

Medium Term Strategy

2006–2011

Introduction

The purpose of this document is to set out the Agency's goals and objectives for the period 2006-2011, the actions required to achieve those objectives and how the Agency expects to be perceived at the end of the given timeframe. Unlike its predecessor, the Medium Term Strategy (MTS) for 2001-2005, this iteration covers a six-year period, i.e. three complete programme and budget cycles.

Approach

The new MTS has been developed through a process of interaction between the Secretariat and a Working Group of the Board of Governors established for this purpose. The lessons learned, experience gained and changes in the Agency's environment over the last five years have been taken into account in the formulation of this MTS. As with the MTS for 2001–2005, the new MTS also follows the three broad 'pillars' of technology, safety and verification and it adopts a 'cross-cutting' approach in which all Agency activities, regardless of organizational structure, programme location or sources of funding are integrated into specific goals. This approach will continue to be used in the formulation, implementation and evaluation of all Agency programmes. The MTS is intended only to give general direction to the activities that the Agency will carry out between 2006–2011. It does not include programme details or resource requirements. These will continue to be included in the programme and budget proposals for each biennium that the Secretariat submits, for approval, to the Policy-making Organs.

As for lessons learned from implementing the MTS for 2001–2005, it is clear that needs — and therefore priorities — can evolve. It follows that the specific means and methods through which the Agency seeks to achieve its strategic goals may also change. In this context, it should be noted that all of the actions identified in the 2001–2005 MTS, especially those related to priority activities in the substantive areas of the Agency’s work, were included in Agency programmes as from 2001. Most of them were funded either from the Regular Budget or from the Technical Cooperation Fund or the Nuclear Security Fund and others by extrabudgetary contributions. Some were not funded at all and could not, therefore, be carried out unless funds were forthcoming from voluntary contributions or from cost savings. Following from this, a key lesson learned from past experience is that clearer identification of absolute priorities among competing activities is essential to the optimal use of resources.

Another lesson is that there is a need to have demonstrable cause-to-effect relationships between the planned outputs and objectives of the Agency’s biennial programmes which, in turn, need to be linked more directly and unambiguously to the strategic goals and objectives of the MTS. Similarly, the objectives of the Technical Cooperation Strategy must be reflected in and be linked to the MTS. The MTS for 2006–2011 seeks to achieve this end and to correct the kind of discrepancy apparent between the objectives of the Technical Cooperation Strategy and the MTS for 2001–2005.

Finally, a further lesson learned, relating to functional Goal E, (‘Excellence in Management’) of the MTS for 2001–2005 is that the achievements, to date, of the “one-house approach,” including the introduction, acceptance and implementation of appropriate coordination mechanisms for cross-cutting areas, still need to be built upon. This is underscored in the way in which Goal E (‘Enhancement of Agency Responsiveness and Quality Management’) of the MTS for 2006–2011 has been formulated and includes new areas of particular focus.

Background: Changing times and opportunities

The orientation of a MTS is, by definition, dynamic and needs to be responsive to changing times and circumstances. Whilst the vision embodied in Article II of the Statute remains valid, the world in which the Agency seeks to realize that vision is constantly changing. Indeed the political and economic environment has changed dramatically since the MTS for 2001–2005 was issued in 1999. One major influence has been increasing globalization, characterized by rapid electronic information exchange, interlinked financial systems and global trade and the constant movement of people, ideas and goods. Another is the realization that nuclear proliferation and nuclear terrorism pose significant threats to international security. There is also a renewed interest in possible multilateral approaches to the front and back ends of the nuclear fuel cycle, including supply issues. A further major influence is that substantial growth in energy supplies will be needed in the 21st century to meet sustainable

development goals. This has been emphasized by the UN Commission on Sustainable Development in 2001, the World Summit on Sustainable Development (WSSD) in 2002 and the reports of the Intergovernmental Panel on Climate Change. The Kyoto Protocol, which will enter into force in February 2005, reinforces the importance of increasing energy supplies without adding to greenhouse gas emissions. Additional sustainable development goals set by the WSSD, and by the Millennium Summit in 2000, for health, water, agriculture and the environment serve to guide Agency objectives for non-power nuclear applications.

