

# PROGRAMME FOR PROMOTING NUCLEAR NON-PROLIFERATION

Number 3

NEWSBRIEF

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## Editorial note

PPNN **Newsbrief** numbers 1 and 2 appeared in March and July 1988, respectively. They contained brief introductions to the Programme for Promoting Nuclear Non-Proliferation (PPNN), under whose auspices the **Newsbrief** is prepared, and outlined the purposes of this publication. For the benefit of readers who are not yet acquainted with the Programme or with the **Newsbrief** this information is reproduced in an Annex to this issue.

The **Newsbrief** is a communication from the chairman of the Core Group of the Programme for Promoting Nuclear Non-Proliferation to the members of that Group, which is also distributed to other persons who are presumed to be interested in the topics covered in it. The Group's chairman is responsible for its contents and, unless expressly stated, the inclusion of any item in the **Newsbrief** does not imply the agreement of the members of the Core Group collectively or individually with its substance or with its relevance to the Programme.

The **Newsbrief** seeks to present topical news items on all aspects of nuclear non-proliferation, including references to actual or potential moves towards proliferation. It aims to do so as objectively as possible, reflecting information made public by reputable sources, without commenting on their validity or drawing conclusions. In selecting items for inclusion, the Editor endeavours to give a fair representation of positive as well as of negative developments. Readers who nevertheless find substantive grounds to take issue with any item included in the **Newsbrief** are invited to communicate their comments to the Editor, with a view to publication in a subsequent issue.

## I. Topical developments

### Introductory Remarks

The first **Newsbrief**, published in March 1988, included reports on (non-) proliferation events going back to mid-1987, i.e. the approximate time at which the Programme for Promoting Nuclear Non-Proliferation started its activities. The second issue, which came out in July 1988, covered a period of about seven or eight months, going back to late 1987 and thus overlapping by a few months with the preceding issue. As issues of the **Newsbrief** follow each other in relatively regular progression, the overlap will necessarily become less. Accordingly, the current issue presents items from early summer of this year only. Once again, the Editor wishes to point out that, as in most matters of security policy, current events in the area of nuclear non-proliferation have long histories, of which some general knowledge is required to grasp their full import. It is obviously not possible for a publication of this modest size and scope to attempt to present

the background for all the items reported or even to include references to events going back more than a few months. It is one of the purposes of the periodic bibliography of new publications in the field to give information on recent books and articles that may help provide a background against which reports on current developments may be judged.

### a. The Present Situation

There are reports about some further progress in the bilateral negotiations on the reduction of strategic nuclear arms, although it is fast becoming very unlikely that the present United States Administration will still have time to conclude any concrete agreements with the Soviet Union. The relatively smooth manner in which the implementation of the INF Treaty is said to have begun may have contributed to a general improvement of the atmosphere that can also be noticed, *inter alia*, in various multilateral arms control talks. In this context one notes that France is reported to be slowing down modernization of its short-range nuclear arsenal by suspending development of its "Hades" missile. The linkage between nuclear and conventional arms limitation that is recognized more and more also merits special attention.

With regard to verification, the emphasis now seems to be laid increasingly on methods of monitoring, with the principle of on-site inspection obviously having been accepted as axiomatic. Substantial progress is reported from contacts between American and Soviet scientists, with regard to the verification of nuclear testing, indicating that there exist reliable ways to monitor underground explosions down to very low yields. It should be noted, however, that in a report to Congress in late September, the US President expressed scepticism about the prospects and value of setting new limits on nuclear testing and stated that a reduction in the nuclear strategic arsenal would increase the need for nuclear testing. Current attempts to convert the Partial Test Ban Treaty of 1963 to a comprehensive ban on all nuclear tests, which would need the approval of the "Original Parties" (The USSR, UK and USA) may not have much chance of succeeding, but their failure might be felt in the discussions at the next NPT review conference about implementation of Article VI of the Treaty.

The "missile dimension" that has come to figure prominently in the international security picture in recent years has become even more pronounced with the successful launch of Israel's "Horizon" observation satellite and the development by Argentina of a long-range ballistic missile. Concern about the proliferation of a ballistic missile capacity has led to bilateral Soviet-American contacts on this subject and to another round of discussions between those Western nations seeking to establish a Missile Technology Control Regime.

The increasing recourse to the use of chemical warfare agents

in regional as well as in internal conflicts justifies concern not only at the lowering of human standards in modern warfare but also at the possibility that the possession of chemical weapons by one nation may provoke a nuclear reaction on the part of others. The fresh American initiative to strengthen the 1925 Geneva Protocol (prohibiting the use in war of asphyxiating, poisonous and other gases) and the French call for sanctions against users of chemical weapons deserve special mention in this connection.

