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Held at Headquarters, New York, on Thursday, 27 October 1988, at 3 p.m.

President:

Mr. CHAGULA (Vice-President)

(United Republic of Tanzania)

- Report of the International Atomic Energy Agency: [14] (continued)
  - (a) Note by the Secretary-General transmitting the report of the Agency
  - (b) Draft resolution

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In the absence of the President, Mr. Chagula (United Republic of Tanzania), Vice-President, took the Chair.

The meeting was called to order at 3.20 p.m.

AGENDA ITEM 14 (continued)

REPORT OF THE INTERNATIONAL ATOMIC ENERGY AGENCY

- (a) NOTE BY THE SECRETARY-GENERAL TRANSMITTING THE REPORT OF THE AGENCY (A/43/488)
- (b) DRAFT RESOLUTION (A/43/L.17)

The PRESIDENT: I remind representatives that, in accordance with the decision taken this morning, the list of speakers in the debate on this agenda item will be closed today at 4 p.m. I therefore request those representatives wishing to put their names on the list to do so as soon as possible.

I now invite the Director General of the International Atomic Energy Agency, Mr. Hans Blix, to present the report of the Agency for the year 1987.

Mr. BLIX (International Atomic Energy Agency (IAEA)): Many of the speakers in the Assembly's general debate expressed concern about growing regional and global environmental problems, not least the predicted global warming. An examination of the annual report of the International Atomic Energy Agency for the year 1987, which is before the Assembly, will show that a great many techniques with which the IAEA deals help to protect or to monitor the environment. The report the IAEA is invited to submit to the General Assembly next year on the subject of environment and development will document this in detail.

In my statement today I hope I can show that the environmental interest in nuclear power should not be limited to questions concerning rare accidental

releases of radioactivity and the disposal of waste. I submit that our choice of energy policies and the roles that we give to nuclear power and to fossil fuels are of signal importance to our forests and lakes and the atmosphere of the world. It goes without saying that our choice will have an impact on the availability of adequate and reliable energy, an essential engine that drives economic growth.

The emotional and intellectual fall-out from Chernobyl was even more globally spread than the radioactive fall-out, and it has had a considerable impact on public opinion and energy policies. The world picture is heterogeneous, however, and the scepticism vis-à-vis nuclear power that was nurtured by Chernobyl is beginning to be somewhat offset by an increasing awareness of the serious environmental consequences of the current levels of use of fossil fuels. The greenhouse effect of the warming world atmosphere is now seen by scientists and policy-makers as a very real threat, and it is becoming more widely realized that, apart from hydropower, nuclear power is the only source that is now available to generate electricity in the quantities, form and reliability needed without producing any of the greenhouse gases.

During 1987 22 new nuclear-power plants came into operation in the world, bringing the world-wide total to 417 power reactors with 300,000 megawatt capacity in 26 countries. So far this year some 10 new plants have come on line. Of the world's electric energy, 16.2 per cent was produced by nuclear power in 1987, and that figure may be expected to increase to close to 20 per cent - or the same as hydropower - in the mid-1990s. Most of the capacity is in the industrialized countries, but a few developing countries, such as India, the Republic of Korea, Argentina and Brazil, are well ahead in the technology. In some States, such as Japan and Korea, nuclear power programmes are going ahead vigorously, while in

several others strong public opposition has led to stagnation. It is no coincidence that in nations with fast-growing economies there is a fast-growing electric supply system.

It is testimony to the heterogeneous situation that at the time - around 1995 - when Sweden is planning to shut down two power reactors, thus reducing the number of its reactors from 12 to 10, the utility in the Republic of Korea is planning to connect two new plants, numbers 11 and 12, to the electric grid.

It is understandable that Governments do not want to take decisions on new electricity generating capacity in the face of vocal and widespread public opposition. Indeed, so long as there is not an urgent need for new capacity one can allow oneself to be critical not only of nuclear power but also of hydro schemes because of the huge dams that often drastically affect the environment, of coal, oil and gas for their contribution to the greenhouse effect, and of coal and oil for their impact on forests and lakes. One can also allow oneself the hope that conservation measures will further delay the need for new capacity and that, when the need becomes imperative, new and renewable clean sources, such as solar cells, windmills and biomass, will be able to provide significant quantities of electricity.

This has been the situation of many industrialized countries until recently. No decisions have been urgently called for, as the plants which were under construction or decided upon already in the 1970s have sufficed to meet the slower increase in electricity demand which resulted from the recession. However, the capacity which resulted from decisions taken in the past has now been absorbed in many industrialized countries and they will soon have to choose what source to use for producing more electricity or else face the risk that an inadequate electricity supply may put a brake on their economic development.

The first question to examine is: what is the magnitude of our future requirements of energy - in particular, electricity? The second question is: what sources are available to generate this energy? A third question relates to the environmental effects of the different options or mixes of options.

The report of the World Commission on Environment and Development, which the General Assembly has invited organizations of the United Nations system to consider, rightly focuses on energy as one of the crucial issues for sustainable development and examines the three questions I have just mentioned.

The Commission affirms that further growth is indispensable for development and that energy has a crucial role in this respect. It emphasizes the need for energy saving and commends a rather vaguely defined low-energy path, which would offer the world the energy services it will need some 30 to 40 years from now while using only half of the primary energy it now uses. Whatever may be the realism of this thesis, which has regard to a rather distant date, most forecasts point to a demand for more electricity all over the world and to an increased need for both primary energy and electricity in developing countries in the near and intermediate future.

The need for developing countries to increase their energy consumption - for irrigation, for industrialization, for transport - is clear when one considers that

the average per capita consumption of energy in developing countries is just about one eighth of that in the industrialized countries and that their consumption of electricity is about one fourteenth. Let me give some concrete examples. Norway - rich in hydropower - leads with a consumption of 25,000 kilowatt hours per person and year. Through a massive build-up of nuclear power, France has increased its electricity consumption from 3,550 kilowatt hours per person and year in 1973 to 6,000. Italy, which has recently stopped the construction of new nuclear plants and closed a few old ones, consumes 3,000 kilowatt hours per person and year - half the average for industrial countries. Among developing countries, China uses 370 kilowatt hours per person and year; India 232; Indonesia 167; Sudan 48; and Bangladesh 46.

In view of the high figures which I have cited for many countries, we can surely expect that many other countries with a lower consumption will strive to produce much more electricity. I have in mind not only the developing countries, but also industrialized countries. Present trends bear this out.

What sources of new energy can the world have recourse to, in particular to produce electricity?

Fossil fuels - that is, coal, oil and natural gas - will necessarily continue to be used extensively not only for heating and transport, but also for electricity production. Likewise, hydropower will obviously continue to be exploited where it is economically reasonable, but the remaining hydro potential is small in most industrialized countries.

Experience has shown that, with the exception of hydro, new and renewable sources of energy — such as solar, wind and biomass — are not easily harnessed for the large-scale economic production of electricity which will be needed. Clearly, it is desirable that more research and development funds be spent on these sources. They already have their useful niches, but it is fair to say that, with

the exception of hydro, they do not offer significant and viable solutions to the need for increased large-scale electricity generation in the near and intermediate term.

We come, then, to the environmental consequences of the possible options or mixes of options. How are they to influence our choice of energy sources? We must, of course, consider not only effects on the atmosphere, forests, lakes and buildings, but also injury to the health and life of people and flora and fauna, present and future.

The World Commission on Environment and Development really seems at a loss to offer any practical advice that can be used by Governments faced today with a need to expand energy and electricity production. It recognizes the grave environmental consequences of emissions of sulphur dioxide, nitrogen oxides and carbon dioxide from the burning of fossil fuels, but it fails to mention that nuclear power does not give rise to any of these problems. Rather, the Commission points to nuclear waste disposal, the safety of nuclear plants and the risk of the proliferation of nuclear weapons as major problems connected with nuclear power. It clearly does not recommend the nuclear option but concludes only that the

"highest priority must be accorded to research and development on environmentally sound and economically viable alternatives, as well as on means of increasing the safety of nuclear energy." (A/42/427, annex chapter 7, para. 63)

Even more alarmed about the global environmental consequences of the world's current energy uses is the World Conference on the Changing Atmosphere, which was held in Toronto last June under the sponsorship of the Canadian Government and with the support of the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO). One focus of the Conference was the risk of global warming from the emissions of so-called greenhouse gases, notably carbon

dioxide and others resulting from the burning of fossil fuels. The Conference recommended that

"An initial goal should be to reduce CO2 emissions by approximately 20 percent of 1988 levels by the year 2005."

### It suggested that:

"Apart from efficiency measures, the desired reduction will require

(I) switching to lower CO2-emitting fuels; (II, reviewing strategies for the implementation of renewable energy, especially advanced biomass conversion technologies; (III) revisiting the nuclear power option, which lost credibility due to problems related to nuclear safety, radioactive wastes and nuclear-weapons proliferation. If these problems can be solved through improved engineering designs and institutional arrangements, nuclear power could have a role to play in lowering CO2 emissions."

The Toronto Conference, rather like the World Commission on Environment and Development, points to "strategies for the implementation of renewable energy" and singles out "advanced biomass conversion technologies".

When we look to the practical energy policies of Governments around the world today we do not see much reliance on renewable energy sources, biomass or other, to generate the electricity which is increasingly demanded. What we clearly see almost everywhere is an increasing reliance on coal and gas. This is the reality. We are at present heading not for any reduction or levelling out of emissions of carbon dioxide, but for a considerable increase in them.

It is perhaps understandable that the World Commission, drafting its report only one year after the Chernobyl accident, did not say one good word about nuclear power. The Toronto Conference is one nuance more positive and suggests "a revisiting of the nuclear option" on certain conditions.

It is not suggested that nuclear power would be a panacea against the greenhouse effect, or against acid rains or dying forests and lakes, and although the overall safety record of civilian nuclear power is very good - and continuously improving - the risk is never zero. Nor is it to be ignored that the disposal of nuclear waste did not always in the past meet the high standards required in the civilian nuclear sector today. As the IAEA is exclusively concerned with the peaceful uses of nuclear energy, I cannot comment on the recent reports of serious waste and safety problems in the military nuclear sector. I can only say that to the ordinary citizen and to society it does not matter whether radioactivity released is military or civilian. Without ignoring these points, it should be recognized that nuclear power today is one large-scale source of energy which does not give rise to acid rain or any of the greenhouse gases. In Belgium, to take an example, the emissions of sulphur dioxide from power plants decreased from 385,000 tons in 1973 to 204,000 tons in 1983, or by 60 per cent per kilowatt hour produced. This was the result mainly of increased use of nuclear power, but a switch to higher quality fuel oil also contributed.

The problems which the World Commission and the Toronto Conference attribute to nuclear power - safety, waste and proliferation risk - must be examined in an informed and objective manner, and the risks identified must be compared with the risks connected with alternative options. Perhaps the time is ripe for a more thorough examination of environmentally responsible and practical energy policies under United Nations auspices. Let us by all means critically examine how much energy we shall need in the next decades for industrial and social development in industrial as well as in developing countries. To what extent can efficiency gains in energy production and use offset increased needs? Everyone agrees that

conservation is essential. Let us discuss to what extent sulphur dioxide and nitrogen oxide can be eliminated from fossil fuel emissions - and at what cost. Let us examine what contributions to global and regional energy balances renewable sources like solar energy, wind power and biomass can realistically make - and at what cost. How far away is nuclear fusion? To what extent could the problems of sulphur dioxide, nitrogen oxide and carbon dioxide be alleviated by greater use of natural gas and nuclear power? Let us discuss the problems which the World Commission and the Toronto Conference see in nuclear power. Are their concerns justified? Are they susceptible of settlement?

