The Agency's Programme and Budget 2014–2015

IAEA
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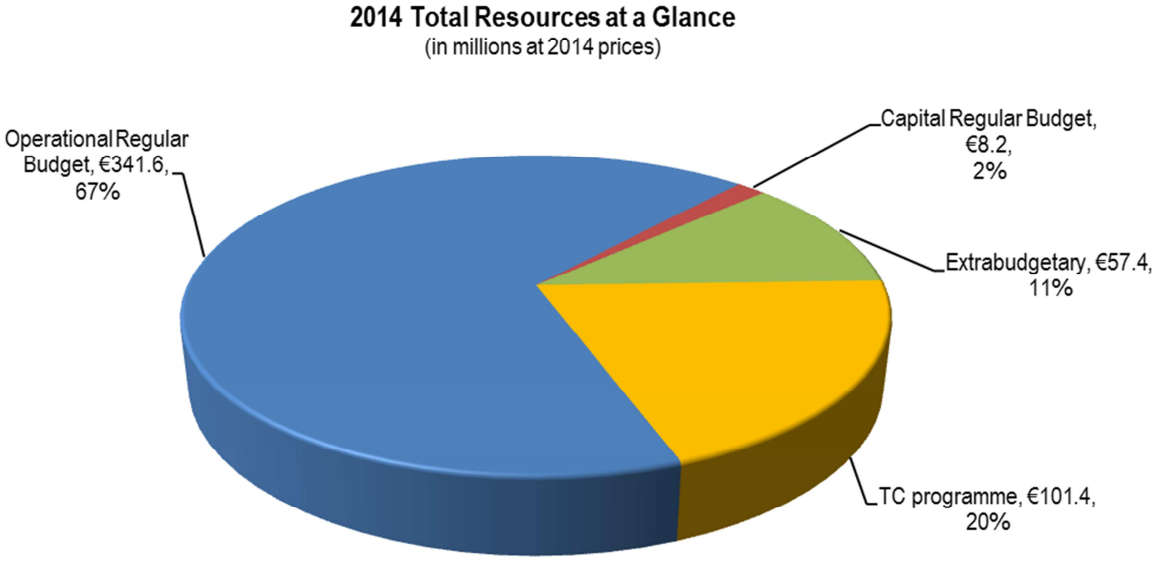
Introduction

The overarching consideration in the preparation of the Programme and Budget proposal for the 2014–2015 biennium has been the global financial situation. The Secretariat is keenly aware of the constraints which many Member States face in funding Agency activities. However, Member States' needs are increasing. Therefore, resources were reallocated to areas that will require attention during the next biennium, in response to emerging needs and priorities. In preparing the 2014–2015 Programme and Budget, strict prioritization was pursued among and within the programmes, and efficiency measures were applied. Low priority projects and areas where efficiencies can be realized have been identified, so that only those Agency activities deemed a priority, in addition to all relevant efficiencies and synergies, have been incorporated into the budget. As was the case in the 2012–2013 biennium, the proposal that is submitted strikes a balance between the increasing needs of Member States for Agency assistance, their capacity to contribute and the Agency's capacity to deliver an efficient and effective programme.

As an internal budget preparation process, a two-step approach was adopted similar to the approach used in the 2012–2013 biennium. The first stage involved the setting of budget ceilings at 95% of the 2013 budget (at 2013 prices) for all major programmes for the purpose of the internal exercise. The aim was to identify and implement efficiencies wherever possible, and to identify and discontinue or reduce low priority activities. In the second stage of the process, final budget ceilings were established for each major programme to provide funding for new or expanding high priority activities. The Medium Term Strategy for 2012–2017 provides the roadmap for these programme and budget proposals.

Technical cooperation, the IAEA Action Plan on Nuclear Safety, nuclear security, the enhancement of laboratories and cancer control are the Agency's top priorities for the 2014–2015 biennium. The Agency's laboratory facilities in Seibersdorf will be modernized over the following years to ensure that the best services can be provided to Member States.

2014–2015 Programme and Budget at a Glance



€349.8 million	2014 regular budget (operational and capital) ➢ 0.3% real-growth over 2013, ➢ 1.4% overall average price adjustment for 2014. (€341.6 million annual operational regular budget (+0.4%) €8.2 million annual capital regular budget (-4.1%)).
Zero real growth	2015 regular budget (operational and capital) over 2014.
€2.5 million	increase for technical cooperation (TC) support in the 2014 regular budget.
€5.5 million	2014 regular budget for the IAEA Action Plan on Nuclear Safety.
€2.7 million	annual capital regular budget for enhancement of the Nuclear Sciences and Applications (NA) Laboratories at Seibersdorf.
56%	additional funds for the Programme of Action for Cancer Therapy (PACT) in the 2014 regular budget at 2013 prices.
11.0%	increase in Nuclear Security in the 2014 regular budget at 2013 prices.
43.5	General Service positions decrease as compared to the inception of the Agency-wide Information System for Programme Support (AIPS) in 2011.

PART I

OVERVIEW

Overview

1. Despite its unique mandate, Agency funding has been constrained for years by zero or near zero growth budgets. This state of affairs is compounded by the challenges that Member States face due to the overall economic situation. Demands for the Agency's services are growing at a rate beyond what can realistically be funded through the regular budget. As a result, the Agency is increasingly dependent on extrabudgetary contributions, which are unpredictable, often tied to restrictive conditions, require specialized management and, thus, involve some risk for the programme. In view of the above, the Director General proposed a modest increase for the coming biennium.

2. The Agency's Draft Programme and Budget 2014–2015 (GOV/2013/1) was submitted to the Board of Governors on 5 March 2013 with a proposal for an operational regular budget for 2014 of €342.9 million and a capital regular budget of €8.0 million (prior to a 1.4% price increase). This represented a real increase of €7.4 million, or 2.2% above the 2013 level for the operational portion, and a decrease of 4.1% for the capital portion of the budget. The total net increase proposed in the regular budget as compared with 2013, was 2.1%.

3. Following intensive consultations among Member States in the context of the Informal Open Ended Working Group on the Programme and Budget and the Technical Cooperation Fund (TCF) targets for 2014–2015, the revised proposal reflected in this document was recommended by the Board of Governors for submission to the General Conference for approval. The Board recommended an operational regular budget for 2014 of €337.0 million and a capital regular budget of €8.0 million (prior to a 1.4% price increase) as outlined in GOV/2013/30/Rev.1. This represents an increase of €1.5 million, or 0.4% above the 2013 level for the operational portion, and a decrease of 4.1% for the capital portion of the budget. The total net increase proposed in the regular budget as compared with 2013, is 0.3%.

4. Once a price adjustment of 1.4% is added to bring the proposal to 2014 prices, the operational regular budget for 2014 results in €341.6 million, and the capital regular budget in €8.2 million. The budget for 2015 will be adjusted by the price adjustment to be submitted by the Secretariat in the Budget Update for 2015. All tables in the document are presented in euros, unless otherwise specified.

Prioritization

5. As the global financial situation continues to affect the ability of Member States to fund the Agency's activities, the preparation of the Programme and Budget 2014–2015 has followed an internal two-stage process where a concerted effort has been made to streamline the Agency's activities through prioritization and identification of suitable efficiencies.

6. In this regard, the aim of the first stage in the budget process was to identify areas where efficiencies could be realized and to identify low priority activities, through both programmatic prioritization and efficiency measures.

7. In addition, the Director General set ceilings for travel, consultancies and corporate shared services, and included funding for corporate shared services as part of the major programme ceilings.

8. Once this stage was finalized, in the second stage of the process, final budget ceilings were set for each major programme to provide funding for new or expanding high priority activities, taking into consideration the required balance among major programmes. Each of the proposals was reviewed for compliance with the process and to fully assess its programmatic merits.

PRIORITIES

9. The Director General identified the following priority areas for the 2014–2015 biennium:

- Technical cooperation and the Programme of Action for Cancer Therapy (PACT) — €2.2 million for the PACT in the 2014 regular budget and €21.1 million for TC programme.
- The Action Plan on Nuclear Safety (Action Plan) — €5.5 million in the 2014 regular budget.
- Nuclear security — €5.0 million in the 2014 regular budget.
- Laboratory enhancements in Seibersdorf — €2.7 million in the 2014 capital regular budget.

10. In line with the statutory mandate "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world", Nuclear Energy continues to be an Agency priority within the biennium 2014–2015.

11. Proposed changes to the organizational structure for the 2014–2015 biennium include:

- Upgrade of the Office of Nuclear Security to a Division within the Department of Nuclear Safety and Security.
- Upgrade of the Office of Programme of Action for Cancer Therapy to a Division and its transfer from the Department of Nuclear Sciences and Applications to the Department of Technical Cooperation.
- The Division of Public Information becomes one of the Offices Reporting to the Director General.

Efficiencies

12. The biennium budget was prepared with a focus on realizing efficiencies. Low priority projects and areas where efficiencies can be realized have been identified, so that only those activities deemed a priority are incorporated into the budget.

13. Examples of such efficiencies include streamlining of the Agency's programmatic structure, reduction of General Service staff levels, and a reduction in the budget available for consultancies.

14. To accomplish the current revised proposal with minimal adverse impact on the results of the proposed programme, while preserving the balance and the priorities proposed in the Agency's Draft Programme and Budget 2014–2015, the Secretariat will be pursuing further efficiency improvement initiatives and austerity measures, with a view to achieving the proposed reductions. The following areas for additional efficiency savings in the 2014–2015 biennium will be explored:

Travel

- Review travel rules and procedures with a view to reducing overall travel expenditures.

Consultants

- Rationalize the use of consultants, only when the required expertise is not available within the Secretariat, for specific time limited services and through a transparent hiring process, in line with the recommendations made by the Office of Internal Oversight Services.

Managerial austerity

- Optimize the use of technical and office supplies.
- Introduce a paper smart environment.
- Continue to streamline programmatic structure.
- Further rationalize workload, leveraging the use of AIPS.
- Continue to optimize use of information technology (IT) and related policies.

- **Partnership for continuous improvement**
- Review business processes to improve their efficiency, while maintaining robust internal controls.
- Review the arrangements for meetings, including their length.
- Reduce the number of steps and signatures of administrative processes.

AIPS

15. The full benefits of the Agency-wide Information System for Programme Support (AIPS) will be realized after the completion of all project plateaus, which is expected at the conclusion of the 2014–2015 biennium. Anticipated efficiencies to be realized include:

- Improvements and streamlining of Agency's business processes.
- Substantial improvement of the Agency's reporting capability, thereby enhancing its transparency.
- Replacement of a large number of disparate and obsolescent legacy computer systems with a unified system that will prove more cost-effective by offering industry-standard functionality.

16. Specific details of efficiencies are mentioned in the following paragraphs.

17. Within the managerial and administrative services that enable the work of the scientific and technical programmes, the use of low value purchasing will continue as it has reduced the number of orders that require processing through procurement services by 58%. In addition, blanket purchase and contract purchase agreements will continue to be used wherever possible as they have reduced the number of orders requiring processing by an additional 16%. Blanket purchase agreements and contract purchase agreements are established with vendors by MTPS via the normal procurement process of competition and negotiation. However, once established, items (blanket purchase agreements) or services (contract purchase agreements) can be bought by Agency allotment managers under purchase orders without a new call for bids.

18. In the area of IT, increased usage of commercial off-the-shelf (COTS) software will allow the delivery of more applications to more customers with the same resources. The use of commercial infrastructure and application services ('cloud services') will also be increased to host publicly available applications and web sites, thereby reducing the cost of ownership, increasing the efficiency of IT operations and optimizing overall IT service availability. With regard to ICT and knowledge management, common standard costing approaches will be explored for ICT services and investments.

19. With regard to financial management and services, emphasis will continue to be placed on reviewing processes and improving their efficiency, while maintaining robust internal controls. The introduction of both AIPS and International Public Sector Accounting Standards (IPSAS) has brought significant change to the Agency. For example, in 2012 the Agency completed the closure of accounts for the 2011 financial year using AIPS and IPSAS for the first time. At this point, it is important for the Agency to take time to assess whether the processes in place are the most efficient and productive. The internationally accepted DMAIC (define, measure, analyse, improve and control) is being used to systematically review and analyse finance related processes, which include those with a heavy dependence on AIPS. AIPS will be used to generate greater efficiencies, for example by processing a larger number of transactions using the same level of staff resources. In addition, the development of an internal 'dashboard' in AIPS will allow managers to monitor productivity and implementation rates on a near-real-time basis.

20. Comparative analyses and reviews of the staff regulations and rules of UN system

organizations will be carried out, focusing attention in particular on employment arrangements of staff in non-Headquarters duty stations.

21. Efficiencies achieved in the ordering of office supplies will be continued. These supplies are now ordered on-line directly from a single supplier by Divisions/Sections and delivered to the Agency twice a week instead of being ordered in bulk and stored on the premises.

22. Consolidation of the contract for cleaning services at the Vienna International Centre (VIC) and Seibersdorf has reduced operating and administrative costs. Scanning/digitization of documents is being carried out to reduce duplication involved in the maintenance of paper and digital formats, following the principle of 'single source multiple accesses'. This will generate efficiencies in terms of less paper circulation/distribution across the Secretariat and fewer paper transfers to the archives.

23. The increasing use of e-publishing and digital solutions has made it possible to rationalize the staffing structure in the publishing and conference Services areas, including the abolishment of General Service positions.

24. Major Programme 1 is pursuing the optimal utilization of resources, specifically through programmatic and organizational restructuring, a reduction in staff costs by abolishing some General Service posts, decrease in travel and a reduction in the use of consultants.

25. In order to streamline the programme structure, the number of projects in Major Programme 2 has been substantially reduced by consolidating existing similar projects. The modernization of the NA laboratories in Seibersdorf is a top priority for 2014–2015. Savings achieved from the management and operation costs (MOSCs) of the laboratories will be redirected to support the modernization of the laboratories. Other efficiency gains include the move towards virtual training programmes. This approach is being applied across Major Programme 2 and is a cost efficient way to reach a broad spectrum of Member States. IT is also being used to move from paper to electronic publications, which reduces costs to both the Agency and Member States.

26. Despite the increased number of activities in Major Programme 3 as identified in the priorities of the Director General, efficiencies were realized through the substantial reduction in the regular budget funding for travel, as well as for research contracts.

27. Within Major Programme 4, the evolution of safeguards implementation has resulted in an overall reduction of in-field activities in States with a comprehensive safeguards agreement (CSA) and additional protocol (AP). This has been achieved through greater focus on activities in areas of safeguards significance. Savings will be directed to address priority areas identified for each State concerning the implementation of its safeguards agreement.

28. Emphasis has been placed on the streamlining of operational procedures in order to identify and implement efficiency gains. Efficiencies and productivity improvements of the safeguards system will continue to be vigorously pursued by the Secretariat through the continuous implementation of a quality management system.

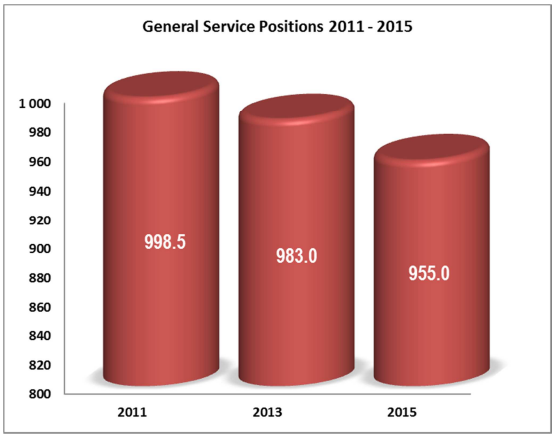
29. The scale of instrumentation use in field missions has, in some cases, been reduced, which has led to a corresponding decrease in staff travel and equipment costs. Similarly, in order to ensure optimal use of human resources and reduce travel costs, field activities, including maintenance and installation missions in neighbouring geographical regions, have been merged where possible. At the same time, new technical equipment will allow the Safeguards Analytical Laboratory to spend fewer resources on maintenance and more resources on analysis.

30. The Secretariat is gradually introducing technical policies in the safeguards programme aimed at standardizing equipment, switching to low-maintenance engineering solutions, maintaining the prevailing orientation towards using commercially available instrumentation, and minimizing diversity in the equipment pool.

31. A critical evaluation of subscription services and contracts with satellite imagery vendors has been undertaken to ensure that the Agency has access to essential information without incurring extraneous costs. Moreover, the implementation of electronic state files should reduce the need for printing and acquisition of documentation for performing effectiveness evaluations.

32. Efforts are being made within Major Programme 6 to ensure optimal utilization of human resources specifically engaged with the delivery of the technical cooperation (TC) programme. This includes training of TC staff in relevant delivery components to increase efficiency.

33. The number of General Service staff is proposed to be reduced by 43.5 positions from 2011, when AIPS was put in place. The following chart indicates the downwards trend.



Synergies

34. The Agency recognizes the importance of internal and inter-organizational synergies and the benefits afforded by them. Major programmes will make a concerted effort to leverage interactions and cooperation within the Agency and with external counterparts. In doing so, the Agency will continue to take advantage of strategic directions, core competencies, and lessons learned, and avoid duplication of programmatic effort.

IAEA Action Plan on Nuclear Safety

35. The Action Plan is an example of internal synergy in practice within the Agency that will continue during the 2014–2015 biennium. Dedicated Action Plan projects have been established in Major Programme 1, Nuclear Power, Fuel Cycle and Nuclear Science; Major Programme 2, Nuclear Techniques for Development and Environmental Protection; and Major Programme 3, Nuclear Safety and Security, with resources directed towards the Action Plan by all three of these major programmes.

36. Every major programme will continue to work with external counterparts. For example, Major Programme 1 cooperates with other UN organizations on climate change, sustainable development and energy statistics through the Planning and Economics Section (PESS). By virtue of its energy planning models, the Agency is the sole UN agency building national capabilities in overall energy planning. It works through UN-Energy to leverage its capacity building expertise, apply the Agency's models to joint projects, and incorporate data on renewables from, for example, the United Nations Environment Programme (UNEP) and the Food and Agriculture Organization of the United Nations. UN-Energy includes 22 UN organizations and entities, and was created by the UN Chief Executives Board's High Level Committee on Programmes to coordinate UN energy activities. Through Subprogramme 1.3.2, the Agency contributes expertise on energy projections and nuclear power's climate benefits to reports of the Intergovernmental Panel on Climate Change (IPCC) and deliberations under the UN Framework Convention on Climate Change (UNFCCC) and the Commission on Sustainable Development (CSD).

37. In addition to its cooperation with UN agencies, Major Programme 1 works together with the Organisation for Economic Co-operation and Development Nuclear Energy Agency (OECD/NEA) and other international organizations on a number of issues.

38. Major Programme 2's relationships with important partners in the UN system will be an area of focus in 2014–2015. The FAO/ IAEA Joint Division on Nuclear Techniques in Food and Agriculture draws on the broad expertise of staff in both organizations to deliver comprehensive programming in the area of food and agriculture to Member States. A priority in 2014–2015 will be on working closer with regional as well as national FAO offices.

39. Synergies sought by Major Programme 3 include the Agency's cooperation with the World Health Organization (WHO) in the area of radiation protection in medicine by organizing international events. Through Major Programme 3, the Agency develops safety standards using information from the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). The Agency is continuing its close liaison with UNSCEAR, WHO and FAO on issues related to assessments of exposures to public and radiological impacts on the environment following the accident at the Fukushima Daiichi nuclear power plant.

40. Where relevant, nuclear security activities are undertaken in coordination with UN and other organizations and initiatives involved in nuclear security, in accordance with the respective mandates of the bodies involved. The Office of Nuclear Security organizes regular information exchange meetings with such organizations to discuss further improvement of interaction, cooperation and coordination among these organizations. In addition, the relevant organizations are invited to take part, as observers, in nuclear security related forums, such as the Nuclear Security Guidance Committee, the Nuclear Security Support Centre Network and the International Nuclear Security Education Network. Promotion of the entry into force of the Amendment to the Convention on the Physical Protection of Nuclear Material takes full account of the responsibilities of the United Nations Office on Drugs and Crime (UNODC) as they relate to the criminalization aspects dealt with in the international conventions.

