The Strategic Plan of the Nuclear Energy Agency

2005-2009

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I. Introduction

The first Strategic Plan of the Nuclear Energy Agency (NEA) was adopted in 1999. It was an essential step in the NEA reform process that was launched in 1997 and completed in 2000. This document provided the NEA with guidance for defining and implementing its activities over the period 1999-2004. To assist member countries in meeting the foreseeable future energy, environmental and societal challenges of the next five years, the Nuclear Energy Agency has developed a revised Strategic Plan covering the period 2005-2009. The important changes that have occurred in the energy and nuclear landscapes, as well as in the OECD framework, are the basis for this revision insofar as they influence the NEA's role and activities.

This revised Strategic Plan is the result of a five-step process started early in 2003, which included preliminary debates within the Secretariat and the Steering Committee Bureau as well as with the chairpersons of the standing technical committees, and approval by the NEA Steering Committee. As a first step, a questionnaire was sent to the Steering Committee members to collect national assessments of the previous Strategic Plan and the functioning of the Steering Committee and the Secretariat, as well as their ideas and wishes for the new Strategic Plan. Secondly, a small, independent, high-level advisory group provided additional comments and ideas. Thirdly, a Steering Committee policy debate took place in October 2003 to gather the main messages for preparing the draft Plan. Fourthly, the draft Plan was sent to the Steering Committee for comments, and a second draft was prepared to take these comments into account. The fifth step was the April 2004 meeting of the Steering Committee that permitted final discussion and general approval of the Strategic Plan. The final text was formally approved by the Steering Committee in July 2004.

A major finding of the evaluation process achieved with the questionnaire was that the Strategic Plan has been generally considered relevant, exhaustive and a useful tool for providing a better understanding of NEA objectives and guidance for its activities. A large majority of Steering Committee members expressed the view that the global structure of the first Strategic Plan should remain unchanged for the new Plan, with only substantive adjustments needed to adapt the NEA strategy to the new context and requirements of the next five years.

The context: What's new? What isn't?

For the OECD

Several countries have joined the OECD and the NEA over the last decade and additional ones are expected to join in future. In view of this situation and new budget pressures, the OECD reform process is being carried forward with two main objectives: streamlining the role and priorities of the Organisation, and preparing its future shape and functioning. The first point includes the preparation of a Mission statement, committee reform and a new definition of OECD core work and priorities. The current, medium-term priorities assigned to the OECD are economic surveillance, human and social capital, employment policies and social cohesion, and business climate. The relationship between the OECD and its semi-autonomous bodies, such as the NEA and the International Energy Agency (IEA), as well as the impact of OECD work in capitals are being examined as a part of this reform process. Regarding the second objective, the OECD is invited to be a world leader in terms of its structural economic analyses but also a leader in areas such as international taxation, education, insurance, agriculture and competition policies, public and corporate governance, co-ordination of donor policies and a major player in shaping development policies more broadly. A strategy for accommodating the future enlargement of the Organisation and adapting the current scale of financial contributions is also being considered.

For the energy field

Energy use continues to grow inexorably and fossil fuels continue to dominate the energy mix. Although the earth's energy resources are adequate to meet demand in the medium term, serious concerns remain regarding security of supply, investment in energy infrastructure and the threat of environmental damage caused by energy production. The attitude of some suppliers risks undermining energy security and creating great uncertainty in the oil market. Huge infrastructure additions are needed to bring natural gas to market and to burn coal more cleanly, as well as to strengthen and enlarge the electricity grids. To meet these challenges and exploit the favourable reserves

situation, massive investments will be required in infrastructure and technology.

Member countries will rely more and more on the competitive market to supply their energy at acceptable cost. The reform process of energy markets will continue with the objective of creating a clear division of responsibility among the government, the regulatory authority and operators in the market. But the secure and predictable supply of affordable electricity, challenged by blackouts in recent years, remains a matter of concern. In the same way, concern is increasing about price volatility of energy markets, which is a considerable obstacle to the significant investments required to ensure that future supplies meet future demand.

Concerns about climate change are growing. In 2030, $\rm CO_2$ emissions are expected to be 70% higher than today, with new emissions that will shift from industrialised countries to the developing world. To help meet the short-term and long-term objectives of the energy policies that they have decided in a sustainable development perspective, OECD member countries will continue to favour energy savings as well as renewables and less $\rm CO_2$ -producing energy sources. In addition, many of them consider nuclear power as a realistic option for their energy mix. Governments will have to take strenuous actions in many areas of energy use and supply if all of these concerns are to be met. In certain areas, the need for more regulation is recognised.

For the nuclear energy field

Despite regular increases in electricity demand, the contribution of nuclear power to electricity production in OECD countries remains stable at approximately 24%. The number of nuclear power plant retirements has been less significant than expected since the life of many operating plants has been extended. The impact of these plant retirements on electricity generation has also been counterbalanced by better availability factors and the power uprating of some plants. The cost of electricity generated by existing nuclear power plants is still very competitive with conventional plants, including gas plants.

Most countries using nuclear energy consider that it provides significant environmental benefits, in particular in limiting ${\rm CO_2}$ emissions and helping to fulfil commitments under the Kyoto Protocol.

A number of countries have shown new or renewed interest in this form of energy and have taken decisions to prepare its future development. The construction of a new nuclear power plant has been decided in Finland and a number of countries have decided to co-operate to prepare a new generation of nuclear energy systems including power plants and the associated fuel cycle facilities. This co-operation is part of the long-term planning for replacing plants to be retired in future.

While some OECD countries stopped their moratorium on nuclear power over the last few years, some others decided to phase out nuclear power due to national concerns about consequences of a severe accident and radioactive waste disposal. To sustain or increase its role as a significant non-fossil source of electricity, nuclear power must meet several challenges. The safety record of nuclear power plants is good in OECD countries, but maintaining high standards of safety and enhancing the quality and effectiveness of nuclear regulation are crucial in a context of increasing market liberalisation and continuous efforts are needed. A large number of nuclear power plants are presently approaching the end of their initially estimated lifetimes and require license extension or decommissioning. The competitiveness of new nuclear plants has not been demonstrated everywhere in today's market conditions and the reduction of their capital cost is a real challenge. Recent progress towards the opening of the Yucca Mountain disposal site in the United States and the Olkiluoto disposal facilities in Finland, and the characterisation of two sites in Sweden are important to validate the current approaches to the disposal of high-level radioactive waste and spent fuel, but more must be done in this area to improve public and political confidence that such waste can be safely managed. The continuous reduction of government funding for research is not new, but in the long term loss of expertise, facilities and data may cause serious damage to the scientific and technical infrastructures, may limit the transfer of knowledge to new people and may deter young scientists from working in the nuclear field. The absence of

construction of new plants over a long period affects industrial capabilities, skills and competencies. Satisfactory answers to these issues are a precondition to keeping nuclear energy as a credible option for the future.

The role and needs of governments

Governments will continue to rely on a competitive free market to provide sufficient energy supplies at acceptable cost. But several of the key challenges mentioned above will not be met by the market alone. Ensuring that national energy and nuclear policies meet sustainable development principles is clearly the responsibility of governments. Among these principles, good functioning of and fair access to the market, environmental protection and long-term security of supply will remain priorities for governments. Informing and involving the public is another key responsibility for governments.

Governments must also establish regulations and monitor their implementation where and when necessary, in particular in areas involving core responsibilities, such as nuclear safety, radiation protection, radioactive waste disposal, non-proliferation and national security. They have to ensure, to the greatest extent possible, that these regulations reflect the best modern practices, comply with the state of the art and are consistent across all energy technologies. Government support of research and development will continue to play a key role in the pursuit of technological progress and will contribute to halt the worrisome decrease of human and technical infrastructure in member countries.

