Statement of the Director General to the 21st Session of the General Conference of the IAEA

INTRODUCTORY REMARKS

May I first express our warmest thanks to President Kirchschläger for his kindness in joining us today to celebrate the twentieth anniversary of the International Atomic Energy Agency and for his thoughtful statement. His interest in and support for the Agency is evidenced by the fact that this is the second time this year that he has assisted in opening one of our meetings, the previous occasion being the Salzburg Conference in May. I would also like to convey through him to the Government and people of Austria and to the City of Vienna our sincere appreciation for the twenty years of generous and unfailing hospitality and understanding that the Agency has enjoyed in the city and in this country. I would like to thank the President of the National Council, Mr. Anton Benya, and the Minister for Foreign Affairs, Dr. Willibald Pahr, for honouring this conference with their presence.

The founders of the Agency showed wisdom not only in the far-sighted provisions of the Agency's Statute but also in the selection of Vienna as the permanent headquarters of the Agency, a choice which has encouraged other United Nations organizations to come here, such as our sister organization UNIDO, and which I hope will be followed by many more.

I should like to extend a special welcome to our guests of honour, each of whom has played a significant role in the history of the Agency. These include: Ambassador G.P. Arkadiev, Professor H.G. de Carvalho, Mr. Sterling Cole, Professor V.S. Emelyanov, Dr. Bertrand Goldschmidt, Professor Bernhard Gross, Ambassador Karl Gruber, Father Hesburgh, Ambassador Heinrich Haymerle, Professor I.I. Rabi, and Ambassador Henry D. Smyth. A special welcome goes to Dr. W.B. Lewis, chairman of the Scientific Advisory Committee and the present members of the committee. Ambassador Paul R. Jolles and Ambassador P. Winkler, who were also invited, were unfortunately unable to attend.

May I also ask you, Mr. Winspeare-Guicciardi, to convey our thanks to the Secretary-General for his kind message.

THE FIRST YEARS

The idea of creating an international atomic energy agency dealing with the peaceful uses of nuclear energy and their regulation was first put before the world by President Eisenhower in his address to the General Assembly on 8 December 1953; until that time, nuclear energy had primarily been known for its power to destroy. The General Assembly acclaimed the President's proposal.

In October 1956, a Conference of 81 nations put the final touches to the Agency's Statute and opened it for signature. Just prior to that, in August 1955, the first Geneva Conference on the Peaceful Uses of Atomic Energy had led to the disclosure of previously classified scientific and technical secrets (including, incidentally, the technology of reprocessing, but not of enrichment). The Conference revealed to the international community the peaceful potential of nuclear energy and created a surge of optimism with respect to its early use throughout the world.

The Agency's Statute entered into force in July 1957, and the first General Conference was held in the Konzerthaus in Vienna in October of that year under the Presidency of the former Austrian Foreign Minister, Dr. Karl Gruber. Among other decisions it was decided to locate the permanent headquarters of the Agency in Vienna. In December 1957 the first Director General, Mr. Sterling Cole, signed the Headquarters Agreement with the late Dr. Leopold Figl, who was then the Foreign Minister of Austria.

Article II of the Agency's Statute describes the objectives of the Agency "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world". The Article continues: "It shall ensure, so far as it is able, that assistance provided by it or at its request or under its supervision or control is not used in such a way as to further any military purpose".

The first objective gives the organization the advantage of dealing with scientific and technical matters where understandings can be reached more easily than when dealing with political matters. But as the late Ralph Bunche said when addressing this conference eleven years ago: "The Agency cannot live in a political vacuum". Through the second statutory objective, the Agency is brought into the political field and circumstances to which I shall refer later have given the Agency a political importance which only a true optimist could have foreseen in 1957.

Ten years after the first General Conference the Board accepted the generous offer by the Austrian Government to provide a site and buildings for the Agency's permanent headquarters, which according to latest information, will be ready for occupancy in the summer of 1979.

A few comparative figures may be of interest. As of 1 October 1957 the IAEA had 54 Member States. Today, there are 110. This growth has also been reflected in the Agency's Board of Governors, the executive organ of the Agency which, in 1957, had 23 Members and today has 34. While in 1958 the Board held a total of 70 meetings, by the middle of the 1960's and during recent years the number declined to not more than eight to ten. The Board has changed from a forum for political debates to an effective decision-making body and is often quoted as such in the UN family.