41. There is close cooperation between Major Programme 4 and the State and regional systems of accounting for and control of nuclear material (SSACs/RSACs), which are a key component of international safeguards and are essential for effective and efficient safeguards implementation. The Agency relies on Member State Support Programmes (MSSPs) for implementation of its research and development programme for nuclear verification to anticipate trends in technology and its application. These programmes provide technology, expertise and resources.

42. The involvement of Major Programme 5 in top-level coordinating bodies such as the Chief Executives Board for Coordination (CEB) and the High-Level Committee on Management (HLCM), will be given priority so as to take advantage of synergies that exist with other UN organizations and to keep abreast of the latest system-wide management best practices. Specific proposals aimed at generating further efficiencies include: financial management initiatives; creation of common system-wide treasury services; development of financial statistics databases and reporting systems; and participation in the Finance and Budget Network as well as the System-wide Accounting Task Force, both of which address common financial issues of importance to UN system organizations.

43. In the case of Major Programme 6, design, programming and implementation of many TC projects are undertaken in close interaction with other UN agencies and entities, including the FAO (through the FAO/IAEA Joint Division), the WHO, the United Nations Industrial Development Organization (UNIDO), the United Nations Children's Fund (UNICEF), the United Nations

Educational, Scientific and Cultural Organization (UNESCO), or the United Nations Environment Programme (UNEP), especially in areas where the Agency does not have the thematic lead mandate, such as health, food and agriculture, water and environment. Through this cooperation, Agency staff can draw on professional expertise and information, as well as on thematic strategies and networks of lead UN agencies, and coordinate Agency activities with a view to avoiding duplication of efforts. Furthermore, through the framework of a Joint Programme on Cancer Control, the Agency's expertise in radiation medicine for cancer diagnosis and treatment is complemented by the WHO's expertise in cancer control. This approach seeks to maximize the cost effectiveness and efficiency of radiation medicine investments by the Agency and its Member States.

Medium Term Strategy

44. The Medium Term Strategy (MTS) covers the period 2012–2017 and was developed through a process of interaction between the Secretariat and an open-ended Working Group established for this purpose by the Board of Governors. The MTS 2012–2017 provides overarching guidance and serves as a roadmap for the Agency's activities during this period by identifying priorities among and within programmes based on such considerations as recent technological trends, emerging needs and the political, economic and social background.

45. The MTS 2012–2017 sets out six strategic objectives to be pursued in a coordinated and mutually reinforcing manner:

A. Facilitating access to nuclear power.

B. Strengthening promotion of nuclear science, technology, and applications.

C. Improving nuclear safety and security.

D. Providing effective technical cooperation.

E. Strengthening the effectiveness and improving the efficiency of the Agency's safeguards and other verification activities.

F. Providing efficient, innovative management and strategic planning.

46. The programme and budget for the 2014–2015 biennium has been developed on the basis of the MTS 2012–2017 objectives. Specific attention was paid by major programmes to ensure coverage of relevant MTS objectives.

47. The Agency's priority areas for 2014–2015 in the areas of technical cooperation, the IAEA Action Plan on Nuclear Safety (Action Plan), nuclear security, enhancement of the laboratories in Seibersdorf and cancer control closely coincide with the strategic objectives and sub-objectives of the MTS.

48. Given the importance of incorporating the Agency's Gender Equality Policy in the programmatic activities, as mentioned in the MTS 2012–2017, specific attention to this topic was paid in the budget preparation process.

Performance Indicators

49. An Agency-wide project in 2011–2012 established a register of improved performance indicators for the 2014–2015 Programme and Budget, that lend themselves to tracking progress towards meeting stated results. The project leveraged Plateau II of AIPS through the functionality provided by the AIPS Planning tool to establish an Agency-wide 'dashboard' comprising measurable performance indicators, their baseline and their target values. In line with best practices in the United Nations system, the Director General's Office for Policy (DGOP) issued guidelines on Programme performance stating that all performance indicators must be SMART.

SMART:

- *Specific*: The goal is clear and unambiguous;
- *Measurable*: Helps assess progress towards successful completion;
- *Achievable*: Goals and indicators must be realistic and attainable: neither out of reach nor below standard performance;
- *Relevant*: Consistent with the larger, general objectives of the organization; and
- *Time-Bound*: Grounding indicators to a specific time frame is essential.

Risk Management

50. Risk management is a fundamental part of results based management (RBM). It refers to the identification and mitigation of potential events, both internal and external, which might negatively affect the Agency's ability to deliver its outputs, to achieve its outcomes or meet its objectives.

51. During 2011, the Agency revised and updated its Risk Management Policy and developed Guidelines on Risk Management for implementing its Risk Management Policy. These have been approved and incorporated in the Agency's Administrative Manual. The Agency has an organization-wide risk management system in place and a structured approach to ensure effective risk management. It has an established official risk register, which is periodically updated, where assessed risks are centrally recorded. Risk management is also integrated with major Agency processes: strategic planning, programme and budget development, and work planning, to ensure consistent identification, consideration and mitigation of risks in decision-making. Risk management policies, processes and practices in the Agency are overseen by the DGOP.

I.1 Programmatic Overview by Major Programme

Major Programme 1: Nuclear Power, Fuel Cycle and Nuclear Science

52. The major programme provides scientific and technical support, services and advice for reliable and safe operation of existing power and research reactors and fuel cycle facilities; expanded use of nuclear power, particularly for countries currently without nuclear power or with only small programmes; development of advanced and innovative reactors and their fuel cycles, including through the International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO); capacity building for energy analysis and planning; objective consideration of the role of nuclear power for sustainable development; and development of nuclear science, nuclear knowledge management, and nuclear information and communication.

53. By 2014–2015, several countries starting nuclear power programmes will have reactors under construction or be preparing for construction. The Agency will target assistance to such 'advanced newcomer countries' and to countries expanding currently small programmes while maintaining support to countries at earlier stages.

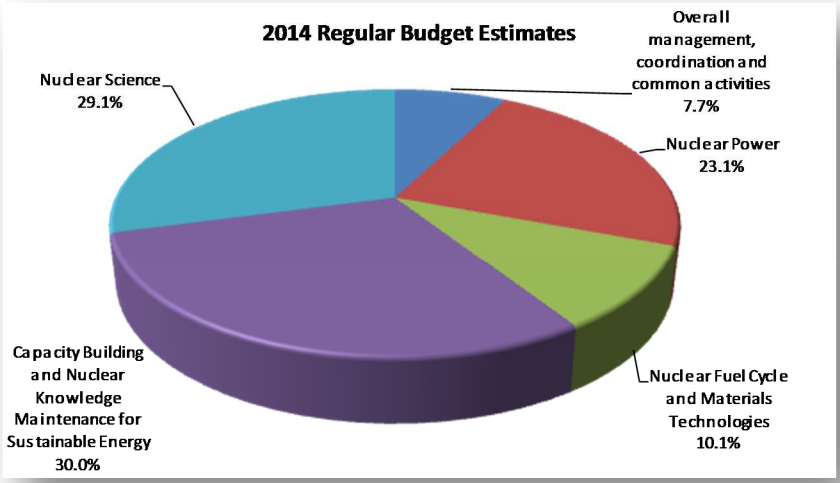
The Agency will target assistance to such 'advanced newcomer countries' while maintaining support to countries at earlier stages.

54. For operating nuclear power plants, there is increased interest in advances since the accident at the Fukushima Daiichi nuclear power plant in areas such as spent fuel integrity, design vulnerabilities, defueling, accident management, monitoring and remediation.

55. The projected growth of nuclear power will generate a strong interest in new uranium exploration, mining and milling, including in countries without current nuclear activities.

56. Greater use of intermittent renewables, 'smart grids', demand side management and new environmental policies will make energy planning more complex. In incorporating these developments into its assistance to Member States, the Agency will make use of the partnerships cited in the "Synergies" section.

57. Nuclear information and knowledge will expand with experience, research and improved information technology. Improved knowledge management will multiply the benefits.



58. The Agency will remain a reliable source of atomic, molecular and nuclear data. It will help improve utilization of existing research reactors and with the planning of new research reactors. With progress on the International Thermonuclear Experimental Reactor (ITER), the Agency will involve additional Member States in fusion technology and facilitate links with partners in the ITER project.

59. The Action Plan calls for actions in the fields of fuel behaviour under severe accident conditions, the management of severely damaged fuel and the performance of spent fuel storage facilities under severe accident conditions. In this context, one of the objectives will be to improve the capability of Member States to plan, develop and implement safe, environmentally sound and efficient spent fuel management programmes.

Major Programme 2: Nuclear Techniques for Development and Environmental Protection

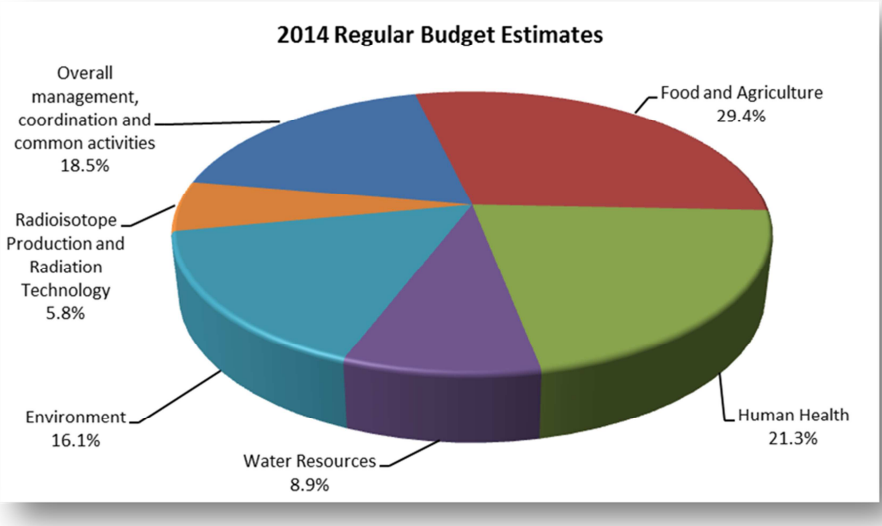
60. The overall objectives of the major programme continue to support the peaceful uses of nuclear science and technologies. Building on a core foundation of adaptive and applied research and development, Major Programme 2 provides Member States with science based advice, education and training materials, standards and reference materials, and technical documents. Areas of growing demand for this major programme's assistance include non-communicable diseases, food security, water scarcity and environmental degradation.

61. This major programme's laboratories at Headquarters, Monaco and Seibersdorf remain an important vehicle for the Agency's programme delivery. Ensuring the laboratories are able to meet the changing needs of Member States is a priority. Investments will be made in the Seibersdorf laboratories following a staged plan to ensure that they are fit-for-purpose and able to respond to the needs of Member States. Quality assurance (QA) is a key element of the safe and efficient operation of the laboratories. Enhancing QA is a priority in order to enable the laboratories to achieve and maintain high levels of proficiency, to demonstrate competence, and to serve as reference laboratories for Member States.

62. Partnerships are an increasingly effective tool for programme delivery of Major Programme 2, and efforts will be made to strengthen and expand these partnerships. The IAEA Collaborating Scheme will continue to be a valuable mechanism for working together with Member State institutions. The scheme will be further enhanced and strengthened based on lessons learned. Relationships with important partners in the UN family will also be an area of focus. In the FAO/IAEA Joint Division, increased emphasis will be placed on closer working relationships with regional as well as national FAO offices.

Ensuring the laboratories are able to meet the changing needs of Member States is a priority. Investments will be made in the laboratories following a staged plan to ensure that they are fit-for-purpose and able to respond to the needs of Member States.

63. Education and training are other important ways in which this major programme supports the use of nuclear science and technologies in Member States. The global reach of the internet and the ability to continually evolve content is allowing the Agency to reach an ever expanding audience with timely, relevant information. There will be an increasing trend towards the development of e-learning tools and online education platforms to reach a wider audience, and achieve costs savings.



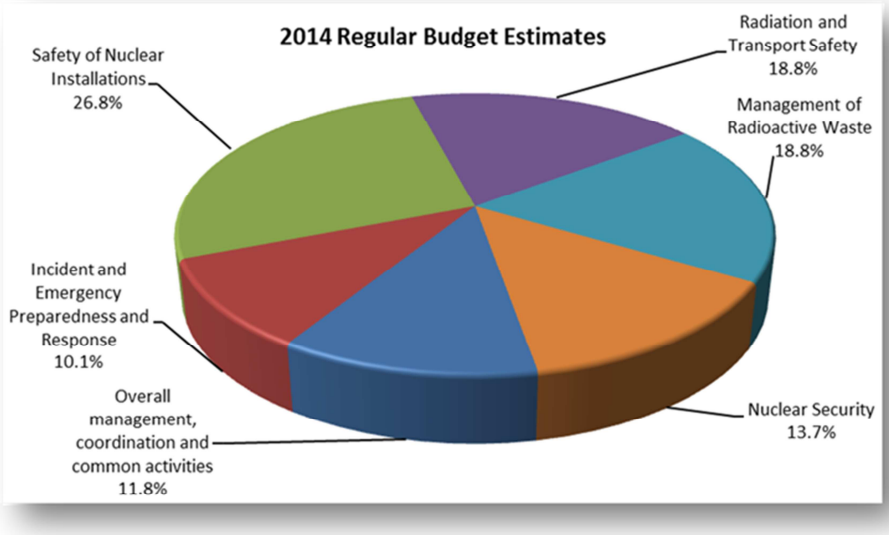
Major Programme 3: Nuclear Safety and Security

64. The major programme establishes and continuously improves Agency nuclear safety standards and security guidance. The Agency provides for application of these standards and guidance to its own operations, and assists, upon request, Member States in implementing them in their own activities. The Agency promotes international instruments related to nuclear safety and security. This major programme also helps coordinate international preparedness for effectively responding to and mitigating the consequences of a nuclear and radiological incident or emergency, and for supporting global efforts to improve nuclear security.

65. Another important role of Major Programme 3 is the strengthening of national infrastructures for safety and security to ensure safe and secure development of new or expanding nuclear power programmes, as well as safe operation of existing nuclear installations.

The Agency will continue addressing issues and lessons learned from the accident at the Fukushima Daiichi Nuclear Power Plant through the implementation of the IAEA Action Plan on Nuclear Safety.

66. Radiation protection of people and the environment will be addressed by helping Member States strengthen control of medical, occupational and public exposure to radiation, as well as by addressing issues related to transportation of radioactive material. The long life of many nuclear and radioactive materials calls for more extensive efforts in the area of decommissioning of nuclear installations and remediation of contaminated sites. The long term management of radioactive sources, spent fuel and radioactive waste should be taken into account at early stages of their life cycles.



67. Addressing the constant threat of nuclear terrorism and the misuse of nuclear and other radioactive material continues to be a challenge.

This major programme also helps coordinate international preparedness for effectively responding to and mitigating the consequences of a nuclear and radiological incident or emergency, and for supporting global efforts to improve nuclear security.

68. Implementing the Agency's statutory responsibilities and legal commitments will remain the first priority during this biennium, and Major Programme 3 will put more emphasis on implementation of the IAEA Action Plan on Nuclear Safety, strengthening emergency preparedness and response capabilities and arrangements, and addressing States' nuclear security needs.

Major Programme 4: Nuclear Verification

69. The major programme supports the Agency's statutory mandate to establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency, at its request or under its supervision or control, are not used in such a way as to further any military purpose.

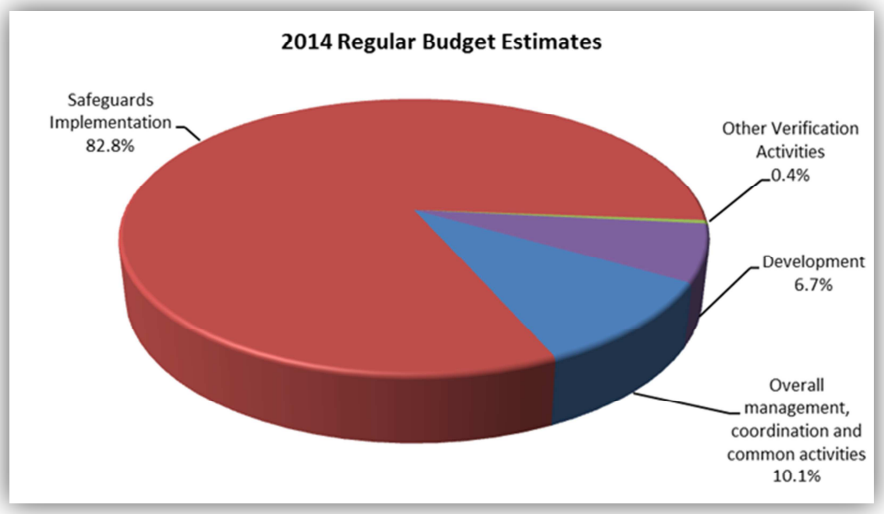
70. This major programme will continuously strive to strengthen the effectiveness and improve the efficiency of safeguards and other verification activities. The Agency will seek to provide credible assurances that States are fully honouring their safeguards obligations. To this end, it will improve its capability to draw independent and soundly based safeguards conclusions and to detect early possible cases of misuse, particularly undeclared nuclear material and activities.

71. Under this major programme, the Agency carries out verification, information analysis, and evaluation activities, and provides safeguards instrumentation as well as analytical services required for implementing safeguards. These activities enable the Agency to establish information upon which safeguards conclusions can be drawn. In addition, the Agency supports the efforts of the international community with other verification tasks.

The continuous improvement of the safeguards system to draw independent and soundly based safeguards conclusions, and the strengthening of its capability of early detection of the possible misuse of nuclear material or technology for proscribed purposes.

72. The main challenges for Major Programme 4 include:

- The implementation of comprehensive safeguards agreements (CSAs) and additional protocols (APs) by all non-nuclear -weapon States (NNWS) in order for the safeguards system to be realized to its full potential.



- The evolution of safeguards implementation to respond to emerging challenges.
- The improvement of physical and information security to protect the confidentiality and integrity of all safeguards related information.
- The development of approaches and concepts to address technical issues through the development of innovative solutions.
- Ensuring the safeguards workforce is capable of meeting current and future needs through knowledge management and preservation.
- The response to requests to assist with other verification tasks.

Major Programme 5: Policy, Management and Administration Services

73. Under the leadership, direction and authority of the Director General, the Agency's programme seeks to achieve the goals and objectives of its Member States. This requires effective coordination to ensure a one-house approach, particularly with respect to:

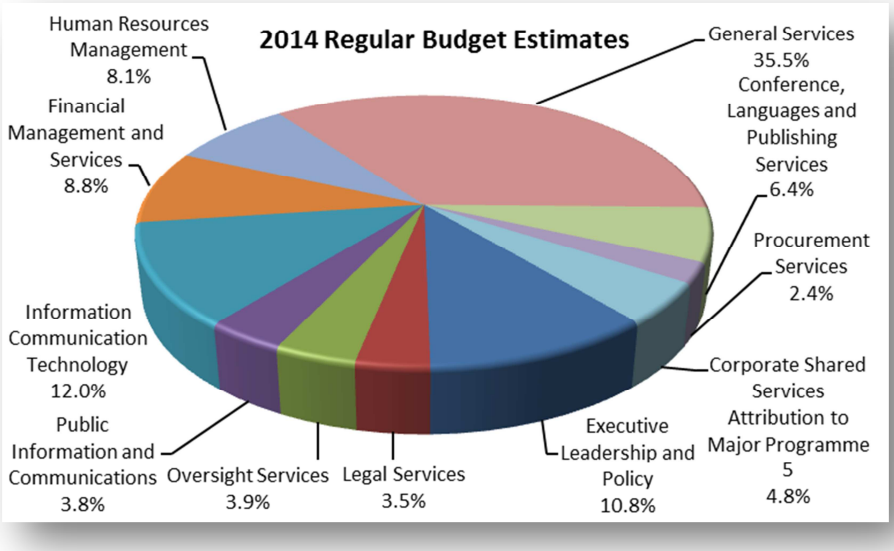
- Overall policies.
- Interactions with Member States.
- Policy and strategy planning, including risk management, in line with the MTS.
- The setting of priorities.
- The development and implementation of programmes.
- The evaluation and assessment of performance.
- Management of the exchange of information within the Secretariat, between the Secretariat and Member States, and for the benefit of the media and the general public.