Nuclear Power

Against this background, the present picture of nuclear power remains mixed and projections for the future vary. Each country and region faces different constraints and opportunities when choosing its energy strategy — and choices therefore vary. At the global level two principal factors come into play. First is the unprecedented expansion of energy demand that the world faces in the next fifty years. This will be driven by continuing population growth, economic development and the aspiration to provide access to modern energy systems to the 1.6 billion people now without such access. Second is a focus on limiting greenhouse gas emissions, and reducing the risk of climate change. Both factors have tended to raise the profile of nuclear power. The contribution that further nuclear energy applications— seawater desalination and hydrogen production— could make to sustainable development are also attracting increased funding and visibility. The continuing trend toward energy market liberalization has focused additional attention on increasing the economic efficiency of nuclear power plants and on licence extension, capacity upgrading and increased availability.

In response to these challenges, the main adjustments in the new MTS as compared to the MTS for 2001–2005 are reflected in the emphasis placed on assessments and actions to ensure that the nuclear power option is open and accessible to all interested Member States, that it adapts to changing energy markets and customer needs and that its development fulfils the requirement of remaining competitive, efficient, safe, secure and clean, and does not contribute to proliferation. Towards these ends, the adjustments include an increased emphasis on nuclear knowledge preservation and management, and on innovation including all safety, security, non-proliferation, economic and environmental aspects of nuclear power. They also include greater emphasis on technological advances that strengthen proliferation resistance whilst, at the same time, continue to facilitate the spread of nuclear power benefits to interested Member States through the Agency's regular and technical cooperation programmes.

Nuclear Applications

The focus of the Agency's work in the fields pertaining to sustainable development has been on how to adapt and develop new nuclear, radiation and isotope techniques effectively to address the major challenges facing the developing world — hunger, disease, poverty and management of water resources, together with measures for a cleaner and safer environment. The MTS responds to increased interest by Member States in the contributions that nuclear technologies can make towards meeting socio-economic needs in a sustainable manner through the Agency's technical cooperation and regular programmes. Research and development work on new, cost effective solutions is being vigorously pursued. New developments in areas such as biomolecular technology, gene sequencing and nanotechnology will have a significant impact on the comparative advantage of the applications of nuclear technology for food and agriculture production, human health improvement, water resources management, industrial development and environmental management.

Nuclear Safety

Greater use of nuclear technology leads automatically to greater use of nuclear and other radioactive material and radiation sources. This increases the risks of exposure to ionizing radiation. A current trend is for States to subscribe, in increasing numbers, to international safety and security undertakings and guidance including Conventions and Codes of Conduct. The Agency safety standards should become the global frame of reference for the high level of safety required for nuclear applications. The high level of safety now achieved in the nuclear sector needs to be sustained. The increase in requests by Member States for Agency safety services, including through the technical cooperation programme, and the strong desire of Member States to take part in regional and global safety networks have been taken into account in the development of the MTS. Actions for developing cost effective solutions for managing and networking nuclear and radiation safety knowledge to enhance the exchange of experience and learning have been incorporated.

Nuclear Security

In recent years, the security of nuclear and other radioactive material has become a priority. There is international consensus about the need to strengthen the security of nuclear and other radioactive material in use, storage and transport, and to protect them and associated facilities against terrorist and malevolent acts. In the area of nuclear security, the MTS focuses on measures and assistance to Member States to prevent, detect and respond to security risks and on the completion and implementation of an international infrastructure of legal instruments, recommendations and

guidelines. Of particular importance is the Convention on the Physical Protection of Nuclear Material. Parties to the Convention are currently engaged in efforts with a view towards extending the scope of the Convention to cover nuclear material for peaceful purposes, not only in international transport and storage, but also in domestic transport, storage and use, and to protect nuclear material and facilities from sabotage.

With the recognition of the interlinkage of safety and security aspects and the synergies between them that are possible, the MTS proposes comprehensive and effective international frameworks for strengthening nuclear safety and nuclear security with the aim of protecting people and the environment worldwide.

Verification

In the nuclear non-proliferation area, the consequences of global interdependence have been brought into sharp focus through the discovery of further, clandestine nuclear programmes and activities. These include illicit trade in nuclear technology and materials. Another aspect of the changed environment, the emergence of terrorist threats from non-State actors, represents a new dimension. These new developments underscore the need for effective safeguards in order to deter and detect the use of nuclear material for proscribed purposes, in contravention of safeguards agreements, and the vital importance of effective safeguards in facilitating cooperation in the field of peaceful uses of nuclear energy. In addition, the new developments highlight the need for improved national controls over nuclear material and related technology. All of these new challenges need to be factored into and reflected in the proposed MTS.