## b. NPT Events

- On the occasion of the **20th anniversary of the date that the Treaty on the Non-Proliferation of Nuclear Weapons was opened for signature (1 July 1968)**, statements commemorating that fact and reconfirming the importance of the Treaty were made by the Secretary-General of the United Nations; on behalf of the three Depositary States by the Prime Minister of the USSR, the Secretary of State for Foreign and Commonwealth Affairs of the UK and the President of the USA, as well as his Assistant for Press Relations; and by the Nordic Foreign Ministers, the Prime Minister of Australia, the President of Bangladesh, the Canadian Secretary of State for External Affairs, the President of Costa Rica, Cyprus,\* the Czechoslovak Ministry of Foreign Affairs, the Egyptian Foreign Ministry, the Federal Minister of Foreign Affairs of the Federal Republic of Germany, Greece,\* the Foreign Affairs Committee of the Hungarian Parliament, the Government of Ireland, the Foreign Minister of Japan, the Government of Mexico, the Netherlands Ministry of Foreign Affairs, New Zealand's Minister for Disarmament and Arms Control, the Solomon Islands,\* the Spanish Government, Sri Lanka,\* the Swiss Federal Council, Thailand's Ministry of Foreign Affairs, Trinidad and Tobago\* (**IAEA Document INFCIRC 355, Annex**, August 1988).

\* No mention of the authority issuing the statement.

- At a public ceremony in New York on 3 October, 1988, Prince Saud Al-Faisal, the Minister for Foreign Affairs of **Saudi Arabia**, handed his country's instruments of ratification of the NPT to the United States' Secretary of State, Mr. George Shultz. (**Riyadh Daily**, Vol 4, No 113, Wednesday 5th October, 1988 and **US State Department in Washington**, 26 October, 1988).
- On 25 October, 1988, parties to the NPT attending the United Nations General Assembly held an informal meeting at UN Headquarters in New York, during which they decided **inter alia** that the fourth conference of the parties to the NPT to review the Treaty's implementation will be held in August/September 1990. They established an open-ended preparatory committee, which will have its first session from 1 to 5 May, 1989.
- At its series of meetings that started on 14 September 1988, the Board of Governors of the IAEA approved a draft safeguards agreement between the Agency and **Panama**, pursuant to the NPT and the Treaty of Tlatelolco (**IAEA Newsbrief**, Vol 3, no.7).
- Following up on its statement of 21 September 1987, that it was prepared to "commence negotiations with each of the nuclear weapon states on the possibility of signing the non-proliferation treaty", **South Africa**, in July, 1988, informed the USSR, UK and USA that it was prepared to have discussions on this matter in August (**The New York Times**, July 15 and **International Herald Tribune**, July

16, 1988). On 11 and 12 August a South African delegation, including the Ministers of Foreign Affairs and of Economic Affairs and Technology, held talks in Vienna with representatives of the three depositary governments of the NPT. Not having met with "a conformity of view" on "a number of key issues" which it sought to clarify, South Africa also "held wide-ranging discussions" with representatives of some thirty countries from the 5 September 1988 onwards. "It is South Africa's objective and desire to accede to the NPT if [it] could be satisfied that its concerns would be met" (**Communication from the Resident Representative of South Africa to the IAEA**, in document **GC(XXXII)/848, Annex**, of 16 September 1988). Previously, the South African Foreign Minister, in a press conference held on 13 August, had said he did not believe the IAEA's Director General, Dr. Hans Blix, "[wanted] South Africa to be part of the Agency". In a statement issued to **Reuters** on 14 August Dr. Blix pointed out that the talks recently held in Vienna had been between South Africa and the depositary powers, that neither he nor anyone else in the Agency's Secretariat participated in them and that "personally" he "would welcome South African adherence to the NPT". In a **letter dated 20 September 1988** to the President of the IAEA's 32nd General Conference, the Resident Representatives of the USSR, UK and USA stated, **inter alia**: "*The depositaries take a firm and consistent position that South Africa should adhere to the NPT as soon as possible. We understand that the issue of South Africa's accession to NPT remains under consideration by the Government of the Republic of South Africa*". In its closing paragraph the letter expressed the depositaries' resolution to press South Africa further to accede to the NPT (IAEA document **GC(XXXII)/855, Attachment, Annex**). See also para. e, below.

- The Foreign Minister of **Bahrain**, Sheik Mohammed bin Mubarak al Khalifa, recently announced at the UN that his country is to sign the NPT. Bahrain will also become party to the Geneva Protocol on chemical weapons and the Biological Weapons Convention (**Jane's Defence Weekly**, 15 October 1988).

## c. Other Non-Proliferation Developments

- **Brazil**: on 18 August 1988 the National Constitutional Assembly adopted and included in the final draft of the new Brazilian Constitution a clause to the effect that "all nuclear activities on the nation's territory shall be permitted for peaceful purposes only and with the approval of the National Congress" (Amb. Bernardo Pericas Neto, Under-Secretary-General for Multilateral and Special Political Affairs, Ministry of External Relations: **Statement to the Conference on Disarmament**, Geneva, 1 September 1988, and Mr. Rex Nazare Alves, Chairman, National Nuclear Energy Commission: **Statement in Plenary, 32nd General Conference of the IAEA**, Vienna, 20 September 1988).
- **China**: an agreement between the IAEA and the People's Republic of China, for the application of Agency safeguards to some civilian nuclear power facilities in China was signed on 20 September (**IAEA Press Release, PR 88/33**, 20 September 1988).
- **India**: at its series of meetings preceding the General Conference, the IAEA Board of Governors approved an agreement for the application of safeguards in India in relation to the supply of a nuclear power station from the Soviet

Union to India. Under the agreement, spent fuel from the reactors will be returned to the USSR and safeguards on the material will cease when it is retransferred to the Soviet Union (**Nucleonics Week**, Vol. 29, no. 37, September 15, 1988).