There is no world authority that can adopt energy policy decisions for individual countries and enforce them - however much our global survival might depend on it. The concerted action and mutual accommodation that may be indispensable can only come from common convictions that emerge from a discussion between the world's Governments of energy needs and the economic and environmental consequences of different approaches.

I should like to turn now to the three problems which the World Commission on Environment and Development and the Toronto Conference linked to the use of nuclear power and report to the General Assembly on IAEA activities in these matters.

To help protect man from harmful radiation while making use of radiation for the benefit of man are objectives of the IAEA. The subject of radiation is not well understood by the public. There is a need for more education and factual information. No data in this field are more authoritative than those given by the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). The figures recently published by UNSCEAR are of great interest. Even those who are not familiar with the measurement of radioactive doses in millisieverts will appreciate the relative proportions of the doses we receive. UNSCEAR reports that,

on average, each person in the world annually receives a dose of 2.4 millisieverts from natural sources, now mainly radon. Medical diagnostic activities are estimated to contribute another 1 millisievert, while all activities in the world related to nuclear power give 0.0002 millisievert annually.

UNSCEAR has also specifically assessed the impact of the radioactivity released by the Chernobyl accident. During the first year after the accident the population of Europe, including the European part of the Soviet Union, received on average an additional dose of radiation which corresponds to less than one third of what it receives from natural sources during a year. For the most exposed population in the Byelorussian region, the first year average dose was lower than one year's dose from natural background radiation. These figures on average doses are reassuring and deserve to be made widely known. They should not obscure the tragic fact, however, that individuals and groups which were subjected to high doses in connection with Chernobyl are subject to special risks. Fortunately, the number of these individuals is not high.

While it is important to ascertain and disseminate factual information about radiation, an even more important task is to help work out measures to limit the radiation dose to which man is subject, whether natural as in the case of radon, or man-made as in the case of X-ray examinations and nuclear power operations. The regulations and measures surrounding the operation of nuclear power serve both to keep very low the radiation to which the professional personnel is subjected in normal operations and to prevent accidents which would risk releasing radiation. While national Governments bear the major responsibility for enacting and implementing these rules and measures, those instituted through the IAEA now form a very substantial body of rules, standards, principles and measures which together may be termed an international nuclear safety régime. Some important elements may be mentioned.

The first are the nuclear safety standards. The five codes of practice have been revised to reflect current thinking and the experience gained in accident prevention and management. These codes are not legally bind g but have considerable authority and have been much used in the elaboration of national regulations. It is evidently desirable that national regulations are consistent with nuclear safety standards and Member States have been asked to provide information on this matter, or have in some cases spontaneously informed the Agency thereon.

A second and new element is the set of basic safety principles for nuclear power plants developed by the Agency's International Nuclear Safety Advisory Group. These principles are not regulatory by nature. Rather they establish exacting but realistic safety objectives for existing and future plants. They are based on the premise that safety must never be a static concept, but must develop in the nuclear industry, as it develops in others.

A third element is the service provided by the Agency's Operational Safety Review Teams which, upon request by Governments, visit nuclear plants and review their operational safety. So far, 25 such teams have been sent to 15 Member States. One team has just reviewed a power plant in Japan, and some 12 reviews are requested for the next 12 months, including the first ones in the Soviet Union, China, Hungary, the United Kingdom and Czechoslovakia.

In the current international discussion, the suggestion is not infrequently heard that nuclear power would be more acceptable if new reactors with greater "inherent" - or to use a better word, "passive" - safety were developed. However, if the discussion is to be realistic, we must first take account of the fact that for a rather long time to come the issue of nuclear power safety will be largely identical with the issue of safe operation of the over 400 nuclear power reactors which are already working. That is why an expanding part of the IAEA's activity is devoted to this.

## 'Mr. Blix, TAEA)

This does not mean that the questions of new technical devices further to improve safety in existing plants and of the next generation of nuclear power reactors are uninteresting or neglected. Just as automobiles and aeroplanes are continuously made safer and more reliable through new designs and inventions, the safety technology of nuclear power reactors must also continuously develop. Current power reactor designs tolerate many human errors and much redundance is built into their safety systems. However, this is no reason for neglecting the search for designs which display more "passive" safety. Such designs are, in fact, emerging both as regards the currently dominant types of reactors and in new types of reactors.

The issue of waste disposal has attracted public concern in the recent past, following various reports of illicit exports and dumping of toxic and nuclear wastes in developing countries. In May of this year, the Summit Conference of the Organization of African Unity adopted a resolution which, inter alia, condemned such practices, and requested the IAEA, the United Nations Environment Programme, the Economic Commission for Africa and other concerned organizations to assist African countries to establish apppropriate mechanisms for monitoring and controlling the movement and disposal of nuclear and industrial waste in Africa.

The Agency has no mandate with regard to toxic wastes. The question of nuclear dumping, however, was a subject of discussion at both the IAEA Board of Governors and the General Conference this year. The result was a resolution - which I have been asked to bring to the attention of the Secretary-General of the United Nations - that:

"requests the Director General of the Agency to establish a representative technical working group of experts with the objective of elaborating an internationally agreed code of practice for international transactions involving nuclear wastes."

Obviously, a first basic principle which should govern nuclear waste transactions is that each State generating radioactive waste should ensure that it is disposed of in accordance with acceptable safety standards. The transfer of such waste to any country that lacks the technical or administrative capacity to handle it safely is patently irresponsible, the more so if it occurs without the knowledge and consent of that country.

The Agency has for some time been providing assistance to developing countries in the field of waste management under its Waste Management Advisory Programme and

as part of its technical assistance programme. At the request of one member country, the Agency also sent an expert to determine whether dumped waste actually contained radioactive material. The result was negative. We will, of course, continue to assist member States which have reason to believe that they have been the subject of such dumping and which do not have adequate resources of their own for checking on this. So far, no incident of dumping of radioactive wastes has come to light.

On the larger issue of disposal of radioactive waste, as distinguished from the question of international transactions in wastes, it should be reported first that internationally agreed codes of practice and guides exist for the management and disposal of low and intermediate—level wastes and that an international consensus now also exists on principles for the safe underground disposal of high-level waste.

One of the concerns expressed about nuclear power by the World Commission on Environment and Development is that reliance on this technology may lead to a proliferation of nuclear weapons. The Commission urges that all nations should contribute to the development of a viable non-proliferation régime. The nuclear-weapon States should - and I quote the Commission:

"Deliver on their promise to reduce the number and ultimately eliminate nuclear weapons in their arsenals and the role those weapons play in their strategies. And the non-nuclear-weapon States must co-operate in providing credible assurances that they are not moving towards a nuclear-weapon capability." (A/42/427, annex, chapter 7, para. 43)

The Commission emphasizes the need for credible safeguards.

Most countries outside the five nuclear-weapon States have explicitly renounced nuclear weapons and submitted all the nuclear installations and fissile

material which they may have to IAEA safeguards, in order to create maximum confidence that their nuclear activites serve exclusively peaceful purposes. To suggest, as is sometimes done in the name of non-proliferation, a phasing out of nuclear reactors is to suggest the termination of practically the only activity in this world that is legally committed to exclusively peaceful use and is internationally verified to be so. It is neither a realistic nor a reasonable proposal. Were it to be followed we would scrap electricity-producing nuclear power stations and be stuck with the nuclear weapons – all in the name of non-proliferation. It would certainly seem more appropriate to suggest an expanded acceptance of safeguards and decisive steps to nuclear disarmament. Such steps, which were envisaged in the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) might, indeed, encourage further adherence to non-proliferation, whether under the NPT or other agreements.

Perhaps the present climate of <u>détente</u> allows some optimism. The first missiles have met the chain saws and major new disarmament efforts are under discussion. In the non-proliferation field we can note Spain's adherence to the NPT in 1987 and Saudi Arabia's adherence recently. The TAEA safeguards now cover about 95 per cent of the fissile material and 95 per cent of the nuclear installations in non-nuclear-weapon States. With an agreement recently concluded between China and the TAEA, under which some nuclear facilities in China will be placed under Agency safeguards, all five nuclear-weapon States now experience some safeguards inspection.

Perhaps the new climate will yield results even in more intractable areas. The General Conference of the IAEA concerned itself, last month, with the acceptance of safeguards in South Africa and in Israel.

The question of the establishment of a nuclear-weapon-free zone in the Middle East has been discussed here in the General Assembly. The subject is essentially

a political one. However, such a zone, whether established by treaty or established by the assumption of similar obligations by a group of neighbouring States would require verification. This is a task that may be entrusted to the IAEA. I should mention that the IAEA General Conference adopted a resolution, in September 1987, which urged Israel to place all its nuclear facilities under IAEA safeguards, and requested me this year to prepare a technical study on different modalities of application of IAEA safeguards in the region. Such a study will be prepared in the coming year.

When I addressed the Assembly in October last year, I reported that the South African Government had announced its intention to begin discussions on the signing of the non-proliferation Treaty. Such discussions have taken place in Vienna in August and September this year and it is hoped that South Africa will now adhere to the Treaty and respond positively to the resolutions calling for its acceptance of safeguards. If it does so, the secretariat of the IAEA will be ready to discuss the conclusion of an NPT-type safeguards agreement with the Government of South Africa. In those circumstances, perhaps other States in Africa which have not yet done so will also adhere to the non-proliferation Treaty. In that way a step may be taken towards a nuclear-weapon-free Africa.

Mankind is not threatened by the approximately 420 nuclear power stations which produce energy for our well-being without burdening our atmosphere. It is not these high-tech creations that should be decommissioned, but rather the approximately 50,000 nuclear warheads, whether they are located on land, ships or planes or planned to hang above us in space, as swords of Damocles.

The PRESIDENT: I now call on the representative of Canada, to introduce draft resolution A/43/L.17.

Mr. FORTIER (Canada) (interpretation from French): It gives me great pleasure to open the debate by congratulating the Director General, Mr. Hans Blix, on his statement, which ably set out the priorities and preoccupations of the Agency. Canada also wishes to take this opportunity to commend the Director General for his annual report for 1987, which sets out in clear and concise fashion the Agency's activities in promoting the peaceful uses of nuclear energy. My delegation wishes to reaffirm Canada's strong support for the Agency and its various programmes for the development of nuclear energy for the benefit of all.

The International Atomic Energy Agency (IAEA) plays a crucial role at the centre of international nuclear co-operation. Its safeguards activities are the core of the international non-proliferation régime, without which meaningful co-operation in the peaceful uses of nuclear energy would be impossible. Canada is pleased to note that no anomalies were detected during 1987 which would have indicated the diversion of a significant amount of safeguarded nuclear material.

The twentieth anniversary of the Treaty on the Non-Proliferation of Nuclear Weapons, (NPT) in 1988, should remind us of the Treaty's central importance in preventing nuclear proliferation, facilitating nuclear co-operation for peaceful purposes and encouraging nuclear-weapon reductions. Canada has an abiding commitment to the NPT and attaches particular importance to all States becoming full parties thereto. As we approach the 1990 Review Conference of Parties to the Treaty, the Treaty's role in the strengthening of international peace and co-operation remains essential.

Canada congratulates the Agency and the People's Republic of China on the conclusion of a voluntary-offer safeguards agreement. With this agreement, all the nuclear-weapon States are now covered by voluntary-offer agreements. We believe

this to be an important development. Canada favours the full implementation and extension of such agreements with a view to achieving universal application of IAEA safeguards to all peaceful nuclear activities in all States.

Turning to developments at the recent General Conference, my delegation welcomes the fact that the Director General has attached great importance to sustainable development. The Agency is to be commended for its ongoing activities in matters related to the environment - in particular nuclear safety, radiation protection and nuclear-waste management. World attention is also being focused increasingly on the environmental impact of fossil fuel use, and concern is growing over climatic changes caused by man. In its call for action by Governments and industry, the World Conference on the Changing Atmosphere, held in Toronto in June 1988, recommended "revisiting the nuclear power option", which, it suggested "could have a role to play in lowering carbon dioxide emissions". The Director General has shown the extent to which he is determined that the Agency shall play a full role in current activity in this field. We believe that a review of Agency programmes from the environmental perspective would be of benefit and that it would contribute both to the public acceptance of nuclear power and to the Agency's important role in its promotion.