Therefore, a major thrust of the objectives envisaged for the 2006-2011 MTS is to strengthen further the Agency's ability to provide assurance that States are complying with their obligations under safeguards agreements, including NPT safeguards agreements, thereby contributing to their collective security. Towards this end, the effectiveness of the Agency's safeguards system should be further strengthened and its capability to detect undeclared nuclear material and activities increased. Bearing in mind the importance of achieving the universal application of the Agency's safeguards system, every State which still has an outstanding obligation to bring a comprehensive safeguards agreement into force should do so promptly. Efforts further to strengthen the effectiveness and improve the efficiency of the safeguards system must also be based on the recognition that the full potential of the safeguards system can be best realized when comprehensive safeguards agreements and also protocols additional to safeguards agreements are being implemented in all States and when traditional safeguards measures are integrated with strengthening measures. For its part, the Agency must, inter alia, continue actively to integrate new types and sources of safeguards relevant information, in an

effective and efficient manner, into safeguards State evaluation. This is the process through which the Agency seeks to obtain as full a picture as possible about a State's nuclear programme, activities and plans in order to strengthen the basis on which it conducts its verification activities and draws safeguards conclusions for a State as a whole.

For the next MTS period, the Agency also needs to ensure that it has at its disposal the wherewithal to respond in a cost efficient way to the increasing demands of information analysis and of other, technical verification challenges. The Agency needs to seek timely solutions to remaining constraints to fully effective and efficient safeguards implementation, including the implementation of integrated safeguards. It will be particularly important to intensify activities to help States to strengthen arrangements for accounting for and control of nuclear and other radioactive materials. Finally, the Agency must remain ready to assist, in accordance with its Statute, with the verification tasks that it could be called upon to carry out under nuclear arms reduction and disarmament initiatives.

Management

It is clear that a common planning and priority setting mechanism is essential to synergies and reinforcement between all Agency programmes and especially between the technical cooperation programme and the regular programme, while ensuring an appropriate balance between promotional and other statutory activities of the Agency. Member States are placing greater emphasis on more effective methods designed to define their needs, interests and priorities and, in response, focus the Agency's programmes more sharply. More specifically, the MTS reflects the strategic directions and objectives of technical cooperation, a cross-cutting Agency mechanism supporting Member States programmes.

Finally, the adoption and implementation of results based management since 2001 have had substantial impact on the Agency's work in terms of programme design and delivery and performance assessment. The results based approach will be further strengthened through the introduction of appropriate standards for quality management and advances in information and communication technology to consolidate gains in the effectiveness and efficiency of programme implementation. Improvement of work processes and the introduction of integrated management systems are among the actions included in the MTS that would benefit Member States and Agency programme managers alike. Also, in view of increasing demands by Member States for Agency services and support, the availability of adequate resources for the regular programme and for the technical cooperation programme will continue to be critically important.

The Agency in 2011

The Agency expects to have enhanced its reputation as a professional, innovative, impartial and transparent organisation which is capable of anticipating new developments and responding promptly to new challenges. The Agency will be playing a leading role in anticipating, promoting and facilitating the peaceful uses of nuclear energy for sustainable development, by responding effectively and efficiently to the expressed needs of its Member States and focusing on areas where nuclear technology offers competitive solutions and advantages. It will have standards, recommendations and guidelines in place that are relevant, as appropriate, to the safety and security of nuclear and other radioactive material, and adoption of these standards, recommendations and guidelines will have been widespread. The Agency will also be playing a major role internationally in formulating improved approaches to challenges posed by nuclear verification, nuclear safety and nuclear security. It will have an effective and cost efficient verification system in place which will make full use of appropriate technological advances and which will operate around the backbone of a re-engineered IAEA Safeguards Information System. The Agency's scientific and technical expertise will be regarded as a major resource for nuclear-related problem-solving and for nuclear technology transfer.