As regards the Agency's staff, it has grown form 400 in 1958 to 1400 now. The representation of staff from as wide a geographic area as possible is an important structural requirement of an international organization. Twenty-eight nationalities were represented in 1958; today there are 61. The Regular Budget for 1958 amounted to about $4 million and for 1978 it is set at about $51 000 000.

The President of the Federal Republic of Austria, Dr. Kirchschläger (centre), is shown being escorted to the opening session by Mr. Etemad, the Conference President (left) and Ambassador Amadou M. Cissé of Senegal, 1976/77 Chairman of the IAEA Board of Governors.

Assembly of guests of honour and delegates to the General Conference at the opening session during the performance of the Alban Berg String Quartet.

Mr. W. Sterling Cole of the USA (right), the first Director General of the IAEA, is greeted by Dr. Sigvard Eklund, who was appointed to his fifth term as Director General by the Conference. In the centre is Dr. Bernhard Gross of Brazil, who in 1958 was appointed to serve on the IAEA's first Scientific Advisory Committee.

Three members of the current IAEA Scientific Advisory Committee are shown at a Committee meeting during the General Conference. Left to right: Dr. T. Ipponmatsu of Japan, Dr. Wolf Häfele of the Federal Republic of Germany and Dr. W.B. Lewis of Canada, who was appointed to the Scientific Advisory Committee in 1958.

LANDMARKS

So much for the framework. What has been achieved during these twenty years? The answers span a wide latitude and it may help us to assess both the present and future if we look at some past landmarks.

Let me first refer to important extramural activities represented by the establishment of the Seibersdorf Laboratory (1961), the International Laboratory of Marine Radioactivity in Monaco (also 1961), the International Centre for Theoretical Physics in Trieste (1964, and since 1970 operated jointly with UNESCO). Each of these institutions has proven itself viable and all are carrying out work of value to Member States. The Middle Eastern Regional Radioisotope Centre for the Arab Countries, Cairo, was organized in 1963 with the support of IAEA until 1968, at which time it became self-supporting. The establishment of the Joint FAO/IAEA Division of Atomic Energy in Food and Agriculture (1964) has led to effective collaboration between the two organizations.

I have already mentioned the 1955 UN Conference on the Peaceful Uses of Atomic Energy. The Agency took part in the second conference of this series in 1958 and was responsible for the scientific programmes of the conferences in 1964 and 1971. The conference on Nuclear Power and its Fuel Cycle, held in Salzburg this spring, was organized entirely under the auspices of the Agency.

The conferences I have mentioned, where the Agency's active contribution has played a substantial role, have been fundamental in respect of information exchange between east and west as well as north and south.

Another achievement is represented by the establishment of INIS (the International Nuclear Information System) which was approved by the Board early in 1969. It provides world-wide coverage of literature dealing with all aspects of the peaceful uses of nuclear energy. It is the first international, fully decentralized, computer-based information system in any field and has served as a model for the systems developed by FAO and UNESCO. Its publication "INIS Atomindex", first issued in April 1970, became last year the world's only international abstracting service in the nuclear field. Forty-nine Member States are now providing input for its preparation and the number of subscriptions to INIS Atomindex rose from less than 500 in 1975 to more than 1500 in 1976. The system is constantly being improved, for instance, by introducing interactive computer methods and by telecommunications through the telephone network between national terminals and the Agency's computer.

In the early years the Agency sought to achieve its aims mainly by promoting the use of radioisotope techniques and radiation in medicine, agriculture, industry, and water resources development. Now, after two decades, many methods in these fields have become routine, and not only in the highly industrialized states. For the majority of the Agency's developing Member States, the use of these techniques is still the major application of nuclear energy. The activities carried out by the Department of Research and Isotopes now account for nearly one-quarter of the Agency's Budget.

In 1957 the commercial use of nuclear power was still on the horizon and the Obninsk, Shippingport and Calder Hall prototypes had yet to prove themselves. Ba the end of 1977 there will be over 200 nuclear power reactors in operation. In this short period of the history of energy production, after the expenditure of billions of dollars on research,

Reunion of IAEA veterans at the Palais Schönbrunn in Vienna during a reception given by the Federal Chancellor of Austria. From left to right: Dr. Bertrand Goldschmidt, Governor from France on the Agency's Board of Governors since 1957 and member of the Scientific Advisory Committee since 1958; Dr. John Hall, IAEA Deputy Director of Administration; Dr. Vassily S. Emelyanov of the USSR, member of the Scientific Advisory Committee 1958–67; Dr. Isidor I. Rabi of the USA, member of the Scientific Advisory Committee 1958–72.