Canada also welcomed the adoption by consensus at the General Conference of a resolution on the dumping of nuclear wastes. This resolution, the first of its kind adopted in the United Nations system, clearly defines the role of IAEA in this important and topical aspect of nuclear safety.

Canada was pleased to participate in the Diplomatic Conference on the Relationship between the Paris Convention and the Vienna Convention on Civil Liability for Nuclear Damage. The Joint Protocol adopted by the Conference represents a modest improvement in the civil liability régime. My Government believes, however, that the time has come for a study of broader questions relating

to liability, including state liability. The usefulness of a new international instrument should not be excluded from such a study.

As Canada has assumed the chairmanship of the Agency's Board of Governors in Vienna, I have the special honour of introducing, on behalf of Algeria and the German Democratic Republic, the other members of the Bureau, draft resolution in A/43/L.17, entitled "Report of the International Atomic Energy Agency". The draft resolution is the result of close consultation among interested member countries in both Vienna and New York. The draft resolution follows, to a large extent, the format and text of earlier resolutions adopted by the General Assembly under this item, with some additions in both the preambular and the operative parts reflecting recent IAEA nuclear safety activities.

Under operative paragraphs 1 and 2 the General Assembly would take note of the report of the Agency and affirm its confidence in the role of the Agency in the application of nuclear energy for peaceful purposes.

In paragraph 3 of the draft resolution the Assembly

"Urges all States to strive for effective and harmonious international co-operation in carrying out the work of the Agency, pursuant to its statute; in promoting the use of nuclear energy and the application of the necessary measures to strengthen further the safety of nuclear installations and to minimize risks to life, health and the environment; in strengthening technical assistance and co-operation for developing countries; and in ensuring the effectiveness and efficiency of the Agency's safeguards system".

In paragraph 4 the Secretary-General is requested to transmit to the Director General of the Agency the records of the forty-third session of the General Assembly relating to the Agency's activities.

We are confident that, in keeping with our previous tradition, and in view of

(Mr. Fortier, Canada)

the importance of the matters contained in this draft resolution, the General Assembly will adopt it by consensus.

Mr. KENNEDY (United States of America): My delegation wishes to express its strong support for the draft resolution before us regarding the 1987 annual report submitted by the International Atomic Energy Agency (IAEA). As my Government has often stated, IAEA is an organization of critical importance. As demonstrated in its excellent report to the General Assembly, the Agency continues to play a vital role in promoting the peaceful uses of nuclear energy and in fostering international peace and security. We take this opportunity to commend the Director General, Mr. Blix, and the IAEA secretariat for the diligence and commitment they have continuously demonstrated, which have contributed so greatly to the Agency's success.

As we review the report and reflect upon the Agency's accomplishments in 1987 and over the three decades since its establishment, one fact clearly emerges, namely, that the IAEA has provided high quality programme activities to its members on a consistent and long-term basis.

I am certain that many representatives here will agree that the past several years have been challenging ones for the United Nations system. It has been a time of re-examination, a time of questioning, a time to take a closer look at exactly what the system and the United Nations stands for and whether, indeed, it is continuing to serve effectively the interests of all its Members.

We have been pleased to note that much has happened in recent months to restore the confidence of Members in the work of the United Nations and its efforts. Its diplomatic initiatives clearly today are resulting in genuine progress towards peace between Iran and Iraq, in Afghanistan, Angola and the Western Sahara.

These and the many other steps which are on the positive side give us cause for great hope, a reinvigoration of the system. And these events form a useful backdrop against which we can look at the accomplishments of other, perhaps somewhat less visible, bodies of the system, many of which have maintained a solid record of achievement throughout these years. One such organization is the IAEA. It has clearly and consistently served the interests of its members in a wide variety of ways.

In highlighting the importance of the Agency, it may be useful to consider what the world might be like without it. The IAEA maintains an international system of safeguards by which members provide tangible evidence of their commitment to utilize nuclear energy exclusively for peaceful purposes. Rather than restricting nuclear development, the IAEA safeguards system has provided the necessary basis for peaceful nuclear co-operation. That system creates confidence

among nations that transfers of nuclear technology and information will not serve military purposes and thereby undermine international peace and stability. Indeed precisely the opposite. It assures that peace and stability.

In the absence of the extensive and effective safeguards system, suspicion rather than trust could well characterize international nuclear trade. This, in turn, would likely lead to a climate of tension rather than co-operation among States. The IAEA safeguards system could not, I submit, be duplicated by any array of bilateral arrangements or controls. At best, such controls would be a less effective, more costly and confusing patchwork of disparate arrangements. Thus, all Members of the United Nations clearly benefit from the IAEA safeguards system, first, because it fosters peace and security; secondly, because it facilitates co-operation among States for social and economic development and, finally, because it is a cost-effective and efficient means of achieving those ends.

I would ask a similar question as to the Agency's Technical Assistance and Co-operation Programme. Where would we be without the many programmes conducted by the IAEA in support of peaceful nuclear development?

Over the past three decades, we have become increasingly aware of the potential of nuclear technology to aid countries in fields basic to the well-being of mankind: energy production, agriculture and medicine. The IAEA's annual report this year, as it has in the past, makes clear the breadth of the Agency's activities which benefit the developing world in all these fields.

The Agency has assisted countries in all aspects of nuclear power planning and development, from the exploration and mining of uranium resources, to the production of nuclear reactor materials, to the safe operation of plants, and ultimately to the safe disposal of nuclear wastes.

Yet, as extensive as the Agency's nuclear power programme is, requests for assistance in the non-power nuclear technologies represent over 70 per cent of all requests for IAEA technical co-operation. In agriculture, for example, the IAEA implements a variety of programmes to improve crop and animal production. It has assisted countries in developing food irradiation facilities to protect and preserve scarce food resources. In medicine, the IAEA continues to work with Member States to identify better methods for diagnosing and treating diseases - particularly, I would note, cancer - as part of its overall programme devoted to radiotherapy and dosimetry.

Nor should we overlook the wide range of IAEA activities in the physical sciences. Perhaps one of the most important of these is isotope hydrology. This has benefited many developing States in efforts to identify and harness crucial water resources.

Clearly, it is impossible in this forum to detail the Agency's many technical co-operation initiatives. Suffice it to say that the IAEA's work touches, in a very positive way, the lives of many across the globe.

In reflecting upon the Agency's accomplishments, I would also suggest that we should not overlook its work in the area of nuclear safety. As in the fields of safeguards and technical co-operation, we can readily acknowledge the Agency's valuable contributions to the international community.

The Agency's involvement in these areas has become more visible in recent years as a result of Chernobyl and other radiological accidents. But for many years the IAEA has in fact devoted major resources and efforts to promoting nuclear safety. Safety guide-lines have been developed; persons from many nations have been trained in nuclear safety and radiological protection; and a programme of voluntary safety inspections of nuclear facilities has been effectively pursued.

Moreover, the Agency continues to work towards the widest possible adherence and most effective implementation of the two international conventions negotiated in 1986 on early notification and emergency assistance in the event of nuclear accidents. Activities of this kind have helped to make the benefits of safe nuclear energy ever more widely available.

All Members of the United Nations have profited and will continue to profit from the important work of the IAEA, sharing in the benefits of peace and security that it fosters. The IAEA has remained faithful not only to its own statutory mandate but also to the purposes and principles of the United Nations enshrined in its Charter: to maintain international peace and security; to develop friendly relations among nations; and to achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character.

My Government would also wish to note that key to the continued success of the IAEA is its commitment and the commitment of its members to its unique scientific and technical character. The IAEA's work is far too important for its energies to be expended on matters for which it has neither competence nor responsibility. We are pleased, therefore, to note that the Agency's membership has become increasingly alert to the dangers which such diversions might pose for its continued success in the pursuit of its mission. We believe this signals an ever growing awareness of the importance of the IAEA to world peace and development.

In closing, my Government wishes today to commend the International Atomic Energy Agency for its invaluable contribution to a safer, more prosperous and more secure future. The United States pledges its continuing strong support for the work of the IAEA.

Mrs. HYDER (Pakistan): Once again the General Assembly is considering the report of the International Atomic Energy Agency (IAEA), which this year is annexed to a note by the Secretary-General (A/43/488) dated 29 July 1988.

Since its establishment 31 years ago, the Agency has made important contributions to the objective of harnessing nuclear technology for peaceful purposes. It is a matter of great satisfaction for us that, as the embodiment of international efforts to use atomic energy for the well-being of mankind, IAEA has carried out the tasks assigned to it in a thorough and exemplary manner.

I should like to take this opportunity to express our admiration for the dynamic, brilliant and farsighted leadership of Director General Hans Blix and the manner in which he has conducted the affairs of the Agency. His wise guidance and commitment to the goals of the Agency have not only ensured its success but also helped to expand and strengthen the role which it has been called upon to play in the peaceful application of nuclear energy.

Pakistan has always attached great importance to the work of IAEA. As in the case of many other developing countries, we have benefited enormously from our collaboration with the Agency and are deeply appreciative of the co-operation it has extended to us. The Agency provided valuable assistance in the formulation of Pakistan's long-term programme for nuclear power generation necessitated because of the scant non-renewable resources of energy at its disposal. We are grateful for the expertise, support and advice it has rendered to us in this context.

As we approach the twenty-first century, the increasing depletion of fossil fuel resources, the threatening deterioration of our global environment and the gradual but perceptible dangers of an ecological backlash have reinforced the viability of nuclear energy as a safe, clean and reliable alternative. Therefore,

in our collective efforts geared to the socio-economic development of humankind, IAEA will be called upon to play its due and increasingly important role.

According to IAEA's latest report, during 1987 the total installed nuclear power generating capacity world-wide increased by about 8 per cent, reaching 297.9 GW(e) by the end of the year, an increase of 24.6 GW(e) over the previous year. Sixteen per cent of the world's electricity was being generated by nuclear power plants in 1987, with 417 power plants in operation, which, as the IAEA report points out, represents an accumulated operating experience of around 4,600 reactor years. According to the report, 120 nuclear power reactors are under construction. From the gradual expansion of global nuclear power generation capacity, it would be safe to conclude that the Agency should, accordingly, expand its programme for providing assistance for the development of nuclear power.

We commend the IAEA's ongoing efforts to help strengthen infrastructures for the planning, implementation and operation of nuclear power projects in developing countries through interregional and national training courses and technical co-operation projects. The Agency's assistance to developing countries in assessing the role for nuclear power within their national energy plans can and does provide relevant and useful inputs in their long-term strategies for socio-economic development.

The IAEA's contributions in the field of food and agriculture, in connection with nuclear techniques in the domain of medicine and in the sphere of physical sciences deserve special praise. They constitute invaluable inputs of assistance to developing countries. It is, therefore, a matter of constitution for us that the technical assistance programme continues to receive the necessary attention in the activities of the Agency.

Pakistan has always attached importance to the Agency's existing safeguards system, which has demonstrated its reliability and effectiveness in detecting any diversion of nuclear materials to non-peaceful purposes. We have noted from the Director General's report that no anomaly was detected during 1987 which could indicate diversion of nuclear material or misuse of other material and equipment under safeguards. As the Director General has concluded:

"nuclear material under Agency safeguards in 1987 remained in peaceful nuclear activities or was otherwise ... accounted for." (A/43/488, annex, para. 384)

Over the years the imbalance between the funds allocated to technical assistance and those allocated to safeguards activities has been highlighted. While Pakistan supports the Agency's safeguards activities, it must be recognized that it has limitations in this field. It carries out safeguards inspections of nuclear installations, plants and facilities in accordance with the terms of the respective safeguards agreements. It is not equipped or competent to deal with tasks outside its assigned mandate.