The Agency will be maintaining an appropriate balance between its promotional and other statutory activities. It will be adequately resourced through Member States fully meeting their financial obligations. The Technical Cooperation Programme, which responds to expressed needs of Member States and is based on Country Programme Frameworks for recipient countries, will be adequately and appropriately funded, bearing in mind the shared responsibility of all Member States for financing and enhancing the technical cooperation activities of the Agency. The Agency will have extended the impact of its work by increasing synergies with UN and other international organisations and partners. It will also be communicating its achievements effectively to the public.

The "One House" approach to meeting the Agency's objectives will be fully realised and a culture of continuous improvement in management practices will be well embedded. Support and administrative systems will have been further refined and streamlined. Full and consistent use of Results Based Management will be ensuring the effective and efficient planning, implementation and evaluation of Agency programmes. The strength of the Agency will continue to stem from well-motivated, dedicated staff of the highest competence and integrity, representing wide geographical distribution and gender balance.

Goals

There are three substantive goals that will continue to form a basis for the Agency's work and two complementary functional goals whose aim is to ensure efficient and effective achievement of the substantive goals.

Substantive goals

- A. An enhanced contribution of nuclear technologies to sustainable development goals of Member States
- B. Comprehensive and effective international frameworks for promoting nuclear safety and security
- C. Assurances to the international community of the peaceful use of nuclear energy

Functional goals

- D. Enhancement of cooperative interaction with partners and the public to achieve the Agency's goals
- E. Enhancement of Agency responsiveness and quality management

Goal A:

An enhanced contribution of nuclear technologies to sustainable development goals of Member States

Challenges:

In a changing world it is important that the Agency remain an authoritative independent source of quality information, knowledge, capacity building and expertise in support of peaceful uses of atomic energy. The effective transfer of nuclear technologies and knowledge for sustainable development can be achieved only through the assessment of available applications of nuclear science and technology, the improvement of existing nuclear technologies with the expansion of their scope and applicability, and the effective introduction of innovations. Further efforts will also be required for the development of innovative nuclear technologies and for the development of new safety, security and verification approaches for those technologies to achieve efficiently improved safety, non-proliferation, economic, environmental and security characteristics. In light of growing global energy demands, the full range of Member State interests and concerns regarding nuclear power needs to be addressed, and innovation needs to be fostered in nuclear science, technology and applications. The Agency must catalyse and expand international research and development collaboration and expand partnerships.

Objective A.1

Achieve more effective use of current nuclear technologies

Actions:

- (i) With respect to nuclear power, research reactors and the fuel cycle, assist Member States on human and technical infrastructures, management skills, plant life optimization, exchange of operational experience, decommissioning technologies, spent fuel and waste management, civil plutonium management, including use of MOX fuel, and high enriched uranium management.
- (ii) Assess and compare the economic, environmental and other characteristics of nuclear power with those of alternative energy options and provide the necessary data, tools and capacity building in order to help Member States to meet their energy development goals and to elaborate sustainable energy strategies.

- (iii) Contribute to international forums on sustainable energy development and greenhouse gas emission reductions.
- (iv) Evaluate radiation and isotope technologies and compare them with other technologies with a view to their application in different sectors.
- (v) Assist Member States in the applications of nuclear science, and radiation and isotope technologies, with due regard to safety, security and non-proliferation and thereby contribute, wherever possible, to the achievement of the United Nations Millennium Development Goals and the Plan of Implementation of the World Summit on Sustainable Development, in the context of international development cooperation, concentrating on:
 - *food and agriculture*: particularly support to sustainable intensification and diversification of crop and livestock production, improving food safety and quality and access to markets, increasing the efficiency of water use in agricultural practices, combating desertification and land degradation and breeding better crops and livestock and protecting them from pests and diseases;
 - *human health*: particularly support for nuclear techniques in nutrition and disease prevention, advancing nuclear medicine and diagnostic imaging, building capacities for radiation oncology and cancer treatment and promoting quality assurance and metrology in radiation medicine;
 - *water resources*: particularly understanding of the water cycle and its changes and fluctuations, assistance in stopping the unsustainable exploitation of groundwater, and further integration of isotope techniques into water resources assessment, development and management;
 - *environment*: particularly the application of novel nuclear and isotopic techniques for better understanding of key oceanic process and dynamics, ocean–climate coupling and change, biological effects and cycling, pollutant diagnostics and solutions for coastal marine environments, the development of terrestrial radioecology and ecotoxicology;
 - *industry*: particularly support for the use of radiation technology for industrial applications and a cleaner environment.
- (vi) Assist in expanding capabilities in nuclear science, concentrating on atomic, molecular and nuclear data for innovative nuclear energy systems, strengthening basic science for

technological development, and support work on fusion technology, ITER, accelerator systems and spallation, and neutron beam research.