The IAEA Director General greeting Ambassador Karl Gruber of Austria (right), who was President of the first regular and special sessions of the General Conference in 1957, and Ambassador Heinrich Haymerle of Austria.

development and construction, electricity produced by nuclear energy has now reached nearly 10% of the total in the industrial countries and today the commercial use of nuclear power may be considered routine.

This trend is reflected in the Agency's programme, in which the economic and technical aspects of power reactors and fuel cycle plant play a steadily increasing role. One of the main objectives within this programmes has always been to foster the safety and reliability of these plants and the protection of the environment from radioactive releases under routine and abnormal operating conditions.

Since 1974 the Agency has been responsible for a most important activity concerning the safety and standardization of nuclear reactors, the Nuclear Safety Standards (NUSS) programme.

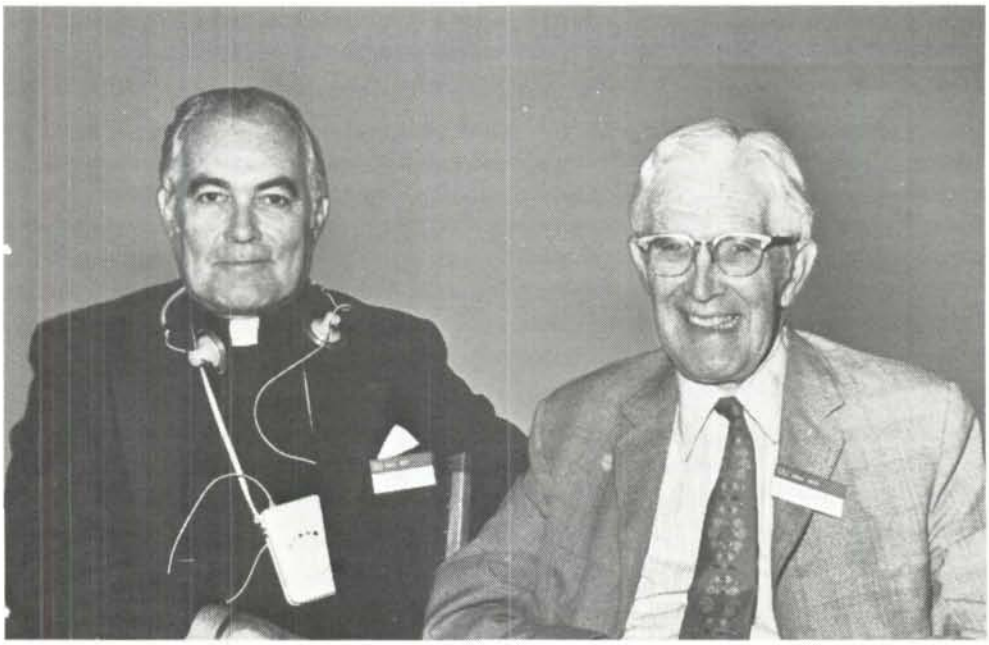
When the developing countries began to introduce nuclear power, the Agency launched programmes designed to help them to build up their nuclear energy organization and to train the needed manpower in this new field of technology. The Agency's main programme in this field – the manpower development programme – takes the form of a series of extended training courses, of which the first was held in 1975, as well as on-the-job training.

Since the mid-60s, the Agency has also embarked on three major special studies. The first, in 1963, dealt with the use of nuclear power for desalting seawater. The second began in 1971 and was a market survey of the potential role of nuclear power in selected developing countries. The third, just concluded, deals with multinational fuel cycle centres. This study has brought out the significant advantages that a multinational approach would offer, particularly in deterring proliferation and in facilitating radioactive waste management, as well as the economic benefits that the participating countries would derive from combining their fuel cycle requirements.

Although no project has yet been realized as a result of these extensive studies, they have produced valuable reference material which will facilitate a realistic evaluation of individual projects. For instance, water desalination may be incorporated in nuclear power projects now under discussion in the Middle East. The multinational fuel cycle centre study will certainly be useful in the international fuel cycle evaluation to be launched next month, in which the US has invited many Member States and the Agency to participate.