74. In addition, a wide range of administrative and legal services will continue to be provided to support Agency programmes in efficiently and effectively fulfilling the organization's mandate. It should be noted that approximately 24% of the budget for Major Programme 5 is related to the cost of buildings management and the common security services of the Vienna International Centre (VIC).

75. In 2014–2015, this major programme will continue to have a leadership role in respect to implementation of AIPS.

76. Major Programme 5 will pay more attention to coordinating security efforts through a centralized security coordination function within the Agency.

77. The Agency will continue to strengthen its focus on results, efficiency, effectiveness, quality, accountability and risk management. The oversight activities of the Agency will continue to strengthen accountability, efficiency and effectiveness through audits, evaluations, investigations and the provision of advisory support to senior management and the Board of Governors.



Major Programme 6: Management of Technical Cooperation for Development

78. The major programme encompasses the development, implementation and management of technical cooperation projects in the framework of biannual technical cooperation programmes.

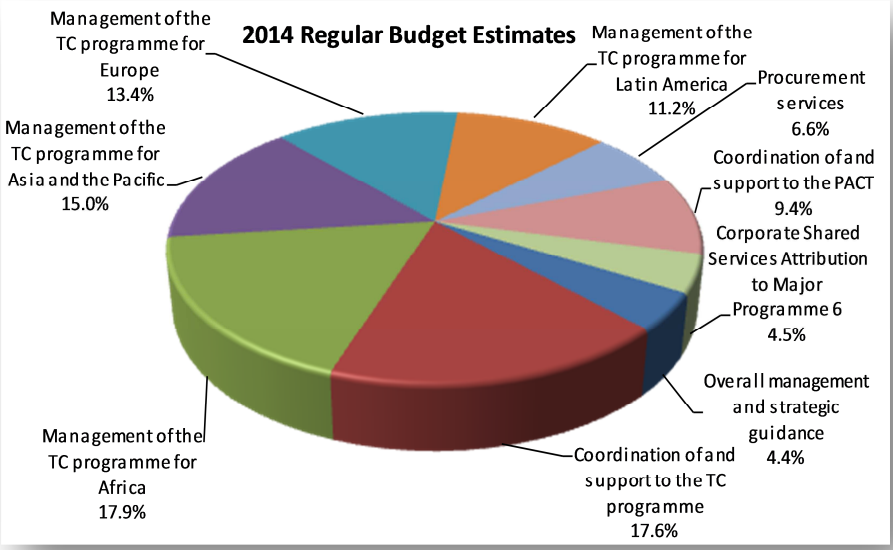
79. The technical cooperation programme consists of national, regional and interregional projects funded from the Technical Cooperation Fund (TCF) and extrabudgetary contributions. As of 2014, the major programme will include the management function of the Agency's Programme of Action for Cancer Therapy (PACT).

80. There are a number of major issues and challenges for the major programme. These include:

- Ensuring the Agency's capability to swiftly and adequately respond to Member States needs and requests for technical cooperation support.
- Ensuring adequate support to a growing number of Member States: six Member States have joined the Agency since 2012 and up to 14 additional Member States may introduce a national technical cooperation programme.

Enhancing the visibility, promotion and outreach efforts related to the Agency's technical cooperation programme as well as PACT, while targeting the development community, potential donors and partners.

- Ensuring stronger contributions of Member States to the frameworks and modalities that promote synergies among Member States for the peaceful application and utilization of nuclear energy and technologies.
- Strengthening support to Member States in the area of radiation safety and regulatory infrastructure and to Member States that embark on nuclear power programmes.
- Enhancing the visibility, promotion and outreach efforts related to the Agency's technical cooperation programme, as well as PACT, while targeting the development community, potential donors and partners.

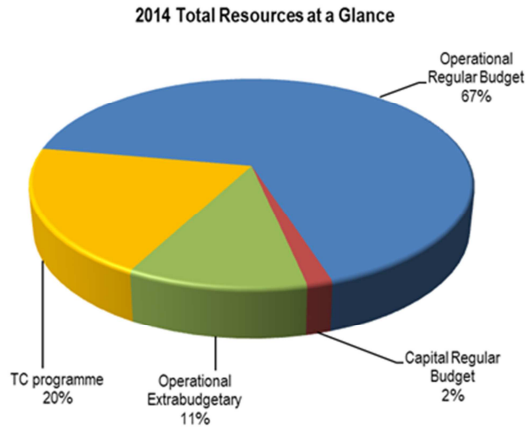


- Achieving a minimum rate of attainment of 95% of the TCF for 2014 and 2015.
- Ensuring the timely availability of adequate, additional funds to sustain and enhance PACT's programmatic work.
- Enhancing the efficiency of the technical cooperation programme, including through the implementation of performance monitoring and quality assurance regimes.
- Enhancing the strategic planning and governance approaches for PACT, including through improved coordination with technical cooperation activities.

I.2 Financial Overview

Total Resources

81. The Agency's total resources consist of the regular budget, extrabudgetary resources and resources for the technical cooperation programme. For 2014 the Agency's total resources amount to €508.7 million at 2014 prices.



2014-2015 Total Resources at a Glance
(in millions)

Funding Source	2014	2015	Total
Operational Regular Budget	341.61	341.61	683.22
Capital Regular Budget	8.22	8.22	16.45
Operational Extrabudgetary	57.42	55.31	112.72
Capital Extrabudgetary	-	-	-
TC Programme	101.42	102.08	203.50
TOTAL	**508.67**	**507.22**	**1,015.89**

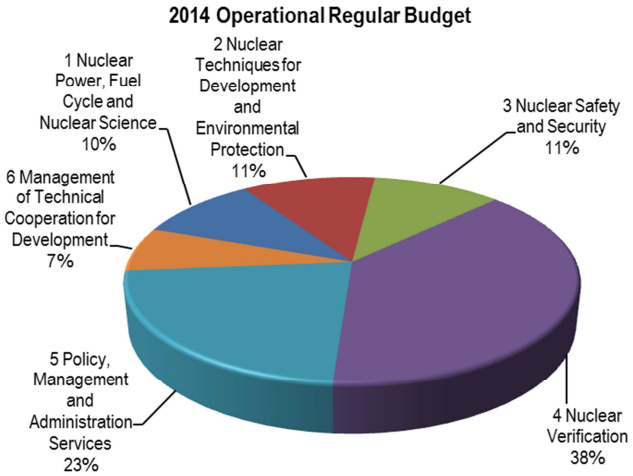
82. The regular budget consists of an operational and a capital component, the latter to fund major infrastructure investments. Regular budget estimates, in accordance with the structure of the Agency's programme of work, are presented in six major programmes.

83. The Agency continues to rely on extrabudgetary funds, mostly from Member States, to carry out some of its activities. For 2014 and 2015, €57.4 million and €55.3 million respectively are expected to be received.

84. For the technical cooperation programme, $79.4 million for 2014 and $80.1 million for 2015 is expected to be available for estimated core project funding. It is estimated that this amount will be supplemented each year by €2.0 million of national participation costs and €20.0 million of extrabudgetary activities.

Operational Regular Budget Resources

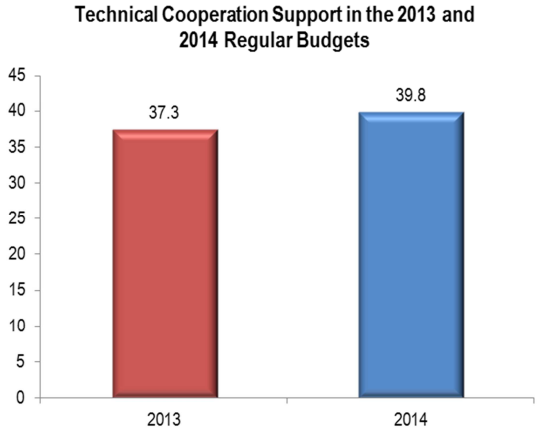
85. Both the operational and capital regular budget for 2014 and 2015 have been prepared with a view to maintaining the balance between the major programmes. No change is proposed in 2015 as compared with 2014 in either the funding envelope for the total regular budget or the relative share of funding by major programme. The following chart and table depict the operational regular budget at 2014 prices.



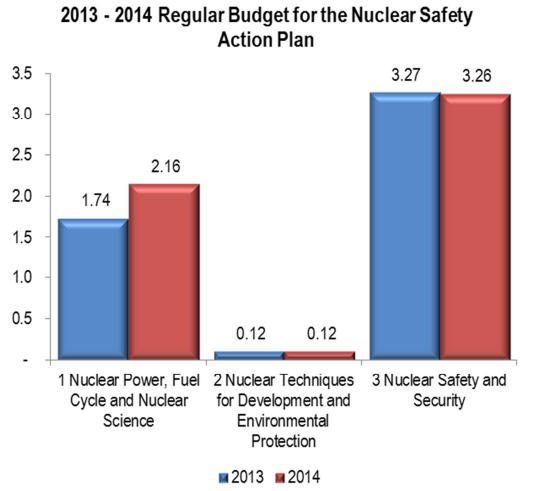
2014 - 2015 Operational Regular Budget
(in millions)

Major Programme	2014	2015
1 Nuclear Power, Fuel Cycle and Nuclear Science	34.48	34.47
2 Nuclear Techniques for Development and Environmental Protection	38.48	38.49
3 Nuclear Safety and Security	37.11	37.11
4 Nuclear Verification	131.03	131.04
5 Policy, Management and Administration Services	76.94	76.95
6 Management of Technical Cooperation for Development	23.56	23.56
Total	**341.61**	**341.61**

86. The proposed budget also includes an increase in Agency-wide support to the technical cooperation programme from the regular budget from €37.3 million in 2013 to €39.8 million in 2014 representing an increase of €2.5 million (6.7 %) at 2013 prices.



87. The 2014 regular budget includes a provision of €5.5 million for the IAEA Action Plan on Nuclear Safety distributed among three major programmes. At 2013 prices, this represents an increase in the 2014 regular budget resources earmarked for these activities of €0.4 million (8%) over 2013.

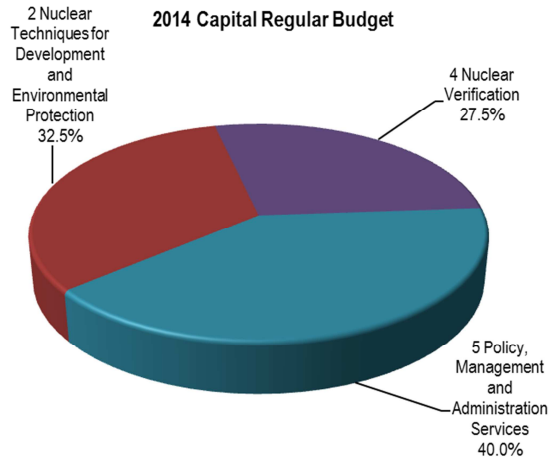


2013 - 2014 Regular Budget for the IAEA Action Plan on Nuclear Safety

Major Programme	2013	2014
1 Nuclear Power, Fuel Cycle and Nuclear Science	1.74	2.16
2 Nuclear Techniques for Development and Environmental Protection	0.12	0.12
3 Nuclear Safety and Security	3.27	3.26
Total	**5.13**	**5.54**

Capital Regular Budget Resources

88. The capital regular budget for 2014 and 2015 has been prepared with a view to addressing the highest capital priorities of the Agency. No change is proposed in 2015 as compared with 2014 in either the funding envelope for the capital regular budget or the relative share of funding by major programme. The capital requirements for 2014 and 2015 will be supplemented with extrabudgetary contributions and prior balances in the Major Capital Investment Fund. The following chart and table depict the capital regular budget at 2014 prices.



2014 - 2015 Capital Regular Budget
(in millions)

Major Programme	2014	2015
2 Nuclear Techniques for Development and Environmental Protection	2.67	2.67
4 Nuclear Verification	2.26	2.26
5 Policy, Management and Administration Services	3.29	3.29
Total Agency	**8.22**	**8.22**

Structural Changes

89. The following is the effect of structural changes that can facilitate the comparison of the budget proposal to the 2013 budget:

- PACT and associated funding is moved from Major Programme 2 to Major Programme 6, hence the slight decrease in Major Programme 2 in 2014 at 2013 prices. Excluding the effect of this transfer, Major Programme 2 would have an increase of 0.5% as opposed to the actual decrease of 3.1%.
- Costs of the Radiation Safety Regulator, radiation protection services and activities related to "Supporting long term operation safety" have been consolidated, accounting for €1.2 million (3.6%) of the total increase of 6.8% under Major Programme 3. Excluding the effect of this transfer, Major Programme 3 has an increase of 3.2% as opposed to the increase of 6.8%.
- The costs of the management of laboratories are distributed among Major Programme 2 and Major Programme 4. With the opening of the new Clean Lab Extension (CLE) and the completion of the new Nuclear Material Laboratory (NML), there will be a shift in the share of these costs from Major Programme 2 to Major Programme 4. The effect of this change, in monetary terms, amounts to €1.1 million.
- Medical shared services have been centralized under Human Resources Management, accounting for an increase of €1.0 million in this function and a corresponding decrease in corporate shared services within Major Programme 5.

Other Financial Considerations

Budget Preparation in AIPS-Planning

90. For the first time, the programme and budget was prepared using AIPS-Planning, an application for planning which supports not only the preparation of the Programme and Budget, but also the assessment of programme implementation. AIPS-Planning has facilitated programme prioritization, simplification and assessment in a number of ways. It has enabled the Agency to better prioritize regular budget funds to the benefit of the activities reflected in the MTS 2012–2017. It provides for the automatic enforcement of ceilings spanning both, the programmatic structure and items of expenditure, and the use of standard costs. The application supports the formulation of staffing plans in the context of programme and budget preparation. AIPS-Planning strengthens the assessment of programme performance through the establishment of quantitative baselines and general management performance indicators. The new application is designed to eliminate the need to perform technical adjustments and ensures comparability of the current proposal to previous approved budget appropriations.

Price Adjustment

91. The overall average price adjustment for 2014 is 1.4%. This is based on a number of factors, including:

- No increase for Professional staff costs and consultants;
- Increase for General Service staff costs of 3.3%; and
- Increase for all other items of expenditure of 2.8%.

92. Trends and expectations for staff costs are based on forecasts provided by the International Civil Service Commission (ICSC) and the Austrian Tariflohn index, while, for all other items of expenditure the Agency has used the most recent statistical data on Harmonized Indices of Consumer Prices (HICP). Adjustments for 2015, the second year of the biennium, will be submitted to the Governing Bodies in the 2015 Budget Update document.

93. This price adjustment compares favourably to international indices, including 1.4% for the euro area as per the IMF World Economic Outlook (October 2012), 1.5% increase for the euro area as per the Price Waterhouse Coopers global economic watch projections (January 2013) and 1.9% as per the European Central Bank inflation forecast (January 2013).

Miscellaneous Income

94. Compared to 2013, there is an increase in the projections for the reimbursable work for others offset by a decrease in other planned miscellaneous income reflecting the global financial situation and financial investment possibilities. The overall miscellaneous income increases slightly by €0.2 million.

Budget currency and exchange rate

95. The Agency's functional currency is the euro. As in the past, regular budget estimates have been prepared in euro, using a budget exchange rate of €1 to US$1. All tables and charts in this document are in euro, based on the budget exchange rate.

Report on the Budget to the United Nations General Assembly

96. In accordance with Article XVI of the Agency's relationship agreement with the United Nations (INFCIRC/11, part I), the budget may be reviewed by the Advisory Committee on Administrative and Budgetary Questions (ACABQ), which would report on the administrative aspects thereof to the United Nations General Assembly.

Details of the Programme and Budget for 2014–2015 by Major Programme

97. Further details by Major Programme are available in Part II of the document. Due to rounding, figures included in the tables of Part II do not always reconcile with the totals.