- (vii) Develop further quality assurance and quality management guidance for nuclear and radiation technologies.

Objective A.2

Advance nuclear science and technology and catalyse innovation

Actions:

- (i) Expand partnerships and information exchange and facilitate collaborative research and development for beneficial uses of nuclear energy — including evolutionary and innovative technological developments for improved competitiveness, safety, proliferation resistance and waste reduction — particularly for developing countries in the areas of small and medium size reactors and non-electricity applications such as desalination, heat production and hydrogen production.
- (ii) Assist Member States in advancing innovative nuclear energy systems (INS) by identifying and assisting future infrastructure development, improving methodology for holistic assessment (including safety, economics, proliferation resistance, waste management, environment, sustainable development and public acceptance), identifying future technologies with break-through potential, developing methods to assess the implications of safety requirements on INS costs and encourage continuous improvement, applying these methods in energy planning and analysing the future role of nuclear energy at global, regional and national levels.
- (iii) Facilitate collaboration among interested Member States in the joint development of evolutionary and innovative nuclear energy systems.
- (iv) Assist in identifying promising R&D areas to expand and improve existing applications of current nuclear technologies and facilitate development of innovative new applications.
- (v) Develop options for the management of spent fuel.
- (vi) Assess new and modified applications of radiation and isotope technologies.

- (vii) Assist Member States in developing strategies and management options for effective utilization of research reactors.
- (viii) Collect and disseminate information in cutting-edge areas of nuclear science through the use of new information technologies as well as information on alternative technologies.

Objective A.3

Sustain and build up the experience, expertise, knowledge base and capacity needed to support existing and expanded use of nuclear power and applications

Actions:

- (i) Provide an integrated approach to nuclear knowledge management, particularly for expanding nuclear expertise in Member States and efficiently tracking and preserving the increasing volume of nuclear scientific information and knowledge, with INIS and the Agency Library as principal knowledge resources.
- (ii) Support the collection and maintenance of data information and experience on nuclear power, nuclear fuel cycle, nuclear sciences and nuclear applications.
- (iii) Improve Member State capacity to perform their own analyses regarding electricity and energy system development, energy investment planning and energy–environment policy formulation and their economic implications.

Goal B:

Comprehensive and effective international frameworks for promoting nuclear safety and security

Challenges:

Safety and security considerations have significant impacts on the full utilization and further expansion of the peaceful uses of nuclear technologies and the international transport of nuclear and radioactive materials. A nuclear safety culture must be strengthened and a nuclear security culture fostered. The outstanding safety record achieved in the past several years in the nuclear power industry needs to be maintained in a sustainable manner with no room for complacency. Minimizing the likelihood of nuclear and radiological accidents that could endanger life, property and the environment, and could increase public concern on nuclear safety continues to be essential to the expanded use of nuclear technology in the future. All aspects of the protection of people and the environment against the effects of ionizing radiation under conditions of increasing power and non-power applications and the related amounts of radioactive waste and spent fuel generated worldwide also require attention. Potential malicious acts, and terrorist threats need urgent and effective responses. The need to achieve a comprehensive and effective international framework for strengthening nuclear security, and to exploit the potential for synergy between aspects of nuclear security and aspects of nuclear safety, remain a matter of high priority.

Objective B.1

Continue to strengthen international nuclear safety and security instruments

Actions:

- (i) Continue to promote broad adherence to and implementation by States of existing international safety and security related instruments and undertakings, including relevant international instruments on civil liability for damage, with the Agency carrying out its assigned functions, particularly the facilitation of peer review processes in the context of nuclear safety.

- (ii) Promote and co-ordinate the regular review of existing international safety and security related instruments in terms of updating their scope and improving their effectiveness.
- (iii) Continue to develop new international safety and security related instruments as needed.