Two more vital activities must be mentioned, namely technical assistance and safeguards. Following a somewhat modest beginning, technical assistance activities were given full departmental status in 1964 in recognition of their increasing importance. The level of voluntary contributions has increased from a target of $1.5 million in 1959 to $6 million this year, a comparison which is somewhat flawed owing to the effects of inflation. The situation has been further improved, however, through contributions in kind, which will exceed $2 million this year. The availability of UNDP funds, which this year will amount to some $3 million, must also be taken into account.

The Agency's work in the field of safeguards has expanded from a single division in 1958 to a department now comprising four divisions, a section for standardization and administrative support and a safeguards evaluation section. In my report to the General Conference ten years ago I mentioned that since 1964 the Safeguards System had been extended from reactors with a thermal power of less than 100 MW to reactors of any size as well as reprocessing plants, and that a further extension to plants for converting nuclear



Two guests of honour at the 20th anniversary of the IAEA: The Reverend Father T.M. Hesburgh, who was Representative of the Holy See to the General Conference 1957–69, and Dr. Henry DeWolf Smyth, Governor from the USA on the Agency's Board of Governors 1961–70.

Dr. V.S. Emelyanov of the USSR and former IAEA Director General Sterling Cole of the USA exchanging reminiscences.

materials and fabricating nuclear fuel would be studied by a working group. These studies have been carried out and the Agency is now able to safeguard all types of facilities mentioned, as well as enrichment plants.

The importance of the Agency's safeguards work took a great stride forward when the General Assembly of the United Nations commended the Non-proliferation Treaty (NPT) in 1968. It is not always realized what a substantial achievement the NPT represents. The 102 parties to the Treaty now include almost all the main industrial non-nuclear-weapons States. Even in non-nuclear-weapons States not yet parties to NPT, nearly all significant nuclear plants are at present under Agency safeguards. There are, however, five exceptions — Egypt, India, Israel, South Africa and Spain — and this number may grow unless the NPT regime is made universal. In four of the countries mentioned, certain facilities are under safeguards and others are not.

Although the nuclear-weapons countries are still discussing their obligation regarding the cessation of the nuclear arms race, the Treaty represents a milestone in the efforts to prevent nuclear proliferation. It is an infinitely better mechanism than a policy of denial, which is the alternative.

I shall dwell no longer on the past. Of course, we would have liked to have achieved more. International organizations, however, must take into account the interests of a large number of Member States. As these interests are seldom perceived to be identical, the process is often difficult and always time-consuming. I would use this opportunity to pay tribute to the guidance given by the Scientific Advisory Committee and other advisory bodies in helping to shape the Agency's programmes. The strong spirit of co-operation which has been very much in evidence between the Secretariat, the Board and the Member States over the past two decades, has been of fundamental importance and a continuing source of inspiration.

FUTURE TASKS

Let me now turn to the future and the tasks which I see of immediate and greatest importance for the Agency. I shall condense these to three: activities relating to nuclear power, technical assistance to the developing members of the Agency and the Agency's safeguarding functions.

It is evident that present oil and gas reserves are limited and may be exhausted before the end of the century. Despite some views to the contrary, it is also evident that the only new energy source which is available for immediate use is nuclear energy. Each 1000 MW(e) of nuclear capacity saves about 1.5 million tons of oil per year. Even the minimum target of nuclear capacity for the year 2000 will correspond to more than half the present annual world oil consumption. The potential use of renewable energy sources in producing electricity — the most convenient energy form — is only marginal. Solar energy for heating can be expanded very much in many areas of the world but its use even for this purpose will remain limited until the storage problem has been solved.

The rational conclusion which can be drawn from the more authoritative studies is that it would be unwise to eliminate any option now. We must use *all* energy sources already existing or having a reasonable prospect of being developed, and we must also conserve energy where this is feasible. Only in this way will it be possible to better the living conditions in

developing countries, to produce food for an increasing population and to ensure that at least some growth level above zero can be maintained.

It must be recognized, however, that this rational conclusion is questioned in a number of industrial countries by persons who appear to command more public attention than their popular support would justify. Even those who believe in the role of nuclear power must acknowledge that current public acceptance problems give rise to concern about the possibility of implementing nuclear power plans already decided upon. I am conscious that I am entering into a very complex field with social, economic, ethical and political ramifications. Nevertheless, unless we can reverse the present trend of making a legal playground of complex technical questions, the development of nuclear power in the industrial western world will be seriously hampered. The same bleak prospect will lie ahead of many developing countries, dependent as they are on the nuclear manufacturing industry.