It is our earnest hope that the Agency will, in conscnance with its charter and mandate, assign first priority to the promotion of the peaceful uses of nuclear energy. The task is all the more imperative in that the developing countries are faced with increasing resistance from some States in their efforts to acquire technology for the development and advancement of their peaceful energy programmes. The results of the International Conference on the Peaceful Uses of Nuclear Energy only served to underscore the need for the Agency to undertake its activities for the promotion of the peaceful uses of nuclear energy with renewed vigour.

There has been a growing tendency to exploit concern for nuclear safety by restricting greater co-operation in the peaceful uses of nuclear technology. The

need for a more rational and equitable régime covering the various aspects of international co-operation in the peaceful uses of nuclear energy cannot be made an excuse for imposing discriminatory restrictions against the flow of nuclear technology for peaceful purposes. It may be recalled that Pakistan has endeavoured to promote an international agreement prohibiting attacks against all nuclear facilities. Such an agreement could further reinforce measures for nuclear safety. Pakistan would also like to reiterate the need for sharing safety-related information within the framework of the IAEA. We consider it very important, in order to forestall the possibility of future nuclear accidents, which would have a far-reaching and negative impact on the harnessing of nuclear energy for peaceful purposes.

The international community, conscious of the need for peaceful nuclear co-operation, enunciated certain principles through the instrument of this Assembly. These principles, contained in General Assembly resolution 32/50, categorically affirmed that

"All States have the right, in accordance with the principle of sovereign equality, to develop their programme for the peaceful use of nuclear technology for economic and social development, in conformity with their priorities, interests and needs".

The resolution also clearly spelled out that

"All States, without discrimination, should have access to and should be free to acquire nuclear technology, equipment and materials for the peaceful use of nuclear energy".

It is our earnest hope that all States will abide by these principles in order to reverse the negative trends in peaceful co-operation and provide a fillip to the building of nuclear energy crucial to the needs of developing countries.

Pakistan is in a position to join the adoption, by consensus, of the draft resolution on the report of the IAEA.

Mr. ZACHMANN (German Democratic Republic): The delegation of the German Democratic Republic wishes to thank the Director General of the International Atomic Energy Agency (IAEA), Dr. Hans Blix, for his wide-ranging observations in the course of introducing the annual report of the IAEA for 1987. The competence of the Agency in the promotion of international co-operation in the fields of the peaceful uses of nuclear energy in safety, and the prevention of the further spread of nuclear weapons, is highly appreciated in my country. The organization's activities are an impressive illustration of the great potential and benefits inherent in peaceful international co-operation and in the advancement of science and technology as an alternative to their misuse for military purposes.

The past year has been marked by favourable political developments that are of immediate relevance to the activities of the IAEA. The Treaty concluded between the USSR and the United States of America on the elimination of their intermediate—and shorter—range nuclear missiles brought the advent of nuclear disarmament. This must now be followed up with further steps, such as a 50 per cent cut in Soviet and American strategic offensive weapons while strictly observing the anti-ballistic missile Treaty and a comprehensive nuclear—test ban.

The non-proliferation Treaty has been in force for more than 20 years now. The preservation and strengthening of that key instrument in the field of arms limitation and disarmament is a decisive prerequisite for a sustained process of nuclear disarmament expanding to include further categories of arms. universality of that Treaty were achieved, it would be conducive to greater international security and more effective multilateral co-operation in the peaceful uses of nuclear energy. Preparations for the Fourth Review Conference of the non-proliferation Treaty in which my country is actively involved are already under way. We attach special importance to that Conference since it is to lay the groundwork for the extension of the Treaty, which will be up for decision in 1995. The outlook for such an extension is favourable since the basic provisions of the Treaty have come to be generally recognized norms in international relations. German Democratic Republic shares the view of many States which believe that concrete agreements on the nuclear disarmament priorities I mentioned in the beginning would have an exceedingly favourable impact on the results of the forthcoming Review Conference on the non-proliferation Treaty.

Jointly with the great majority of IAEA member States, my country demands that all nuclear activities of South Africa be subjected to IAEA safeguards without delay.

In this connection we welcome the joint statement on the question of the immediate and unqualified accession of South Africa to the non-proliferation Treaty circulated by the depositaries of the Treaty at the thirty-second session of the Agency's General Conference. Those who work together with South Africa in the nuclear field are called upon to bring their influence to bear along these lines. The same holds true for Israel.

The German Democratic Republic attaches great importance to the activities of the Agency in the field of nuclear material safeguards. The latter are closely related to efforts to strengthen the non-proliferation régime and to create an atmosphere of confidence among States. We noted with satisfaction that the annual report states that,

"... the Secretariat... did not detect any anomaly which would indicate the diversion of... safeguarded nuclear material - or the misuse of facilities [or] equipment... subject to safeguards... - for the manufacture of any nuclear weapon, or for any other military purpose, or for the manufacture of any other nuclear explosive device...". (A/43/488, para. 384)

Nevertheless we cannot help pointing to the financial problems the IAEA is facing, notably where its safeguards system is concerned. To enhance the meaningfulness and credibility of IAEA safeguards, my delegation sees the need for all Member States to make their contribution to the growing budget required for these activities. As for the German Democratic Republic, it will continue to live up to its obligations towards the organization.

The 1987 annual report illustrates the wide-ranging efforts of the Agency and its member States to keep strengthening international co-operation in the fields of nuclear safety and radiation protection.

We support the efforts of the IAEA for the implementation of the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the

Case of a Nuclear Accident or Radiological Emergency which have come into force. The essential thing now is expeditiously to increase the number of States parties to these important accords and to underpin them by more detailed regulations. On the basis of article 9 of the Convention on Early Notification, the German Democratic Republic has since 1987 concluded bilateral agreements on the exchange of information in the field of radiation protection with seven countries.

The IAEA works extensively and beneficially in the area of physical protection. Even though the corresponding international Convention has meanwhile entered into force, a number of things remain to be done. First, there is a need for further States to accede to the Convention; secondly, it would be an achievement of great importance if the Convention could be widened to cover nuclear facilities in addition to nuclear material. The German Democratic Republic is ready to take part in activities designed to achieve this with a view to the review conference scheduled for 1992.

The renewal and revision of nuclear safety standards carried out by the Agency and the document on basic safety principles worked out by the International Nuclear Safety Advisory Group are of great benefit to IAEA member States, notably where their national nuclear safety and radiation protection policies are concerned.

The German Democratic Republic welcomes the more expeditious pursuit of the establishment of an international régime for liability for nuclear damage with a transboundary effect. My country took part in the Diplomatic Conference on the adoption of a joint protocol on matters of nuclear liability. At present we are closely studying the question of becoming a party to the Joint Protocol and to the Vienna Convention on the Civil Liability for Nuclear Damage. The working group to be set up by the Agency should look into all cutstanding questions as regards both civil and State liability.

In connection with the current programme of missions of the Operational Safety Review Team, the German Democratic Republic recently informed the IAEA Director General that it was prepared to receive such a mission in 1990.

Of course, the safety of the nuclear energy industry and the industry's future prospects do not depend solely on technological or organizational measures.

Measures for the prevention of attacks on nuclear facilities and for the

prevention of all manifestations of nuclear terrorism are also needed. We hope that the Geneva Conference on Disarmament will react favourably to the readiness of the Director General of IAEA to work out a corresponding study, so that a step may be taken in the direction of an international agreement on the prohibition of armed attacks on nuclear facilities.

The German Democratic Republic will continue to contribute its share to the implementation of the Agency's programme, including that in the area of technical assistance. This applies not only to the funding of the technical assistance programme but also to the provision of equipment and materials, the training of scientists from developing countries, the hosting of study tours and training programmes and the provision of experts.

My delegation would like to express its appreciation to the permanent Representative of Canada for having so ably introduced draft resolution A/43/L.17. As a sponsor of that draft we express the hope that it will be adopted without a vote.

Mr. ZAPOTOCKY (Czechoslovakia) (interpretation from Russian): First, I should like to congratulate the Director General of the International Atomic Energy Agency (IAEA), Mr. Hans Blix, on his statement at this meeting. We have also carefully studied Mr. Blix's statement to the third special session of the General Assembly devoted to Disarmament and his statement to the thirty-second General Conference of the IAEA, in which he gave an analysis of the activities of the Agency during the preceding period and the results achieved in the use of nuclear energy for peaceful purposes to meet economic development needs and maintain ecological balance, in the adoption of measures to ensure greater safety in the use of nuclear installations, and in helping to ensure the non-proliferation of

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nuclear weapons. We have also devoted careful attention to the report of the Agency (A/43/488, annex).

The work of the Agency is taking place today in circumstances which differ from those of the recent past. Positive changes in the international climate, heightened confidence among States and understanding of the common responsibility for the survival of mankind are leading to a strengthening of political and material guarantees that atomic energy will be used solely for peaceful purposes and to meet development needs. Today's conditions highlight more clearly than ever before IAEA's task of ensuring the non-proliferation of nuclear weapons through the application of its system safeguards and, in particular, its efforts to establish the broadest possible and most fruitful co-operation in the use of nuclear energy for peaceful purposes. The Agency is a universally recognized international organization which unites the efforts of States in the area of the peaceful uses of nuclear energy.

This year marked the twentieth anniversary of the signing of the Treaty on the Non-Proliferation of Nuclear Weapons. The practical results of the Treaty have reaffirmed that it is promoting the maintenance of peace and the strengthening of international security. Czechoslovakia supports the universalization of the Treaty and is ready to work actively on the preparations for the forthcoming Fourth Review Conference of the parties to that legal instrument.

We have noted with satisfaction that in carrying out its inspection activities in the period under review, the Agency did not discover any serious violations of States' obligations of the kind to lead it to suspect that there had been misuse of nuclear materials to produce nuclear weapons or other nuclear explosive devices, or for unknown purposes.

Czechoslovakia continues to believe that the activity of the Agency in extending safeguards to nuclear materials is of the highest priority. It believes the Agency's safeguards system to be an important element in efforts to prevent a nuclear war and strengthen peace, confidence and co-operation throughout the world.

We therefore support the proposal of the Director General of the Agency, Mr. Hans Blix, to make use of the Agency's experience in this control activity in carrying out inspection measures in connection with both steps already agreed upon and those which are still being worked out in the area of disarmament.

Czechoslovakia continues to support constructive measures leading to the enhanced effectiveness and the improvement of safeguards system and it is ready to make available its experts and technical means in order to promote the implementation of those measures. At the same, however, we are concerned at trends that have recently emerged indicating that some difficulties and problems may arise in the near future in the activities of the Agency with regard to safeguards. At the present time, specific conceptual changes could be made in the safeguards system in order that in the near future, with an extremely limited increase in its financial resources, the Agency would be able to meet new political demands for control and inspection activities linked to disarmament and the development of the use of nuclear energy.

In that connection, at the thirty-second session of the General Conference of the International Atomic Energy Agency (IAEA) we proposed the introduction of two levels for the inspections system. The first level would be the conducting of large-scale inspections without notification - inspections that, with the help of statistical mechanisms, would be concentrated on the search for possible irregularities. On the second level, if irregularities were detected, careful control by testing and inspection would be carried out in the appropriate area.

We have taken note with great appreciation of the conclusion of a safeguards agreement between the People's Republic of China and the IAEA based on the voluntary offer by the People's Republic of China to place some of its nuclear installations under the IAEA safeguards. So, too, we welcome Spain's adherence to the Treaty on the Non-Proliferation of Nuclear Weapons. Indeed, we should be very pleased to be able to express gratitude to other States as well in this regard, in

particular to those States located at the so-called flash points of our planet.