Objective B.2

Achieve global acceptance of international safety standards

Actions:

- (i) Update safety standards and develop new standards, as needed in all areas of nuclear installations, radiation, transport and waste safety.
- (ii) Promote global acceptance and application of IAEA safety standards and seek feedback for their continuous improvement through:
 - providing guidance for the safety assessment of nuclear power plants for long term operation;
 - supporting the review of the design, construction and operation of research reactors and fuel cycle facilities against the IAEA safety standards;
 - contributing to the development and application of safety criteria for innovative and evolutionary reactor designs;
 - supporting the application of international nuclear transport regulations and provision of transport safety appraisals;
 - working in cooperation with other international organizations and professional bodies to prepare guidelines and provide for the application of Agency safety standards relevant to the radiation exposure of people in medical practices;
 - developing a coherent approach for the management of radioactive waste, in accordance with the appropriate safety standards, the safe life cycle management and decommissioning of nuclear installations, including research reactors, and the protection of the public and the environment from the impact of ionizing radiation due to radionuclides, either discharged or present in the environment, including naturally occurring radioactive material;

- promoting the global harmonization and optimization of occupational radiation protection standards.
- (iii) Extend safety related assistance to address Member State needs. Coordinate with other organizations, where appropriate, and promote national self-assessments and support sustainable safety infrastructures by:
- supporting development of appropriate national legislation;
 - supporting the upgrading of safety related regulatory infrastructures, in particular to address the problems related to the safety of some research reactors and control over radioactive sources;
 - delivering an integrated ‘package’ of existing safety review services and appraisals and planning new ones, including those for research reactors, fuel cycle facilities and emergency preparedness and response activities;
 - providing material for education and training in nuclear, radiation, transport and waste safety and training the trainers for its effective utilization.
- (iv) Assist in strengthening national and international mechanisms for nuclear and radiological emergency preparedness and response including training and field response.
- (v) Assist in managing existing nuclear safety knowledge and promote the creation of new knowledge by pooling, analysing, classifying and developing sustainable networks for sharing nuclear safety knowledge.
- (vi) Increase the outreach and transparency of safety related activities.

Objective B.3

Establish and achieve global acceptance of an agreed international framework for nuclear security and support its application

Actions:

- (i) Develop an effective international framework to ensure sustainability of nuclear security systems.

- (ii) Advise and assist in the establishment of national infrastructures in all States with specific requirements for security for nuclear and other radioactive materials in nuclear as well as non-nuclear use, storage and transport.
- (iii) Develop a comprehensive set of recommendations and guidelines for the international community, for the prevention, detection and response to acts of nuclear terrorism or other malicious acts, along with an appropriate review process.
- (iv) Devote increased efforts to develop effective techniques, methodologies and services to assist Member States in combating illicit trafficking in nuclear and radioactive materials and sensitive equipment, including establishing and sustaining the necessary information systems.
- (v) Provide support, as requested, to address Member State nuclear security needs, also in coordination and cooperation with Member States having bilateral support programmes and with other organizations, as appropriate, through:
 - developing appropriate legislation and regulations;
 - upgrading security related infrastructures, for nuclear and other radioactive material in use, storage and transport, and the associated facilities;
 - promoting and providing education and training in the prevention, detection and response to malicious acts involving nuclear and other radioactive materials and their associated facilities;
 - developing modular nuclear security services, in response to specific requests for security related missions and follow-up.
- (vi) Continue to cooperate and enhance cooperation with other international and non-governmental organizations to improve coordination of nuclear security activities at the national, regional and international levels and to facilitate exchange of information related to nuclear security issues.
- (vii) Increase the outreach of nuclear security information to Member States and the general public with due consideration to confidentiality.

Goal C:

Assurances to the international community of the peaceful use of nuclear energy

Challenges:

The Agency needs to be equipped to provide credible assurances regarding the peaceful use of nuclear energy to the international community. This entails, inter alia: promoting the entry into force of outstanding comprehensive safeguards agreements, and of additional protocols for all States; the further development of an effective, efficient and non-discriminatory approach to safeguards, which includes the implementation of integrated safeguards where appropriate; enhancing the capabilities of State Systems of Accounting for and Control of Nuclear Material (SSACs) and other relevant infrastructures and their cooperation with the Agency; further enhancing the capability of the Agency to detect indications of clandestine nuclear programmes; and identifying and obtaining timely access, for the Secretariat, to further sources of safeguards relevant information. Additionally, the Agency needs to be able to count on the availability of appropriate techniques and technology, including reliable and secure network, telecommunications and database services available at all times for effective and efficient verification activities in order to make the best use of the human and technical resources available to the Agency. Safeguards approaches will need continually to be kept under review and, as appropriate, improved or modified to take account of new challenges, technological developments and the ongoing need for effectiveness and cost efficiency. The Agency must also be ready to contribute, as appropriate, in conformity with the relevant provisions of its Statute, and subject to further consideration by the Board of Governors, to the verification of nuclear arms control and reduction agreements, including nuclear disarmament.