- **Latin America:** the Board of Governors further approved an agreement with the **United States of America** for the application of safeguards pursuant to Additional Protocol I of the Tlatelolco Treaty in territories for which, *de jure* or *de facto*, the US are internationally responsible and which lie within the limits of the geographical zone established in that Treaty (**IAEA Newsbrief**, Vol. 3, No. 7, 5 September 1988).

#### d. Nuclear Trade

- **Australia:** at its national convention Australia's ruling Labour Party decided that the Government should no longer permit the sale of uranium to **France** (**Nuclear Engineering International**, July 1988).
- **Egypt:** the Government has renewed its request to three firms for tenders for the construction of a 1,000 MW nuclear power plant at El Dabaa. They are Westinghouse (USA), Siemens AG Kraftwerk Union (FRG) and Framatome (France) (**Nucleonics Week**, June 30, 1988).
- **India:** the current energy crisis has forced the country to make a significant shift from established policy and request foreign countries for assistance in the generation of power. Thus, the USSR will sell India over 6,000 MW of generating capacity, including two 1,000MW nuclear stations (**The Energy Daily**, July 28, 1988).
- **Japan:** the nuclear cooperation agreement with the USA entered into force on 17 July 1988. The agreement, which provides for the shipment of separated plutonium between the two countries, has raised concerns about safety and security, especially in respect of aerial transport of material over American territory (**Nuclear Fuel**, June 27, 1988; press release from **Nuclear Control Institute**, July 17, 1988). Submission for Congressional approval of a subsequent agreement under which the U.S. would give Japan long-term approval to ship plutonium by sea from Europe, in the form of an amendment to the earlier instrument, was reported to be on the way (**Nuclear Fuel**, September 19, 1988). The Japan Atomic Energy Research Institute (JAERI) and the US Arms Control and Disarmament Agency (ACDA) are said to have jointly developed a remote-controlled satellite surveillance system for nuclear material in marine transit (**Atoms in Japan**, June 1988). The reprocessing plant being developed for the Japan Nuclear Fuel Service Company (JNFS), on which construction is scheduled to start in 1991, with the first spent fuel due to arrive in 1994 and operations starting in 1997, will mainly rely on French technology, some use being made also of British and German techniques (**Nuclear Engineering International**, August 1988).
- **Pakistan:** according to Pakistani sources consideration is being given to a French government offer to supply a 900 MW nuclear plant under IAEA safeguards. The deal is said to be contingent on the satisfactory solution of a dispute with **France** over the suspension of the supply of a reprocessing plant in 1978. The dispute is pending before the Court of Arbitration of the International Chamber of Commerce, in Paris (**Nucleonics Week**, August 18, 1988).

- **Romania:** The Nuclear Regulatory Commission of the USA has granted a licence for the export of 16.5 kilograms of high-enriched uranium to serve as fuel for the Triga III research reactor at the Pitesti Nuclear Research Centre in Bucharest (**Nuclear Fuel**, August 22, 1988).

#### e. IAEA Developments

##### 1. Safeguards

- The latest **IAEA Safeguards Implementation Report** states that it is "considered reasonable to conclude that nuclear material under agency safeguards in 1987 remained in peaceful nuclear activities or was otherwise adequately accounted for" (**Nuclear Fuel**, July 11, 1988; **IAEA Press Release** 10 June 1988). Several publications in Europe, including the **Guardian** and **Der Spiegel** have printed reports about the application of safeguards which illustrate how the Safeguards Implementation Report can be misinterpreted by non-experts or people intent on casting doubt about the non-proliferation regime (**IAEA Press Releases** of 10 June and 3 August, 1988).
- According to the IAEA's Director General, the application of the Agency's **safeguards system** is being **hampered** and made unnecessarily costly by the restrictions many States put on inspectors' designations and by the admission procedures. Dr. Blix proposes that safeguards inspectors should be given special passports that would convey an automatic right of entry (**The New York Times**, July 16, 1988). In his **Statement in the Plenary of the 32nd General Conference**, the head of the USSR delegation announced his country's support for the proposal and expressed his readiness to accept IAEA safeguards inspectors without preliminary approval on the condition that they came from countries with which the USSR has diplomatic relations (**IAEA Press Release PR 88/32**, 19 September, 1988).

