO17 1BJ, United Kingdom (Tel. 023 8059 2522; Fax. 023 8059 3533; international code +44/23) e-mail: ppnn@soton.ac.uk

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