Objective C.1

Provide credible assurances to the international community that States are honouring their safeguards obligations

Actions:

- (i) Seek to overcome constraints on the Agency's ability to draw timely, soundly-based safeguards conclusions by such means as:

- the timely acquisition and processing of reports and declarations required by safeguards agreements and additional protocols and other safeguards relevant information;
 - obtaining access as necessary to nuclear facilities and other safeguards relevant locations to carry out the required verification activities;
 - obtaining satisfactory and timely responses to questions regarding the correctness and completeness of State declarations;
 - the timely implementation of safeguards strengthening measures;
 - addressing any additional, technical limitations that come to light over time.
- (ii) Continue activities to encourage the conclusion of safeguards agreements and additional protocols.
- (iii) Continue further to develop and implement an effective, efficient and non-discriminatory approach to safeguards implementation taking account of State-specific factors including the implementation of integrated safeguards where appropriate.
- (iv) Monitor and address observed deficiencies or vulnerabilities in safeguards approaches, equipment and technology and acquire new or improved equipment/technology where appropriate.
- (v) Develop and/or use new concepts, approaches, techniques and technology for information analysis and verification activities, especially with regard to enhanced ability to detect undeclared nuclear material and activities.
- (vi) Help States to develop and improve their SSACs and other relevant infrastructure as important prerequisites for effective safeguards implementation.
- (vii) Seek to strengthen co-operation between the Agency and SSACs as opportunities to do so arise.
- (viii) Obtain, through appropriate mechanisms and channels, pertinent information on international nuclear activities and trade relevant to safeguards implementation.
- (ix) Seek continually to improve safeguards working methods, including through the application of a Quality Management System.

Objective C.2

Contribute as appropriate to effective verification of nuclear arms control and reduction agreements, including nuclear disarmament

Actions:

- (i) Respond, as appropriate in conformity with the Statute, to any request by States to verify weapons-origin and other fissile material released from nuclear weapons programmes and remain ready to use the technical and legal framework developed under the Trilateral Initiative in the negotiation of relevant bilateral or multilateral agreements.

- (ii) Provide advice and assistance, as requested, on other pertinent verification tasks.

Goal D:
**Enhancement of cooperative interaction with partners and the public to
achieve the Agency's goals**

Challenges:

Development planning would benefit from the inclusion of nuclear solutions with demonstrated competitiveness as components of larger projects. Many constituencies in Member States do not capitalize on the results of Agency work because of insufficient knowledge, awareness and a limited capacity for marketing services and products. All these areas need to be addressed and more effective methods for international cooperation applied.

Objective D.1

Increase cooperation among Member States and capacity to address national, regional and international priorities

Actions:

- (i) Encourage, where appropriate, the emergence of regional resource centres and the use of regional expertise, goods and services to deliver Agency programmes.
- (ii) Apply more effective methods for technical cooperation that strengthen the capacity of Member States using nuclear technology to increase technical and financial self-reliance, wherever possible.
- (iii) Promote and support cooperation and technical exchanges among Member States including through South–South and North–South cooperation, regional agreements and other collaborative mechanisms that sustain the benefits derived.
- (iv) Facilitate ties among national nuclear research institutes and other relevant institutions in Member States, particularly national development authorities.

Objective D.2

Enhance the impact of the Agency's work through strengthened relationships with Member States, development and funding organizations, scientific and technical institutions and the private sector

Actions:

- (i) Increase efforts to develop new partnerships, for example with private industry and other non-traditional partners, while respecting the inter-governmental and non-commercial character of the Agency.
- (ii) Strengthen cooperation focused on the developing countries, including least developed countries, where nuclear science and technology can play a significant role.
- (iii) Actively seek partnerships with multilateral and bilateral donors in those fields where nuclear technology can help optimize the investment of other donors and facilitate coordinated delivery of support in those fields to Member States.
- (iv) Maintain and develop stronger ties with scientific and technical institutions and, wherever possible, promote the sustainability and self-sufficiency of nuclear scientific and technical institutions.
- (v) Establish strategic partnerships in order to maximize the role and responsibilities of national institutions to develop and apply nuclear technologies for sustainable social and economic development.
- (vi) Develop strategic alliances with international development organizations and other stakeholders using the competitiveness of nuclear technologies as leverage.
- (vii) Engage with relevant partners and stakeholders, including major donors.