##### 2. The 32nd General Conference

- The text of a resolution adopted by the General Conference at its 32nd regular session (by 58 votes in favour, 27 against and 4 abstentions, South Africa was not present) postponing until next year's General Conference the decision to suspend South Africa from the exercise of the privileges and rights of membership in the Agency, is included in Section V below.
- The text of a resolution adopted by the General Conference at its 32nd regular session (by 44 votes in favour, 29 against and 11 abstentions - 20 member states being absent) condemning "the repeated refusal by Israel to renounce the possession of nuclear weapons and to submit all its nuclear facilities to the Agency's safeguards ...", asking the Director General to report on the matter and to study "different modalities of application of IAEA safeguards in the region" and deciding to include the item "Israeli nuclear capabilities and threat" in the agenda of the 33rd regular session in 1989 is also included in Section V below.

#### f. Peaceful Nuclear Developments

- **Argentina:** fabrication of slightly enriched uranium fuel elements for use in the pressurized heavy-water reactor Atucha-1 has started. The use of slightly enriched uranium is expected to increase burnup and decrease uranium requirements and running costs of the reactor. The uranium in question was enriched to 0.85% at the (un-

safeguarded) Pilcaniyeu pilot enrichment plant. In the next stage of work Pilcaniyeu is to produce 20% enriched uranium (**Nuclear Fuel**, September 5, 1988).

- **Brazil:** President Sarney has decreed changes in the organization of the country's nuclear sector, under which reactor construction and operation are separated from the fuel cycle and research and development is split off from commercial applications. The separation between the safeguarded and the unsafeguarded programmes, which used to operate in parallel, has also been done away with (**Nucleonics Week**, September 8, 1988).
- **India:** the Nuclear Power Company of India has ordered the initial calandria for a 500 MWe PHWR, the first of six new reactors to be built. The last of the series of 235 MWe reactors should be completed by 1990 and the first of the new generation of reactors, built predominantly by indigenous means, should be ready by 1995 (**Nuclear Engineering International**, July 1988).
- **USA:** plans are being considered to seal the damaged Three Mile Island Unit 2 for 30 years, as soon as the ten-year clean-up of the reactor has been completed, presumably in late 1989 (**The New York Times**, August 29, 1988).

#### g. Developments of Concern for Vertical Proliferation

- **United Kingdom:** three British scientists and an American colleague have confirmed the calculations they published in 1985 that at least 2.3 tonnes of plutonium (plus or minus 0.8 tonne) are missing from the UK civilian plutonium stockpile. They speculate that the plutonium has been used in the nuclear-weapons programme of the UK and/or the USA (**Letter to the Editor of Nature**, 23 June 1988). In an **Associated Press** report quoted in the **Wall Street Journal** of June 24, 1988, a spokeswoman for Britain's Central Electricity Generating Board is cited as saying that the figures are "inaccurate".
- **USA:** the Department of Energy, which is seeking new sources for the production of weapons-grade plutonium and tritium, is proposing to build two new reactors: one heavy-water plant, to be erected at the Department's Savannah River site and a still-to-be-developed high-temperature gas reactor (supposedly graphite-moderated and helium-cooled) at Idaho Falls. Development of the latter plant would be undertaken also with commercial purposes in mind and is being criticized because it blurs the distinction between military and civil nuclear development (**The New York Times**, August 4, 1988; **Nature**, 18 August 1988). The General Accounting Office of the US Congress is of the opinion that the cost of cleaning up radioactive and toxic pollution after the closing of the production reactors at Hanford will greatly exceed the 110 billion dollars estimated by the Department of Energy. The GAO estimates the cost to be \$ 175 billion but this does not include restoring the 17 major and the many smaller sites involved to be used again (**The New York Times**, July 14, 1988). The Department of Energy revealed that in the period between 1957 and 1985 there have been dozens of unpublicized accidents at the five reactors operating at Savannah River for the production of plutonium and tritium (**The New York Times**, October 4, 1988). The Administration has agreed to ACDA's plans to phase out the Reduced Enrichment Research and Training Reactor (RERTR) programme, which would have replaced high-

ly-enriched uranium in research reactors abroad by low-enriched fuel (**Nuclear Fuel**, June 27 and August 22, 1988).

- **USSR/USA:** members of a US team at Semipalatinsk to study techniques of monitoring nuclear test explosions were apprehended trying to ship tools and samples out of the Soviet Union, in contravention of the rules agreed to by both parties. The matter was settled amicably (**Washington Post**, August 12, 1988).
- At the United Nations, **India** proposed that rather than using the fissionable material released as a result of INF in other nuclear weapons, the superpowers should put it under IAEA safeguards for use in peaceful nuclear activities (**The Tribune**, Chandigarh, and **The Statesman**, Calcutta, 21 June 1988).