Perhaps the whole situation reflects a loss of confidence by some with regard to technology in general of which nuclear energy is to them a symbol. We must hope that the stark realities with which the world will be confronted in the next decade or two when the demand for oil overtakes supply, and when it becomes generally understood that the so-called renewable sources of energy are a long way off, will restore the will to action, before it is too late.

It is significant that doubts about nuclear energy are generally limited to sections of the affluent countries. With one or two exceptions they are not shared by Governments, by trade unions or by the developing or socialist countries. Perhaps developing countries and workers' organizations have a firmer sense of the true implications of "zero growth". Whatever the reason, the Salzburg Conference revealed the commitment of most of the participating Governments at least to the full use of the present generation of nuclear power reactors and a recognition that nuclear energy is a necessary and irreplaceable source for mankind for both a short and a longer run and this same conclusion has been drawn by the 10th World Energy Conference held in Istanbul.

It must be realized, however, that no major industry can survive indefinitely if it is buffeted in the way that nuclear power has been in certain countries in recent years. If the nuclear industry is to remain viable it is essential that it should operate within an orderly regulatory framework which would remain valid over a longer time period.

The Agency's own role in the field of nuclear power safety will continue to grow. There is little doubt that we shall have to find internationally agreed standards and recommendations to deal with an increasing number of aspects of the safe operation of power plants and the protection of the public. This area of the Agency's work will have to be extended gradually to cover the safety aspects of other parts of the fuel cycle. In particular, the problems of safe storage of spent fuel and ultimate disposal of radioactive wastes demand international solutions.

Because of the importance of the public acceptance issue and the Agency's extensive experience in this field, the Agency will also have to become more active in providing objective factual information about nuclear power to its Member States. In this way, it will help to supply the background against which persons who are seriously interested in the matter, by virtue of their responsibilities or vocations, can form a balanced opinion about the pros and cons of nuclear energy compared with other energy sources. The Agency will continue to co-operate with UNEP in UNEP's comparative study of the environmental effects

of various energy sources. Late next year the Agency will co-sponsor a UNEP International Panel on the Environmental Impacts of Nuclear Energy, which forms part of this study. We are also co-operating with IIASA in a long-term study of the environmental impacts of various energy technologies and in a special project concerning the public's perception of risks. This may help clarify the essentially irrational resistance by certain groups to nuclear power.

With respect to the longer-term development of nuclear power, the IAEA will continue its work in fast breeder development through an international working group. In response to the interest in the high-temperature reactor as a promising route to improving fuel utilization through the thorium cycle and to non-electrical energy supply through high-temperature nuclear process heat, its activities in these areas will be further expanded.

At the first Geneva Conference in 1955, it was predicted that we would have controlled thermal nuclear fusion power in twenty years. This should remind us of the hazards of forecasting the development of new energy sources, whether nuclear or non-nuclear. Today it seems unlikely that fusion will be a practical possibility before the turn of the century, if then. Nevertheless, the potential of fusion is enormous, and the community of fusion research workers has pointed out that their research has reached a critical juncture. The time is now ripe for investments in large machines which cost several hundred million dollars, but since the prospect of return is distant and research money scarce, there is a risk that fusion research and development will stagnate. The fusion community believes that there is a need for far closer international co-operation, including joint action in investment. They want the Agency to be more actively involved in these new endeavours and I intend to explore the views of Member States on this issue.