Objective D.3

Increase support for the Agency's work through awareness of its activities and recognition of its contributions

Actions:

- (i) Explain complex, technical subjects clearly to the general public and media.
- (ii) Expand outreach and promotional activities with governments, non-governmental organizations, media and the general public, particularly through the use of Internet connections.
- (iii) Seek continually to improve the quality and timely availability of information on the Agency's work and the results achieved in the peaceful uses of nuclear technologies, safety, security and verification.
- (iv) Promote communications with the public through all Agency programmes.

Goal E:

Enhancement of Agency Responsiveness and Quality Management

Challenges:

It is important to establish consistent and effective communication of the needs of Member State to the Secretariat and translation by the Secretariat of these needs into effective regular and technical cooperation programmes that will produce tangible outcomes. It is also vital for the Agency to secure adequate and predictable resources to fund commitments to both promotional and other statutory activities. Additionally, for quality performance to be sustained, a quality management culture needs to be created and sustained within the Secretariat along with the implementation of a quality management system. This needs to include knowledge management as an important component.

Objective E.1

Improve the relevance and impact of the Agency's programmes through maximum responsiveness to the needs, interests and priorities of Member States

Actions:

- (i) Identify Member State priority needs and interests through improved dialogue, consultation, use of recommendations and advice provided by Agency Advisory Groups and use of Country Programme Frameworks, Thematic Planning and a wider range of information sources.
- (ii) Integrate major programme planning and priority setting processes to bring greater synergy between the technical cooperation and regular programmes.
- (iii) Maximize the benefits from the application of results based management, already introduced, through the improvement of processes and methodologies for programme formulation, including the application of the Central Criterion for the technical cooperation programme, performance assessment and evaluation, and the introduction of modern management practices and self-evaluation methodologies.

- (iv) Coordinate closely all activities, particularly activities in the technical cooperation programme and the regular programme and all cross-cutting areas, to ensure efficient and effective delivery of programmes.
- (v) Make optimal use of information technology to support programme planning and delivery, and increase access to nuclear information.
- (vi) Ensure an appropriate balance between promotional and other statutory activities of the Agency.

Objective E.2

Continue to improve the efficiency and effectiveness of programme delivery and assessment

Actions:

- (i) Seek adequate and predictable funding for all Agency activities.
- (ii) Seek to achieve effective management of financial resources by:
 - introducing further cost consciousness and cost control measures including cost-benefit studies to reinforce programme priorities;
 - addressing in the most appropriate way the social security deficit (post-retirement health insurance);
 - adopting a new methodology for funding capital requirements, through development of an Agency capital spending plan and the creation of a reserve capital fund.
- (iii) Develop resource mobilization strategies and dedicate efforts to fund footnote components of the technical cooperation programme.
- (iv) Align human resources policy and practices more closely with new and emerging programme needs.
- (v) Seek continually to capture and build upon the specialized knowledge of staff members to ensure maximum value-added from Agency activities.

- (vi) Enhance efforts to recruit and retain, when appropriate, staff of the highest competence and integrity, including individuals with advanced degrees or appropriate experience in the nuclear field, and to promote geographical diversity and gender equality.
- (vii) Introduce integrated management systems for improved work planning and ease of information retrieval by managers and Member States.
- (viii) Assess programme performance in a systematic way and use lessons learned to improve subsequent programme formulation.

Objective E.3

Establish a Quality Management System throughout the Agency

Actions:

- (i) Adopt appropriate quality management standards for application throughout the Agency along with policy, objectives and necessary procedures and work instructions.
- (ii) Train staff in quality management practices and procedures with the aim of creating a quality management culture throughout the Agency.
- (iii) Apply continual process improvement methodology to all work processes.
- (iv) Monitor the effectiveness of and continually improve the Quality Management System.