I.3 Budgetary Requirements by Programme and Major Programme

Table 1. The Regular Budget — By Programme and Major Programme

Programme / Major Programme	2013 Budget	2014 Estimates at 2013 Prices	2014 Variance over 2013 EUR	2014 Variance over 2013 %	2015 Preliminary estimates at 2013 Prices	2014 Price Adjustment	2014 Estimates at 2014 Prices	2015 Preliminary estimates at 2014 Prices
1. Nuclear Power, Fuel Cycle and Nuclear Science								
Overall management, coordination and common activities	2 574 820	2 605 506	30 686	1.2%	2 602 612	1.4%	2 641 891	2 636 143
Nuclear Power	7 634 100	7 850 127	216 027	2.8%	7 849 525	1.0%	7 929 763	7 928 930
Nuclear Fuel Cycle and Materials Technologies	3 320 852	3 451 476	130 624	3.9%	3 451 476	1.2%	3 491 867	3 491 622
Capacity Building and Nuclear Knowledge for Sustainable Energy Development	10 702 942	10 194 559	(508 383)	(4.7%)	10 192 299	1.3%	10 326 485	10 322 264
Nuclear Science	9 872 727	9 930 165	57 438	0.6%	9 930 165	1.6%	10 088 797	10 088 964
Major Programme 1	**34 105 441**	**34 031 833**	**(73 608)**	**(0.2%)**	**34 026 077**	**1.3%**	**34 478 803**	**34 467 923**
2. Nuclear Techniques for Development and Environmental Protection								
Overall management, coordination and common activities	6 737 074	7 012 736	275 662	4.1%	7 013 310	1.9%	7 148 972	7 148 473
Food and Agriculture	11 169 455	11 119 160	(50 295)	(0.5%)	11 119 160	1.6%	11 295 034	11 294 468
Human Health *(excluding PACT in 2014-2015)* [1]	9 564 712	8 065 766	(1 498 946)	(15.7%)	8 065 766	1.4%	8 176 873	8 176 887
Water Resources	3 431 530	3 384 294	(47 236)	(1.4%)	3 384 294	1.6%	3 437 018	3 437 158
Environment	6 003 938	6 109 211	105 273	1.8%	6 109 211	1.5%	6 201 177	6 201 031
Radioisotope Production and Radiation Technology	2 206 066	2 190 166	(15 900)	(0.7%)	2 190 166	1.5%	2 223 928	2 223 900
Major Programme 2	**39 112 775**	**37 881 333**	**(1 231 442)**	**(3.1%)**	**37 881 907**	**1.6%**	**38 483 002**	**38 481 917**
3. Nuclear Safety and Security								
Overall management, coordination and common activities[2]	3 322 482	4 322 678	1 000 196	30.1%	4 323 262	1.1%	4 368 243	4 365 562
Incident and Emergency Preparedness and Response	3 443 868	3 730 310	286 442	8.3%	3 730 194	1.1%	3 772 821	3 771 831
Safety of Nuclear Installations[3]	10 160 017	9 842 247	(317 770)	(3.1%)	9 842 247	0.7%	9 915 952	9 916 596
Radiation and Transport Safety *(Including Radiation Protection Services in 2014-2015)* [4]	5 921 487	6 927 191	1 005 704	17.0%	6 927 191	1.0%	6 997 627	6 996 624
Management of Radioactive Waste	7 037 819	6 906 389	(131 430)	(1.9%)	6 906 389	0.9%	6 969 365	6 969 933
Nuclear Security	4 548 812	5 047 476	498 664	11.0%	5 047 592	0.8%	5 089 980	5 090 100
Major Programme 3	**34 434 485**	**36 776 291**	**2 341 806**	**6.8%**	**36 776 875**	**0.9%**	**37 113 988**	**37 110 646**
4. Nuclear Verification								
Overall management, coordination and common activities	13 177 565	13 092 634	(84 931)	(0.6%)	12 638 125	1.5%	13 288 489	12 822 818
Safeguards Implementation	106 656 643	107 176 512	519 869	0.5%	110 875 757	1.2%	108 512 207	112 232 194
Other Verification Activities	542 458	527 501	(14 957)	(2.8%)	527 501	0.5%	530 249	530 249
Development	10 252 353	8 646 727	(1 605 626)	(15.7%)	5 405 640	0.6%	8 697 933	5 452 099
Major Programme 4	**130 629 019**	**129 443 374**	**(1 185 645)**	**(0.9%)**	**129 447 023**	**1.2%**	**131 028 878**	**131 037 360**
5. Policy, Management and Administration Services								
Policy, Management and Administration Services	76 517 489	75 559 585	(957 904)	(1.3%)	75 561 939	1.8%	76 943 995	76 945 863
Major Programme 5	**76 517 489**	**75 559 585**	**(957 904)**	**(1.3%)**	**75 561 939**	**1.8%**	**76 943 995**	**76 945 863**
6. Management of Technical Cooperation for Development								
Management of Technical Cooperation for Development[1]	20 717 070	23 275 803	2 558 733	12.4%	23 276 291	1.2%	23 561 013	23 561 983
Major Programme 6	**20 717 070**	**23 275 803**	**2 558 733**	**12.4%**	**23 276 291**	**1.2%**	**23 561 013**	**23 561 983**
Operational Regular Budget	**335 516 279**	**336 968 219**	**1 451 940**	**0.4%**	**336 970 112**	**1.4%**	**341 609 679**	**341 605 692**
Major Capital Investment Funding Requirements								
Nuclear Techniques for Development and Environmental Protection	-	2 600 000	2 600 000	-	2 600 000	2.8%	2 672 800	2 672 800
Nuclear Verification	1 682 710	2 200 000	517 290	30.7%	2 200 000	2.8%	2 261 600	2 261 600
Policy, Management and Administration Services	6 658 242	3 200 000	(3 458 242)	(51.9%)	3 200 000	2.8%	3 289 600	3 289 600
Capital Regular Budget	**8 340 952**	**8 000 000**	**(340 952)**	**(4.1%)**	**8 000 000**	**2.8%**	**8 224 000**	**8 224 000**
Total Agency Programmes	**343 857 231**	**344 968 219**	**1 110 988**	**0.3%**	**344 970 112**	**1.4%**	**349 833 679**	**349 829 692**
Reimbursable Work for Others	2 417 027	2 762 977	345 950	14.3%	2 740 680	2.8%	2 840 340	2 817 419
Total Regular Budget	**346 274 258**	**347 731 196**	**1 456 938**	**0.4%**	**347 710 792**	**1.4%**	**352 674 019**	**352 647 111**
Less Miscellaneous Income								
Reimbursable Work for Others	2 417 027	2 762 977	345 950	14.3%	2 740 680	2.8%	2 840 340	2 817 419
Other Miscellaneous Income	842 000	655 000	(187 000)	(22.2%)	655 000	-	655 000	655 000
Assessment on Member States	**343 015 231**	**344 313 219**	**1 297 988**	**0.4%**	**344 315 112**	**1.4%**	**349 178 679**	**349 174 692**

[1] PACT and associated funding is moved from Major Programme 2 to Major Programme 6, hence the slight decrease in Major Programme 2 in 2014 at 2013 prices. Excluding the effect of this transfer, Major Programme 2 has an increase of 0.5% as opposed to the apparent decrease of 3.1%, while Major Programme 6 includes an increase of 5.6% as opposed to the increase of 12.4% (of the 5.6%, the additional increase in PACT accounts for €0.8 million while, in other TC subfunctions the additional increase accounts for €0.4 million).

[2] Nuclear Safety Action Team accounts for €0.8 million and the radiation safety regulator, previously funded by all Major Programmes, accounts for €0.2 million of the total €1.0 million increase in Overall management, coordination and common activities in 2014.

[3] The project "Supporting long term operation safety", previously funded from Major Programme 1 accounts for €0.1 million in 2014.

[4] Radiation Protection services previously funded by Major Programme 3 and Major Programme 4 have been discontinued as a shared service and have been fully attributed to Major Programme 3 under subprogramme 3.3.1 Radiation Safety and Monitoring, and this accounts for €1.0 million of the total increase.

Table 2. The Regular Budget — Summary of Income

	2013 budget at 2013 prices	2014 estimates at 2013 prices	Variance 2014 over 2013	2015 prelim. estimates at 2013 prices	Variance 2015 over 2014
Operational regular budget	334 674 279	336 313 219	1 638 940	336 315 112	1 893
Capital regular budget	8 340 952	8 000 000	(340 952)	8 000 000	-
Assessed contributions on Member States	**343 015 231**	**344 313 219**	**1 297 988**	**344 315 112**	**1 893**
Miscellaneous income					
Reimbursable work for others					
Printing services	618 104	400 000	(218 104)	400 000	-
Medical services	876 489	863 439	(13 050)	863 439	-
Radiation protection and monitoring services [1]	120 034	-	(120 034)	-	-
Translation services [1]	153 809	-	(153 809)	-	-
Nuclear Fusion journal	188 951	194 512	5 561	193 741	(771)
Other financial services	125 744	153 000	27 256	153 000	-
General Services	58 396	58 000	(396)	58 500	500
Laboratory services	275 500	232 026	(43 474)	210 000	(22 026)
Amounts recoverable under Safeguards Agreements [2]	-	862 000	862 000	862 000	-
Subtotal reimbursable work for others	**2 417 027**	**2 762 977**	**345 950**	**2 740 680**	**(22 297)**
Other					
INIS products	5 000	5 000	-	5 000	-
Publications of the Agency - other	250 000	250 000	-	250 000	-
Laboratory income	200 000	200 000	-	200 000	-
Amounts recoverable under Safeguards Agreements [2]	185 000	-	(185 000)	-	-
Other service income	2 000	-	(2 000)	-	-
Investment and interest income	200 000	200 000	-	200 000	-
Subtotal Other	**842 000**	**655 000**	**(187 000)**	**655 000**	**-**
Total miscellaneous income	**3 259 027**	**3 417 977**	**158 950**	**3 395 680**	**(22 297)**
Total Regular Budget Income	**346 274 258**	**347 731 196**	**1 456 938**	**347 710 792**	**(20 404)**

[1] As of 2014, no additional Reimbursable Work for Others income is planned for both Radiation protection and monitoring services, and Translation services due to the inclusion of this income in "on-demand shared services".

[2] As of 2014, amounts recoverable under Safeguards Agreements are moved within miscellaneous income from Other to Reimbursable Work for Others.

Table 3(a). Total Resource Requirements for 2014 — By Programme and Major Programme (at 2014 prices)

Programme / Major Programme	Regular Budget		Extrabudgetary		TC Programme	Total	*Capital Carry-over*	*Unfunded*	
	Operational	Capital	Operational	Capital				*Operational*	*Capital*
1. Nuclear Power, Fuel Cycle and Nuclear Science					-				
Overall management, coordination and common activities	2 641 891	-	41 192	-	-	2 683 083	-	*10 620*	-
Nuclear Power	7 929 763	-	3 821 831	-	5 381 837	17 133 431	-	-	-
Nuclear Fuel Cycle and Materials Technologies	3 491 867	-	1 262 273	-	2 416 474	7 170 614	-	*51 173*	-
Capacity Building and Nuclear Knowledge Maintenance for Sustainable Energy Development	10 326 485	-	54 714	-	1 673 998	12 055 197	-	-	-
Nuclear Science	10 088 797	-	799 804	-	5 695 491	16 584 092	-	*402 381*	-
Major Programme 1	**34 478 803**	**-**	**5 979 814**	**-**	**15 167 800**	**55 626 417**	**-**	***464 174***	**-**
2. Nuclear Techniques for Development and Environmental Protection					-	-			
Overall management, coordination and common activities	7 148 972	2 672 800	1 018 835	-	-	10 840 607	-	*12 772*	*5 515 589*
Food and Agriculture	11 295 034	-	2 358 704	-	13 819 215	27 472 953	-	*1 086 640*	-
Human Health	8 176 873	-	175 586	-	27 643 115	35 995 574	-	*411 745*	-
Water Resources	3 437 018	-	-	-	2 546 737	5 983 755	-	*297 005*	-
Environment	6 201 177	-	509 748	-	3 884 646	10 595 571	-	*2 424 945*	-
Radioisotope Production and Radiation Technology	2 223 928	-	-	-	11 042 575	13 266 503	-	-	-
Major Programme 2	**38 483 002**	**2 672 800**	**4 062 873**	**-**	**58 936 287**	**104 154 962**	**-**	***4 233 107***	***5 515 589***
3. Nuclear Safety and Security					-	-			
Overall management, coordination and common activities	4 368 243	-	1 339 985	-	-	5 708 228	-	*109 649*	-
Incident and Emergency Preparedness and Response	3 772 821	-	2 373 852	-	2 517 556	8 664 229	-	*186 705*	-
Safety of Nuclear Installations	9 915 952	-	12 822 938	-	6 440 083	29 178 973	-	*834 259*	-
Radiation and Transport Safety	6 997 627	-	789 711	-	9 288 757	17 076 095	-	*106 642*	*390 434*
Management of Radioactive Waste	6 969 365	-	857 650	-	8 550 656	16 377 671	-	*191 640*	-
Nuclear Security	5 089 980	-	19 024 921	-	-	24 114 901	-	-	-
Major Programme 3	**37 113 988**	**-**	**37 209 057**	**-**	**26 797 052**	**101 120 097**	**-**	***1 428 895***	***390 434***
4. Nuclear Verification					-	-			
Overall management, coordination and common activities	13 288 489	-	268 393	-	-	13 556 882	-	*236 002*	-
Safeguards Implementation	108 512 207	-	5 321 708	-	-	113 833 915	*3 421 158*	*16 005 347*	-
Other Verification Activities	530 249	-	436 139	-	-	966 388	-	-	-
Development	8 697 933	2 261 600	857 322	-	-	11 816 855	*1 233 600*	*1 925 773*	*17 628 414*
Major Programme 4	**131 028 878**	**2 261 600**	**6 883 562**	**-**	**-**	**140 174 040**	***4 654 758***	***18 167 122***	***17 628 414***
5. Policy, Management and Administration Services					-	-			
Policy, Management and Administration Services	76 943 995	3 289 600	2 772 426	-	518 861	83 524 882	-	*4 100 350*	-
Major Programme 5	**76 943 995**	**3 289 600**	**2 772 426**	**-**	**518 861**	**83 524 882**	**-**	***4 100 350***	**-**
6. Management of Technical Cooperation for Development					-	-			
Management of Technical Cooperation for Development	23 561 013	-	507 661	-	-	24 068 674	-	*610 596*	-
Major Programme 6	**23 561 013**	**-**	**507 661**	**-**	**-**	**24 068 674**	**-**	***610 596***	**-**
Total Agency Programmes	**341 609 679**	**8 224 000**	**57 415 393**	**-**	**101 420 000**	**508 669 072**	***4 654 758***	***29 004 244***	***23 534 437***
Reimbursable Work for Others	2 840 340					2 840 340			
Total	**344 450 019**	**8 224 000**	**57 415 393**	**-**	**101 420 000**	**511 509 412**	***4 654 758***	***29 004 244***	***23 534 437***

Table 3(b). Total Resource Requirements for 2015 (preliminary estimates) — By Programme and Major Programme (at 2014 prices)

Programme / Major Programme	Regular Budget		Extrabudgetary		TC Programme	Total	Capital Carry-over	Unfunded	
	Operational	Capital	Operational	Capital				Operational	Capital
1. Nuclear Power, Fuel Cycle and Nuclear Science					-				
Overall management, coordination and common activities	2 636 143	-	42 226	-	-	2 678 369	-	10 620	-
Nuclear Power	7 928 930	-	3 732 657	-	5 416 860	17 078 447	-	-	-
Nuclear Fuel Cycle and Materials Technologies	3 491 622	-	1 125 604	-	2 432 199	7 049 425	-	51 173	-
Capacity Building and Nuclear Knowledge Maintenance for Sustainable Energy Development	10 322 264	-	-	-	1 684 892	12 007 156	-	-	-
Nuclear Science	10 088 964	-	549 372	-	5 732 555	16 370 891	-	718 401	-
Major Programme 1	**34 467 923**	**-**	**5 449 859**	**-**	**15 266 506**	**55 184 288**	**-**	**780 194**	**-**
2. Nuclear Techniques for Development and Environmental Protection					-				
Overall management, coordination and common activities	7 148 473	2 672 800	1 020 080	-	-	10 841 353	-	12 772	5 565 223
Food and Agriculture	11 294 468	-	2 210 265	-	13 909 144	27 413 877	-	1 232 721	-
Human Health	8 176 887	-	179 417	-	27 823 005	36 179 309	-	464 905	-
Water Resources	3 437 158	-	-	-	2 563 311	6 000 469	-	297 005	-
Environment	6 201 031	-	509 748	-	3 909 925	10 620 704	-	1 240 842	-
Radioisotope Production and Radiation Technology	2 223 900	-	-	-	11 114 435	13 338 335	-	-	-
Major Programme 2	**38 481 917**	**2 672 800**	**3 919 510**	**-**	**59 319 821**	**104 394 048**	**-**	**3 248 245**	**5 565 223**
3. Nuclear Safety and Security					-				
Overall management, coordination and common activities	4 365 562	-	1 341 195	-	-	5 706 757	-	12 420	-
Incident and Emergency Preparedness and Response	3 771 831	-	2 030 801	-	2 533 939	8 336 571	-	186 705	-
Safety of Nuclear Installations	9 916 596	-	12 689 412	-	6 481 992	29 088 000	-	752 283	-
Radiation and Transport Safety	6 996 624	-	861 882	-	9 349 205	17 207 711	-	92 083	398 864
Management of Radioactive Waste	6 969 933	-	872 849	-	8 606 300	16 449 082	-	283 900	-
Nuclear Security	5 090 100	-	18 644 217	-	-	23 734 317	-	-	-
Major Programme 3	**37 110 646**	**-**	**36 440 356**	**-**	**26 971 436**	**100 522 438**	**-**	**1 327 391**	**398 864**
4. Nuclear Verification					-				
Overall management, coordination and common activities	12 822 818	-	272 641	-	-	13 095 459	-	43 596	-
Safeguards Implementation	112 232 194	2 261 600	4 752 837	-	-	119 246 631	-	24 696 011	491 949
Other Verification Activities	530 249	-	483 334	-	-	1 013 583	-	-	-
Development	5 452 099	-	689 499	-	-	6 141 598	-	1 986 331	4 635 989
Major Programme 4	**131 037 360**	**2 261 600**	**6 198 311**	**-**	**-**	**139 497 271**	**-**	**26 725 938**	**5 127 938**
5. Policy, Management and Administration Services					-				
Policy, Management and Administration Services	76 945 863	3 289 600	2 789 286	-	522 237	83 546 986	-	3 920 450	1 542 000
Major Programme 5	**76 945 863**	**3 289 600**	**2 789 286**	**-**	**522 237**	**83 546 986**	**-**	**3 920 450**	**1 542 000**
6. Management of Technical Cooperation for Development					-				
Management of Technical Cooperation for Development	23 561 983	-	512 176	-	-	24 074 159	-	607 114	-
Major Programme 6	**23 561 983**	**-**	**512 176**	**-**	**-**	**24 074 159**	**-**	**607 114**	**-**
Total Agency Programmes	**341 605 692**	**8 224 000**	**55 309 498**	**-**	**102 080 000**	**507 219 190**	**-**	**36 609 332**	**12 634 025**
Reimbursable Work for Others	2 817 419					2 817 419			
Total	**344 423 111**	**8 224 000**	**55 309 498**	**-**	**102 080 000**	**510 036 609**	**-**	**36 609 332**	**12 634 025**

I.4 Major Programmes at a Glance

Major Programme 1 – Nuclear Power, Fuel Cycle and Nuclear Science
Summary of Regular Budget Resources for the Biennium
(excluding Major Capital Investments)

Table 4

Subprogramme / Programme		2013 Budget	2014 Estimates at 2013 prices	2014 Variance over 2013 EUR	2014 Variance over 2013 %	2015 Preliminary Estimates at 2013 prices	2015 Variance over 2014 EUR	2015 Variance over 2014 %
1.0 Overall management, coordination and common activities	▬	**2 574 820**	**2 605 506**	***30 686***	***1.2%***	**2 602 612**	***(2 894)***	***(0.1%)***
1.1.1 Strengthening Integrated Engineering Support for Nuclear Power Programmes	↓	2 049 060	1 583 746	*(465 314)*	*(22.7%)*	1 582 631	*(1 115)*	*(0.1%)*
1.1.2 Integrated Management and Human Resources Development for Nuclear Power	↑	575 516	1 003 275	*427 759*	*74.3%*	1 003 938	*663*	*0.1%*
1.1.3 Infrastructure and Planning for New Nuclear Power Programmes	↑	2 008 000	2 221 260	*213 260*	*10.6%*	2 221 110	*(150)*	*(0.0%)*
1.1.4 International Project on Innovative Nuclear Reactors and Fuel Cycles	↑	649 054	667 421	*18 367*	*2.8%*	667 421	-	-
1.1.5 Technology Development for Advanced Reactor Lines	↑	1 878 010	2 374 426	*496 416*	*26.4%*	2 374 426	-	-
1.1.6 Support for Non-electric Applications of Nuclear Power	↓	474 460	-	*(474 460)*	*(100.0%)*	-	-	-
1.1 Nuclear Power Total	↑	**7 634 100**	**7 850 128**	***216 028***	***2.8%***	**7 849 526**	***(602)***	***(0.0%)***
1.2.1 Uranium Resources and Production	↑	1 220 915	1 266 232	*45 317*	*3.7%*	1 238 358	*(27 874)*	*(2.2%)*
1.2.2 Nuclear Power Reactor Fuel	↑	628 269	856 733	*228 464*	*36.4%*	780 485	*(76 248)*	*(8.9%)*
1.2.3 Management of Spent Fuel from Nuclear Power Reactors	↑	1 011 595	1 328 510	*316 915*	*31.3%*	1 432 632	*104 122*	*7.8%*
1.2.4 Topical Issues of Nuclear Fuels and Fuel Cycles for Advanced and Innovative Reactors	↓	460 073	-	*(460 073)*	*(100.0%)*	-	-	-
1.2 Nuclear Fuel Cycle and Materials Technologies Total	↑	**3 320 852**	**3 451 475**	***130 623***	***3.9%***	**3 451 475**	**-**	**-**
1.3.1 Energy Modelling, Data and Capacity Building	▬	1 864 097	1 834 813	*(29 284)*	*(1.6%)*	1 834 881	*68*	*0.0%*
1.3.2 Energy Economy Environment (3E) Analysis	↓	1 421 570	1 340 962	*(80 608)*	*(5.7%)*	1 340 962	-	-
1.3.3 Nuclear Knowledge Management (NKM)	▬	2 180 167	2 181 286	*1 119*	*0.1%*	2 181 459	*173*	*0.0%*
1.3.4 Nuclear Information	↑	2 622 837	4 837 497	*2 214 660*	*84.4%*	4 834 997	*(2 500)*	*(0.1%)*
1.3.5 Library and Information Support	↓	2 614 271	-	*(2 614 271)*	*(100.0%)*	-	-	-
1.3 Capacity Building and Nuclear Knowledge for Sustainable Energy Development Total	↓	**10 702 942**	**10 194 558**	***(508 384)***	***(4.7%)***	**10 192 299**	***(2 259)***	***(0.0%)***
1.4.1 Atomic and Nuclear Data	↓	2 748 613	2 685 712	*(62 901)*	*(2.3%)*	2 685 712	-	-
1.4.2 Research Reactors	↑	1 661 241	1 705 479	*44 238*	*2.7%*	1 705 479	-	-
1.4.3 Accelerator Applications and Nuclear Instrumentation	▬	2 497 165	2 468 594	*(28 571)*	*(1.1%)*	2 468 594	-	-
1.4.4 Nuclear Fusion Research and Technology	↑	597 692	785 632	*187 940*	*31.4%*	785 632	-	-
1.4.5 Support to the Abdus Salam International Centre for Theoretical Physics	↓	2 368 016	2 284 749	*(83 267)*	*(3.5%)*	2 284 749	-	-
1.4 Nuclear Science Total	▬	**9 872 727**	**9 930 166**	***57 439***	***0.6%***	**9 930 166**	**-**	**-**
Total for Nuclear Power, Fuel Cycle and Nuclear Science	▬	**34 105 441**	**34 031 833**	***(73 608)***	***(0.2%)***	**34 026 078**	***(5 755)***	***(0.0%)***

Note: As a result of programme structure streamlining, the number of projects in some major programmes has been substantially reduced and certain activities have been subsumed into other subprogrammes.