#### h. Developments of Concern for Horizontal Proliferation

- **Argentina:** the visit of former President Maria Estela "Isabel" Martinez de Peron to Libya has prompted concern in Buenos Aires that the agreement of 1984 between the two countries would be revived if the Peronistas win next year's presidential election (**Nucleonics Week**, September 8, 1988). **Iraq** and **Egypt** are said to be helping Argentina with the construction of a two-stage medium-range rocket, Condor II. The missile would have a range of 4,200-6,200 miles and would be capable of a payload of 770 pounds (**Washington Post**, September 19, 1988). President Alfonsin is reported to have stopped the completion of the first Argentine nuclear submarine. The boat is said to have been virtually ready for launching and waiting for the reactor which was being built at Pilcaniyeu. It was the intention to equip the vessel with an indigenously developed, 500-mile range missile, called "Bigua" (**Sunday Times**, 21 August 1988). The President of Argentina's National Atomic Energy Commission, Emma Perez Ferreira, has denied press reports that there is a project to develop a nuclear submarine propulsion system but an unnamed government official is reported to have said that the government had not ruled out such a project. It is reported that Argentina has carried out a preliminary feasibility study for a submarine LWR (**Nucleonics Week**, August 25, 1988).
- **Egypt:** two Americans (one of them Egyptian-born) and an Egyptian military officer have been arrested in the **United States** and charged with attempting to smuggle missile parts to Egypt (**The New York Times**, September 4, 1988).
- **India:** Rohstoff Einfuhr, a subsidiary of Alfred Hempel GmbH, of the Federal Republic of Germany, is alleged to have diverted more than 15 tons of Norwegian heavy water to India (**The Christian Science Monitor**, July 8, 1988). A five-stage rocket, said to have been intended as the principal vehicle to place satellites into orbit, failed on 13 July. This is reported to have been the second time the launching of a missile of this kind has failed (**The New York Times**, July 14, 1988). "India can produce indigenously all the fissile material it needs for its nuclear program. It ... can separate plutonium from the spent fuel at two unsafeguarded reprocessing plants. India has an annual capacity to produce 180 to 200 kilograms of plutonium, or enough material for 12 to 18 bombs" (**Nuclear Proliferation in South Asia: Containing the Threat. A Staff Report to the Committee on Foreign Relations of the**

**United States Senate, August 1988).** Statement of 5 June by Prime Minister Rajiv Gandhi: "...we do not intend making nuclear weapons. And we will hold ourselves back from developing a nuclear weapon. But the fact is that if Pakistan does have a nuclear weapon, it is going to cause very severe problems for us." (*The Statesman*, Calcutta, 6 June 1988).

- **Iran:** beside the 280 km range Scud-B (R-17E) missile which was obtained from the USSR and is now being produced locally, and the 40 km Oghab that was bought in China, Iran is now producing an indigenously designed missile, the IRAN-130, which is supposed to have a 130 km range. The missile, which has solid-fuel propulsion, is said not yet to have performed to specifications (*Jane's Defence Weekly*, 23 July 1988).
- **Israel:** on 19 September Israel launched a satellite said to be intended for experimental communications purposes but suspected of being a military reconnaissance vehicle. Arab commentators called for joint efforts to develop a similar capability (*The International Herald Tribune*, September 21; *The Christian Science Monitor*, September 22, 1988). Israel and the USA have signed an agreement to share the development costs of the 'Arrow' anti-missile missile (*Jane's Defence Weekly*, 9 July 1988).
- **Pakistan:** "At current levels of operation, Kahuta [Pakistan's enrichment plant, Ed.] may be able to produce enough weapons-grade uranium for one to three explosive devices annually" (*Nuclear Proliferation in South Asia: Containing the Threat. A Staff Report to the Committee on Foreign Relations of the United States Senate*, August 1988). According to Amb. Shah Nawas, Permanent Representative of Pakistan to the United Nations, speaking to the General Assembly during the Third Special Session on Disarmament "Pakistan does not possess nuclear weapons nor does it intend to possess them..." (*Statement Distributed by Permanent Mission of Pakistan to the United Nations, New York, June 13, 1988*).
- **South Africa:** "We have the capability to make [a bomb]. We have the capability to do so should we want to." (Foreign Minister R.F. Botha, quoted in *The New York Times*, August 14, 1988). South Africa's ability to design and produce nuclear weapons is virtually undisputed. Whether or not South Africa has actually assembled weapons, they are capable of doing so quickly. Current estimates of the number of weapons range from 9 to 23 (Michele A. Flournoy and Kurt M. Campbell, "South Africa's Bomb: A Military Option?", *Orbis*, Summer 1988).

## II. PPNN Activities

- The PPNN Core Group will hold its **fourth semi-annual meeting** at the University of Virginia, Charlottesville from 17-20 November 1988. The substantive discussions will be divided into a systematic analysis of matters likely to be raised in the 1990 Review conference; functional questions and regional issues. In the first of these categories, discussion will be initiated by a presentation from Ambassador Jayantha Dhanapala on Article 4 of the NPT. In the second, presentations are scheduled to be made by Jan Murray on The Future of Nuclear Power and the Uranium Market; by Lewis Dunn on Verification Approaches Con-

tained in New Disarmament Agreements and their Potential Impact on IAEA Safeguards and by Leonard S. Spector on the Use of Satellite Verification for Non-Proliferation Purposes. Regional issues will include presentations by Rodney Jones on China and Nuclear Non-Proliferation; by Charles Van Doren on China as a Nuclear Supplier and by Ambassador Richard Butler on the Treaty of Rarotonga. A full report on the meeting will appear in the next edition of the *Newsbrief*.