Like many other countries, we believe that an integral element of non-proliferation is the strengthening of already existing, and the creation of new, nuclear-free zones in various regions of the world. That is precisely the aim of the joint proposal by Czechoslovakia and the German Democratic Republic regarding the establishment of a non-nuclear corridor in Central Europe.

A comprehensive approach to achieving broad international co-operation in the use of nuclear energy for peaceful purposes and the elimination of the nuclear threat is today, in our view, particularly relevant to ensuring the safe development of nuclear energy. A feeling of great responsibility vis-à-vis the activities of the IAEA in this domain led Member States to produce the international Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. Since those vitally important international Conventions were adopted, they have been signed by more than 70 countries, and approximately 30 countries have already ratified them. The process of adherence by new States to those Conventions is actively continuing.

In preparing for the thirty-second session of the General Conference of the IAEA, Czechoslovakia, together with other countries of the socialist community, reached the conclusion that that useful process needed a new impetus. That led, in turn, to a new initiative in support of both Conventions, in the form of resolution GC/XXXII/865 of 22 September 1988. It was introduced by Czechoslovakia and 19 other States and was adopted by consensus, with universal support.

The activity in the field of nuclear energy at the present time has demonstrated that, despite the irreversible successes of that activity and despite its predominantly positive effect, we cannot exclude the possibility of a nuclear

accident or the danger of radiation. In order for the international community as a whole to avert such a potential danger, it is imperative that both of the Conventions to which I have just referred should become universal.

Czechoslovakia is extremely interested in ensuring that the basis for co-operation laid down in those two Conventions continues to develop and expands through both bilateral and multilateral relations. That is why Czechoslovakia was one of the initiators in the preparation of agreements between the countries members of the Council for Mutual Economic Assistance (CMEA) in regard to notification of nuclear accidents and mutual assistance. Those agreements should be signed in the near future. There has also been good progress in the work on agreements between Czechoslovakia and the Federal Republic of Germany that will regulate relations in the development of nuclear energy in our two neighbouring States.

We have been extremely open in giving our Austrian partners information regarding Czechoslovak nuclear-power stations, in accordance with the agreemer. concluded between Czechoslovakia and Austria on the regulation of questions of mutual interest linked to nuclear installations. The same can be said of negotiations on the expansion of co-operation that are now under way.

We believe also that the implementation of measures that would prevent various forms of nuclear terrorism should form part of a comprehensive solution to issues of international security. In this connection, we shall welcome the entry into force of the multilateral Convention on the Physical Protection of Nuclear Material. We attach great significance also to the efforts of the IAEA and a

number of its member States to prevent nuclear installations from becoming the targets of armed attacks in which either conventional or nuclear weapons are used.

The activities of the Agency in the sphere of technical assistance and co-operation are, we consider, one of the major areas for the development of the use of nuclear energy for peaceful purposes on a global scale, but particularly in the less developed countries. We therefore support the proposal for the allocation for this purpose of \$42 million in 1988. The fund for technical assistance thus created should, however, be based as usual on the principle of voluntary contributions.

Czechoslovakia plans to organize in our country in 1989 two IAEA training courses, and also to serve as host and give grants to specialists from the developing countries for advanced training in scientific research institutions in Czechoslovakia.

As in past years, Czechoslovakia has paid increased at antion to the field of the non-energy uses of nuclear power. There has been broad development in the application of radio-nuclides in industry and of radio-indicator methods and activated analysis. We are interested in involving the IAEA in research programmes in this field, and we are ready in particular to give the developing countries effective assistance in using radio-nuclide methods in various spheres of the economy.

During past years we have acquired considerable experience in producing equipment for and building and using nuclear-power stations. The necessary technical and legal conditions have been created to ensure their safe use. As has always been the case in the past, the work of Czechoslovak nuclear-power stations is characterized by great stability and by reliable use.

In co-operation with the USSR and other countries of the socialist community, we are beginning work on a project for a modernized nuclear power station with a WWER-1000 reactor of a more sophisticated type, enhanced security against radiation and significantly better economic indicators.

The past year has once again demonstrated that the assessment of the activity of IAEA made in connection with its thirtieth anniversary was fully merited.

I should therefore like to express the gratitude of the Czechoslovak delegation for the work of the Agency over the past year. We should like to express our approval of the constructive approach and initiative of the representatives of IAEA, headed by the General Director, Mr. Blix, as well as of the representatives of the Board of Governors in seeking to resolve a number of the extremely complex issues and problems which faced and continue to face the Agency.

Mrs. BERTRAND (Austria): The General Assembly is once more called upon to deal with the annual report of one of the most prestigious and efficient organizations of the United Nations system, the International Atomic Energy Agency (IAEA). Representing as I do the host country of the Agency and a country that is closely involved in many of its substantive activities — while holding an independent view on the merits and prospects of nuclear power — I should like to take this opportunity to express once more Austria's strong support for the Agency and its confidence in the Agency's able leadership.

Nuclear power, one of the major areas of the activities of IAEA, continues to be a subject of debate and even of controversy. While the number of nuclear-power plants in operation and the share of nuclear power in world electricity production is still increasing, so too is the general concern with regard to the unsolved issues related to nuclear power, such as safety hazards, radioactive waste disposal and physical protection requirements. It is a fact that only a few of those Member States in which nuclear power production is at present an economically viable

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option pursue energy policies aimed at the constant expansion of nuclear power potentials. Other countries have been led by economic or safety considerations to take a more cautious stance, which has led to a freeze or near-freeze in the growth of their nuclear power potential. Still others have committed themselves to a gradual phasing out of nuclear power production and some countries — including Austria — have deliberately withdrawn from the nuclear option.

In addition to the diversity of attitudes towards nuclear power on the governmental level, there is also a diversity of attitudes within countries, so that in several instances government endorsements of nuclear power have met with opposition from important segments of the population.

The General Conference requested the Agency's Board of Governors to continue, as a matter of priority, its consideration of the question of liability for damage arising from a nuclear accident and to convene, in 1989, an open-ended working group to study all aspects of the question of liability for nuclear damage. This obviously includes the important question of State liability for damage arising from nuclear accidents, a question which now, for the first time, has been put on the agenda of a working body reporting to the Agency's Board of Governors. This is an important development indeed. Austria hopes that it will ultimately lead to the elaboration of an international convention on State responsibility for nuclear damage and to the adoption of such a convention under the auspices of the Agency. As was stated in the General Conference, Austria is ready to submit a first draft of such a convention to serve as a basis for further work. Austria firmly believes that it is not only possible to resolve the difficult issue of State liability for nuclear damage through an appropriate instrument, but that it is also timely and necessary to do so.

Our particular interest in the Agency's activities relating to nuclear safety in no way diminishes our interest and involvement in the other activities of the

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Agency, in particular those in the area of non-proliferation safeguards. It is an ongoing achievement of the Agency as a whole, of its management and of its highly specialized staff that it has been possible for the Treaty on the Non-Proliferation of Nuclear Weapons - which was opened for signature 20 years ago - to be implemented on a world-wide basis and in a satisfactory manner. The coming months will see the beginning of the preparations for the Fourth Review Conference of the Parties to the Non-Proliferation Treaty to take place in 1990. Austria trusts that the Agency, with all its experience and prestige, will play an important role in this process.

Mr. FAN Guoxiang (China) (interpretation from Chinese): The Chinese delegation listened with great attention to the statement made by Mr. Blix in presenting the annual report of the International Atomic Energy Agency (IAEA) for 1987. It is clear to us that over the past year, IAEA has done much to promote peaceful uses of nuclear energy. We are pleased to note that IAEA has improved its training programme for developing countries. The three regional plans of co-operation for Asia and the Pacific, Latin America and Africa supported by IAEA are also welcomed by the developing countries.

Progress has also been made on the issues of nuclear energy, nuclear fuel recycling, nuclear safety and protection against radioactivity. Apart from its achievements in the field of technical co-operation, IAEA has made great efforts to strengthen nuclear safeguards and improve administrative management. We support the technical appraisal and the review of policies of technical co-operation carried out by the Secretariat and aimed at greater efficiency and better results. We are confident that IAEA will continue to make further contributions to the promotion of peaceful uses for nuclear energy.

#### (Mr. Fan Guoxiang, China)

The Chinese Government has always followed closely, and supported, the IAEA's work. Although China is a relatively new member of the Agency, it has taken an active part in its activities. It pays its dues, and and makes its contributions for technical assistance, in time and is actively involved in the work of the International Nuclear Safety Advisory Group. After the Chernobyl accident, China actively participated in the drafting of two conventions on nuclear safety, which it later signed and ratified. We have also agreed to and financed a nuclear safety expansion plan. Chinese experts on nuclear safety have worked with others on the revision of the nuclear-safety-standards plan. Or the past year, China, as a host country, and the IAEA have jointly run six training classes and sponsored seven international conferences, especially the tenth meeting of the Working Group on the Plan of Co-operation for Asia and the Pacific, held last April. After this meeting, China and the IAEA will sponsor a series of activities. We are ready develop the relationship of co-operation with the Agency and its other members, both benefiting from it and contributing to it.

In its co-operation with other countries in the nuclear field, China strictly follows a policy of neither standing for, nor encouraging or helping, the development of nuclear weapons by other countries. Guided by this policy, when exporting nuclear materials, and equipment, China requests the receiving country to place them under IAEA safeguards. When importing such materials and equipment China also sees to it that they will be used for peaceful purposes.

In the light of this policy, at IAEA's twenty-ninth plenary session China proclaimed that, when appropriate, it would voluntarily place some of its civil nuclear facilities under IAEA safeguards, and, in fulfilment of that undertaking, it has thereafter conducted consultations with the Agency accordingly. After two rounds of formal negotiations, held in August 1986 and September 1987 respectively China and the IAEA reached an agreement on the safeguards text and signed it

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officially last September. This agreement once again reflects China's devotion to the peaceful uses of nuclear energy and to the international endeavour towards this end. It also demonstrates our support for the two major objectives prescribed in the IAEA's statute - namely, the peaceful use of nuclear energy and its safeguards.

By signing this agreement China will extend its co-operation with the IAEA and its members. In the meantime, the agreement will also create conditions for greater participation by us in the Agency's operational activities in the field of safeguards. China has already recommended experts of its own to work as IAEA inspectors, and will receive Agency inspectors on its own soil. To facilitate implementation of the agreement, China is stepping up the building of state systems of accounting for and controlling nuclear material and is consulting with the Agency on auxiliary arrangements.

In conclusion, the Chinese delegation would like to express its great appreciation of the IAEA's work. We endorse its annual report and support draft resolution A/43/L.17.

Mr. LOZINSKIY (Union of Soviet Socialist Republics) (interpretation from Russian): The Soviet delegation has carefully studied the report of the International Atomic Energy Agency for 1987, presented by the Director-General of the Agency, Mr. Hans Blix, of whose activity we greatly approve. This important document fully reflects the leading role of that unique organization in the comprehensive development of inter-State co-operation in the peaceful uses of nuclear energy and control over the non-proliferation of nuclear weapons.

The Soviet Union views very positively the varied activies of the IAEA and its effective response to the emergence of new problems. The Agency must be directly involved in finding solutions to such problems, as happened in the case of the accident at the Chernobyl nuclear-power station.

The Agency is now working in conditions brought about by positive changes in the general international climate. The implementation of the Soviet-American Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles has laid down the basis for beginning a process of real disarmament. Progress is being made, though with some difficulty, in working out a treaty on a 50 per cent reduction of Soviet and American strategic offensive weapons, in compliance with the anti-ballistic-missile Treaty. Definite progress has also been made at the current Soviet-American negotiations on the limitation and ultimate cessation of nuclear tests.