TECHNICAL ASSISTANCE TO MEMBER STATES

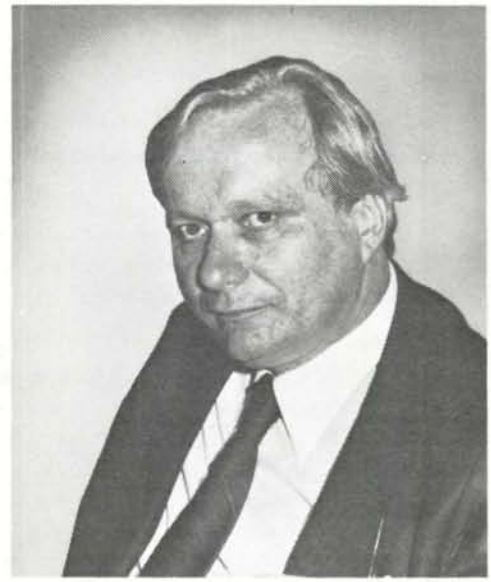
The Agency's technical assistance programme relies on voluntary contributions, amplified by UNDP country programmes. It is clear that the scope of assistance the Agency gives to the developing countries must continue to expand, and it is also evident that programme delivery must be improved. The scope of assistance should be, and is, broader than "technical assistance" in the usual meaning of the term. Nearly all the Agency's work in research and isotopes, much of its work in nuclear power, nuclear safety and information exchange is geared to meeting developing country needs which is, of course, what Article III.A.2 of the Statute intended.

A group of high level consultants, which met less than a month ago, has given us valuable advice on the administration of the technical assistance programme in the future in order to eliminate delays and make full use of gifts in kind and gifts in the form of non-convertible currencies.

One of the main findings is that major adjustments will be needed in the administration of technical assistance to accommodate its growth in size in the last several years. Technical assistance is a major higher priority Agency function, and all Departments of the Secretariat bear responsibility for its success. It is essential that means be found to ensure that the assistance we give to a Member State constitutes a truly integrated programme for that country instead of a series of sometimes unrelated small projects. This will require closer and more continuous contact with the nuclear programmes of our developing Member States. In future, emphasis will be placed on integrated multi-year programmes instead of

Invited guest of honour, Ambassador G.P. Arkadiev, who was Resident Representative of the USSR to the Agency 1966–75.

His Excellency Mr. Khor Eng Hee of Malaysia was elected Chairman of the IAEA Board of Governors for 1977/78.



At the IAEA General Conference, the afternoon of 28 September was devoted to two scientific lectures. Prof. Abdus Salam (left) of the International Centre for Theoretical Physics in Trieste gave a wide-ranging and extemporary talk on developments on the frontiers of physics. The second lecture, "On Energy Demand", was presented by Prof. Wolf Häfele (right) of the International Institute for Applied Systems Analysis in Laxenburg, Austria.

individual short-term projects. To this end, the Agency will again start sending technical assistance missions of the type that were used earlier. To improve the total performance, the Secretariat will adopt more aggressive administrative measures and amend out-dated practices and procedures.

The consultants' report also shows that improvements are needed in the criteria, consistency and depth of analysis employed in evaluating technical assistance requests. I intend to bring the recommendations of the group to the Technical Assistance Committee in December.

A conclusion which clearly emerges from the report is that both the size and scope of the technical assistance programme must be directly related to the evaluated needs of our Member States. This means, as the report implies, that the IAEA must remain constantly attuned to the changing requirements of developing countries. Let me give one example. The standard thousand megawatt power reactor now costs a billion dollars, or more, utterly dwarfing the financial value of a few experts or fellowships. In cases like these the main assistance that the Agency might give is in ensuring, as far as it can, that the developing country concerned has access to the best and most suitable technology for its power programme, that safety requirements which may be different from those of the supplying country are fully met, that the developing country has irrevocable access, at a reasonable price, to nuclear fuel and fuel cycle services and that its voice and interests are taken into account in decisions about the structure and direction of international nuclear energy policy. In this context, it may be recalled that a suggestion was made at the last General Conference to create an international pool for nuclear fuel. Many mechanisms, formal and informal, may be needed to achieve the objectives mentioned, of which technical assistance is one.

SAFEGUARDS

Finally, a few remarks regarding the Agency's safeguards activity.

The Agency is a product of the awareness that the spread of the use of nuclear energy should be actively promoted, balanced against concern about the spread of military nuclear capacity or proliferation.

In the twenty years of the Agency's existence, and particularly in the past several years, concern about proliferation has played an increasingly important part in the thinking of a growing number of States. The Salzburg Conference underscored the depth of this concern.

Recent years have shown that safeguards (in the sense of international measures to detect, and thereby deter, the diversion of nuclear material to explosive uses) remain the central element of any combination of measures taken against nuclear proliferation; their existence has shown to be a primary condition for international commerce and co-operation in the nuclear field. The NPT is most relevant in this connection, and it is heartening to note that 99 non-nuclear-weapons States have now acceded to it. In future I would also hope either that the remaining States that have not yet acceded to the NPT will find it possible to do so — or, if not, that in such cases agreement can be reached for the application of complete fuel-cycle safeguards. This is an appeal which, as you will recall, I have repeatedly made on the occasion of the General Conference.