In addressing these issues, governments can benefit from authoritative international assessment and common understandings. More generally, governments need a consistent and balanced OECD view of all future energy sources, including nuclear energy, within the broader energy, socio-economic and environmental contexts. Governments can also benefit from international co-operation to help them maintain nuclear expertise and sound scientific and technical infrastructure.

Aim and structure of the Strategic Plan

This Strategic Plan for the Nuclear Energy Agency is aimed at helping it to meet the evolving needs of its member country governments in the nuclear energy field, including applications of ionizing radiation. Following this introduction, the second chapter presents the NEA mission statement and general objectives; the third chapter describes the Agency's basic areas of work or "strategic arenas"; the fourth chapter considers interactions with various organisations and groups outside the NEA, including within the OECD family; and the fifth chapter addresses issues regarding the Agency's efficiency. The basis of authority for the Nuclear Energy Agency and its activities is presented in the Appendix.

II. Mission of the Nuclear Energy Agency

Mission statement

To assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes. To provide authoritative assessments and to forge common understandings on key issues as input to government decisions on nuclear energy policy and to broader OECD policy analyses in areas such as energy and sustainable development.

General objectives

To fulfil its Mission, the NEA:

will be a forum for sharing information and experience among member countries by:

- maintaining an efficient communications network among experts;
- interacting with the main players in the nuclear field as well as international organisations;
- involving selected non-member countries;
- disseminating the results of its activities, and increasing and ensuring its visibility in member countries and in the international community as an objective and non-promotional organisation.

will promote international co-operation in the nuclear field by:

facilitating the development of consensus positions, including "collective opinions", among member countries;

- developing good practice documents and common strategies where possible;
- > organising co-ordinated research and exercises;
- > sponsoring joint undertakings and projects;
- > co-ordinating and pursuing co-operation with international organisations.

will help member countries to pool and maintain their technical expertise and human infrastructure, and support their nuclear activities by:

- > reviewing the state of the art, documenting experiments and setting up databases;
- ➤ being a scientific, technical and legal centre of nuclear competence, and providing advice;
- contributing to the preservation of knowledge and to the efforts of member countries to attract young scientists and researchers to the nuclear field:
- > organising peer reviews;
- ensuring appropriate dissemination of the scientific and technical results of its work.

will provide member countries with nuclear policy analyses by:

- carrying out studies on the fundamental aspects of current and future nuclear energy use;
- contributing to studies on broader issues, including those carried out within the OECD on energy and sustainable development;
- benefiting from the expertise existing within, and using the products of, the OECD family;
- > taking into account human and societal issues and concerns of the public.

Areas of activity

The following areas of work will continue to provide the basis for NEA activities over the next five-year period covered by this Strategic Plan: nuclear safety and regulation; radioactive waste management; radiation protection and public health; nuclear science; economics, resources and technology; legal affairs; Data Bank services; and information and communication. These areas of work are considered as "strategic arenas" insofar as they represent the key areas in which the NEA must fulfil its Mission cited above: they are also addressed individually in this Strategic Plan. There are other areas of the Agency's work which are crosssectorial by nature such as decommissioning, scientific and technical infrastructure, the impact of market liberalisation or next-generation reactors. These areas are addressed in each relevant strategic arena and receive special attention to ensure that they are satisfactorily dealt with and that the relevant activities are well co-ordinated within the Agency. The NEA activities in the strategic arenas as well as the crosscutting issues, together with their intended output, are described in the biennial Programme of Work and Budget, which is approved by the NEA Steering Committee and submitted to the OECD Secretary-General for transmittal to the OECD Council, which decides on the OECD Programme of Work and Budget as a whole.

The selection of the strategic arenas and their prioritisation is based on a careful evaluation of the needs in these areas at the international level, which include identifying common technical problems, improving databases for scientific, technical, regulatory, legal, economic and policy analyses, increasing understanding of decisions in these fields and developing common approaches where appropriate. Maintaining a sound scientific, technical and human infrastructure in these areas is important to support current nuclear activities as well as to shed light on factors influencing the future prospects for nuclear energy. In selecting the strategic arenas, particular attention has also been paid to the work of other international organisations and to the potential added value of the NEA, taking into account its strengths and its specificities, such as

its membership, methods of work and structure, past experience and achievements

A standing technical committee structure has been established by the Steering Committee to carry out the work in the strategic arenas. To ensure the best use of existing competencies in the standing technical committees and to maintain flexibility in carrying out the Programme of Work, the standing technical committee mandates do not strictly or systematically mirror the scope of the strategic arenas. Some strategic arenas are dealt with by two committees and some committees cover several strategic arenas, partly or totally.

All of these strategic arenas, which are essential to meet the needs of member countries, are presented in Chapter III in their current order of priority. This prioritisation, which reflects the views expressed by NEA member countries, provides guidance in distributing the efforts of the Secretariat. It does not mean, however, that all of the activities of a high-ranked arena have systematic priority over the lower-ranked arenas. There are, however, two strategic arenas which cannot be integrated into this sectorial ranking: Data Bank services, as the Data Bank acts as the reference centre for many NEA countries, and Information and communication, which is an activity that concerns all sectorial arenas. For each strategic arena, an introduction states why the given area is a strategic arena; a goal sets out the general purpose of NEA work in that field; and the strategies to achieve it are presented together with the way they will be carried out.

III. Strategic arenas of work

A. Sectorial arenas

1. Nuclear safety and regulation.



The goal

To assist member countries in ensuring high standards of safety in the use of nuclear energy, by supporting the development of effective and efficient regulation and oversight of nuclear installations, and by helping to maintain and advance the scientific and technological knowledge base.

Maintaining and improving high standards of nuclear safety in accordance with the current state of science and technology, and enhancing the quality and effectiveness of nuclear regulation are two interrelated objectives for member countries. The NEA will assist them in maintaining and further developing the scientific, technical and regulatory knowledge base required to assess the safety of design, construction, operation and decommissioning of nuclear reactors and other civilian nuclear installations. International co-operation plays an essential role in this field to maintain safety performance and further improve it where possible, and to address existing and future safety and regulatory issues on the basis of best knowledge and methodology available.

How to achieve the goal?

The Agency will:

ensure an effective exchange of safety-relevant information among member countries and develop common understandings and approaches on current safety issues by:

- organising discussions on operating experience, incident analysis, safety research issues and results, regulatory policies and strategies and longterm requirements in the area of future competencies;
- organising discussions on the implications of safety-related decisions and modifications in regulatory approaches;



- summarising the knowledge in specific technical or regulatory policy areas and preparing state-of-the-art reports;
- where necessary, encouraging the setting-up of "centres of excellence" and "networks of excellence", in the framework of the Agency or other frameworks

identify generic issues and trends that may affect the safety of nuclear installations and anticipate problems of potential safety significance by:

- collecting information on safety-significant events and exchanging data on safety-related operating experience;
- producing detailed, generic reports on issues raised by analysis of operating experience;
- developing specialised databases to complement the body of knowledge on safety-significant events and obtain information from them for use in probabilistic assessments and safety management;
- improving understanding of human and organisational aspects of operating experience and stimulating improved modelling of human reliability;
- analysing emerging research and regulatory issues such as plant ageing, safety margins, safety culture, good practices of safety management, and the impact of liberalisation of the market; developing harmonised views on these issues when possible; and making recommendations where appropriate.

assist member countries in the resolution of safety issues and strengthen confidence in the solutions and their implementation by:

identifying the scope, type, nature and priority of improvements in scientific and technical knowledge necessary to resolve current and potential future safety issues, as well as ways to achieve those improvements;