The Soviet Union hopes that agreement on effective measures of control and ratification of the Soviet-American Treaties of 1974 and 1976 will be reached in the very near future and that the parties will without delay engage in the consideration of further, more radical, measures to limit the yield and number of nuclear tests pending their total cessation.

On the threshold of the new and historic era of the liberation of mankind from nuclear weapons and other weapons of mass destruction, the IAEA incarnates the peaceful alternative to the military use of nuclear energy. It is the prototype of the international organization of the future, which must guarantee that nuclear weapons will not re-emerge. In that connection we should like to emphasize that the Agency's control machinery and its experience in the area of implementing safeguards could be used broadly in the process of creating political, legal and control machinery to regulate international relations both in the process of nuclear disarmament and in a future nuclear-free and non-violent world.

One of the important conditions necessary for uninterrupted progress in nuclear disarmament is the strengthening of the Treaty on the Non-Proliferation of Nuclear Weapons, the twentieth anniversary of which is being marked this year. The principles laid down in that Treaty are widely recognized and have become fundamental to international law.

In terms of the number of parties adhering to it the Treaty is obviously the broadest international legal document in the area of arms limitation. The objective of ensuring adherence to the Treaty by countries that are not yet parties to it is of the utmost importance. In that connection we should like to mention the nuclear ambitions of South Africa and Israel and emphasize that the adherence of those States to the Treaty is imperative. Strict compliance by all States with the obligations they have undertaken under the Treaty in the area of the non-proliferation of nuclear weapons is of great significance in ensuring comprehensive security.

Another important contribution is the continuation of the work on developing international machinery to ensure the safe development of nuclear energy, including the solution of such questions as the prevention of attacks on nuclear facilities, the prevention of nuclear terrorism and the international legal regulation of responsibility for nuclear damage. In all of those areas the International Atomic Energy Agency has an important contribution to make. We are convinced that the Fourth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, to be held in 1990, will promote a further strengthening of the non-proliferation régime.

The Soviet Union will continue its firm support for the Treaty, which must remain in effect until such time as a nuclear-free and non-violent world has become a reality. It can only be replaced by a comprehensive international treaty on the non-re-emergence of nuclear weapons following their total and definitive elimination.

As the report of the Agency makes clear, and as the Director-General of the Agency noted in his statement, during the period covered by the report the safeguards activities of the Agency have been expanded and the safeguards system has been consistently improved. The safeguards system effectively and reliably

ensures that there will be no diversion of nuclear material from peaceful applications to the production of nuclear weapons. We note with satisfaction that, as in previous years, the secretariat of the Agency did not detect any anomaly that would indicate the diversion of a significant amount of safeguarded nuclear material for the manufacture of any nuclear weapon or for any other military purpose, or for the manufacture of any other nuclear explosive device. The Soviet Union therefore favours the involvement of as many States as possible in the work of IAEA and supports the universal nature of that body.

The Soviet Union is making its contribution to the technical improvement of safeguards within the framework of its national programme for scientific and technical support for IAEA safeguards. In 1988 work was done to implement 40 individual projects in major safeguards areas. To conduct the next cycle of scientific research and experimental design work under that programme, the Soviet Union will allocate 4 million rubles for 1989-1990. In addition, our country has allocated 300,000 rubles as a voluntary contribution to educational programmes concerning safeguards in 1989-1990 to be conducted by the Soviet Union with the participation of IAEA specialists.

We welcome the increase in the Agency's efforts to transmit experience, knowledge, technology and equipment in the area of the peaceful uses of nuclear energ, to the developing countries members of the Agency for their social and economic development. That activity has been promoted by the Agency's orientation towards the implementation of long-term and large-scale technical-assistance projects and co-operation.

The Soviet Union contributes fully and regularly to the Fund for Technical Assistance and Co-operation and, together with the Agency, is conducting activities on the effective use of nuclear energy. The voluntary contribution made by the

USSR in national currency to the IAEA Fund for Technical Assistance and Cc-operation for the coming year has been increased to a sum equivalent to \$US4,238,000.

In 1989 there will also be continued disbursement of the sum allocated by the Soviet Union for additional assistance to States members of the IAEA that are also parties to the Treaty on the Non-Proliferation of Nuclear Weapons. The Soviet delegation would like to associate itself with other delegations that have already expressed their approval of the IAEA report for 1987. We also support the draft resolution introduced by the representative of Canada. We are convinced that the Agency will continue to remain a reliable instrument for organizing international co-operation in the peaceful uses of nuclear energy under the régime for the non-proliferation of nuclear weapons.

Mr. SOULIOTIS (Greece): On behalf of the 12 States members of the European Community, I should like first of all to thank the Director-General of the International Atomic Energy Agency (IAEA) for his annual report on the Agency's work during 1987. I should also like to express appreciation for the comments made by the Director-General in his introductory statement on the main developments that have occurred in the Agency during 1987.

We wish to reaffirm our full support for IAEA's objectives of encouraging and facilitating international co-operation in the use of nuclear energy for peace, health and prosperity throughout the world and in preventing nuclear proliferation. The Agency remains, in our view, the primary international organization for the promotion of the application of nuclear energy for peaceful purposes.

We should like to express our appreciation for the work that has been done to promote the safe use of nuclear energy in some areas of special interest to members

of the European Community. First, we repeat our support for the activities of the IAEA in the Technical Assistance Programme. We are among the major contributors to the Agency's Technical Assistance and Co-operation Programme, and it is our policy to maintain that position despite domestic budgetary problems.

The Agency's Technical Assistance and Co-operation Programme is a useful reminder that, in addition to the power applications of nuclear energy, nuclear techniques are increasingly being used to combat disease and improve human welfare in many parts of the world.

Of significance to us all is the application of nuclear technology in medicine and agriculture. The work in that area is also of special importance to Member States for which the nuclear-power option is still only a distant possibility.

Further, we note with appreciation that the Agency is making a valuable contribution in nuclear research activities in the laboratories in Seibersdorf, Trieste and Monaco - activities in which scientists from both developed and developing countries take an active part. We are convinced that this work is in the long-term interest of all Member States and deserves their full support and encouragement.

We also wish to stress our continuous support to, and interest in, the Agency's activities as regards waste management. These are of importance for the continued utilization of nuclear energy, the protection of the environment and public safety. This work should not be confined to safe storage, but should also cover such matters as transport.

The annual report for 1987 records an increase of about 8 per cent in total world installed nuclear power generating capacity. Twenty-two new plants came on line in nine States members of the Agency, bringing the total to 417 operating nuclear power plants in 26 countries. Within the European Community a third of our electricity is generated by 132 nuclear power reactors. It is thus clear that nuclear power is playing, and will continue to play, a substantial role as a source of energy. Ensuring nuclear safety is recognized in the Statute of IAEA as one of its functions and since the Agency's formation in 1957 it has been an important, integral part of its programme.

We appreciate and support the activities of the Agency in the area of nuclear safety and believe that it is important for the Agency's activities in this field to maintain their momentum. Nuclear energy could not develop without rigorous safety measures, which must be kept under regular review, and the Agency's programmes in this area should be accorded high priority.

Chernobyl clearly showed that a nuclear accident can have trans-boundary effects, and it underlined the vital importance of international co-operation in the nuclear field.

The Agency is playing an essential role in the field of nuclear safety and radiation protection, not only by contributing to the establishment of enhanced safety principles, guides and standards, but also in the way in which it provides a focus for discussion on key subjects.

The entry into force of the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency has been an important step towards improved international co-operation in the field of nuclear safety and radiological protection. The two Conventions have already been signed or ratified by a large number of member States.

It is gratifying that the five Nuclear Safety Standards (NUSS) Codes of Practice have now been reviewed and, where necessary, revised to reflect current thinking and the experience gained in accident prevention and management.

Nuclear safety is primarily a national responsibility, but it also has an international dimension. It is our hope that the acceptance of the updated NUSS-safety standards can help obtain and preserve a high international level of nuclear safety, and that member States will take them into account when elaborating their own national safety requirements.

In this context, we also appreciate the work which has been carried out by the International Nuclear Safety Advisory Group (INSAG) during the past year. The INSAG principles, now completed, show once more that the establishment of INSAG has been very useful.

We should like to express our support for the Agency's Operational Safety Review Team (OSART) programme. Its missions are a good example of the kind of services the Agency can provide to member States in order to secure a high international safety level and a reassurance that strict standards are being

applied in the field of nuclear plant operation. We also welcome the efforts made by the Agency to encourage greater co-operation in the areas of regulatory régimes and legislation.

We should also like to express our appreciation of the efforts put forth within the Agency and other forums to improve the régime governing liability for nuclear damage. We note with satisfaction that the text of the Joint Protocol relating to the application of the Paris Convention on Third Party Liability in the Field of Nuclear Energy and the Vienna Convention on Civil Liability for Nuclear Damage elaborated during the meeting of experts of IAEA and the Nuclear Energy Agency (NEA) of the Organisation for Economic Co-operation and Development in October 1987 was adopted and opened for signature on 21 September 1988.

Having stressed the Agency's work in support of nuclear safety, we wish to underline the importance of the Agency's safeguards activities.

We have noted from the annual report with satisfaction that the Agency has concluded that in 1987 all nuclear material under Agency safeguards continued to be used only in peaceful nuclear activities.

The safeguards system is an essential part of non-proliferation policy, which the European Community and its member States strongly support. The Community and its member States consider it a matter of great importance that the safeguards should be applied as widely as possible in furtherance of the policy of non-proliferation. Therefore, we repeat our appeal to those non-nuclear-weapon States having nuclear facilities which are not under IAEA safeguards to place them under that régime. We also appreciate the fact that the negotiations with China to place some of its civilian nuclear installations under Agency safeguards led to the conclusion of a voluntary offer agreement in September 1988. This means that such safeguards agreements have now been concluded with all five nuclear-weapon States.

In reviewing the Agency's achievements in 1987 I should like, finally, to express our appreciation of the initiation of a project under the auspices of IAEA by the world's four major fusion partners - the European Community, Japan, the United States of America and the Union of Soviet Socialist Republics - for a conceptual design of an international thermonuclear experimental reactor (ITER).

While Member States have expressed their appreciation of the effectiveness of IAEA and underlined the importance of its tasks, major problems threaten its smooth working.

First, we note that not all assessed contributions were paid on time. In our opinion, it is important that the financial regulations of the Agency be respected as international obligations. If they are not, IAEA will not be able to perform in a satisfactory way the important tasks to which I have referred.

Secondly, it is also of great concern to the European Community and its Member States that the Agency has to deal with political issues that are really the responsibility of other forums. This jeopardizes the role of the Agency as an effective instrument for the promotion of co-operation in the peaceful use of nuclear energy.

It is the firm wish of the European Community and its Member States that the close co-operation which exists between them and the Agency in all fields of peaceful nuclear activities should continue to develop successfully.

Mr. MAKAREVITCH (Ukrainian Soviet Socialist Republic) (interpretation from Russian): The delegation of the Ukrainian SSR has read with great interest and satisfaction the report submitted to the General Assembly of the United Nations on the activities of the International Atomic Energy Agency (IAEA) for 1987 and has also heard with the same satisfaction the statement of the Director General of the Agency, Mr. Hans Blix, made at this meeting.

First of all, we should like to express particular gratitude to Mr. Blix for his great personal contribution to the activity of the Agency and also to his colleagues at the IAEA for their positive and effective work. The Ukrainian SSR has a very positive view of the activities of the IAEA, the authoritative international organization which is promoting the comprehensive development of international co-operation in the sphere of the peaceful uses of nuclear energy, control over the non-proliferation of nuclear weapons and the safe use of nuclear energy.