In February of this year, the Safeguards Agreement with EURATOM finally entered into force and I hope that it will soon be possible to fully implement it.

International interest in the potential effectiveness of safeguards continues to increase. The first issue of the Special Safeguards Implementation Report has been received by the Board with interest. Such reports will in future be prepared on an annual basis in order to provide background for the continuing review of progress in this area. The recent organizational changes made within the Department of Safeguards will prove most useful for the continuous evaluation of safeguards effectiveness.

It is evident from the report that effective and strong national systems to account for and control fissile material are required. I appeal to Member States to now give their fullest co-operation in establishing effective national systems and wish to re-affirm the Agency's readiness to assist them in any way possible.

Intensive development work will be essential to make safeguards both more credible and more cost effective. We have recently made considerable advances with surveillance instruments which will serve both purposes; more needs to be done to improve safeguards in continuously fuelled power reactors and certain types of fuel fabrication plants. I need hardly mention that the support we are receiving from Member States is absolutely essential for these programmes.

At the same time, there is recognition of certain limitations of the non-proliferation measures so far taken. In addition to the need for better control and physical protection of all nuclear material it must be recognized that the handling of large quantities of plutonium, such as in a reprocessing plant, requires a particular type of materials management. Even the strictest international safeguards verification does not prevent accumulation of weapons-grade nuclear material within the peaceful fuel cycle. Hence there is a tendency to try to prevent proliferation by limiting the expansion of the peaceful nuclear fuel cycle. There is also an awareness that such measures might be counter-productive by impeding development or by encouraging independent national fuel cycles instead of furthering international co-operation in this field.

It is worth recalling that reprocessing was declassified by the time of the first Geneva Conference in 1955. As the result of experience gained to date, including the Agency's study of regional nuclear fuel cycle centres, it is generally accepted that the number of such plants should be limited to a minimum. To prohibit them, however, would probably lead to a result opposite to that intended. Isotope separation has always been classified by the nuclear-weapons States, which only seems to have stimulated a great deal of work in several countries on new separation methods, a fact which became clear at Salzburg. This is a prime example of how a policy of denial may stimulate research and development activity in a sensitive area.

Let us remember that in the long run there is no way of stopping the spread of nuclear technology amongst nations, and we must face the proliferation problems that result. The question is therefore not how to stop nuclear development but how best to make use of it and how to apply effective safeguards.

Because of its interest in promoting as well as safeguarding nuclear energy, the Agency is interested in the plans now being drawn up for the International Fuel Cycle Evaluation Programme to be undertaken by a group of States.

The Salzburg Conference indicated the potential usefulness of certain measures aimed at reducing the risk of proliferation and which would be complementary to the safeguards

regime. One suggestion made at the time of the 1975 NPT Review Conference was that the common export requirements recommended by the Conference be complemented by common import requirements. Other proposals that have been discussed in recent years and which would go beyond the mere detection of diversion concern the development of multi-national fuel cycle centres and the protected storage of fissile material under the control of the Agency. Some of these measures would require new forms of international co-operation, and it is clear that such co-operation will be required if trade in the nuclear field and the transfer of nuclear technology are to develop to their full potential. The Agency is prepared to serve as a forum for discussion and as a mechanism for implementation of these new concepts aimed at non-proliferation.

INTERNATIONAL CO-OPERATION

The ultimate purpose of an international organization in the UN family is to contribute to peace, although the means to achieve this purpose may vary. The promotion of nuclear energy within the framework of the Agency has taken place in an excellent atomosphere of co-operation and this in turn has enabled the international community to give the Agency important tasks under the NPT. During the first twenty years of the Agency's life, the industrial use of nuclear power has grown from infancy to maturity and is available to play an ever-increasing role in providing energy for an energy-hungry world, which includes developing as well as advanced countries.

If the support which Member States have given the Agency's regulatory work until now is continued, it should certainly be possible to fulfil the Agency's most important political task: to discharge its obligations under the NPT and thus contribute to making the Treaty live up to the expectations which are associated with it in curbing the nuclear arms race.

Let us hope that the atmosphere of co-operation that we have known, and to which many have referred as the spirit of Vienna, may even penetrate to the assemblies where deliberations on general disarmament take place.