- The most recent product of the Programme's **Occasional Paper Series** was published in July 1988. This was Occasional Paper Number Two, **Nuclear Submarines and Non-Proliferation: Cause for Concern** by Ben Sanders and John Simpson. **Copies of this paper have been distributed to those on the PPNN mailing list as a matter of course. Persons not on the mailing list who wish to receive a copy, or those who require additional copies should write to John Simpson at the address given on Page 8 of this Newsbrief.**
- Dr Benson Agu represented PPNN at the **International Meeting for Nuclear-Weapon-Free-Zones** held in East Berlin from 20-22nd June 1988. He reports: "The meeting was attended by 1034 enthusiastic delegates from 113 countries. Following the opening speech by the Chairman of the GDR Council of State and General Secretary of the SED Central Committee, Erich Honecker, several world figures that included Nobel Laureates, Heads of State, eminent scientists and politicians addressed the meeting in a day of plenary sessions. Nine Commissions then met separately for a day and a half, each covering different aspects of NWFZs. These included possible steps towards a nuclear-free world; zones of confidence and co-operation; regional conflicts and crisis management; NWFZs and conventional disarmament; verification of NWFZs and nuclear non-proliferation (Ambassador Mohamed Shaker of Egypt, another member of the PPNN Core Group, acted as rapporteur for this group); NWFZs and European Security; the practical lessons of the NWFZs in Latin America and the South Pacific; initiatives for NWFZs in Asia and Africa and denuclearisation, disarmament and development. The conclusions reached by the Commissions were then reported to a closing plenary session. Most of the remarks in the plenary session supported the view that common sense and realism were coming to the fore in international relations and in the quest for peace and security. Several speakers rightly identified NWFZs as regional issues, and I came away with the feeling that both the NPT and IAEA safeguards were perceived as essential confidence building systems without which NWFZs could not function effectively."

## III. Other Non-Governmental Groups Active in Related Areas

**ACCESS: A Security Information Service:** 1730 M Street NW, Suite 605, Washington D.D. 20036.

**ACCESS** is a non-profit clearing-house of information on international security and peace issues, but more particularly it provides details of groups and researchers working in this area. **ACCESS** connects people with questions to people with answers about issues like arms control, regional conflicts and military spending.

#### IV. Some recent books, articles and other materials on Nuclear Non-Proliferation

##### Books:

B. Beit-Hallahmi, **The Israeli Connection**, (New York: Pantheon Books, 1987), 289 pp. (hbk).

A. Ehteshami, **The Nuclearisation of the Middle East**, (London: Gulf Centre for Strategic Studies, 1988), 123 pp. (hbk).

A. Gromyko and M. Hellman, **Breakthrough: Emerging New Thinking**, (New York: Walker and Company, 1988 and London: Fountain Books, 1988), 281 pp. (pbk).

J.W. Lewis and X. Litai, **China Builds the Bomb**, (Stanford, CA.: Stanford University, 1988), 329 pp.

I. Lindahl, **The Soviet Union and the Nordic Nuclear-Weapons-Free-Zone**, (London: The Macmillan Press Ltd., 1988), pp. 227 (hbk).

**The United Nations Disarmament Yearbook**, (New York: United Nations, 1988), 506 pp. (pbk)

##### Articles and other materials:

A. Arbatov and V. Baranovsky, **Stopping Nuclear Tests**, (Washington, D.C.: Novosti Press, 1988), 41 pp.

A. von Baeckmann, "IAEA safeguards in nuclear weapons States", **IAEA Bulletin**, Vol. 30, No. 1, 1988, pp. 22-25.

O.G. Bates, "International SSAC training courses", **IAEA Bulletin**, Vol. 30, No. 1, 1988, pp. 18-21.

B.D. Berkowitz, "Proliferation, deterrence, and the likelihood of nuclear war", **Journal of Conflict Resolution**, Vol. 29, March 1985, pp. 112-136.

C. Buechler, "The future of safeguards under INFCIRC/66/Rev.2", **IAEA Bulletin**, Vol. 30, No.1, 1988, pp. 25-28.

A. Chapman, "The Gas Centrifuge, Uranium Enrichment and Nuclear Proliferation", **Ballrigg Paper on International Security**, No. 10, (Lancaster, England: University of Lancaster, Centre for the Study of Arms Control and International Security).

H. Cobban, "Israel's Nuclear Game", **World Policy Journal**, Summer 1988, pp. 415-433.

W. Donnelly, **Israel's participation in the International Atomic Energy Agency and the 32nd IAEA General Conference: Issue Brief**, Library of Congress, Congressional Research Service.