- promoting convergence on key aspects of these issues in stimulating the formulation of technical opinion papers and collective opinion statements for technical specialists as well as decision makers, and, where appropriate, encouraging harmonisation of policies;
- developing databases and contributing to the preservation of data accumulated through decades of experimentation, power plant operation, and code development and use;
- organising international exercises to help member countries use major computer codes used for safety analyses.

address safety issues associated with new technologies and reactor designs by:

- identifying and documenting safety issues and research needs as well as existing capabilities and knowledge associated with new technologies/ reactor designs;
- co-ordinate with and participate in relevant activities associated with new technologies/reactor designs.

help maintain an adequate level of capability and competence necessary to ensure the safety of existing and future nuclear facilities by:

- reviewing needs, identifying critical areas where capabilities are at risk, especially regarding the key safety research facilities, and defining possible international approaches to the problem;
- assisting member countries in organising programmes to strengthen staff competence at national or international institutions;
- > promoting, organising and co-ordinating internationally funded safety research projects;
- promoting the transfer and management of knowledge developed through past member country and NEA programmes and experience;

> promoting ways to attract young scientists and engineers to nuclear safety careers, and contributing to the maintenance of an adequate level of education and infrastructure in nuclear science and engineering.

help obtain better understanding of national regulatory requirements, encourage harmonisation of regulatory standards where appropriate, and enhance the efficiency and effectiveness of the regulatory process by:

- carrying out comparisons of national regulations on specific issues, and reviewing and analysing regulatory experience and inspection practices in member countries;
- helping member countries to establish liaisons between regulators, performing peer reviews and implementing quality assurance programmes;
- > promoting effective independence of regulatory bodies;
- > providing multidisciplinary fora for exchanging information and practices on communicating regulatory matters to stakeholders.

2. Radioactive waste management



The goal

To assist member countries in the area of management of radioactive waste and materials, focusing on the development of strategies for the safe, sustainable and broadly acceptable management of all types of radioactive waste, in particular long-lived waste, and spent fuel.

Radioactive waste and materials exist in countries with and without nuclear power programmes as a result of past and present activities, and need to be managed in a manner that is responsible to present and future generations. Significant progress has been achieved and considerable experience is available in NEA member countries on waste and materials processing, conditioning, storage, transportation and disposal. Special efforts are being expended in the area of long-term management of radioactive waste with a view to continue to integrate technical advances and societal demands in decision making as well as to refine regulatory and policy frameworks. International co-operation amongst implementers, regulators, policy makers and R&D specialists is essential to fostering a broader understanding of the issues at hand and formulating more widely accepted solutions.

Scientific studies and system analyses of innovative concepts to close the fuel cycle or minimise the production of waste are dealt with in other arenas, particularly "Nuclear science" and "Economics, resources and technology".

How to achieve the goal?

The Agency will:

bring about a shared and broad-based understanding on the management of radioactive waste and materials, particularly in the long-lived waste area by:



- providing multidisciplinary fora for exchanging information and experience and for promoting an open dialogue amongst waste management implementers, regulators, policy specialists at government level, research and development specialists and stakeholders;
- issuing collective opinions on topical issues;
- preparing documents and databases on national waste management frameworks and approaches for technical specialists as well as decision makers, opinion formers and stakeholders.

facilitate the elaboration of waste management strategies at national and international level by:

- reviewing strategies adopted by member countries with a view to identify and analyse emerging technical and policy issues, and improve understanding and consensus;
- organising peer reviews of national programmes for such activities as research and development and performance assessment, as requested;
- examining and improving approaches for performing long-term safety analyses and for documenting safety cases;
- > examining criteria for stepwise decision making;
- preparing good practice documents;
- > liaising with other relevant, international institutions.

help elaborate common regulatory approaches in the management of radioactive waste by:

- identifying and analysing emerging regulatory issues associated with the waste management strategies of member countries;
- promoting the dialogue between waste management implementers and regulators to identify and address future regulatory challenges and integrate technical and non-technical approaches;

> reviewing regulatory bases, requirements and criteria, and licensing processes with a view to support regulatory approaches.

enable the management of radioactive waste and materials to benefit from progress of scientific and technical knowledge by:

- reviewing the state of the art of scientific and technical bases of geological disposal concepts and decommissioning technology for nuclear facilities with a view to identify areas where additional efforts are required;
- promoting co-operative efforts to compile internationally applicable data and information, and benchmarking exercises;
- promoting joint technical initiatives in support of repository development and decommissioning technologies;
- promoting initiatives to maintain relevant competencies, as well as the accumulated knowledge, within organisations during the execution of long-term waste management and decommissioning projects;
- promoting initiatives to transfer current waste management and decommissioning knowledge to future nuclear systems, including new fuel cycles.

3. Radiation protection and public health



The goal

To assist member countries in the regulation and implementation of the system of radiological protection by identifying and addressing conceptual, scientific, policy, regulatory, operational and societal issues in a timely and prospective fashion, and clarifying their implications.

In order to beneficially utilise and cope with radiation and radioactive material, NEA member countries proactively engage in the radiological protection of the public, workers and the environment. New scientific and social challenges continue to arise in this area, notably concerning the radiological protection of non-human species, and the application of modern risk-governance approaches to radiological-risk decision making. In response, the international system of radiological protection, international standards, and national policies and regulations are also evolving. It is in the interest of all NEA member countries to share and build on past experience, and to address emerging issues and their practical implications, focusing on the development of policy-relevant regulatory, scientific, technical and practical aspects of radiological protection.

How to achieve the goal?

The Agency will:

identify emerging issues in radiological protection science and improve the implementation of scientific knowledge for practical uses by:

assessing developments in state-of-the-art radiological protection science, particularly within the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) and the World Health Organisation, and identifying gaps needing to be filled in support of policy and regulatory decisions:

- assisting in the development of multilateral scientific research programmes to address identified scientific gaps;
- alerting policy makers and regulators to significant scientific developments and their implications.

assist policy makers in developing and improving policies to best reflect state-of-the-art science and technology, as well as modern approaches to risk governance by:

- assessing the policy implications of scientific advances for member countries, and assisting them in implementing their policies and regulations;
- organising exchanges of experience and identifying key issues, common lessons and opportunities;
- developing consensus views on how international radiological protection recommendations can best serve the needs of radiological protection in member countries.

contribute to reach common understanding of regulatory issues in radiological protection by:

- developing consensus views on regulatory approaches to the implementation of international radiological protection policy;
- ➤ analysing the regulatory implications of recommendations being prepared by the International Commission on Radiological Protection (ICRP), and dialoguing with the ICRP on regulatory views of arising issues;
- ➤ identifying and analysing emerging regulatory issues, and exchanging experience and lessons learnt.

facilitate the improvement of member's operational radiological protection capabilities by:

- serving as an international forum for regulators and practitioners in reviewing the applicational approaches to operational radiological protection, and in identifying, understanding and implementing the most up-to-date knowledge and experience in radiological protection;
- improving national and international capabilities to respond to nuclear emergencies, using international nuclear emergency exercises to test new approaches and identify areas for improvement, such as transboundary information;
- ➤ fostering the exchange of operational radiological protection experience in the management of occupational exposure at nuclear power plants, and analysing worker exposure data for emerging trends in order to better focus the use of resources.



The goal

To help member countries identify, collate, develop and disseminate basic scientific and technical knowledge required to ensure safe, reliable and economic operation of current nuclear systems and to develop next generation technologies.

Research capability and technical expertise in basic disciplines such as nuclear and radiation physics, thermal hydraulics, neutronics, fuel chemistry and material science are needed to maintain a high level of performance and safety, and to develop nuclear programmes. Present and future nuclear technologies will greatly benefit from improved knowledge in these areas. Fostering active maintenance and development of this knowledge in an international framework and enhancing the dissemination of the scientific results are vital to the performance of nuclear activities.

How to achieve the goal?