The reality of peaceful alternatives to military uses of nuclear energy is already symbolized for most States by the Treaty on the Non-Proliferation of Nuclear Weapons, which Mikhail Gorbachev called in his article "Reality and Guarantees of a Non-Nuclear World" a universal example of the great responsibility of States. The conclusion of that Treaty was an adequate collective answer by the international community to the threat of further proliferation of nuclear weapons. Special recognition here should be given to the role of the IAEA, to which the Treaty entrusts control functions and which worked out the system of guarantees effectively and reliably ensuring the non-diversion of nuclear materials from peaceful applications to the production of nuclear weapons. That control is being carried out with full respect for the sovereign rights of States and without detriment to the development of their peaceful nuclear activity and international co-operation in the area of the peaceful uses of nuclear energy.

#### (Mr. Makarevitch, Ukrainian SSR)

Therefore, as we see it, there is every reason to use the experience acquired in connection with the IAEA safeguards to work out systems of control for future measures of nuclear disarmament. We believe that a comprehensive strengthening of the non-proliferation régime still remains the highest priority objective of the Agency in limiting the nuclear arms race.

The Treaty on the Non-Proliferation of Nuclear Weapons plays a substantive role in the maintenance of international peace and in particular in building comprehensive international security. Therefore we share the profound concern of the international community regarding the actions of those near-nuclear States which, openly displaying their nuclear ambitions, do not wish to recognize that adherence to the Treaty is the sole option which can be dictated by reason, morality or genuine concern for national and international security.

Our delegation supports the establishment of an international régime for the safe development of nuclear energy and the programme for its creation which was put forward by the Soviet Union in 1986. We also support the working out of a reliable system of measures to prevent attacks on nuclear facilities, steps to prevent nuclear terrorism and the international regulation of responsibility for nuclear damage.

The Ukrainian SSR actively supports areas of activity and the programmes of the Agency, and all countries are interested in their implementation. In our view, those programmes are on the whole in keeping with the principles and purposes of the Agency, the goals of which are the universal use of nuclear energy for peaceful purposes and the expansion and strengthening of international co-operation in this sphere.

In our view, the issues of atomic energy are an important element here.

Analysis of available data demonstrates that needs for energy and its consumption throughout the world are growing unchecked. It is perfectly obvious that the

## (Mr. Makarevitch, Ukrainian SSR)

fundamental question determining the future of nuclear energy is that of ensuring its reliability and safety. In this connection, we should note the useful activity of the IAEA in this area: the holding of a number of conferences and meetings on nuclear safety, the working out of international standards for such safety and the adoption of the Conventions On Early Notification of a Nuclear Accident and on Assistance in the Case of a Nuclear Accident.

At the same time, in our view, the Agency should step up work on norms for action in cases of nuclear accidents. The experience of many countries has demonstrated that, with appropriate efforts, the problems of safety of nuclear power stations can be successfully resolved.

The Ukrainian SSR is devoting a great deal of attention to this question. We have taken into account the bitter experience of Chernobyl and at the present time a range of measures have been carried out excluding the possibility of a recurrence of such an accident at any of our functioning reactors. There has been a significant enhancement of the safety of work on nuclear power stations as a whole. Last May in Kiev, the capital of the Ukraine, an international scientific conference took place on the medical aspects of the accident at the Chernobyl nuclear power station, with the participation of scientists from more than 20 countries of the world and also representatives of the IAEA. The conference emphasized that the experience of the huge and effective work to eliminate the consequences of the accident at the Chernobyl nuclear power station is of great significance for science and practice throughout the world.

The Agency is devoting a great deal of attention to issues of the application of nuclear methods in various areas. For many countries this problem is fundamental, in so far as the broad use of sources of ionizing radiation in agriculture, health, various areas of science and technology is promoting an enhancement of the standard of living of the population and the growth of national economies. Here, definite success has been achieved in a number of spheres. However, the field of application is still very wide. We see as one of the major tasks of the IAEA the development and practical use of ecologically clean radiation methods, which promote a solution to agrarian problems facing many countries and in particular the developing countries.

Other aspects of the application of nuclear methods are also very important. We support the desire of the IAEA to make those methods as accessible as possible to all countries.

The Ukrainian SSR views positively the activity of the IAEA in rendering technical assistance to the developing countries and favours the further development and improvement of forms and methods of such assistance. This year the Government of the Republic took a decision to make a voluntary contribution from the Ukrainian SSR to the Fund for Technical Assistance of the Agency for 1989; that contribution amounts to the equivalent of more than \$500,000.

We believe that the activity of the IAEA aimed at broad use of nuclear energy in various fields and the carrying-out of the relevant programmes of the Agency in this area are an important step in the implementation of the major objective of the Agency: promoting the use of nuclear energy for peaceful purposes, welfare and progress.

In a relatively short historical time-frame, nuclear energy has become an integral part of the life of society today. Moreover, there is a need for resolving a number of important problems which have further intensified the need

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for a significant deepening and strengthening of international co-operation in the sphere of the safe development of nuclear energy. The activity of the IAEA in consolidating peace and security and the further development of international co-operation in the area of the use of nuclear energy for peaceful purposes is a clear and outstanding example of how the difficult problems of today's world can be resolved on the basis of mutual interest.

Mr. N. SINGH (India): My country is wedded to the peaceful uses of nuclear energy. The Indian Atomic Energy Programme witnessed satisfactory progress during the preceding year. The pressurized heavy water reactor system is now totally indigenized from the point of view of design, manufacture of components, construction and operation. The successful attainment of criticality of the fast breeder test reactor at Kalpakkam gave us the necessary experience and confidence for the design of a prototype fast breeder reactor of 500 MW(e) capacity. Our efforts during the last few years at planning and designing larger unit size pressurized heavy water reactor systems of 500 MW(e) are also nearing fruition, with the design work on primary heat transport system, moderator system, reactor boiler and auxiliaries at an advanced stage. The two units of the power station at have Tarapur have logged 34 reactor years of successful operation. Rajasthan atomic power station unit-2 recorded the highest annual power generation of all its years of commercial production. The problems faced by the two units of the power station at Madras in the generator transformer and the fuel transfer system were overcome successfully. The indigeneously designed and constructed 100 megawatt high flux research reactor - DHRUVA - which met with initial problems has been operating at 60 megawatt thermal which is expected to be raised to 80 megawatt thermal. A uranium-233-fuelled neutron reactor facility is nearing completion at Kalpakkam. This research reactor will be used mainly for the neutron radiography of radioactive and non-radioactive objects. Another major development is conversion of the Nuclear Power Board into a corporation to manage nuclear power generation along modern commercial lines and involve the public in its financing. This, we hope, will speed up the achievement of our objective of generating 10,000 MW(e) of nuclear power by the year 2000.

#### (Mr. N. Singh, India)

India has never lost track of the need to assure the public of absolute safety in its nuclear installations. The Atomic Energy Regulatory Board, which has been established and entrusted with the overall responsibilities for the purpose, has set about its task in a systematic manner. The Board has undertaken preparation of codes and guides in the nuclear medical, industrial and transportation areas. A fresh safety assessment of the country's nuclear power plants was undertaken last year. Environmental surveys were conducted around all the nuclear plants and research sites.

The International Atomic Energy Agency (IAEA) has completed 30 years of its fruitful career. Three decades ago the Agency came into existence in response to the widespread realization that nuclear technology is important for all-round economic development. The international promotion of nuclear energy was accepted as its most important task. This was clearly reflected in the statute of the organization. India participated actively in the statute conference in the person of the late Dr. Homi Bhabha, an articulate champion of the peaceful uses of nuclear energy. Since then Indian scientists have actively co-operated with the IAEA.

In addition to its promotional role, the IAEA has been asked to concern itself with the danger posed by the possible diversion of nuclear technology for military purposes. The implementation of safeguards at those facilities where we have voluntarily placed nuclear material under safeguards continues to be smooth. The safeguards inspectors have carried out their tasks in a mutually satisfactory manner.

India is deeply committed to the objective of nuclear disarmament. We are an active participant in the six-nation initiative for peace and nuclear disarmament. We are firmly opposed to any kind of proliferation of nuclear weapons - horizontal, spatial or vertical. We believe in a linkage between disarmament and

#### (Mr. N. Singh, India)

development. I had the honour to preside over the first ever International Conference on the Relationship between Disarmament and Development, held last year in New York.

If the world is to be made safe from nuclear destruction, nuclear weapons of all types and in all countries must be banned and nuclear technology - everywhere, not selectively - should be used only for peaceful purposes.

Finally, my delegation would like to thank Mr. Hans Blix, Director General of the IAEA, for his comprehensive, thought-provoking and useful remarks. We also appreciate the contribution of the Agency during the past few years in the area of nuclear safety, such as the evolution of basic safety principles for nuclear power plants, the revision of nuclear safety codes and the adoption of the two Conventions on early notification and assistance in the case of nuclear accidents.

Mr. TOTH (Hungary): My country considers the International Atomic Energy Agency (IAEA) to be one of the outstanding organizations of the United Nations system. The report of the Agency now before us fully bears out the importance that Hungary has always attached to the activities of the IAEA. It well reflects the manifold functions of the Agency in the spheres of the production and peaceful uses of nuclear energy, the safety of nuclear material and installations, the application of isotopes in various fields, the disposal of nuclear waste, the important and efficient technical assistance programme and, last but not least, the safeguards activities entrusted to the Agency under the Treaty on the Non-Proliferation of Nuclear Weapons. In all these areas the Agency, under the able leadership of Director General Hans Blix, has done an outstanding job, as Hungarian representatives had the opportunity to state at the General Conference and in the Board of Governors of the IAEA.

(Mr. Toth, Hungary)

Hungary is profoundly interested in the furthering of international co-cperation in the production and peaceful uses of nuclear energy. Suffice it to say that the four blocks in operation at the Paks nuclear power plant provide 39 per cent of the country's electrical energy production, a proportion that is one of the highest of any State. It is planned to expand that capacity in the years to come.

In doing so, one of Hungary's main considerations is the belief that nuclear energy is one of the cleanest of all energy sources from the environmental point of view. This is a consideration as important to my Government as its conviction that the most demanding safety measures should accompany the efficient operation of nuclear power plants and the use of fissionable material in general.

Hungary, therefore, not only relies upon the close co-operation established with the Agency in the material, intellectual and moral aspects of the peaceful uses of nuclear energy, but is actively participating in the Agency's efforts to increase the safety of nuclear installations. It is with this in mind that international experts from the Operational Safety Review Team are expected soon to visit the Paks power plant, at the invitation of the Hungarian Government.

## (Mr. Toth, Hungary)

We also note with satisfaction that a growing number of States are acceding to the two Conventions, on early notification and on assistance in case of a nuclear accident, claborated in 1986, which were ratified by Hungary at an early date.

The importance of IAEA resides to a large extent in its highly appreciated role as the organization responsible for the application of safeguards to peaceful nuclear installations and the nuclear material used in them. Therefore it is a source of great satisfaction to us that the Agency has further developed its activities in that regard. It is gratifying to learn from the report that no fissionable material has been diverted to non-peaceful purposes during the past year in installations verified by the Agency. Hungary is doing its best to contribute to the efficiency of the Agency's safeguards activities. This has prompted my Government to respond to Mr. Blix's appeal, and Hungary is the first member State of IAEA to have waived its legal right of preliminary approval of the safeguard inspectors to be designated to work in the country. It is a source of satisfaction to us that our gesture, aimed at speeding up the safeguards process and thereby assisting the Director General's endeavours, has since been emulated by other member States.

An event of great importance took place recently, when an agreement was signed between the People's Republic of China and the Agency placing certain Chinese nuclear installations under Agency safeguards. The fact that all five nuclear-weapon States have now placed some of their installations under Agency safeguards reinforces the universal character of the safeguards system. Hungary also welcomes the accession of Spain and Saudi Arabia to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and expresses the hope that others will follow suit.