J. Etinger, "Nuclear-Free Zones and Zones of Peace: the Position of the USSR", **Development and Peace**, Vol. 8, Autumn 1987, pp. 70-78.

D. Fischer, "The Spread of Nuclear Weapons: Hopes and Fears", **Bulletin**, (London: The Council for Arms Control), No. 39, August 1988, pp. 3-4.

M.A. Flournoy and K.M. Campbell, "South Africa's Bomb: A Military Option?", **Orbis**, Summer 1988, pp. 385-401.

V. Goldansky, "'Verification Deterrence' and Nuclear Explosions", **International Affairs (Moscow)**, No. 6, June 1988, pp. 27-35.

J. Goldblat, "What it would take to ban testing", **Bulletin of**

**the Atomic Scientists**, Vol. 44, No. 8, October 1988, pp. 25-27.

D. Hayward, "Hybrid Submarine Technologies", **Arms Control Communiqué**, No. 53, 12 September, 1988, Canadian Centre for Arms Control, Ottawa, Ontario.

"Iran's growing missile forces", **Jane's Defence Weekly**, 23 July, 1988, pp. 126-131.

J. Jennekens, "IAEA safeguards - a 1988 perspective", **IAEA Bulletin**, Vol. 30, No. 1, 1988, pp. 5-7.

"Joint Nuclear Tests Raise Questions About Administration Policy", **Arms Control Today**, October 1988, p. 26.

H. Kurihara, "The role of support programmes in safeguards", **IAEA Bulletin**, Vol. 30, No. 1, 1988, pp. 13-17.

G.D. Moffat, "Modern Missiles Add Twist to Mideast Arms Spiral", **The Christian Science Monitor**, July 15, 1988, pp. 1, 32.

R. Nordland, "The Nuclear Club", **Newsweek**, July 11, 1988, pp. 14-19.

R. Nordland, "The Bombs in the Basement", **Newsweek**, July 11, 1988, pp. 42-45.

C. Norman, "O.T.A. Disputes U.S. Policy on Test Ban", **Science**, June 3, 1988, pp. 1265-6.

"Nuclear Establishments of the Middle East", **Middle East Strategic Studies Quarterly**, (London: Gulf Centre for Strategic Studies Ltd.) Summer 1988, Vol. 1, No. 1, pp. 74-90.

"Nuclear trade and non-proliferation policies: a historical overview", **NEA Newsletter**, Vol. 6, No. 1, Spring 1988, pp. 6-9.

P. Papadimitropoulos, "The Raratonga Treaty: a regional approach to non-proliferation in the South Pacific", **IAEA Bulletin**, Vol. 30, No. 1, 1988, pp. 29-31.

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## V. Documentation

**International Atomic Energy Agency General Conference**

**GC(XXXII)/RES/503 September 1988**

**SOUTH AFRICA'S NUCLEAR CAPABILITIES**

**Resolution adopted during the 312th plenary meeting on 23 September 1988**

**The General Conference**

- a) **Recalling** the recommendation of the Board of Governors to suspend South Africa from the exercise of the privileges and rights of membership as contained in its report GC(XXXI)/807 pursuant to the General Conference resolution GC(XXX)/RES/468,
- b) **Having considered** the annual report of the Agency for 1987 contained in document GC(XXXII)/835, the report by the Director General contained in document GC(XXXII)/844 and the report of the Board of Governors on South Africa's nuclear capabilities contained in document GC(XXXI)/807.
- c) **Stressing** that, despite the requests of the General Conference and the international community, South Africa has persistently violated international law as well as the purposes and principles of the United Nations, upon which the IAEA's activities are based in accordance with Articles III.B.1 and IV.B of the Statute, and
- d) **Stressing** that the acquisition of nuclear weapons capability by the racist regime of South Africa constitutes a very grave danger to international peace and security and in particular jeopardizes the security of African States and increases the danger of the proliferation of nuclear weapons.
  1. **Vehemently condemns** South Africa for its persistent refusal to comply with successive resolutions of the United Nations General Assembly and the General Conference of the IAEA, as well as its refusal to adhere to the principles and purposes

of the United Nations Charter and the Statute of the IAEA;

2. **Resolves** to consider and take a decision on the recommendation of the Board of Governors contained in its report GC(XXXI)/807 to suspend South Africa from the exercise of the privileges and rights of membership in accordance with Article XIX.B of the Statute at the thirty-third regular session of the General Conference;
3. **Requests** the Director General to continue to take all possible measures to ensure the full implementation of resolution GC(XXX)/RES/468 and report to the thirty-third regular session of the General Conference in this regard;
4. **Requests** the Director General to bring this resolution to the attention of the Secretary General of the United Nations; and
5. **Decides** to include in the agenda of the thirty-third regular session of the General Conference an item entitled "South Africa's nuclear capabilities".