The Agency will:

help advance the existing scientific knowledge needed to enhance the performance and safety of current nuclear systems by:

- reviewing model effectiveness and the impact of uncertainties on basic physics parameters in order to provide support for design-margin assessment:
- developing the capability of modelling codes in areas such as core physics and fuel performance;
- advancing scientific knowledge on the use of different fuels, including the modelling of fuel behaviour in civilian reactors loaded with weaponsgrade, mixed-oxide (MOX) fuel;



- addressing scientific and technical feasibility of extending reactor fuel burn-up well beyond current levels;
- conducting international validation and verification studies and performing benchmark exercises for the validation of computer codes and associated nuclear data;
- ➤ identifying areas where further experimental validation is needed and the type of experimental facilities and techniques required.

contribute to building a solid scientific and technical basis for the development of future-generation nuclear systems by:

- addressing emerging scientific issues, especially in support of nuclear safety and radioactive waste management, while taking into account the competitiveness of nuclear energy;
- addressing core physics characteristics of advanced reactor concepts internationally selected for further development;
- ➤ addressing the physical and chemical aspects of advanced fuel cycles;
- contributing to the scientific evaluation of partitioning and transmutation systems and the implementation of advanced fuel cycles;
- organising workshops and information exchange meetings of interest to the development of advanced nuclear systems, for example in the areas of high-temperature materials and the nuclear production of hydrogen.

support the preservation of essential knowledge in the field of nuclear science by:

promoting the collection and safeguarding of important and welldocumented results from experimental activities, for example in the areas of reactor physics, criticality safety, nuclear fuel behaviour and radiation shielding;

- > organising international validation exercises, using the collected experimental information mentioned above;
- > organising joint research projects;
- co-operating with national laboratories and universities to organise international exercises to educate new scientists in specific nuclear disciplines.

5. Economics, resources and technology_



The goal

To provide authoritative, reliable information on nuclear technologies, economics, strategies and resources to governments for use in policy analyses and decision making, including on the future role of nuclear energy in a sustainable development perspective and within the broad context of national and international energy policies.

Energy, particularly electricity, is a vital public commodity needed to support modern life. It is an accepted responsibility of OECD governments to ensure that it is provided economically, securely and with minimal environmental impact. Nuclear energy meets the needs of a significant share of the electricity consumption of OECD countries and has the potential to become more important in the future. There are many synergies between the nuclear energy issues of individual countries and the sector has considerable international implications. The added value of the NEA will result from the engagement of a broad scope of expertise in studies which will lead to robust findings and conclusions that support sound national policy making.

How to achieve the goal?

The Agency will:

analyse the impact of changes in electricity markets on nuclear power and assist member countries in assessing the role of nuclear energy in their energy policies by:

assessing nuclear energy cost elements such as capital investment, fuel cycle, waste disposal and decommissioning, and identifying cost-driving factors:

- ➤ reviewing effects of liberalisation of electricity markets on nuclear power as well as new issues raised, in particular security of supply, in co-operation with the IEA when appropriate;
- ➤ analysing, with the IEA as appropriate, the characteristics of nuclear energy, such as economics and financial risk, as well as the financing mechanisms and their differences from other technical options, from a liberalised electricity market perspective.

promote international co-operation for the development of innovative nuclear energy systems by:

- assessing progress made and technologies available in areas of interest for innovative nuclear energy systems of high performance, including innovative fuel cycles to minimise waste production;
- undertaking or contributing to joint projects funded separately and voluntarily by countries wishing to participate, such as those of the Generation IV International Forum (GIF), to foster international cooperation and enhance the overall efficiency of R&D efforts.

review nuclear power in the broader perspective of sustainable development by:

- ➤ analysing economic, social and environmental aspects, including the issue of the reduction of CO₂ emissions, of current and future nuclear energy use from the sustainable development viewpoint;
- evaluating progress in the different aspects of nuclear energy associated with achieving sustainable development;
- > participating in international fora on sustainable development, in particular in the OECD framework, to provide information on nuclear energy and better understand the overall context.

assess the availability of nuclear fuel and infrastructure required for the deployment of nuclear power and identify the eventual gaps by:

- maintaining databases on uranium and thorium resources, production and demand:
- maintaining qualitative and quantitative up-to-date information on existing man-made and human resources deployed in the design, operation, regulation and decommissioning of nuclear power plants;
- ➤ investigating the relations between qualified manpower requirements and education systems in place;
- collecting and analysing up-to-date information on equipment and infrastructure for nuclear energy R&D.

establish a communication network within and outside the OECD framework aiming at providing factual information on nuclear issues by:

- exchanging information on ongoing activities within the broad international arena for energy issues;
- > participating in joint projects, in particular with other OECD directorates, the IEA and the IAEA;
- participating in international events to present nuclear energy characteristics and performances.

6. Legal affairs



The goal

To help create sound national and international legal regimes required for the peaceful uses of nuclear energy, including international trade in nuclear materials and equipment, to address issues of liability and compensation for nuclear damage, and to serve as a centre for nuclear law information and education.

Achieving confidence in the peaceful exploitation of nuclear energy requires the existence of comprehensive and effective legal regimes whose goals are to protect the public and the natural environment from the risks inherent in those activities. Those regimes include regulation at a national level, co-operation at bilateral and multilateral levels and harmonisation of national policies and legislation through adherence to international conventions. They need to be strong enough to set and enforce limits, and flexible enough to keep pace with technological advances and changing public concerns.

How to achieve the goal?

The Agency will:

assist member countries in the development, strengthening and harmonisation of nuclear legislation that is based upon internationally accepted principles for the safe and peaceful use of nuclear energy by:

- serving as a forum for the exchange of information and experiences on legal issues in the nuclear field;
- making available a pool of expertise to advise and assist member countries on the development and strengthening of nuclear legislation;
- > encouraging member countries to harmonise their nuclear legislation with current, internationally accepted principles so as to remove impediments



to the safe and peaceful use of nuclear energy including international trade in nuclear material and equipment.

contribute to the modernisation of the international nuclear liability regimes and encourage the strengthening of treaty relations between interested countries to address liability and compensation for nuclear damage by:

- > supporting continuing efforts to improve the implementation of the Paris and Brussels Supplementary Conventions;
- > fostering progress towards a global liability and compensation regime;
- ➤ assisting member countries in interpreting and implementing the provisions of existing international nuclear liability instruments.

collect, analyse and disseminate information on nuclear law generally and on topical nuclear law issues in particular by:

- being a centre of reference for all major developments in the field of nuclear law at both national and international levels as well as on nuclear institutions, structures and legislation in member countries and in selected non-member countries;
- organising regional and international workshops, seminars and conferences on topical issues;
- organising nuclear law educational programmes and interacting with nuclear law schools and universities, to strengthen and advance nuclear law knowledge and ensure its continuation.

The goal

To be the international centre of reference for its member countries with respect to basic nuclear tools, such as computer codes and nuclear data, used for the analysis and prediction of phenomena in the nuclear field; and to provide a direct service to its users by developing, improving and validating these tools and making them available as requested.

Computer codes and basic nuclear data are fundamental tools to analyse and predict phenomena in the nuclear field. It is essential that these codes and data be internationally validated and disseminated in order to become common tools for actors in the nuclear area.

The Data Bank is formally a part of the NEA but has its own membership and a separate budget. The relationship between the Data Bank and the general NEA Secretariat is based on the principle of mutual benefit. The Data Bank benefits from, and contributes to, the general infrastructure of the NEA Secretariat and provides various parts of the NEA with its expertise in databases.

How to achieve the goal?