Major Programme 2 – Nuclear Techniques for Development and Environmental Protection
Summary of Regular Budget Resources for the Biennium
(excluding Major Capital Investments)

Table 5

Subprogramme / Programme		2013 Budget	2014 Estimates at 2013 prices	2014 Variance over 2013 EUR	2014 Variance over 2013 %	2015 Preliminary Estimates at 2013 prices	2015 Variance over 2014 EUR	2015 Variance over 2014 %
2.0 Overall management, coordination and common activities	↑	**6 737 074**	**7 012 736**	***275 662***	***4.1%***	**7 013 310**	***574***	***0.0%***
2.1.1 Sustainable Land and Water Management	↓	4 061 053	1 988 966	*(2 072 087)*	*(51.0%)*	2 049 015	*60 049*	*3.0%*
2.1.2 Sustainable Intensification of Livestock Production Systems	↑	2 081 781	2 216 673	*134 892*	*6.5%*	2 174 700	*(41 973)*	*(1.9%)*
2.1.3 Improvement of Food Safety and Food Control Systems	↑	1 490 538	1 528 936	*38 398*	*2.6%*	1 521 461	*(7 475)*	*(0.5%)*
2.1.4 Sustainable Control of Major Insect Pests	↓	3 536 083	3 435 907	*(100 176)*	*(2.8%)*	3 435 989	*82*	*0.0%*
2.1.5 Crop Improvement for Intensification of Agricultural Production Systems	↑	-	1 948 677	*1 948 677*	-	1 937 994	*(10 683)*	*(0.5%)*
2.1 Food and Agriculture Total	–	**11 169 455**	**11 119 159**	***(50 296)***	***(0.5%)***	**11 119 159**	**-**	**-**
2.2.1 Nutrition for improved human health	↓	1 841 579	1 639 418	*(202 161)*	*(11.0%)*	1 582 774	*(56 644)*	*(3.5%)*
2.2.2 Nuclear Medicine and Diagnostic Imaging	↑	1 900 330	2 021 361	*121 031*	*6.4%*	2 019 683	*(1 678)*	*(0.1%)*
2.2.3 Radiation Oncology and Cancer Treatment	–	1 783 347	1 774 842	*(8 505)*	*(0.5%)*	1 773 917	*(925)*	*(0.1%)*
2.2.4 Dosimetry and medical physics for imaging and therapy	–	2 638 212	2 630 144	*(8 068)*	*(0.3%)*	2 689 391	*59 247*	*2.3%*
2.2.5 Programme of Action for Cancer Therapy	↓	1 401 244	-	*(1 401 244)*	*(100.0%)*	-	-	-
2.2 Human Health Total	↓	**9 564 712**	**8 065 765**	***(1 498 947)***	***(15.7%)***	**8 065 765**	**-**	**-**
2.3.1 Isotope Data Networks for Hydrology and Climate Studies	–	872 797	878 843	*6 046*	*0.7%*	966 411	*87 568*	*10.0%*
2.3.2 Isotope Based Assessment and Management of Water Resources	↓	1 402 992	1 074 481	*(328 511)*	*(23.4%)*	997 583	*(76 898)*	*(7.2%)*
2.3.3 Radio-isotope Applications for Hydrology	↑	1 155 741	1 430 971	*275 230*	*23.8%*	1 420 301	*(10 670)*	*(0.7%)*
2.3 Water Resources Total	–	**3 431 530**	**3 384 295**	***(47 235)***	***(1.4%)***	**3 384 295**	**-**	**-**
2.4.1 IAEA Reference Products for Science and Trade	↑	1 603 712	2 339 593	*735 881*	*45.9%*	2 347 265	*7 672*	*0.3%*
2.4.2 Nuclear Techniques to Understand Climate and Environmental Change	↑	1 300 030	1 392 434	*92 404*	*7.1%*	1 390 362	*(2 072)*	*(0.1%)*
2.4.3 Nuclear Techniques for Development of Land, Coastal and Marine Ecosystems	↓	2 291 726	1 593 280	*(698 446)*	*(30.5%)*	1 539 905	*(53 375)*	*(3.4%)*
2.4.4 Applying Analytical Techniques for the Marine and Terrestrial Environment	↓	808 470	783 904	*(24 566)*	*(3.0%)*	831 679	*47 775*	*6.1%*
2.4 Environment Total	–	**6 003 938**	**6 109 211**	***105 273***	***1.8%***	**6 109 211**	**-**	**-**
2.5.1 Radioisotope Products for Cancer Management and Non-communicable Diseases	↓	1 027 026	985 256	*(41 770)*	*(4.1%)*	1 014 709	*29 453*	*3.0%*
2.5.2 Radiation Technology for Health Care and Industrial Applications	↑	1 179 040	1 204 911	*25 871*	*2.2%*	1 175 458	*(29 453)*	*(2.4%)*
2.5 Radioisotope Production and Radiation Technology Total	–	**2 206 066**	**2 190 167**	***(15 899)***	***(0.7%)***	**2 190 167**	**-**	**-**
Total for Nuclear Techniques for Development and Environmental Protection	↓	**39 112 775**	**37 881 333**	***(1 231 442)***	***(3.1%)***	**37 881 907**	***574***	***0.0%***

Note: As a result of programme structure streamlining, the number of projects in some major programmes has been substantially reduced and certain activities have been subsumed into other subprogrammes.

Major Programme 3 – Nuclear Safety and Security
Summary of Regular Budget Resources for the Biennium
(excluding Major Capital Investments)

Table 6

Subprogramme / Programme		2013 Budget	2014 Estimates at 2013 prices	2014 Variance over 2013 EUR	2014 Variance over 2013 %	2015 Preliminary Estimates at 2013 prices	2015 Variance over 2014 EUR	2015 Variance over 2014 %
3.0 Overall management, coordination and common activities	↑	**3 322 482**	**4 322 678**	***1 000 196***	***30.1%***	**4 323 262**	***584***	***0.0%***
3.1.1 Strengthening National and International Emergency Preparedness	–	1 343 418	1 346 574	*3 156*	*0.2%*	1 445 369	*98 795*	*7.3%*
3.1.2 IAEA IES and operational arrangements with MSs and IOs.	↓	2 100 450	1 955 509	*(144 941)*	*(6.9%)*	1 856 598	*(98 911)*	*(5.1%)*
3.1.3 Nuclear Safety Action Plan (NSAP)	↑	-	428 227	*428 227*	-	428 227	-	-
3.1 Incident and Emergency Preparedness and Response Total	↑	**3 443 868**	**3 730 310**	***286 442***	***8.3%***	**3 730 194**	***(116)***	***(0.0%)***
3.2.1 Governmental Regulatory Framework and Safety Infrastructure Development	–	2 732 562	2 715 733	*(16 829)*	*(0.6%)*	2 545 084	*(170 649)*	*(6.3%)*
3.2.2 Safety Assessment of Nuclear Installations	↓	2 327 222	2 162 763	*(164 459)*	*(7.1%)*	2 159 115	*(3 648)*	*(0.2%)*
3.2.3 Safety and Protection Against Internal and External Hazards.	–	835 825	836 565	*740*	*0.1%*	836 965	*400*	*0.0%*
3.2.4 Safe Operation of Nuclear Power Plants	↓	3 018 031	2 331 522	*(686 509)*	*(22.7%)*	2 483 481	*151 959*	*6.5%*
3.2.5 Safety of Research Reactor and Fuel Cycle Facilities	↓	1 246 377	1 153 600	*(92 777)*	*(7.4%)*	1 154 968	*1 368*	*0.1%*
3.2.6 Nuclear Safety Action Plan (NSAP)	↑	-	642 065	*642 065*	-	662 635	*20 570*	*3.2%*
3.2 Safety of Nuclear Installations Total	↓	**10 160 017**	**9 842 248**	***(317 769)***	***(3.1%)***	**9 842 248**	**-**	**-**
3.3.1 Radiation Safety and Monitoring	↑	2 759 064	3 677 418	*918 354*	*33.3%*	3 661 918	*(15 500)*	*(0.4%)*
3.3.2 Regulatory Infrastructure and Transport Safety	↓	3 162 423	2 999 416	*(163 007)*	*(5.2%)*	3 014 916	*15 500*	*0.5%*
3.3.3 Nuclear Safety Action Plan (NSAP)	↑	-	250 357	*250 357*	-	250 357	-	-
3.3 Radiation and Transport Safety Total	↑	**5 921 487**	**6 927 191**	***1 005 704***	***17.0%***	**6 927 191**	**-**	**-**
3.4.1 Waste and Environmental Safety	↓	3 493 709	3 145 342	*(348 367)*	*(10.0%)*	3 151 210	*5 868*	*0.2%*
3.4.2 Technology for RWM, Decommissioning & Environmental Remediation.	↓	3 544 110	3 295 630	*(248 480)*	*(7.0%)*	3 295 630	-	-
3.4.3 Nuclear Safety Action Plan (NSAP)	↑	-	465 416	*465 416*	-	459 548	*(5 868)*	*(1.3%)*
3.4 Management of Radioactive Waste Total	–	**7 037 819**	**6 906 388**	***(131 431)***	***(1.9%)***	**6 906 388**	**-**	**-**
3.5.1 Information Management	↑	-	1 331 720	*1 331 720*	-	1 323 836	*(7 884)*	*(0.6%)*
3.5.1 Needs Assessment, Information Collation and Analysis	↓	1 372 728	-	*(1 372 728)*	*(100.0%)*	-	-	-
3.5.2 Nuclear Security of Materials and Facilities	↑	-	1 289 039	*1 289 039*	-	1 289 039	-	-
3.5.2 Contributing to the Establishment of a Global Nuclear Security Framework	↓	1 342 588	-	*(1 342 588)*	*(100.0%)*	-	-	-
3.5.3 Nuclear Security of Material outside of Regulatory Control	↑	-	1 320 261	*1 320 261*	-	1 328 261	*8 000*	*0.6%*
3.5.3 Providing Nuclear Security Services	↓	1 496 854	-	*(1 496 854)*	*(100.0%)*	-	-	-
3.5.4 Risk Reduction and Security Improvement	↓	336 642	-	*(336 642)*	*(100.0%)*	-	-	-
3.5.4 Programme Development and International Cooperation	↑	-	1 106 456	*1 106 456*	-	1 106 456	-	-
3.5 Nuclear Security Total	↑	**4 548 812**	**5 047 476**	***498 664***	***11.0%***	**5 047 592**	***116***	***0.0%***
Total for Nuclear Safety and Security	↑	**34 434 485**	**36 776 291**	***2 341 806***	***6.8%***	**36 776 875**	***584***	***0.0%***

Note: As a result of programme structure streamlining, the number of projects in some major programmes has been substantially reduced and certain activities have been subsumed into other subprogrammes.

Major Programme 4 – Nuclear Verification
Summary of Regular Budget Resources for the Biennium
(excluding Major Capital Investments)

Table 7

Subprogramme / Programme		2013 Budget	2014 Estimates at 2013 prices	2014 Variance over 2013 EUR	2014 Variance over 2013 %	2015 Preliminary Estimates at 2013 prices	2015 Variance over 2014 EUR	2015 Variance over 2014 %
4.0 Overall management, coordination and common activities	▬	**13 177 565**	**13 092 634**	***(84 931)***	***(0.6%)***	**12 638 125**	***(454 509)***	***(3.5%)***
4.1.1 Concepts and Planning	↑	4 519 614	6 476 389	*1 956 775*	*43.3%*	6 196 104	*(280 285)*	*(4.3%)*
4.1.2 Safeguards Implementation in States under responsibility of Division SGOA	↓	18 395 729	15 213 321	*(3 182 408)*	*(17.3%)*	15 213 321	-	-
4.1.3 Safeguards Implementation in States under responsibility of Division SGOB	↑	16 764 436	19 269 992	*2 505 556*	*14.9%*	19 280 062	*10 070*	*0.1%*
4.1.4 Safeguards Implementation in States under responsibility of Division SGOC	↓	16 665 784	16 076 124	*(589 660)*	*(3.5%)*	16 076 124	-	-
4.1.5 Information Analysis	↓	23 249 351	10 972 520	*(12 276 831)*	*(52.8%)*	10 824 467	*(148 053)*	*(1.3%)*
4.1.6 Provision of Safeguards Instrumentation	▬	15 234 883	15 467 027	*232 144*	*1.5%*	16 440 469	*973 442*	*6.3%*
4.1.7 Safeguards Analytical Services	↑	9 679 791	10 658 302	*978 511*	*10.1%*	10 658 302	-	-
4.1.8 Effectiveness Evaluation	↓	2 147 055	1 708 159	*(438 896)*	*(20.4%)*	1 708 159	-	-
4.1.9 Information Communication Technology (ICT)	↑	-	11 334 678	*11 334 678*	-	14 478 748	*3 144 070*	*27.7%*
4.1 Safeguards Implementation Total	▬	**106 656 643**	**107 176 512**	***519 869***	***0.5%***	**110 875 756**	***3 699 244***	***3.5%***
4.2.1 Other Verification Activities	↓	542 458	527 501	*(14 957)*	*(2.8%)*	527 501	-	-
4.2 Other Verification Activities Total	↓	**542 458**	**527 501**	***(14 957)***	***(2.8%)***	**527 501**	**-**	**-**
4.3.1 Evolving Safeguards Implementation	↑	4 967 629	5 214 945	*247 316*	*5.0%*	1 932 560	*(3 282 385)*	*(62.9%)*
4.3.2 Development of Safeguards Instrumentation	▬	2 611 285	2 647 985	*36 700*	*1.4%*	2 689 283	*41 298*	*1.6%*
4.3.3 Special Projects	↓	2 673 439	783 797	*(1 889 642)*	*(70.7%)*	783 797	-	-
4.3 Development Total	↓	**10 252 353**	**8 646 727**	***(1 605 626)***	***(15.7%)***	**5 405 640**	***(3 241 087)***	***(37.5%)***
Total for Nuclear Verification	▬	**130 629 019**	**129 443 374**	***(1 185 645)***	***(0.9%)***	**129 447 022**	***3 648***	***0.0%***

Note: As a result of programme structure streamlining, the number of projects in some major programmes has been substantially reduced and certain activities have been subsumed into other subprogrammes.

Major Programme 5 – Policy, Management and Administration Services
Summary of Regular Budget Resources for the Biennium
(excluding Major Capital Investments)

Table 8

Function			2013 Budget	2014 Estimates at 2013 prices	2014 Variance over 2013 EUR	2014 Variance over 2013 %	2015 Preliminary Estimates at 2013 prices	2015 Variance over 2014 EUR	2015 Variance over 2014 %
5.0.1	Executive Leadership and Policy	↑	7 442 432	8 180 328	*737 896*	*9.9%*	8 072 928	*(107 400)*	*(1.3%)*
5.0.2	Legal Services	↑	2 548 354	2 633 110	*84 756*	*3.3%*	2 633 110	-	-
5.0.3	Oversight Services	↑	2 765 492	2 946 778	*181 286*	*6.6%*	2 946 778	-	-
5.0.4	Public Information and Communications	↓	3 076 910	2 851 895	*(225 015)*	*(7.3%)*	2 851 895	-	-
5.0.5	Information Communication Technology	↓	9 297 670	9 081 439	*(216 231)*	*(2.3%)*	9 081 439	-	-
5.0.6	Financial Management and Services	–	6 786 972	6 671 722	*(115 250)*	*(1.7%)*	6 671 722	-	-
5.0.7	Human Resources Management	↑	5 159 786	6 125 648	*965 862*	*18.7%*	6 233 266	*107 618*	*1.8%*
5.0.8	General Services	↓	27 801 755	26 792 413	*(1 009 342)*	*(3.6%)*	26 792 413	-	-
5.0.9	Conference, Languages and Publishing Services	↓	5 081 681	4 844 200	*(237 481)*	*(4.7%)*	4 844 517	*317*	*0.0%*
5.0.10	Procurement Services	↓	1 938 696	1 809 580	*(129 116)*	*(6.7%)*	1 809 926	*346*	*0.0%*
5.0.11	Corporate Shared Services Attribution to Major Programme 5	↓	4 617 741	3 622 472	*(995 269)*	*(21.6%)*	3 623 945	*1 473*	*0.0%*
Total for Policy, Management and Administration Services		–	**76 517 489**	**75 559 585**	***(957 904)***	***(1.3%)***	**75 561 939**	***2 354***	***0.0%***

Major Programme 6 – Management of Technical Cooperation for Development
Summary of Regular Budget Resources for the Biennium
(excluding Major Capital Investments)

Table 9

Subfunction			2013 Budget	2014 Estimates at 2013 prices	2014 Variance over 2013 EUR	2014 Variance over 2013 %	2015 Preliminary Estimates at 2013 prices	2015 Variance over 2014 EUR	2015 Variance over 2014 %
6.0.1.001	Overall management and strategic guidance	↓	1 046 112	1 023 483	(22 629)	(2.2%)	1 023 483	-	-
6.0.1.002	Coordination of and support to the TC programme	–	4 155 785	4 086 451	(69 334)	(1.7%)	4 086 451	-	-
6.0.1.003	Management of the TC programme for Africa	↑	3 817 488	4 162 821	345 333	9.0%	4 162 821	-	-
6.0.1.004	Management of the TC programme for Asia and the Pacific	↑	3 378 821	3 508 440	129 619	3.8%	3 508 440	-	-
6.0.1.005	Management of the TC programme for Europe	↓	3 203 226	3 117 557	(85 669)	(2.7%)	3 117 557	-	-
6.0.1.006	Management of the TC programme for Latin America	↑	2 489 292	2 597 897	108 605	4.4%	2 597 897	-	-
6.0.1.007	Procurement services	↓	1 739 959	1 548 914	(191 045)	(11.0%)	1 548 914	-	-
6.0.1.008	Coordination of and support to the PACT	↑	-	2 183 607	2 183 607	-	2 183 607	-	-
6.0.1.009	Corporate Shared Services Attribution to Major Programme 6	↑	886 387	1 046 633	160 246	18.1%	1 047 121	488	0.0%
Total for Management of Technical Cooperation for Development		↑	**20 717 070**	**23 275 803**	**2 558 733**	**12.4%**	**23 276 291**	**488**	**0.0%**

I.5 Major Capital Investment Plan (MCIP) for 2014–2023
and
Major Capital Investment Fund (MCIF) for 2014–2015

Major Capital Investment Plan

98. The Major Capital Investment Plan (MCIP) outlines the Agency's major capital projects for the biennium as well as the 'outer' biennium years (up to eight additional years). The MCIP is updated annually and is derived from the needs of the Agency to maintain an updated, well-functioning and adequate infrastructure. An overview of the plan is presented in the table below, with details by year provided in Table 10.