**GC(XXXII)/Res/487 September 1988**

**ISRAELI NUCLEAR CAPABILITIES AND THREAT**

**Resolution adopted during the 312th plenary meeting, on 23 September 1988**

**The General Conference**

- a) **Having considered** the agenda item "Israeli nuclear capabilities and threat",
- b) **Having also considered** the Annual Report of the Agency for 1987, and in particular paragraphs 37 and 40,
- c) **Recalling** its resolution GC(XXXI)/RES/470 of 25 September 1987, which demanded that Israel comply with Security Council resolution 487 (1981) and place all its nuclear facilities under IAEA safeguards,
- d) **Taking note** of United Nations General Assembly resolutions on Israeli nuclear armament, the latest of which is resolution 42/44, in which, *inter alia*, the General Assembly requested the IAEA to inform the Secretary-General of the United Nations of any steps Israel may undertake to place its nuclear facilities under IAEA safeguards,
- e) **Bearing in mind** the relevant resolutions of the United Nations General Assembly on the co-operation between South Africa and Israel, particularly in the nuclear field,
- f) **Taking note** of the report of the Director General contained in document GC(XXXII)/849,
- g) **Deeply alarmed** by recent information regarding the possession of nuclear weapons by Israel and the subsequent Israeli actions in this connection, which have substantiated the revealed information,
- h) **Conscious** of the grave consequences that endanger international peace and security as a result of Israel's growing nuclear capabilities and threat,
- i) **Gravely concerned** about Israel's policy of aggression and expansion in the region and its acts of oppression against the Arab people in the Occupied Territories,

which grossly violate international law and the provisions of the Charter of the United Nations,

- j) **Noting with deep regret** that Israel has persistently refused to implement the above resolutions and to renounce the possession of nuclear weapons,
1. **Strongly condemns** the continued refusal by Israel to renounce the possession of nuclear weapons and to submit all its nuclear facilities to the Agency's safeguards in compliance with Security Council resolution 487 (1981);
  2. **Expresses** its deep concern that the growing military nuclear capabilities of Israel greatly endanger peace and security in the region and threaten the non-proliferation regime observed by other States in the region;
  3. **Requests** the Director General once again to consider the implementation by the IAEA of the provisions of the United Nations General Assembly resolutions 41/12, 41/93 and 42/44 which are relevant to the Agency;
  4. **Requests** the Director General to respond to the request of the General Assembly contained in paragraph 6 of its resolution 42/44;
  5. **Also requests** the Director General to continue to report, as appropriate, to the Board of Governors and General Conference on the Israeli nuclear capabilities and threat and on the implementation of this resolution;
  6. **Also requests** the Director General, pending the acceptance by Israel to place all its nuclear facilities under IAEA safeguards, to prepare a technical study on different modalities of application of IAEA safeguards in the region, taking into account the Agency's experience in applying its safeguards.
  7. **Further requests** the Director General to transmit this resolution to the Secretary-General of the United Nations; and
  8. **Decides** to include in the agenda for the thirty-third regular session of the General Conference an item entitled "Israeli nuclear capabilities and threat".

## ANNEX

### The Programme for Promoting Nuclear Non-Proliferation and the Newsbrief

The Programme for Promoting Nuclear Non-Proliferation was established in the Spring of 1987 with the ultimate purpose of helping to strengthen the nuclear non-proliferation regime and with the shorter-term goal of contributing to the success of the fourth review conference of the Non-Proliferation Treaty and of the 1995 conference that will decide on the Treaty's extension. To this end, the Programme provides for the creation of an international, non-governmental and informal system of collecting, exchanging and analysing relevant information which should be brought to the attention of government officials, diplomats, the research community, parliamentarians, non-governmental organisations and the media, so as to help foster among those groups, and particularly among their younger members, a greater interest in, and a deeper knowledge of, the issues involved.

The central element of the Programme for Promoting Nuclear Non-Proliferation is an international networking exercise based on a Core Group of high-level experts from a dozen industrialized and developing nations. These experts give general guidance to the Programme, pool and exchange information on the many different aspects of the question of nuclear (non-) proliferation and make the respective communities of which they form part aware of the need to support the non-proliferation regime and the Treaty. The Core Group meets approximately twice a year. Between meetings they seek to keep in touch, *inter alia*, through the **Newsbrief** which contains information on the work of non-governmental groups in related areas, highlights topical developments of interest to the Programme, features extracts of and references to press reports on relevant issues and draws attention to publications and articles on the topic of nuclear proliferation and on steps that are being taken, or that might be taken, to deter it.

The **Newsbrief** was initially conceived principally as a means of communication from the chairman of the Core Group of the Programme for Promoting Nuclear Non-Proliferation to the members, to acquaint them with developments he considered to be relevant to the aims and activities of the Programme. Given its general nature, however, the Core Group felt that the **Newsbrief** could play a useful part in the outreach effort which constitutes a major element of the Programme. Accordingly, the **Newsbrief** is now addressed to a wider, though still limited, audience of persons not directly involved with the Programme for Promoting Nuclear Non-Proliferation but interested in the subject. It is meant to supply its readers with material that might help them in alerting their respective environments to the issue of nuclear non-proliferation and inform them about developments in that context.

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