The Agency will:

improve and develop the Data Bank services to scientists in its member countries by:

- maintaining the collection of verified and validated nuclear data and computer programs up-to-date;
- extending the services according to customer needs and availability of resources:

- enhancing the control of Data Bank access, and ensuring that the data and computer codes are distributed and used according to the criteria set up by member countries;
- using modern computer technology to provide rapid and secured access to the services:
- ➤ maintaining close co-operation with other relevant organisations, such as the IAEA and the US Department of Energy (DOE).

assist its members countries in preserving know-how in computer program and nuclear data validation by:

- ➤ advising customers on the choice of available computer programs and nuclear data to be used in different application areas;
- organising courses, seminars and benchmark exercises to educate the scientific community in the proper use of these basic nuclear tools;
- co-ordinating the development and validation of a new, improved version of the JEFF nuclear data library, used as a standard in many member countries.

make available expertise to other parts of the NEA by:

- ➤ taking the lead or providing support for data preservation efforts and the associated database development and maintenance;
- co-ordinating the evaluation of chemical thermodynamic data for the safety assessment of radioactive waste disposal sites, in particular in deep geological formations;
- ensuring the technical support for the maintenance of the NEA Internet web pages.

C. Information and communication

The goal

To provide member governments and other major stakeholders with information resulting from NEA activities and to enhance awareness and understanding of the scientific, technical and economic aspects of nuclear activities as well as awareness of the NEA itself.

The dissemination of authoritative information and rigorous analyses to policy makers and other interested circles is key to enlightened and broadly shared decision making in the nuclear energy field. Improving the visibility of the NEA and its ability to convey the results of its work to member countries contributes to this endeavour.

How to achieve the goal?

The Agency will:

serve major stakeholders with information and analyses by:

- providing governments with its specialised, scientific, technical and economic output in a timely manner;
- providing the political decision-making circles and opinion formers in member countries with analytical material and policy conclusions deriving from the NEA's specialised work;
- > exchanging information with industry representatives and expert circles in areas of mutual interest.

meet the information needs of a diversified audience by:

providing the traditional range of publications and printed material designed to reach the target audiences described above as well as other potentially interested circles;

- developing new products and titles in order to meet evolving information needs and to improve efficiency of transmittal on a continuing basis;
- carrying out marketing activities in member countries, including publicising the results of the Agency's work.

increase its visibility by:

- ➤ involving the NEA management in efforts to promote the results of the Agency's work in member countries;
- ➤ increasing participation of the NEA at the highest level in major international fora and conferences, within the OECD area and elsewhere;
- maintaining and continuing to develop its website and related electronic information products in the OECD official languages;
- > organising exhibits at major international conferences;
- publishing articles and maintaining contacts with the media, as appropriate.

reinforce its "corporate identity" by:

- presenting the NEA as an objective and non-promotional international instrument to advance co-operation in the safe and economic use of nuclear power among the most developed countries;
- > presenting the NEA as a centre of reference and a repository of scientific and technical know-how and practices on nuclear energy;
- > presenting the NEA as a source of qualified information, rigorous analyses and policy advice on key aspects of nuclear energy.

IV. Interactions.

An interactive NEA will allow the Agency to benefit from outside input and experience, and to enhance the value of its work. Authoritative, balanced NEA involvement in the international nuclear energy arena, drawing on the Agency's competence and experience, will continue to bring value to member countries. Greater NEA participation in broader studies with other organisations and more exchanges with relevant sectors of civil society would be beneficial. Strengthened co-operation with other international organisations would help complement the activities of each other, create synergies and provide full value for the money of member countries. Significant improvements have been observed in this field over the period covered by the previous Strategic Plan, but additional efforts are still possible, including in avoiding duplication of activities. Member country help is key to ensure consistency and complementarity of the activities of the relevant international organisations when approving their respective programmes of work.

1. Working within the OECD family

The goal

To bring NEA expertise and the results of its work into the broader energy, socio-economic and environmental OECD context and to help provide member countries with a consistent and balanced OECD view on energy issues.

Given the large nuclear fuel resources available and the economic and environmental benefit nuclear power can provide as an important non-fossil source of electricity, a thorough discussion of nuclear energy in a sustainability context will continue within the OECD. The case for nuclear energy as a potential contributor to sustainable development will be robust if certain conditions are met to demonstrate that this form of energy is properly managed. The NEA can provide the OECD with the necessary input on the various aspects of nuclear power for further analyses in a broad context. More generally, the NEA will propose its participation in any OECD co-ordinating group in which the nuclear dimension and the Agency's experience might be beneficial, or when NEA activities can benefit from interaction with OECD experts in a broader context.

How to achieve the goal?

The Agency will:

interact with the OECD as a whole by:

- contributing to and benefiting from the OECD reform process;
- contributing to the reflection on the relationship between the Organisation and its semi-autonomous agencies as well as the impact of OECD work in capitals;

- > participating in the horizontal work of the Organisation in such areas as sustainable development and market liberalisation;
- > contributing to the preparation of relevant OECD ministerial meetings and appropriate OECD fora.

interact with the International Energy Agency (IEA) by:

- pursuing co-operation on the basis of respective independence and clearly defined areas of competence, which are conditions for the objectivity of analyses carried out by the two agencies;
- organising systematic cross-participation in the relevant IEA/NEA committees, including the IEA Governing Board and the Steering Committee for Nuclear Energy;
- integrating the relevant IEA analyses of the global energy context into NEA work:
- providing the IEA with nuclear energy input for incorporation into its broader energy studies;
- developing joint studies and publications, particularly when joint work can create synergy and give more value and credibility to the analyses of both agencies;
- > reinforcing co-operation when defining the scope and timing of future work of mutual interest.

interact with the Environment Directorate by:

- providing input on the environmental aspects of nuclear energy to sustainable development studies;
- integrating OECD methodologies and criteria to evaluate the sustainability of nuclear power;
- comparing approaches on topics of common interest, especially long-term issues, from the technical and ethical points of view;

> contributing input for use in connection with work on non-nuclear environmental risk assessment and management.

interact with the Directorate for Science, Technology and Industry (DSTI), the Economics Department and the Public Governance and Territorial Development Directorate by:

- participating in general debates concerning science and technology, on subjects such as financing or public acceptability, and provide NEA expertise in the nuclear field;
- assuring close co-operation with the DSTI in specific areas of common interest such as basic physics;
- co-operating with the Economics Department in relation to NEA economic studies, especially those concerning the liberalisation of the electricity market;
- > reviewing OECD work on public governance and assessing its relevance to the management of the nuclear industry.

2. Working with the International Atomic Energy. Agency (IAEA) and other international bodies

The goal

To ensure complementarity and increase synergy with the International Atomic Energy Agency (IAEA) and with other international bodies as well as to optimise resources, capitalise on NEA expertise and disseminate the results of NEA work to a wider audience.

Various other international bodies work in many of the same or similar areas as the NEA, although their objectives and membership are different. It is therefore important to co-ordinate efforts so that they complement each other and results are properly conveyed to other organisations.

How to achieve the goal?

The Agency will:

enhance co-operation with the International Atomic Energy Agency (IAEA) and undertake additional efforts to minimise overlap and avoid duplication by:

- ensuring full implementation of the co-ordination and consultation mechanisms provided for in the existing Agreement between the two agencies;
- co-ordinating with the IAEA to maintain the complementarity of the two agencies' programmes, including timely consultations when preparing the Programme of Work;
- undertaking activities jointly with the IAEA in appropriate areas and when organising meetings and international conferences;
- benefiting from the participation of non-member countries in NEA activities through the IAEA, whenever the principle of added value is met;

- transmitting the results of NEA work to the IAEA so that they can also be applied outside the NEA;
- seeking the support of member countries to help avoid unnecessary duplication in the agencies' programmes;
- ensuring cross-participation in the governing bodies and relevant committees of the two agencies.

enhance interaction with the European Commission (EC) by:

- holding periodic co-ordination meetings and organising crossparticipation in relevant activities;
- undertaking activities necessary to help OECD members benefit from the results of activities sponsored by the EC;
- helping the EC to benefit from NEA results in its formulation of work programmes and policies.

enhance interaction with other groups by:

- co-operating with the G8 Nuclear Safety and Security Working Group, as appropriate, notably when NEA expertise is required in terms of nuclear legislation and liability;
- co-operating with other bodies, such as the European Bank for Reconstruction and Development, on a case-by-case basis.