Major Capital Investment Plan 2014-2023 - by Major Programme and Major Capital Item

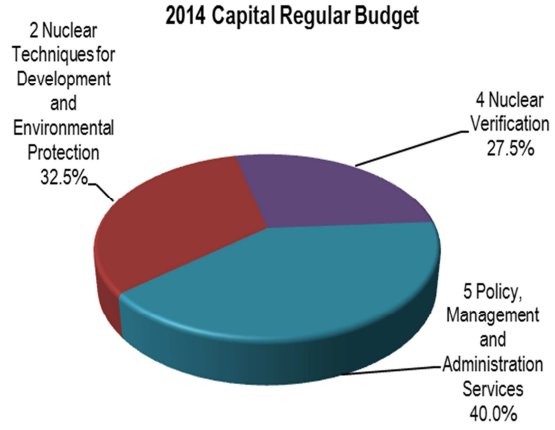
Major Programme / Major Capital Item	Total 2014 - 2023
2. Nuclear Techniques for Development and Environmental Protection	
Enhancing capabilities of NA Laboratories at Seibersdorf	31 027 924
Major Programme 2	**31 027 924**
3. Nuclear Safety and Security	
Radiation safety technical services	887 800
Major Programme 3	**887 800**
4. Nuclear Verification	
NGSS infrastructure replacement	11 329 500
Safeguards information system	13 935 207
Develop and implement SG approaches for the Chernobyl NPP	4 150 000
Enhancing capabilities of the safeguards analytical services (ECAS)	6 649 249
Develop and implement SG approaches for a SF EPGR in Finland/Sweden	7 034 000
Major Programme 4	**43 097 956**
5. Policy, Management and Administration Services	
Agency-wide Information System for Programme Support (AIPS)	3 700 000
Provision for IT Infrastructure Investment	20 200 000
Major Programme 5	**23 900 000**
Major Capital Investment Plan Total	**98 913 680**

99. The Major Capital Investment Fund (MCIF) is a reserve fund established in accordance with Financial Regulation 4.06 to help provide for the Agency's major infrastructure requirements which are included in the MCIP. It provides an opportunity to meet such capital requirements that could otherwise face continued deferral or could require substantial increases in annual contributions. The MCIF is reviewed by the Board in the framework of the established programme and budget approval process.

Capital Regular Budget

100. For 2014, major capital investment requirements total €35.5 million at 2013 prices.

101. The Director General has capped regular budget funding for those major capital items at €8.0 million (€8.2 million with price adjustment), in 2014. The capital regular budget funding will be distributed between projects in Major Programme 2 Nuclear Techniques for Development and Environmental Protection (32%), Major Programme 4 Nuclear Verification (28%), and Major Programme 5 Policy, Management and Administrative Services (40%).



102. Furthermore, part of the 2014 capital needs for "Enhancing Capabilities of the Safeguards Analytical Services" (ECAS) and "Next Generation Surveillance System (NGSS) infrastructure replacement" will be funded (€4.5 million) from the MCIF carry forward balance of the project "Develop and implement a SG approach for J-MOX" due to the uncertainty in the future of the Japanese nuclear energy programme. Should construction and commissioning of the facility continue, additional funding will be required in line with previous projections.

103. The remaining capital needs of €23.0 million in 2014 and €12.3 million in 2015 continue to be unfunded. It is hoped that these requirements will attract extrabudgetary pledges by Member States. Details of these requirements are presented in Table 12.

Overview by Major Programme

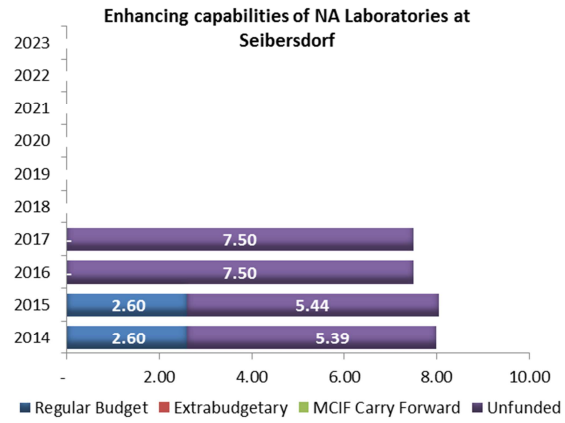
104. An overview is provided in the following paragraphs for those major capital investments that are part of the MCIP for 2014–2023.

Major Programme 2 – Nuclear Techniques for Development and Environmental Protection

Enhancing capabilities of NA Laboratories at Seibersdorf

105. The Director General, in his opening remarks at the 56th Regular Session of the General Conference in September 2012, expressed his intention to launch a new initiative to carry out a project to modernize the existing nuclear sciences and applications laboratories in Seibersdorf. The modernization of the laboratories in Seibersdorf was also called for in a resolution by Member States at the 2012 General Conference. Demand for laboratory services has grown and has evolved into new areas, a trend that is expected to continue.

106. The planning for the renovation of the laboratories is preliminary at this stage with initial estimates of €31.0 million. More detailed planning for the modernization of the NA Laboratories in Seibersdorf will be conducted during 2013 and will be the basis for more comprehensive cost estimates. The capital project will receive €2.6 million from the capital regular budget in each of 2014 and 2015. In 2014, this comprises 32% of the total capital regular budget funding available. Needs of €5.4 million remain unfunded in each of these two years.

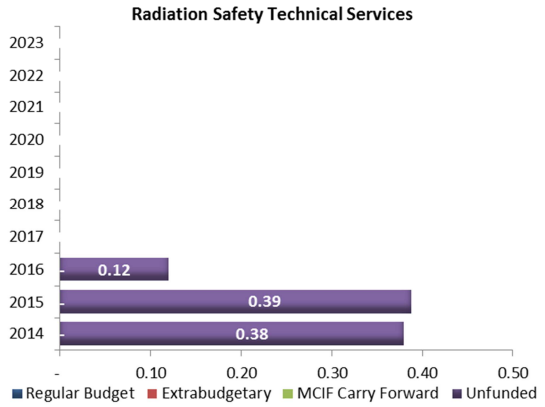


Major Programme 3 – Nuclear Safety and Security

Radiation safety technical services

107. The purpose of the radiation safety technical services project is to achieve a high level of protection for the Agency's operations, including operations using services, equipment and facilities made available by the Agency and in emergency situations and to serve as a reference for implementing a quality system in ISO Standards. The Agency's laboratories and the verification activities employ more than 500 staff members who are occupationally exposed to radiation in the performance of their work. In addition, more than 1100 experts and trainees, within the TC framework, are also monitored.

108. The amounts included in the proposed MCIP would allow for the replacement of existing obsolete equipment and the purchase of new equipment to ensure that the radiation safety technical service maintains a state of the art level for the Individual Monitoring laboratories and the Workplace Monitoring group located at Seibersdorf. The total unfunded requirement of €0.4 million in each of 2014 and 2015 is shown in the following chart.



Major Programme 4 – Nuclear Verification

Replacement of current infrastructure with the new Next Generation Surveillance System (NGSS)

109. Remote video surveillance systems are core technical components for the effective and efficient implementation of safeguards. They are used to maintain continuity of knowledge over inventories of nuclear material and to support verification activities. In 2012, the safeguards programme had about 1400 digital cameras, with the vast majority being permanently installed in approximately 250 nuclear facilities worldwide.

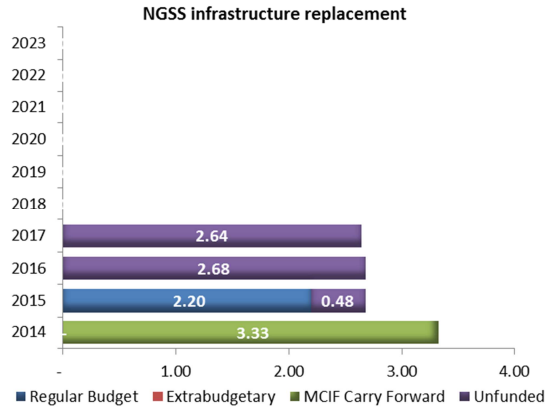
110. The Agency's remote video surveillance systems currently in use at nuclear facilities are based on components developed for safeguards applications in the 1990s. Besides their relatively poor performance when compared with modern technologies, these components may no longer be kept in production, posing serious risks and entailing increased costs for the maintenance of systems deployed in the field.

111. From 2005 to 2011, the Next Generation Surveillance System (NGSS) was developed and completed in the framework of the Member States Support Programme. Replacing all obsolete cameras currently in use under the optimal schedule will require procurement at a rate of 200 cameras per year, as well as the purchase of image server systems to consolidate images from multiple cameras.

112. In previous years the Agency received substantial funding through extrabudgetary contributions of approximately $4 million per year. With this contribution gradually decreasing, it is proposed that the MCIF be utilized as a source of funding for the NGSS through a five year NGSS replacement campaign (2013–2017). The provision for 2013 in the amount of €2.5 million is not presented in the chart below.

113. In 2014, €3.3 million will be funded from MCIF carry forward while in 2015, €2.2 million will be funded from the capital regular budget. Needs of €0.5 million in 2015 remain unfunded.

114. The total funding requirements from 2014 onwards for the project are shown in the chart below:

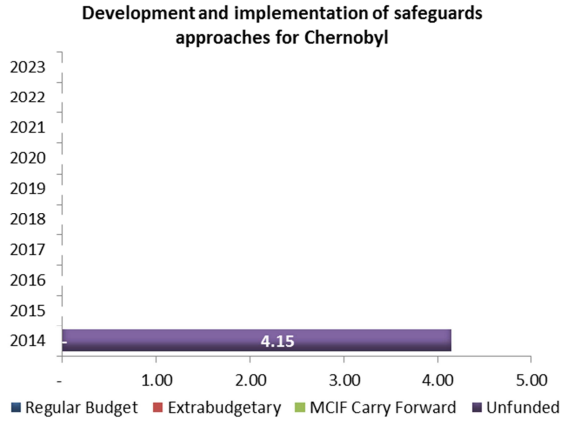


Development and implementation of safeguards approaches for Chernobyl

115. The Agency must develop an effective and efficient approach to safeguard the nuclear material to be contained in the new safe confinement of the Chernobyl Nuclear Power Plant, which is scheduled to be installed over the damaged reactor unit 4 in 2015. The Agency is also required to develop an effective and efficient approach to safeguard the transfer of the irradiated fuel from the wet storage and reactors 1, 2 and 3, to the interim dry storage. The conditioning and transfer of the fuel is expected to commence in 2015 and will take at least ten years. A significant redesign and modification of the new conditioning facility had to be undertaken, which caused delays to

the original schedule. The safeguards approach will be updated as the revised design information becomes available. Procurement and installation of surveillance and radiation monitoring equipment for the conditioning facility, dry storage and new safe confinement is planned for 2014. It is also planned to install surveillance and radiation monitoring equipment on a second rail car to monitor the transfer of spent fuel from the conditioning facility to the dry storage. The second phase of the site data integration will also be completed whereby surveillance and radiation monitoring data from the conditioning facility, dry storage, new safe confinement and rail cars will be integrated and directed to a central location for ease of access by the inspectors to reduce inspection effort and minimize the radiation and contamination hazards as well as to allow secure transmission of remote monitoring data to the Agency's headquarters.

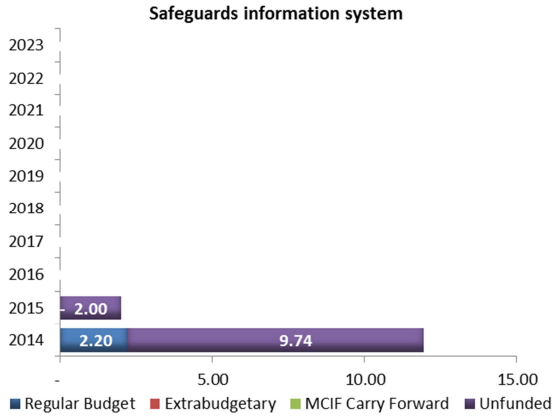
116. The 2014 funding requirement for the project is €4.15 million, all of which is unfunded.



Safeguards information system

117. The collection, storage and analysis of safeguards-relevant information are central features of the Agency's safeguards system. This information includes, inter alia, State declarations, inspection results, satellite imagery, environmental samples and open source information. The Agency's ability to store, analyse and use all safeguards-relevant data in support of the drawing of credible safeguards conclusions requires a reliable IT system. The current IT system used in the Department of Safeguards is increasingly unable to meet that requirement: development of the IT system started in the 1970s on a mainframe, which is now obsolete and facing challenges in handling the volume and variety of data that needs to be processed. Due to the outdated technology, the system cannot be maintained and is increasingly difficult to enhance. Consequently, over time, the protection and security of information will also be placed increasingly at risk. The necessary know-how to maintain and improve the existing, obsolete software and hardware is no longer commercially available. To address these limitations and strengthen its capability to protect confidential information, the Agency has established a new project to develop a modern information system that makes use of available safeguards-relevant information, optimized for security, accessibility and usability.

118. The capital project will receive €2.2 million from the capital regular budget in 2014, while needs of €9.7 million in 2014 and €2.0 million in 2015 remain unfunded, as indicated in the chart below.



Develop and implement SG approaches for a SF EPGR in Finland/Sweden

119. Finland and Sweden are each planning to construct an encapsulation plant and geological repository (EPGR) to permanently store their respective spent fuel. In Finland the construction licence is planned to be granted in 2015 and operation is planned to commence in 2020. The EPGR in Sweden is planned to commence operation in 2027. Safeguards

approaches need to be developed for these facilities.

120. As the safeguards approaches for these types of facility are still under development, the exact equipment specifications and quantities are not known at this time. However, based on preliminary planning and today's understanding of measurement technologies that are either currently available or in mature stages of development, cost estimates have been developed for the following equipment needs:

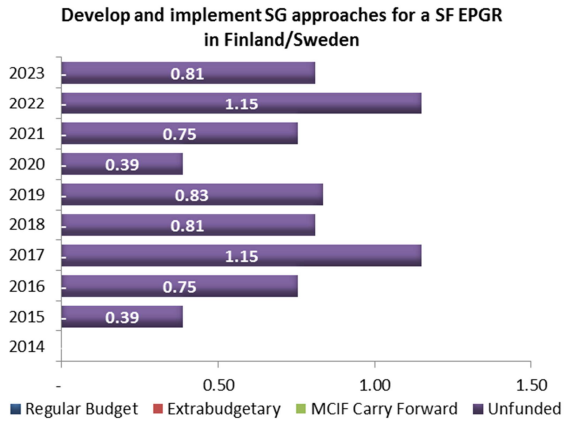
- Encapsulation plants:
  - Transportation cask monitoring;
  - Spent fuel assembly verification;
  - Copper canister loading monitoring;
  - Welding station monitoring;
  - Weld test station monitoring;
  - Buffer storage monitoring; and
  - Canister lift collar monitoring.
- Geological repositories:
  - Vehicle tunnel entrance monitoring;
  - Air and personnel shaft monitoring; and
  - Geological containment monitoring.

121. It is not possible at this time to include a cost estimate for micro-seismic array monitoring of the geological repositories and the need for such monitoring has not been approved yet.

122. Even though the entire project at this stage remains unfunded, it is assumed that all technology development costs will be borne by the Member States Support Programme. Only the estimated procurement and installation costs of the new equipment are included in the project cost estimates presented below.

123. In addition to the total of €7.0 million proposed for the period 2014–2023, it is estimated that an additional €1.0 million will be required in 2024.

124. The following table summarizes the funding plan for this project, all of which remains unfunded.



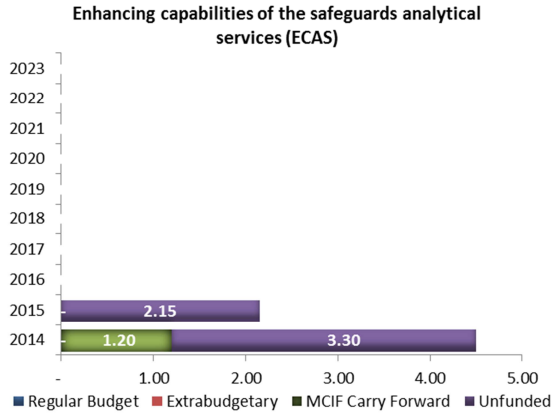
Enhancing Capabilities of the Safeguards Analytical Services (ECAS)

125. Member States and the Board of Governors have acknowledged the need to enhance and sustain the Agency's capabilities to provide an adequate level, type and quality of safeguards analytical services.

126. The ECAS project refers to the comprehensive improvement of the Safeguards Analytical Laboratories (SAL) in Seibersdorf, which includes the Clean Laboratory Extension (CLE) and the Nuclear Material Laboratory (NML). After completion of the CLE in 2012, the objective for this biennium is to finalize all engineering and construction work of the new NML prior to the end of 2014. In this context, the security and infrastructure of the facilities in Seibersdorf will also need to be upgraded.

127. The total revised cost for the project is €80.8 million as communicated to Member States in GOV/INF/2012/15. The main changes are in the security and safety component, infrastructure needs, transition and licensing, equipment, office/training space, as well as in project management and coordination. The increase from the initial project cost will be financed exclusively with extrabudgetary resources. The capital requirements of €3.3 million in 2014 and €2.2 million in 2015 are unfunded, while €1.2 million in 2014 would be funded from the

MCIF carry forward as shown in the following chart.



Major Programme 5 – Policy, Management and Administration Services

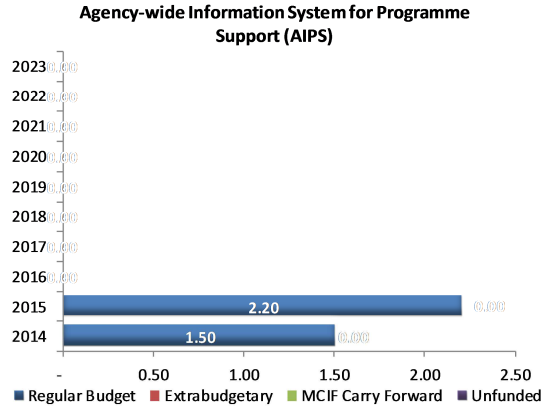
Agency-wide Information System for Programme Support (AIPS)

128. AIPS is a phased project that will gradually implement a central enterprise resource planning (ERP) system.

129. Prior to the 2014–2015 biennium, the ERP system had been introduced in the areas ("domains") of finance, asset management, procurement and contacts management, as well as the management, budgeting and assessment of programmes and projects. During 2014–2015 the domains of human resources and payroll, meetings management and travel management will be completed.

130. Arrangements will be finalized for winding up the project and establishing permanent support and governance structures for the new system and its associated data and business processes.

131. The total estimated cost of AIPS from inception to completion will be approximately €33.0 million, of which €3.7 million will be funded in the biennium from the capital regular budget as indicated in the following chart.



Provision for IT infrastructure

132. This critical project is the successor to the Equipment Replacement Fund (ERF) for which funding was last approved by the Board of Governors in 2005. It is intended to cover the Information and Communication Technology (ICT) costs associated with maintaining up-to-date ICT infrastructure and services in the areas of data processing, storage, networking and security equipment, as well as for securing ICT disaster recovery. A reliable and secure ICT infrastructure is essential to programme delivery, and thus this capital investment is of key importance.

133. Needs of €1.7 million in 2014 and €1.0 million in 2015 will be funded from the capital regular budget, while in 2015 €1.5 million remains unfunded.