#### (Mr. Toth, Hungary)

The significance of the IAEA safeguard system is becoming even more apparent now that, because of the favourable trend in the international political climate, new and important accords on nuclear disarmament are in sight. The experience gained by the Agency in verifying compliance by the parties to the NPT could become immeasurably valuable should the Agency be entrusted in the future with similar tasks in regard to the accords that the nuclear Powers will, we all hope, reach before long.

Permit me to recall that, relying on the rich experience gained by the safeguard system, Hungary raised at the thirty-second General Conference of IAEA the possibility of placing under Agency safeguards fissionable material obtained from the nuclear weapons to be dismantled under future accords.

I cannot refer in detail to other matters, such as the important programmes on the application of nuclear material and the important technical assistance programme of the Agency, in all of which my country actively participates. Nor can I address many other useful activities that are detailed in the report.

I wish to conclude by stating that my delegation is in agreement with the content and the priorities of the Agency's report and takes a highly positive view of the activities of IAEA.

Mr. MGBOKWERE (Nigeria): Please permit me to most warmly thank the Director General of the International Atomic Energy Agency (IAEA) for the comprehensive annual report of the Agency for 1987 and for his lucid statement. My delegation has devoted a great deal of attention to the Agency's activities for 1987 as outlined in the report. We are convinced that it has been a successful year for the Agency. The annual report shows that encouraging strides were taken in some areas of activity, such as the area of nuclear power, where 22 nuclear power plants came on line in 1987. In the field of nuclear safety and radiation protection, the Agency continues to play an active role in strengthening public

confidence in nuclear power. My delegation is also pleased to note that in the field of nuclear applications about 200 technical projects were carried out in 62 developing States members of the Agency, along with 14 regional and interregional projects, especially in the area of food and agriculture. We cannot but agree that development of human resources is a key element of technology transfer, and we hope that more resources will be allocated so that professionals from developing countries may benefit from the Agency's training courses and fellowships.

In recognizing the commendable achievements of the Agency, I wish to stress the need for it to persist in its endeavours to ensure that many developing countries, especially in Africa, benefit adequately from its promotional activities. It is, therefore, my delegation's view that the Agency should intensify efforts to assist those countries, to enable them to establish appropriate infrastructures and acquire the expertise to carry out on their own substantial parts of their nuclear programmes, particularly in the areas of nuclear power and nuclear applications. In this connection, my delegation would like to see the Agency undertake assistance and send pre-project support missions to these countries. We recognize that constraints such as lack of financial resources, inadequate infrastructure, shortage of highly qualified specialists, restriction of access to nuclear materials, equipment and technology, and the low level of research and development support constitute major obstacles to developing countries' efforts in the area of nuclear generation. My delegation therefore urges the Agency to expedite action on the recommendations of the Senior Expert Group on mechanisms to assist developing countries in the promotion and financing of nuclear power programmes. We are thankful to those Governments that have decided to finance Nigeria's footnote (a) projects.

We believe that the new project request forms designed by the Agency will not only enhance the linkage between project and priorities but also be of tremendous help to the developing countries in preparing their requests. The attention now being devoted by the Agency to mid-project and end-of-project evaluation reflects the special degree of thoughtfulness that characterizes its activities and projects.

My delegation would like to express its appreciation to the Agency for taking the opportunity of the thirty-second regular session of the General Conference to convene a preliminary meeting in Vienna to discuss the modalities for establishing a regional co-operation agreement for the African region along the lines of the existing regional arrangements in Asia and the Pacific and in Latin America.

Judging by the experience of the Asian and Pacific regional arrangements, there are advantages to be gained by the African region from the projected agreement. The ground has now been set for individual African Governments to make commitments to this project and put in place arrangements to complement the benefits African countries now receive in nuclear techniques and applications.

With regard to nuclear safety and radiation protection, the Agency should assist developing countries to build up the necessary infrastructure and capability in order effectively to fulfil their obligations under the two Conventions on early notification and on emergency assistance. Assistance is needed in most of those countries in establishing the relevant radiological legislation, acquiring the needed radiological monitoring equipment and establishing effective contact points.

I should like now to turn briefly to an issue of great concern to the Nigerian Government. This relates to the issue of dumping of nuclear wastes, in respect of which Nigeria's delegation to the thirty-second regular session of the IAEA General General Conference, along with others, proposed a resolution which addressed this disturbing subject. In doing so, Nigeria believed that a positive response by the General Conference to the proposals would contribute to strengthening the Agency's role in a potentially dangerous and delicate area which could gravely weaken public confidence in nuclear energy. It is to the credit of the Agency that resolution GC(XXXII)/Res/490 on dumping of nuclear wastes was eventually adopted by consensus. It, inter alia, condemned all nuclear waste dumping infringing the sovereignty of States and called for steps to be taken by the IAEA to elaborate an internationally agreed code of practice for international transactions involving nuclear wastes. We urge the Agency to continue to emphasize environmental protection in its waste management activities.

I take this opportunity to express appreciation to various delegations, among others those of France, Egypt, Erazil and India, which worked closely with Nigeria to produce the consensus resolution. Without being over-sanguine, this holds out the hope that consideration of the question of dumping of nuclear wastes at the current session of the General Assembly will be marked by the same spirit of co-operation and understanding as produced the IAEA resolution.

I wish now to turn to the issue of South Africa's nuclear capabilities. The Report of the International Atomic Energy Agency referred to resolution GC(XXXI)/Res/485, in which the General Conference decided, in 1987, 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-second regular session of the General Conference."

The Board took this important decision after carefully taking into account that South Africa had consistently refused to comply with successive IAEA resolutions and because of the racist régime's apartheid policies in violation of the purposes and principles of the United Nations Charter.

I acknowledge that the issue of South Africa's suspension from the IAEA belongs principally to that organization, that is, IAEA. But I am also convinced that it is a matter on the minds of most of us, apart from being part of the report under consideration. I shall, therefore, be brief.

We are all aware of the diversionary tactics South Africa has been emp\_oying in order to forestall its suspension. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is open to any country that wishes to accede to it. The 136 parties to the NPT to date have taken that route. There is nothing in it to negotiate or hold consultations about. That is why the procedure that the racist régime is adopting in its so-called intention to sign the NPT is unusual and unnecessary.

Perhaps, to put the issue in proper perspective, one may ask what suspension implies. The Vienna Group of 77, at the General Conference last September, sought the legal opinion of the Agency on the implications. That opinion states:

"Suspension is of temporary nature, rather than of permanent character and could, therefore, be lifted once the underlying reasons for suspension no longer exist. Furthermore, suspension could be viewed as a means of applying additional pressure on a State recalcitrant to the provisions of the Statute of IAEA, i.e. South Africa. Suspension of a member's rights include those of representation, voting, election, technical and financial assistance, award of research contract, purchase of equipment and material and hosting of Agency's maetings. It, however, does not include bilateral and multilateral agreements concluded by the Agency or under its auspices, such as safeguards agreement in

existence. Suspension as provided under Article XIX.B of the Statute does not imply exclusions or finality, which expulsion as provided for under the United Nations Charter does.

This opinion is contained in IAEA document GC(XXXII)/IMF/265, of 30 September 1988.

The consultations or negotiations South Africa held in August and September with the three depositary Powers and some members of the IAEA were basically a posturing gambit. Prom various accounts, our understanding was that in these contacts South Africa set pre-conditions and sought far-reaching guarantees that belie its bad faith. We are encourged by certain frank responses that the three Depositary Powers conveyed to South Africa. Nevertheless, we are in no doubt that the only appropriate message which can drive home to the apartheid régime the concerted repugnance of the international community for apartheid lies in Pretoria's suspension from the IAEA, in compliance with General Assembly resolution 41/35 B, which calls on all organizations within the United Nations system to exclude South Africa.

The thirty-second General Conference of IAEA held last September, decided to hold over decision on South Africa's suspension to next year's Conference. Suffice it to say that the racist régime's continued membership of the Agency is not a prospect that can sit well with member States' expressed respect for human dignity and unyielding opposition to apartheid.

Mr. MOYA PALENCIA (Mexico) (interpretation from Spanish): The delegation of Mexico wishes to thank the Director General of the International Atomic Energy Agency (IAEA), Mr. Hans Blix, for his clear statement on the activities of the Agency, as well as for his well-known dedication to the attainment of its objectives.

The peaceful applications of nuclear power are increasing in the fields of agriculture, food and medicine. In 1987 16 per cent of the world's electric power

(Mr. Moya Palencia, Mexico)

was generated by nuclear plants. This emphasizes the growing role that will fall to the IAEA in promoting the benefits of the use of nuclear power for peaceful purposes.

We are pleased to note that in 1987, as in the previous year, the resources earmarked for technical co-operation activities again increased, reaching the amount of \$41.5 million. As the report indicates, this increase in resources has brought about an expansion of the technical co-operation programme of the Agency, which is made up of expert missions, equipment, fellowships and training courses, which benefit, in particular, the developing regions of the world.

## (Mr. Moya Palencia, Mexico)

My delegation notes with satisfaction that recognition has been given to the importance of human resources development as a key element in the transfer of technology and that in the Agency's efforts to render its technical co-operation activities more effective it has made it a permanent practice to assess all its programmes on a continuing basis.

My delegation welcomes the fact that the report highlights a growing and increasingly active participation by developing countries in the programme of technical co-operation, organizing meetings, training courses, providing expert services and lectures and offering fellowships and assistance in kind. Only through combined efforts by the developed and the developing countries will it be possible to ensure the continued success of the programme. In this context, my Government reiterates the desirability of promoting the use of experts from developing countries.

Since the decade of the 1970z, the Mexican Constitution has proclaimed as a fundamental tenet that the use of nuclear power should be exclusively for peaceful purposes and that it also falls to the nation to decide how nuclear fuels will be used to generate power and how its application for other purposes shall be regulated. In that spirit, and with the valuable technical advice of the International Atomic Energy Agency (IAEA) in every phase of the project, and after a series of missions by the operational safety inspection group, my country will soon be bringing on line its first nuclear power plant. We therefore commend the efforts of the Agency to improve the planning of nuclear power programmes in the developing countries and to provide the expertise to insure their appropriate and safe implementation.

The Third Review Conference of the parties to the Treaty on the Non-Proliferation of Nuclear Weapons, held in September 1985, recognized the importance of the IAEA as the key agent in the transfer of nuclear power technology. My delegation wishes to endorse that recognition and to commend all the efforts of the Agency in implementing the recommendations of the Conference relating to the strengthening of its activities in providing assistance to the developing countries.

Mexico believes that the Agency's safeguards régime constitutes one of its essential functions. In this regard, my delegation notes with satisfaction that in 1987 the Agency did not detect any anomaly that might indicate diversion of a significant amount of materials under the safeguards régime. The safeguards system of the Agency is an important verification mechanism which generates confidence among States by guaranteeing that all nuclear activities under the system are devoted to peaceful purposes. All States should place themselves under this system.

We oppose unregulated trafficking in nuclear wastes. The third world cannot become the rubbish bin of nuclear wastes. These should be concentrated as close as possible to the place where they originate. Cross-border traffic in such wastes should be permitted only when it is harmless to the environment.

My delegation attaches particul: importance to the nuclear-weapon States voluntarily accepting IAEA inspection of their peaceful nuclear facilities and placing them under the safeguards régime. My delegation notes with satisfaction the announcement made by China that it will open all of its non-military plants to international inspection.

(Mr. Moya Palencia, Mexico)

While we do not deny the importance of the IAEA safeguards régime, my Government is concerned that the financial resources earmarked for the safeguards programme are increasingly larger than those earmarked for technical co-operation and assistance activities.

The Agency's technical co-operation activities are indispensable to the developing countries if they are to reap the benefits derived from the peaceful uses of nuclear power.

The meeting rose at 6.30 p.m.