3. Liaising with industry

The goal

To maintain contacts with industry, and to collect and utilise relevant information and data in NEA work, as appropriate.

NEA interaction with industry will be based upon the recognition that the NEA is an intergovernmental organisation whose member countries determine its programme and the appropriate degree of industrial involvement with the Agency. However, the liberalisation of electricity markets and the privatisation of production capacities are giving a major role to the industry. Technical and economic aspects of nuclear power in the future are largely in its hands. The NEA can benefit further from industry contributions that the latter may be able to provide to the work of the standing technical committees.

How to achieve the goal?

The Agency will:

establish useful interaction with key organisations and groups representing the nuclear industry in member countries by:

- maintaining interactions with the major international organisations of constructors and operators as well as those in member countries in order to explore appropriate co-operation;
- > pursuing regular or periodic meetings and agreements providing for the systematic exchange of information.

increase exchanges with industry that could be beneficial to NEA activities by:

encouraging industry participation in a task-oriented and flexible way, but taking care not to create commercial distortions; co-ordinating with member countries the appropriate participation of industry bodies in specific NEA activities, including the standing technical committees upon their approval, but in general excluding regulatory activities.

4. Co-operating with non-member countries.

The goal

To establish effective relationships with non-member countries whose participation in the NEA programme can be mutually beneficial, limiting further membership to countries that can make a significant contribution to the Agency.

Several countries have joined the OECD and the NEA over the last decade and additional ones are expected to apply for membership in future. It is recognised that new membership or outreach should provide significant added value to NEA member countries, provided certain conditions are met. Any proposal for co-operation or membership will be considered on the basis of a careful evaluation of potential mutual benefit and of possible consequences for NEA strengths.

How to achieve the goal?

The Agency will:

keep the Agency's membership relatively small and homogeneous by:

- seeking to limit new membership to those countries that are "significant players" in the nuclear field and that can provide added value to the Agency's activities;
- carefully analysing the credentials of non-member countries that indicate an interest in joining the Agency, including those of candidates that are already members of the OECD or of the European Union;
- evaluating a potential member according to criteria such as the nature and extent of its nuclear programme; its international commitments and co-operative activities in the nuclear field; the organisation of its nuclear programme, including in particular the viability and independence of the

safety authority; its domestic nuclear legislation; its resources, including whether it is receiving technical and financial assistance, and its ability to provide technical specialists who can contribute to NEA activities; its contribution as an observer in NEA activities; and its approach to public information:

discouraging membership applications from countries about which serious questions are likely to be raised in respect of the above criteria.

establish forms of co-operation with non-members which help them and provide added value to the Agency's programme, consistent with financial, political and practical realities and OECD policy on outreach by:

- indicating openness to involving non-member countries with significant nuclear power programmes and good non-proliferation credentials in its activities on a step-by-step basis, taking into account OECD non-member country priorities, budgetary constraints affecting the Agency and the anticipated abilities of countries to contribute to NEA activities and finance their own participation;
- avoiding co-operating directly with countries that have not made a nuclear non-proliferation commitment, although co-operation with such countries through the IAEA may be appropriate in certain instances;
- > assisting member countries in their efforts to improve nuclear practices in non-member countries:
- working with the IAEA in areas where non-member countries can benefit from co-ordinated action by the two agencies;
- seeking to establish more formal co-operative links with Russia in order to facilitate its participation in selected NEA activities at its cost, when such participation is of sufficient interest to the Agency; and seeking opportunities to organise internationally funded research projects in this country that are technically attractive and cost-effective;
- developing co-operation with China on a step-by-step basis, with a view to achieving mutually beneficial results.

V. Focusing on efficiency

Efficient working methods aim at establishing the best Programme of Work to meet the needs of member countries and at delivering quality work on time and cost effectively. They should preserve NEA flexibility and responsiveness, which are traditional NEA strengths. Special attention has been paid in the 2005-2009 Strategic Plan to the management of cross-cutting issues and to the monitoring and evaluation of the Strategic Plan.

Cross-cutting issues

It is essential to ensure that cross-cutting issues are satisfactorily dealt with and the relevant activities well co-ordinated within the Agency. The main provisions described in detail in the sections hereunder can be summarised as follows: the cross-cutting issues will be identified in the Programme of Work, including in the relevant activities of each strategic arena; the corresponding resources allocated to cross-cutting activities will also be identified in each strategic arena; the Secretariat will assign the responsibility of each cross-cutting issue to a member of the Secretariat's senior management; the chairpersons of the standing technical committees (STCs) will address the cross-cutting issues during their annual co-ordinating meeting and make comments and proposals to the Steering Committee to overcome possible difficulties; the Steering Committee will review the Agency's annual status report from the standing technical committees with a view to evaluating the consistency of the STC activities relating to cross-cutting issues, and organise sessions involving the relevant STCs.

Monitoring and evaluating the implementation of the Strategic Plan

To ensure that the Programme of Work is consistent with the NEA objectives set out in the Strategic Plan, it is necessary to periodically assess and evaluate the implementation of the Strategic Plan itself. The provisions described in the sections hereunder can be summarised

as follows: both the Steering Committee and the standing technical committees have been assigned special responsibility in this field; in their respective areas, the standing technical committees will have to relate each activity of the Programme of Work to the NEA general objectives and develop performance measures where appropriate, and monitor the implementation of the Strategic Plan over the five-year period; every second year they will evaluate the level of achievement in implementing their strategies; at the end of the five-year period, they will assess the outcome of their work and the added value for member countries in terms of production of common scientific, technical, legal and policy analyses and consensus positions, databases and services, knowledge preservation and development, improvement of infrastructure, and peer reviews. The Steering Committee will assess the results of the intermediate evaluations prepared by the standing technical committees; at the end of the five-year period, and on the basis of a report prepared by the Secretariat after consultation of the member countries, the Steering Committee will analyse the achievements in each strategic arena and evaluate to what extent the NEA general objectives have been met

1. Role of the Steering Committee for Nuclear Energy

The goal

To ensure the Agency's responsiveness to member countries' needs by carrying out assigned tasks in conformity with the provisions of its Statute and OECD Council decisions, and within the policy framework outlined by the Steering Committee.

The Steering Committee's role is to ensure that the purpose of the Agency and its assigned tasks are carried out in conformity with the provisions of the NEA Statute and the decisions of the OECD Council, and to ensure the Agency's responsiveness to member countries' needs. It provides the NEA with political guidance to extend the NEA's focus beyond specialist areas and to allow it to play a more policy-oriented role.

How to achieve the goal?