134. The funding requirements for the project are shown in the following chart:

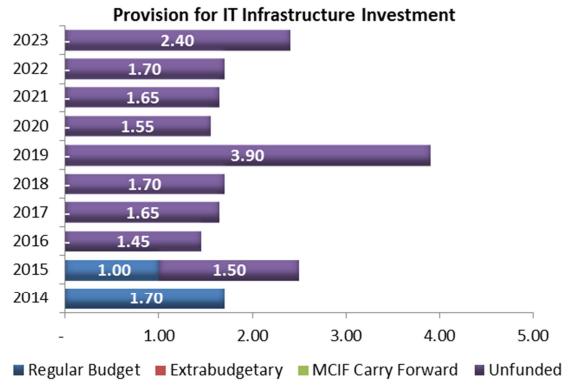


Table 10. Major Capital Investment Plan 2014–2023 (at 2013 prices)

Major Programme / Major Capital Item	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
2. Nuclear Techniques for Development and Environmental Protection											
Enhancing capabilities of NA Laboratories at Seibersdorf	7 988 165	8 039 759	7 500 000	7 500 000	-	-	-	-	-	-	31 027 924
Major Programme 2	**7 988 165**	**8 039 759**	**7 500 000**	**7 500 000**	**-**	**-**	**-**	**-**	**-**	**-**	**31 027 924**
3. Nuclear Safety and Security											
Radiation safety technical services	379 800	388 000	120 000	-	-	-	-	-	-	-	887 800
Major Programme 3	**379 800**	**388 000**	**120 000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**887 800**
4. Nuclear Verification											
NGSS infrastructure replacement	3 327 975	2 678 550	2 678 550	2 644 425	-	-	-	-	-	-	11 329 500
Safeguards information system	11 935 207	2 000 000	-	-	-	-	-	-	-	-	13 935 207
Develop and implement SG approaches for the Chernobyl NPP	4 150 000	-	-	-	-	-	-	-	-	-	4 150 000
Enhancing capabilities of the safeguards analytical services (ECAS)	4 497 449	2 151 799	-	-	-	-	-	-	-	-	6 649 249
Develop and implement SG approaches for a SF EPGR in Finland/Sweden	-	387 000	754 000	1 150 000	809 000	834 000	387 000	754 000	1 150 000	809 000	7 034 000
Major Programme 4	**23 910 631**	**7 217 349**	**3 432 550**	**3 794 425**	**809 000**	**834 000**	**387 000**	**754 000**	**1 150 000**	**809 000**	**43 097 956**
5. Policy, Management and Administration Services											
Agency-wide Information System for Programme Support (AIPS)	1 500 000	2 200 000	-	-	-	-	-	-	-	-	3 700 000
Provision for IT Infrastructure Investment	1 700 000	2 500 000	1 450 000	1 650 000	1 700 000	3 900 000	1 550 000	1 650 000	1 700 000	2 400 000	20 200 000
Major Programme 5	**3 200 000**	**4 700 000**	**1 450 000**	**1 650 000**	**1 700 000**	**3 900 000**	**1 550 000**	**1 650 000**	**1 700 000**	**2 400 000**	**23 900 000**
Major Capital Investment Plan Total	**35 478 596**	**20 345 108**	**12 502 550**	**12 944 425**	**2 509 000**	**4 734 000**	**1 937 000**	**2 404 000**	**2 850 000**	**3 209 000**	**98 913 680**

Table 11. Capital Regular Budget Details 2014–2015

Major Programme / Major Capital Item	2013 Budget	2014 Estimates at 2013 Prices	Variance 2014 over 2013 EUR	Variance 2014 over 2013 %	2015 Preliminary estimates at 2013 Prices	Variance 2015 over 2014 EUR	Variance 2015 over 2014 %	Price Adjustment	2014 Estimates at 2014 Prices	2015 Preliminary estimates at 2014 Prices
2. Nuclear Techniques for Development and Environmental Protection										
Enhancing capabilities of NA Laboratories at Seibersdorf	-	2 600 000	*2 600 000*		2 600 000	-		2.8%	2 672 800	2 672 800
Major Programme 2	**-**	**2 600 000**	**2 600 000**	**-**	**2 600 000**	**-**	**-**	**2.8%**	**2 672 800**	**2 672 800**
4. Nuclear Verification										
NGSS infrastructure replacement	-	-	-		2 200 000	2 200 000		2.8%	-	2 261 600
Safeguards information system	-	2 200 000	2 200 000		-	(2 200 000)		2.8%	2 261 600	-
Enhancing capabilities of the safeguards analytical services (ECAS)	1 314 350	-	(1 314 350)		-	-		-	-	-
Develop and implement a SG approach for J-MOX	368 360	-	(368 360)		-	-		2.8%	-	-
Major Programme 4	**1 682 710**	**2 200 000**	**517 290**	**30.7%**	**2 200 000**	**-**	**-**	**2.8%**	**2 261 600**	**2 261 600**
5. Policy, Management and Administration Services										
Agency-wide Information System for Programme Support (AIPS)	6 410 988	1 500 000	*(4 910 988)*		2 200 000	*700 000*		2.8%	1 542 000	2 261 600
Provision for IT Infrastructure Investment	-	1 700 000	*1 700 000*		1 000 000	*(700 000)*		2.8%	1 747 600	1 028 000
Building Management Services (BMS)	247 254	-	*(247 254)*		-	-		-	-	-
Major Programme 5	**6 658 242**	**3 200 000**	**(3 458 242)**	**(51.9%)**	**3 200 000**	**-**	**-**	**2.8%**	**3 289 600**	**3 289 600**
Capital Regular Budget	**8 340 952**	**8 000 000**	**(340 952)**	**(4.1%)**	**8 000 000**	**-**	**-**	**2.8%**	**8 224 000**	**8 224 000**

Table 12: Unfunded 2014–2015 Capital Needs

135. The table below lists 2014–2015 capital needs that will not be funded within the capital regular budget limit set by the Director General. It is expected that these requirements will attract extrabudgetary pledges by Member States.

Major Programme / Major Capital Item	2014	2015
2. Nuclear Techniques for Development and Environmental Protection		
Enhancing capabilities of NA Laboratories at Seibersdorf	5 388 165	5 439 759
Major Programme 2	**5 388 165**	**5 439 759**
3. Nuclear Safety and Security		
Radiation safety technical services	379 800	388 000
Major Programme 3	**379 800**	**388 000**
4. Nuclear Verification		
NGSS infrastructure replacement	-	478 550
Safeguards information system	9 735 207	2 000 000
Develop and implement SG approaches for the Chernobyl NPP	4 150 000	-
Enhancing capabilities of the safeguards analytical services (ECAS)	3 297 449	2 151 799
Develop and implement SG approaches for a SF EPGR in Finland/Sweden	-	387 000
Major Programme 4	**17 182 656**	**5 017 349**
5. Policy, Management and Administration Services		
Provision for IT Infrastructure Investment	-	1 500 000
Major Programme 5	**-**	**1 500 000**
Major Capital Investment Plan Unfunded	**22 950 621**	**12 345 108**

I.6 Draft Resolutions for 2014

136. This section presents the Agency's draft resolutions for 2014, including the appropriations for the 2014 regular budget, the allocation for the Technical Cooperation Fund (TCF) in 2014, and the Working Capital Fund (WCF) in 2014.

A. The regular budget

137. Regular budget appropriations for 2014 are presented in two parts: one for the operational regular budget (paragraphs 1 to 2 of Resolution A); and one for the capital regular budget (paragraphs 3 to 4 of Resolution A). The expenditures against these appropriations will be recorded separately, so that funds appropriated for the operational regular budget will not be used for major capital investments and vice versa.

138. The resolution for the regular budget appropriation contains an adjustment formula to take into account the exchange rate variations during the year. Member State contributions will be based on the scale of assessment to be fixed by the General Conference in September 2013.

B. Technical cooperation programme

139. The technical cooperation (TC) activities of the Agency are financed from the TCF and extrabudgetary contributions. The TCF is mainly comprised of voluntary contributions, for which a target is recommended each year by the Board of Governors, and National Participation Costs paid by recipient Member States. The target for voluntary contributions to the TCF recommended by the Board of Governors[1] for 2014 amounts to $90 250 000 (equivalent to €69 221 750) and to $91 000 000 (equivalent to €69 797 000) for 2015.

140. The forecast of the resources for the technical cooperation programme for 2014 amounts to $79 420 000[2] and €22 000 000 and comprises: (a) $79 420 000 for estimated core project funding; (b) €2 000 000 for National Participation Costs (to be added to the estimated core funding); (c) €20 000 000 for the estimated implementation levels of extrabudgetary activities. The forecast for 2015 amounts to $80 080 000[3] and €22 000 000 and comprises: (a) $80 080 000 for estimated core project funding; (b) €2 000 000 for National Participation Costs (to be added to the estimated core funding); (c) €20 000 000 for the estimated implementation levels of extrabudgetary activities. These amounts do not constitute a target for or limitation on funds and do not in any way prejudge the technical cooperation programme for 2014 and 2015.

C. Working Capital Fund

141. In its 56th regular session, the General Conference approved a continuation of the WCF at the €15 210 000 level for 2013. No change in this level is proposed for 2014, although it should be borne in mind that the average monthly requirement of the regular budget exceeds the level of the WCF, which constitutes a significant risk to the Agency.

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[1] GOV/2013/30/Rev.1.

[2] Note: This is an indicative amount only. In line with the Secretariat's single currency approach, the actual resource planning for the TC Programme 2014-2015 is based in a rate of attainment against the TCF target of €60 915 140 (based on the exchange rate from 1 July 2013).

[3] Note: This is an indicative amount only. In line with the Secretariat's single currency approach, the actual resource planning for the TC Programme 2014–2015 is based in a rate of attainment against the TCF target of €61 421 360 (based on the exchange rate from 1 July 2013).

A. REGULAR BUDGET APPROPRIATIONS FOR 2014

The General Conference,

Accepting the recommendations of the Board of Governors relating to the regular budget of the Agency for 2014[4],

1. Appropriates on the basis of an exchange rate of $1.00 to €1.00, an amount of €344 450 019 for the operational portion of the regular budget expenses of the Agency in 2014 as follows[5]:

		€
1.	Nuclear Power, Fuel Cycle and Nuclear Science	34 478 803
2.	Nuclear Techniques for Development and Environmental Protection	38 483 002
3.	Nuclear Safety and Security	37 113 988
4.	Nuclear Verification	131 028 878
5.	Policy, Management and Administration Services	76 943 995
6.	Management of Technical Cooperation for Development	23 561 013
	Subtotal of Major Programmes	341 609 679
7.	Reimbursable work for others	2 840 340
	TOTAL	344 450 019

the amounts in the appropriation sections to be adjusted in accordance with the adjustment formula presented in Attachment A.1 in order to take into account the exchange rate variations during the year;

2. Decides that the foregoing appropriation shall be financed, after the deduction of
   - Revenues deriving from Reimbursable Work for Others (Section 7); and
   - Other Miscellaneous Income of €655 000;

from contributions by Member States amounting, for an exchange rate of $1.00 to €1.00, to €340 954 679 (€297 169 304 plus $43 785 375), in accordance with the scale of assessment fixed by the General Conference in resolution GC(57)/RES/ ;

[4] GC(57)/2.

[5] Appropriation Sections 1–6 represent the Agency's major programmes.

3. Appropriates on the basis of an exchange rate of $1.00 to €1.00, an amount of €8 224 000 for the capital portion of the regular budget expenses of the Agency in 2014 as follows[6]:

		€
1.	Nuclear Power, Fuel Cycle and Nuclear Science	-
2.	Nuclear Techniques for Development and Environmental Protection	2 672 800
3.	Nuclear Safety and Security	-
4.	Nuclear Verification	2 261 600
5.	Policy, Management and Administration Services	3 289 600
6.	Management of Technical Cooperation for Development	-
	TOTAL	8 224 000

the amounts in the appropriation sections to be adjusted in accordance with the adjustment formula presented in Attachment A.2 in order to take into account the exchange rate variations during the year;

4. Decides that the foregoing appropriation shall be financed from contributions by Member States amounting, for an exchange rate of $1.00 to €1.00, to €8 224 000 (€8 224 000 plus $0), in accordance with the scale of assessment fixed by the General Conference in resolution GC(57)/RES/ ; and

5. Authorizes the Director General:

a. To incur expenditures additional to those for which provision is made in the regular budget for 2014, provided that the relevant emoluments of any staff involved and all other costs are entirely financed from revenues arising out of sales, work performed for Member States or international organizations, research grants, special contributions or other sources extraneous to the regular budget for 2014; and

b. With the approval of the Board of Governors, to make transfers between any of the Sections listed in paragraphs 1 and 3 above.

[6] Please refer to footnote 5.

ATTACHMENT

A.1 APPROPRIATIONS FOR THE OPERATIONAL PORTION OF THE REGULAR BUDGET IN 2014

ADJUSTMENT FORMULA IN EURO

		€		US$
1.	Nuclear Power, Fuel Cycle and Nuclear Science	30 125 871	+ (	4 352 932 /R)
2.	Nuclear Techniques for Development and Environmental Protection	34 339 998	+ (	4 143 004 /R)
3.	Nuclear Safety and Security	31 167 283	+ (	5 946 705 /R)
4.	Nuclear Verification	112 304 695	+ (	18 724 184 /R)
5.	Policy, Management and Administration Services	69 850 671	+ (	7 093 324 /R)
6.	Management of Technical Cooperation for Development	20 035 786	+ (	3 525 226 /R)
	Subtotal of Major Programmes	297 824 304	+ (	43 785 375 /R)
7.	Reimbursable work for others	2 840 340	+ (	- /R)
	TOTAL	300 664 644	+ (	43 785 375 /R

Note: R is the average United Nations dollar-to-euro exchange rate which will be experienced during 2014.

ATTACHMENT

A.2 APPROPRIATIONS FOR THE CAPITAL PORTION OF THE REGULAR BUDGET IN 2014

ADJUSTMENT FORMULA IN EURO

		€		US$	
1.	Nuclear Power, Fuel Cycle and Nuclear Science	-	+ (	-	/R)
2.	Nuclear Techniques for Development and Environmental Protection	2 672 800	+ (	-	/R)
3.	Nuclear Safety and Security	-	+ (	-	/R)
4.	Nuclear Verification	2 261 600	+ (	-	/R)
5.	Policy, Management and Administration Services	3 289 600	+ (	-	/R)
6.	Management of Technical Cooperation for Development		+ (		/R)
	TOTAL	8 224 000	+ (	-	/R)

Note: R is the average United Nations dollar-to-euro exchange rate which will be experienced during 2014.

B. TECHNICAL COOPERATION FUND ALLOCATION FOR 2014

The General Conference,

(a) Noting the decision of the Board of Governors of July 2013 to recommend the target figure of US $90 250 000 (equivalent to €69 221 750) for voluntary contributions to the Agency's Technical Cooperation Fund for 2014, and

(b) Accepting the foregoing recommendation of the Board,

1. Decides that for 2014 the target figure for voluntary contributions to the Technical Cooperation Fund shall be €69 221 750;

2. Notes that funds from other sources, estimated at €500 000, are expected to be available for the technical cooperation programme;

3. Allocates, in euro, contributions of €69 221 750 for the Agency's Technical Cooperation programme for 2014; and

4. Urges all Member States to make voluntary contributions for 2014 in accordance with Article XIV.F of the Statute, with paragraph 2 of its Resolution GC(V)/RES/100 as amended by Resolution GC(XV)/RES/286 or with paragraph 3 of the former Resolution, as appropriate.

C. THE WORKING CAPITAL FUND FOR 2014

The General Conference,

Accepting the recommendations of the Board of Governors relating to the Agency's Working Capital Fund for 2014,

1. Approves a level of €15 210 000 for the Agency's Working Capital Fund for 2014;

2. Decides that the Fund shall be financed, administered and used in 2014 in accordance with the relevant provisions of the Agency's Financial Regulations[7];

3. Authorizes the Director General to make advances from the Fund not exceeding €500 000 at any time to finance temporarily projects or activities which have been approved by the Board of Governors for which no funds have been provided under the regular budget; and

4. Requests the Director General to submit to the Board statements of advances made from the Fund under the authority given in paragraph 3 above.

[7] INFCIRC/8/Rev.3.

PART II

DETAILS OF THE PROGRAMME AND BUDGET FOR 2014–2015 BY MAJOR PROGRAMME

Major Programme 1
Nuclear Power, Fuel Cycle and Nuclear Science

Introduction

Major Programme 1 provides scientific and technical support, services and advice for continued reliable and safe lifetime operation of existing power and research reactor systems and fuel cycle facilities; expanded use of nuclear power, particularly for countries currently without nuclear power or with only small nuclear power programmes; development of advanced and innovative reactor systems and their fuel cycles, including through the International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO); capacity building for energy analysis and planning; objective consideration of the role of nuclear power for sustainable development; and development of nuclear science, nuclear knowledge management, and nuclear information and communication. By 2014–2015, several countries starting nuclear power programmes will have reactors under construction or will be preparing for construction. The Agency will target assistance to such 'advanced newcomer' countries while maintaining support to countries at earlier stages. For operating nuclear power plants, there is increased interest in advances since the accident at the Fukushima Daiichi nuclear power plant in areas such as spent fuel integrity, design vulnerabilities, defueling, accident management, monitoring and remediation. With nuclear power's expansion, strong interest is expected in new uranium exploration, mining and milling, including in countries currently without nuclear activities. In meeting the demand for capacity building for energy planning, the Agency will strengthen partnerships, as technological change, 'smart grids', demand side management, and new energy and environmental policies add complexity that is best addressed cooperatively. The Agency will remain a reliable source of atomic, molecular and nuclear data. It will help improve the utilization of existing research reactors and the planning of new research reactors. With progress on the International Thermonuclear Experimental Reactor (ITER) and preparations for a Demonstration Power Plant (DEMO), the Agency will involve additional Member States in fusion technology and facilitate links with ITER partners.

Objectives:

— To expand and improve the use of current nuclear technologies in support of sustainable development, advance nuclear science and technology, catalyse innovation, and build up knowledge and expertise to support the existing and expanded use of nuclear power and nuclear science applications.

Outcomes	Performance Indicators
• Increased number of advanced newcomer Member States embarking on a nuclear power programme with improved capacity in developing nuclear infrastructure and increased use in Member States of information provided by the Agency.	• Number of self-evaluations prepared and requests for Integrated Nuclear Infrastructure Review (INIR) missions and Nuclear Energy System Assessments (NESAs). • Number of Member States quoting documents on spent fuel storage published by the Agency.
• Wide use of the Agency's analytical energy modelling tools and experts in interested Member States who are well trained in their use and are able to independently conduct comprehensive energy environment analyses.	• Number of requests by Member States and other international organizations for the Agency's analytical energy modelling tools.
• Increased international cooperation in nuclear sciences for technological advancement.	• Number of institutions and Member States participating in the Agency's nuclear science activities, and number of resultant products, including documents.

Title	Main Planned Outputs
1.0.0.001 Overall management, coordination and common activities	Guidance, reports, policy documents, internal and external communications.

Programme 1.1 Nuclear Power

Rationale: Programme 1.1 has the following four priorities: (i) supporting Member States embarking on new nuclear power programmes to help them build sound nuclear infrastructure for the successful introduction of nuclear power plants and for their safe, reliable and efficient operation. The programme coordinates services with all other Agency Departments; (ii) supporting the operation of nuclear power plants to enhance safety and performance; to achieve better plant life management and safe long term operation (in cooperation with Major Programme 3); to improve performance and power-up rates through advanced process control systems; to expand nuclear programmes, including human resource development; and to implement integrated management systems (in cooperation with Major Programme 3); (iii) catalysing innovations and technical advances and to helping resolve issues associated with nuclear power reactors and their non-electric applications by coordinating research, promoting information exchange and analysing data and results for various reactor lines; by providing a

forum for technology users and holders to jointly consider innovations; and by supporting Member States in their long range planning through INPRO. The objective is continuous improvement in the economic competitiveness, safety levels, proliferation resistance, resource efficiency and waste minimization of new reactors and fuels; and (iv) building, managing, preserving and further enhancing nuclear expertise, knowledge and competence in support of Member States. Subprogramme 1.1.3 has been expanded to reflect the increased priority of support to those Member States exploring or launching nuclear power programmes as well as the 'project approach' by which such activities throughout Major Programme 1 are coordinated. The implementation of the IAEA Action Plan on Nuclear Safety (Action Plan) is one of the important activities in Programme 1.1. Close cooperation with international organizations and initiatives such as the OECD Nuclear Energy Agency (OECD/NEA), World Association of Nuclear Operators (WANO), European Atomic Forum (FORATOM), World Nuclear Association (WNA), Generation IV International Forum (GIF), European Union/European Commission (EU/EC), Electric Power Research Institute (EPRI) and the Institute of Nuclear Power Operations (INPO) will be strengthened to avoid overlap and gain efficiencies.