The Steering Committee will:

increase its role in the preparation of the Programme of Work to better ensure that NEA activities respond to the needs of member countries by:

- reviewing the evolving situation in the nuclear field and the evolving needs of member countries;
- defining the Agency's Programme of Work, including the prioritisation of activities, and identifying the cross-cutting issues to be dealt with in the relevant period;
- presenting the Agency's Programme of Work, along with a proposed budget, to the OECD Council;
- periodically reviewing standing technical committee mandates and ensuring that they are adjusted to correspond closely to the overall objectives of the NEA Programme of Work;

providing guidance to the NEA Secretariat on relations with non-member countries, international organisations and industry.

assess and monitor the implementation of the Programme of Work by:

- providing guidance to the NEA Secretariat and the standing technical committees (STCs) to ensure proper focus on priorities and closer evaluation of the results of their work:
- reviewing the Agency's annual status report from the standing technical committees, and other relevant documents in relation to the outputs and deliverables described in the Programme of Work, and evaluating the consistency of STC activities connected with cross-cutting issues;
- reviewing the report of the annual co-ordination meeting of the standing technical committee chairpersons, paying special attention to the comments and proposals of the STC chairpersons concerning cross-cutting issues, and providing appropriate guidance to the Secretariat;
- reviewing the Director-General's report on budgetary matters relevant to the Programme of Work;
- reviewing the annual report on NEA co-operative activities with nonmember countries, and the Secretariat reports on NEA contributions to OECD horizontal projects.

assess and monitor the implementation of the Strategic Plan by:

- reviewing the STCs' intermediate evaluation of the Strategic Plan's implementation in their respective areas when preparing each biennial NEA Programme of Work;
- assessing at the end of the five-year period, with the contribution of the STCs and on the basis of a report prepared by the Secretariat after consultation of the member countries, the achievements in each strategic arena and the extent to which the general NEA objectives have been met;
- considering revisions to the current Strategic Plan as appropriate and wide consultations for the next one.

pursue a policy-oriented role for the NEA by:

- providing guidance to the NEA Secretariat on the Agency's input into horizontal policy discussions on energy and the environment in OECD circles, including at ministerial level;
- formulating, as appropriate, official statements or opinions on nuclear energy policy questions as an NEA contribution to international discussions on sustainable energy issues;
- encouraging each standing technical committee to develop policyoriented conclusions from its technical work when relevant;
- regularly inviting high-level executives of the International Energy Agency (IEA), the Environment Directorate and other parts of the OECD, as necessary, to discuss policy issues of mutual interest;
- periodically including on its agenda particular policy issues for consideration and organising, as necessary, special sessions to discuss them;
- entrusting the Steering Committee Chair or delegated representative(s), as appropriate, with the task of conveying NEA positions on policy matters to high-level international fora.

establish closer ties with the standing technical committees by:

- arranging for each standing technical committee chair to report to the Steering Committee every two years on his/her committee's achievements and future objectives;
- ➤ arranging for all standing technical committee chairpersons to be invited to attend the spring meeting of the Steering Committee during the year when the biennial NEA Programme of Work is being discussed;
- organising, as necessary, special sessions involving one or more technical committees to address cross-cutting issues and to develop joint policy approaches and outputs in selected horizontal areas of the Programme of Work.

enhance the efficiency of its working procedures by:

- further rationalising and streamlining the agendas of its semi-annual sessions, focusing on decision-oriented work and policy-oriented discussions;
- > requesting its Bureau to undertake tasks delegated to it by the Committee, and to participate in the preparation of full meetings of the Committee, as appropriate, and in the follow-up of Committee decisions, in close co-operation with the Secretariat;
- > allowing for more routine items or reporting to be handled by the written procedure.

2. Role of the standing technical committees.

The goal

To carry out efficiently the NEA Programme of Work in the strategic arenas, and to develop the basic strengths of the Agency as a key international instrument of co-operation.

Composed of member country experts, the standing technical committees constitute a unique feature and important strength of the NEA, providing flexibility for adapting to new issues and helping to achieve consensus rapidly.

How to achieve the goal?

The standing technical committees will:

foster international co-operation in the NEA strategic arenas under the guidance of the Steering Committee, with a view to developing common approaches and consensus by:

- exchanging information and experience through efficient networks of experts in their respective areas and identifying issues of common interest;
- proposing to the Steering Committee the activities, appropriately prioritised and clearly related to the NEA general objectives, for the future Programme of Work, including common analyses, joint exercises, joint projects, peer reviews, databases and state-of-the-art reports;
- carrying out the Programme of Work as decided in their respective areas, producing the relevant deliverables and interacting with civil society as appropriate;
- > favouring the widest possible dissemination of the results of their work.

optimise co-ordination among themselves and treat cross-cutting issues efficiently by:

- co-operating by means of joint studies or joint groups, and carrying out common analyses as appropriate;
- entrusting their chairpersons with the task of attending an annual coordination meeting with a view to addressing topics of common interest and avoiding duplication;
- taking appropriate procedural measures to manage the cross-cutting issues in which the standing technical committees are involved;
- > ensuring that the existing expertise in the other NEA committees is properly taken into account and not duplicated.

monitor the implementation of the Strategic Plan in their respective areas of work under the guidance of the Steering Committee by:

- evaluating, every second year in co-ordination with the preparation of the biennial Programme of Work, the degree of achievement in implementing their respective strategies as well as the means used to do so, and taking corrective measures if appropriate;
- proceeding, at the end of the five-year period, with a final assessment of the implementation of the relevant part of the Strategic Plan – the results over the period will be analysed in terms of added value for member countries and of the NEA contribution to issues such as the production of common technical and political analyses and consensus positions, knowledge preservation and development, improvement of infrastructure and peer reviews;
- > developing performance measures where appropriate.

enhance their efficiency by:

reviewing their working methods regularly and adjusting them as necessary;

- > reviewing the structure of their subsidiary bodies in light of the Agency's Strategic Plan and Programme of Work, and making adjustments as necessary to make them more efficient, flexible and task-oriented;
- co-ordinating their meetings with those of other international organisations:
- requesting their bureaus to undertake tasks delegated to them by the committees, and to participate in the preparation of full meetings of the committees, as appropriate, and in the follow-up of committee decisions, in close co-operation with the Secretariat;
- > establishing rules and procedures for their bureaus.

3. Prioritisation of activities.

The goal

To allocate resources in accordance with the Agency mandates and the priorities given to the strategic arenas, taking into account proposals for extending NEA participation in OECD horizontal activities and for becoming more involved in energy-related policy issues.

The ongoing process of reform at the OECD and budgetary constraints require the NEA to optimise the use of its resources so as to maintain its traditional strengths while responding to the changing global economic environment and the need to address cross-cutting issues more efficiently. The strategic arenas identified to meet NEA general objectives must be given adequate resources, taking into account the prioritisation described in Chapter II.

How to achieve the goal?

The Agency will:

ensure an appropriate selection of activities by:

- showing the link between each activity and the general NEA objectives of the Strategic Plan;
- reviewing annually the needs and results in each strategic arena, in cooperation with the standing technical committees;
- analysing periodically the evolution of nuclear programmes in member countries in order to identify the most important needs that can be met by the NEA;
- taking account of activities performed by other international organisations and of available resources.

ensure the transparency of the Programme of Work by:

- > showing a clear prioritisation of activities and their resource implications;
- > presenting the activities' expected deliverables and outputs;
- > providing improved status reports on activities under way;
- > indicating contributions of the relevant sectors of the Agency to crosscutting issues together with corresponding resources.

The Steering Committee will:

optimise its benefit from standing technical committee input by:

- asking the standing technical committees to proceed with internal reviews of priorities, especially during the preparation of the Programme of Work;
- ➤ asking the standing technical committees to evaluate every second year, in co-ordination with the preparation of the biennial Programme of Work, the implementation of the Strategic Plan in their respective areas;
- ➤ taking appropriate action if, after internal prioritisation or difficulties in meeting the objectives of the Strategic Plan, it appears that a reallocation of resources is needed;
- > reviewing the NEA committee structure and the mandates of the standing technical committees as appropriate.

4. Secretariat efficiency

The goal

To promote continuous improvement in Secretariat efficiency.

Improving efficiency is especially important in a context of zero-growth or decreasing budgets. The OECD effort to reform its working methods and to improve its efficiency will continue to be pursued at the NEA level.

How to achieve the goal?

The Agency will:

streamline administrative procedures by:

- making optimum use of planning and accounting tools to increase and monitor the efficiency of administrative and budgetary procedures;
- pursuing further decentralisation of services currently included within overhead charges paid to the OECD;
- exploring possibilities of outsourcing services currently provided by the OFCD.

benefit from the use of modern technologies by:

- further developing efficient office automation services;
- reinforcing the technical means to circulate and distribute documents in a cost-effective manner, including greater use of the Internet;
- > promoting the use of video-conferencing and conferencing via Internet.

ensure that its structure is appropriate by:

- proposing, if necessary, to adapt its structure to the requirements arising from the new NEA Strategic Plan and the need for increased horizontal interaction inside the NEA;
- > assigning the responsibility of each cross-cutting issue to a member of senior management.

5. Secretariat resources

The goal

To maximise the resources available to the Agency and ensure their efficient use in the pursuit of its Programme of Work. To ensure that the NEA benefits from well-qualified and highly motivated staff covering the range of skills required by the Programme of Work.

Fulfilment of the objectives fixed by the Strategic Plan presupposes a stable and predictable level of financial resources. The Strategic Plan has been developed based on the hypothesis that resources would be equivalent to those of 2003 over the next five years. Well-qualified staff are essential to ensure that the Agency's work is of high quality, and special attention will be paid to the management of human resources at the Agency.

How to achieve the goal?

The Agency will:

consolidate the funding of its core programme by:

- continuously demonstrating the cost-effectiveness of NEA work to member countries;
- basing NEA activities on a significant, well-defined and clearly prioritised core programme;
- > seeking medium-term commitments from member countries at national and OECD levels.

seek additional sources of funding by:

- encouraging voluntary contributions from member countries in support of activities contained in the Programme of Work;
- providing support for separately funded projects on specific and wellidentified activities so long as these do not have any negative impact on either core funding or activities;
- > pursuing possibilities for enabling the Agency to benefit systematically from the sales of publications.

attract the best staff by:

- improving the visibility of the NEA as an attractive career move for highlevel professionals;
- systematically advertising vacant posts in a wide range of circles and seeking help from governments in finding the best-qualified candidates;
- implementing a cost-effective policy to complement Secretariat expertise in specific areas;
- providing the Steering Committee, once a year, with an indication of the specific areas of the NEA programme in which cost-free experts would be useful for the Agency's work in a context of mutual benefit;
- ensuring that all NEA staff are provided with appropriate opportunities for training and career enhancement;
- training managers to achieve and maintain high motivation among their staff.

maintain an efficient operational management of resources by:

- > continuing to enhance the Agency's capacity for planning and reporting;
- placing emphasis on managing activities and resources in a flexible manner that allows changing circumstances to be rapidly identified and accommodated:

- seeking further transparency in support services provided to the NEA by the OECD and decentralisation of such support services and associated financial resources;
- > seeking economies by outsourcing the procurement of specific services when appropriate and possible.

Authority for the Nuclear Energy Agency (NEA) and its activities

Authority for the NEA

Under Article 9 of the Convention of the Organisation for Economic Co-operation and Development (succeeding the Organisation for European Economic Co-operation), the Council establishes subsidiary bodies for the achievement of the aims of the Organisation. Bodies set up by the Council include main committees reporting directly to it, as well as other subsidiary bodies known by other names.

This is the case of the OECD Nuclear Energy Agency (NEA), which was established by a Council Decision of 17 December 1957 embodying its Statute, as amended by subsequent Decisions of the Council [C(77)183(Final), C(92)220 and C(95)157(Final)].

The Statute (Art. 1.b) sets out the purpose of the Agency as follows:

"Taking due account of the public interest and mindful of the need to prevent the proliferation of nuclear explosive devices, the purpose of the Agency shall be to further the development of the production and uses of nuclear energy, including applications of ionizing radiations, for peaceful purposes by the participating countries, through co-operation between those countries and a harmonization of measures taken at the national level."

Authority for the Steering Committee

The Statute (Art. 2) establishes the authority for the Steering Committee as follows:

"The tasks assigned to the Agency shall be carried out, under the authority of the Council, by the Steering Committee for Nuclear Energy, by the bodies which the latter has established... to assist it in its work or perform tasks of common interest to a group of countries, and by the Secretariat of the Agency which shall form part of the Secretariat of the Organisation."

In addition, Art. 3 of the Statute specifies that:

"The Steering Committee shall be competent to deal with any question relevant to the purpose of the Agency under conditions resulting from the provisions set forth below and from other applicable decisions of the Council."

Authority for the NEA standing technical committees

The creation and the terms of reference of such committees is dealt with under the Statute Art. 12.a:

"The Steering Committee may establish such Commissions and Working Parties as it may consider necessary to assist it in the performance of its duties and entrust them with the execution of any task relevant to the purpose of the Agency."

The terms of reference of the NEA standing technical committees are approved by the Steering Committee.

Authority for the Data Bank

The Data Bank was created by decision of the Steering Committee (7 December 1977) based on Art. 5.b of the Statute. At the same meeting the Steering Committee adopted its terms of reference [NE(77)28].

Authority in respect of NEA main areas of activity

The NEA areas of activity are based on three articles of the Statute:

Article 4.a

"The Agency shall promote technical and economic studies and undertake consultations on the programme and projects of participating countries relating to the development of research and industry in the field of the

production and uses of nuclear energy for peaceful purposes, in collaboration with other bodies of the Organisation in matters falling within their competence."

Article 7.a

"The Agency shall encourage the development of research into the production and uses of nuclear energy for peaceful purposes in participating countries."

Article 8 a

- "The Agency shall:
- (i) contribute to the promotion, by the responsible national authorities, of the protection of workers and the public against the hazards of ionising radiations and of the preservation of the environment;
- (ii) contribute to the promotion of the safety of nuclear installations and materials by the responsible national authorities;
- (iii) contribute to the promotion of a system for third party liability and insurance with respect to nuclear damage;
- (iv) ..."

Documentation

The following official documentation is produced regularly by the NEA in respect of its programme, budget, results and committee activities:

- medium-term priorities;
- > biennial programme of work and estimates of expenditure;
- > reports by the Director-General to the Steering Committee (twice a year);
- annual reports by the NEA standing technical committees on the status of their activities;
- > yearly annual report on the activities of the Nuclear Energy Agency;
- > NEA chapter in the OECD Annual Report;
- > NEA News magazine (twice a year).

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996); Korea (12th December 1996) and the Slovak Republic (14th December 2000). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

NUCLEAR ENERGY AGENCY

The OECD Nuclear Energy Agency (NEA) was established on 1st February 1958 under the name of the OEEC European Nuclear Energy Agency. It received its present designation on 20th April 1972, when Japan became its first non-European full member. NEA membership today consists of 28 OECD member countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, Portugal, the Republic of Korea, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Commission of the European Communities also takes part in the work of the Agency.

The mission of the NEA is:

- to assist its member countries in maintaining and further developing, through international cooperation, the scientific, technological and legal bases required for a safe, environmentally friendly and economical use of nuclear energy for peaceful purposes, as well as
- to provide authoritative assessments and to forge common understandings on key issues as input to government decisions on nuclear energy policy and to broader OECD policy analyses in areas such as energy and sustainable development.

Specific areas of competence of the NEA include safety and regulation of nuclear activities, radioactive waste management, radiological protection, nuclear science, economic and technical analyses of the nuclear fuel cycle, nuclear law and liability, and public information. The NEA Data Bank provides nuclear data and computer program services for participating countries.

In these and related tasks, the NEA works in close collaboration with the International Atomic Energy Agency in Vienna, with which it has a Co-operation Agreement, as well as with other international organisations in the nuclear field.

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