Objectives:

— To assist Member States considering the introduction of nuclear power programmes in planning and building their national nuclear infrastructures.
— To provide integrated support to Member States with existing nuclear power programmes and to those planning new nuclear build in order to help improve operating performance and safe long term operation through the implementation of good practices and innovative approaches, and lessons learned from the Fukushima Daiichi accident.
— To provide collaborative frameworks for operators of water cooled reactors to benefit from advances in technology, and for Member States to facilitate effective development of fast reactors and gas cooled reactors and to expand the safe use of non-electric applications.

Outcomes	Performance Indicators
• Enhanced Member State satisfaction with the Agency's services, documents, materials, databases and expertise for the safe and effective operation and life management of existing and new nuclear power plants.	• Number of Member States using the relevant Agency resources, Nuclear Energy Series (NES) publications, guidelines, recommendations and databases.
• Increased cooperation between Member States for evolutionary and innovative nuclear reactor technology development and applications; • Improved understanding of and international cooperation on global nuclear energy sustainability in the 21st century.	• Number of Member States cooperating in evolutionary and innovative nuclear reactor technology development and applications under Agency coordination. • Number of INPRO member countries.
• Increased number of advanced newcomer Member States embarking on nuclear power programmes and improved capacities in those Member States for developing nuclear infrastructure.	• Number of self-evaluations prepared and requests for INIR missions.

Lessons learned from reviews, assessment, evaluations: Programme 1.1 should (i) continue to disseminate best practices through NES and other publications; (ii) continue to provide tailored review and assistance services through technical cooperation (TC) projects; (iii) continue to improve the level of inter-Departmental cooperation; (iv) increase Agency capabilities to respond to Member States interested in expanding or starting a nuclear power programme; (v) enhance information exchange and collaborative research among Member States; (vi) improve the timeliness, quality and user friendliness of Power Reactor Information System (PRIS), Country Nuclear Power Profiles and the Advanced Reactors Information System databases; and (vii) increase cooperation with international organizations and initiatives such as European Commission's Joint Research Centre (EC/JRC), OECD/NEA, WANO, GIF, and FORATOM.

Specific criteria for prioritization:

1. Activities implementing the Action Plan.
2. Activities in response to the increased use of nuclear energy and emerging development needs to ensure the sharing of best practices for efficient operation and to support the launch of nuclear programmes.
3. Activities underpinning the innovative development of nuclear power for a long term sustainable future.
4. Activities fostering international cooperation, information exchange, knowledge management and human resource development.

Subprogramme 1.1.1 Strengthening Integrated Engineering Support for Nuclear Power Programmes

Objectives:

— To enhance performance and safe lifetime operation of nuclear power plants.
— To enhance effectiveness of engineering processes of new nuclear power plant projects.

Outcomes	Performance Indicators
• Use of Agency expertise and guidance to support performance improvements in operating nuclear power plants and to establish and implement best practices in the area of engineering support, including safety aspects, and advanced applications.	• Number of Member States using the relevant Agency resources, NES publications, guidelines, recommendations and databases.
• Use of Agency expertise and guidance to support implementation of new nuclear power plant projects and to implement best practices in the area of engineering support.	• Number of Member States using the relevant Agency resources, NES publications, guidelines, recommendations and databases.

Programmatic changes and trends: This is a continuation of the subprogramme focusing on existing and new nuclear projects. This includes plant life management to enhance safety, improve performance and extend the service life of nuclear power plants, and engineering support for all stages of nuclear projects, including support to newcomer countries.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 23% (€465 314) in 2014, as compared with 2013, and a small decrease of €1 115 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.1.1.001 Engineering support for operating nuclear facilities	Completed Coordinated Research Projects (CRPs), NES publications on specific aspects of ageing management, information and national experience in the subject area exchanged among Member States.
1.1.1.002 Engineering support for expanding and new nuclear power projects	Completed NES publications on specific aspects of technical support organizations (TSOs) and design review, and information exchange among Member States on pre-construction, construction and bid preparation.
1.1.1.003 AP support related to operating nuclear facilities	Completed CRPs, NES publications on specific aspects of ageing management, meetings of the nuclear operator organizations forum.

Subprogramme 1.1.2 Integrated Management and Human Resource Development for Nuclear Power

Objectives:

— To enable effective management of existing, expanding and new nuclear power programmes and to increase capacity in Member States to utilize advanced methods of management and human resource development.

Outcomes	Performance Indicators
• Use of Agency documents, materials and expertise, and consideration of international lessons learned in the management of nuclear programmes.	• Number of Member States using the Agency's resources, NES publications, guidelines, recommendations and databases.
• Use of Agency documents, materials and expertise, and consideration of international lessons learned in human resource development.	• Number of Member States using Agency resources, NES publications, guidelines, recommendations and databases.

Programmatic changes and trends: This is a continuation of the subprogramme focusing on the expansion of nuclear programmes. This includes the management system, human resource development, bidding and contracting, stakeholder involvement, and development of expansion strategies.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 74% (€427 759) in 2014, as compared with 2013, and a small increase of €663 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.1.2.001 Management support for nuclear power plant projects	NES publications, information exchange and direct support services.
1.1.2.002 Human resource development for nuclear power programmes	NES publications, training courses, workshops, e-learning courseware and review services.
1.1.2.003 AP support related to expanding nuclear power programmes	Completed CRPs, NES publications on specific aspects of expansion programmes.

Subprogramme 1.1.3 Infrastructure and Planning for New Nuclear Power Programmes

Objectives:

— To improve understanding among Member States of the requirements and obligations essential to implementing nuclear power programmes.
— To enhance Member State capabilities associated with inviting bids for, and constructing, their first nuclear power plants.
— To enhance Member State abilities to develop the necessary infrastructure for introducing nuclear power.

Outcomes	Performance Indicators
• Improved infrastructure in Member States considering or launching a nuclear power programme.	• Number of self-evaluations prepared and requests for INIR missions.
• Improved capacity of Member States to plan, construct and operate their first nuclear power plants.	• Number of documents published which distribute lessons learned and best practices through guidance, reports and case studies.

Programmatic changes and trends: The resources specified below for Subprogramme 1.1.3 reflect the priority given to supporting countries exploring or launching a nuclear power programme as well as the 'project approach' by which such activities throughout Major Programme 1 are coordinated by the Integrated Nuclear Infrastructure Group (INIG) and reflected in the budget of Subprogramme 1.1.3. This subprogramme will place additional focus in the current budget on 'advanced newcomers', countries which have already made a decision to build their first nuclear power plant; on the development of guidance and services for new owner–operator organizations; and on an INIR mission prior to commissioning.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 11% (€213 260) in 2014, as compared with 2013, and a small decrease of €150 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.1.3.001 Strengthening nuclear power infrastructure	Documents on nuclear power infrastructure as well as objective information on nuclear power; workshop for sharing of experience and lessons learned; and enhancement of coordination and communication.
1.1.3.002 Capacity building for the introduction of nuclear power	Workshops, training courses, expert services, training materials including software, review and INIR missions, networking.

Subprogramme 1.1.4 International Project on Innovative Nuclear Reactors and Fuel Cycles

Objectives:

— To increase international cooperation and dialogue on global nuclear energy sustainability in the 21st century, on long term nuclear energy strategies, and on institutional and technical nuclear energy innovations.

Outcome	Performance Indicator
• Improved understanding of, and international cooperation on, global nuclear energy sustainability in the 21st century, long term nuclear energy strategies, and technical and institutional innovations.	• Number of INPRO members. • Number of self-evaluations prepared and requests for Nuclear Energy System Assessments (NESAs).

Programmatic changes and trends: INPRO is expected to continue to grow in terms of membership. To reflect the priorities of its growing membership, INPRO's activities serve both Member States with nuclear power programmes and those seeking to establish a new programme. Activities include technical studies, expert analyses and publications; direct assistance, services and guidance to individual Member States; large 'dialogue forum' meetings to foster information exchange; and INPRO collaborative projects as cooperation mechanisms for Member States. The focus of INPRO is on global nuclear energy sustainability in the 21st century, long term nuclear energy strategies, and technical and institutional innovations, as specified by the INPRO Development Vision for 2012–2017.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 3% (€18 367) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.1.4.001 International project on innovative nuclear reactors and fuel cycles	Publications on global nuclear energy scenarios and selected innovations; second edition of the INPRO methodology; guidance to Member States on long term strategies; INPRO dialogue forum meeting; and INPRO Steering Committee guidance.
1.1.4.002 AP support related to INPRO	Second edition of the INPRO methodology (safety chapters only); publication(s) on safety issues of innovative reactor designs; and guidance for Member States on incorporating lessons learned from the Fukushima Daiichi accident into long term strategies.

Subprogramme 1.1.5 Technology Development for Advanced Reactor Lines

Objectives:

— To provide a collaborative framework for operators of water cooled reactors to benefit from advances in technology and to preserve nuclear safety; to facilitate effective development of fast reactors and gas cooled reactors in Member States; and to expand the safe use of non-electric applications of nuclear power plants.
— To provide a collaborative framework for Member States to facilitate effective technological advances in fast reactors and gas cooled reactors for greater efficiencies and sustainability.
— To expand the safe use of nuclear power in applications that advance thermal efficiency and expand industrial applications, space heating, water desalination and hydrogen production.

Outcomes	Performance Indicators
• Use by Member States of the information published on technology development and technical solutions in light water and advanced reactors.	• Number of Member States collaborating through the Agency to share information and to conduct collaborative R&D to resolve common challenges.
• Agency publications that share expert knowledge on current issues for newcomers and in technology development areas.	• Number of Member States using Agency provided information and seeking Agency staff expertise for conducting workshops and training.
• Member States participate and pool resources for developing and publishing technology solutions.	• Number of Member State requests for addressing solutions to common problems.

Programmatic changes and trends: In 2014 and 2015, Subprogramme 1.1.5 will include support for non-electric applications of nuclear power. It thus merges two subprogrammes that were separate in the 2012–2013 biennium. It will serve Member States in new areas, including training for technology assessment for newcomers, for which increasing requests are anticipated. The subprogramme includes new CRPs in response to increased requests in connection with water cooled reactors and innovative technology. It includes work on the Action Plan that was initially delayed owing to funding availability. It includes further development and refinement of software for non-electric applications needed to accommodate unique applications.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 26% (€496 416) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.1.5.001 Technology development for water cooled reactors	Publications in the NES and web based status report on the key technological advances and design features of advanced water cooled reactors; and CRP results to address technology development, common problems and design bases challenges.
1.1.5.002 Small and medium-sized reactor technology development	Publications and workshops on key enabling technologies common for small and medium sized reactors in areas of environmental and technology assessment support to Member States; and an NES publication applying lessons learned from the Fukushima Daiichi accident to small and medium sized reactors.
1.1.5.003 Advanced technology for fast and gas cooled reactors	Technical meetings (TMs), workshops, education and training seminars, NES publications, TECDOCs, Status Reports, web sites and databases related to research, technology development and deployment of fast nuclear systems and gas cooled reactors.
1.1.5.004 Non-electric applications of nuclear power	Refinement of Agency software Desalination Economic Evaluation Program (DEEP), Hydrogen Economic Evaluation Program (HEEP), Desalination Thermodynamic Optimization Program (DE-TOP), toolkits for water management) for non-electric applications of nuclear power plants; support for Member State capacity building and software training; and Agency publications, articles by staff in non-Agency publications, and CRPs.
1.1.5.005 AP support related to advanced reactor lines	Implementation of the Action Plan, including development of ways to address existing plant vulnerabilities, facilitating improvements for the new builds and promulgating the information to Member States through workshops and NES publications.

Programme 1.2 Nuclear Fuel Cycle and Materials Technologies

Rationale: The IAEA Action Plan on Nuclear Safety, prepared in response to the Fukushima Daiichi accident calls for actions in the fields of fuel behaviour under severe accident conditions, the management of severely damaged spent fuel — including fuel that has melted in-core — and the performance of spent fuel storage facilities under severe accident conditions.

More broadly, the growth of nuclear power will put increasing demands on the nuclear fuel cycle. Developments are needed to increase uranium production, better utilize uranium resources, improve fuel performance and properly manage spent fuel through long term storage and/or recycling. As new production centres are developed, often in countries with no previous experience, Agency support is needed to disseminate good practices in the uranium production cycle, from exploration to closure and decommissioning. To increase assurances of nuclear fuel supplies, the IAEA is establishing an IAEA Low Enriched Uranium (LEU) Bank funded exclusively by extrabudgetary funds.

A better understanding of fuel behaviour will require cooperation and collaboration, especially for newcomers, as well as advances in modelling capabilities, including for fuels and materials for fast reactors. Pending the resolution of the final disposition of their spent fuel, most countries are storing spent fuel for longer periods. Many countries expect storage periods to exceed 100 years. These extended storage periods create new institutional and technical challenges. The desire for sustainability has also driven new interest in recycling uranium, plutonium and minor actinides from spent fuel, primarily in fast reactors. Such recycling schemes more efficiently utilize mined uranium and significantly reduce the volume, radiotoxicity and decay heat of high level waste. The programme will offer guidance in these areas, provide training, and catalyse technology development and innovation. It will identify best practices in sustainable nuclear fuel cycle activities and encourage cooperation among Member States and with other international organizations such as the OECD/NEA.

Objectives:

— To advance the development and implementation of an increasingly safe, reliable, economically efficient, proliferation resistant and environmentally sustainable nuclear fuel cycle, providing the maximum benefit to Member States.

— To implement relevant actions under the Action Plan, including the collection of data on damaged fuel and storage facilities at the Fukushima Daiichi nuclear power plant and the strengthening of information exchange on nuclear fuel under severe conditions.

Outcomes	Performance Indicators
• Use of Agency guidance, reviews, training and technology exchange forums to plan, make policy, undertake R&D, and implement safe, economic, proliferation resistant and sustainable nuclear fuel cycle activities.	• Number of Member States and participants making use of Agency guidance, reviews and training. • Number of participants, organizations and Member States participating in Agency technology and information exchange forums. • Number of relevant TECDOCs and proceedings of conferences/workshops/meetings produced. • Number of training meetings held.
• Sharing among Member States of best practices in fuel design, engineering, quality assurance, manufacturing and operation.	• Release of publications by tasks under this subprogramme. • Number of participants in Agency activities that result in the sharing of best practices in power reactor fuel engineering.
• Substantial participation in Action Plan activities.	• Number of Member States participating in Action Plan activities. • Publication of documentation as part of the Action Plan response.

Lessons learned from reviews, assessment, evaluations: In the area of nuclear fuel, there are some issues that will require additional efforts. In connection with the Action Plan on Nuclear Safety, there is a need to emphasize all of the activities related to fuel behavior in accident conditions and the management of severely damaged spent fuel. In response to feedback from Member States, various activities within the programme need to be additionally adapted. Increased emphasis is being placed on the uranium production cycle (UPC) and support to countries initiating activities in this area. Some of the effort on current generation nuclear fuels will be moved to support development of future or advanced nuclear fuels, while maintaining activities that support the nuclear fuel user community. Long term spent fuel management will receive increased emphasis, as will recycling technologies that support and enhance the sustainability of the nuclear fuel cycle.

The structure of this programme has, therefore, been adjusted to deal with these issues using available resources more effectively and efficiently. The programme has been restructured into three subprogrammes that focus respectively on uranium resources and production, nuclear power reactor fuel and the management of spent fuel.

Specific criteria for prioritization:

1. Implementing the parts of the Action Plan related to fuel cycle facilities and the management of severely damaged fuel.
2. Fuel cycle facilities in support of the increasing use of nuclear power and ensuring the efficient and safe production of uranium.
3. Activities fostering international cooperation and information exchange on nuclear fuel cycle issues and to activities supporting current fuel cycle practices.

Subprogramme 1.2.1 Uranium Resources and Production

Objectives:

— To improve the capability of Member States to understand, plan and develop activities in the uranium production cycle, through Agency guidance on good practices, publications, peer reviews, training and databases.

Outcomes	Performance Indicators
• Accurate, up to date references available on global uranium resources.	• Joint OECD/NEA–IAEA publication entitled "Uranium Resources, Production and Demand" produced once every two years. • Increased use of IAEA codes and databases based on user accesses to the Nuclear Fuel Cycle Information System (NFCIS), Nuclear Fuel Cycle Simulation System (NFCSS), World Distribution of Uranium Deposits (UDEPO) and World Distribution of Thorium Deposits and Resources (ThDEPO).
• Increase in the material available for understanding and analysis of the UPC.	• Number of released publications by tasks under this subprogramme. • Establishment/revision of Agency uranium/thorium resource reporting standards and guidelines to aid global communication.

Outcomes	Performance Indicators
• Collection and sharing of good practices in the UPC, and support for Member States in understanding and implementing best practices.	• Participation in Agency meetings related to good practices in the UPC. • Person-hours of training imparted through training courses on good practices in UPC.

Programmatic changes and trends: The increased resources specified below, and the associated expansion of all of Subprogramme 1.2.1's activities in 2014, reflect the increased emphasis being placed on the UPC and on support to countries initiating activities in this area.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 4% (€45 317) in 2014, as compared with 2013, and a decrease of 2% (€27 874) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.2.1.001 Uranium resources and production	Uranium resources, production and demand information biennial publication; well-maintained uranium and thorium deposit databases; documents supporting good practice in uranium and thorium production; and well attended meetings on good practices in the uranium and thorium production cycles.

Subprogramme 1.2.2 Nuclear Power Reactor Fuel

Objectives:

— To enable Member States to organize adequate R&D programmes to support effective design and manufacturing technologies and to optimize in-pile performance of current and advanced fuels and materials for reliability and efficiency.

Outcomes	Performance Indicators
• Use in interested Member States of support and information provided by the Agency to improve fundamental understanding and to reveal links between different levels of material structures and operational properties of fuel and core materials.	• Number of CRPs supported. • Number of participants in Agency meetings and workshops on fundamental material science relevant to reactor fuels.
• Sharing among Member States of best practices in fuel design, engineering, quality assurance, manufacturing and operation.	• Number of released publications by tasks under this subprogramme. • Number of participants in Agency activities that result in the sharing of best practices in power reactor fuel engineering.
• Sharing of knowledge in the development of advanced, innovative fuels and fuels and materials for advanced reactors.	• Number of participants in Agency activities addressing advanced, innovative fuels and fuels and materials for advanced reactors. • Degree of coordination with other advanced fuel work.

Programmatic changes and trends: To improve the overall efficiency and effectiveness of Programme 1.2, this subprogramme now incorporates fuel related aspects of the previous biennium's Subprogramme 1.2.4.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 36% (€228 464) in 2014, as compared with 2013, and a decrease of 9% (€76 248) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.2.2.001 Nuclear power reactor fuel engineering	Publications on advanced materials and fuel design, fabrication and performance.
1.2.2.002 LEU Bank	Establishment of an IAEA Low Enriched Uranium (LEU) Bank in accordance with GOV/2010/67.
1.2.2.003 AP support related to nuclear power reactor fuel	Publications on the behaviour of nuclear fuel under accident conditions.

Subprogramme 1.2.3 Management of Spent Fuel from Nuclear Power Reactors

Objectives:

— To improve the capability of Member States to plan, develop and implement safe, environmentally sound and efficient spent fuel management programmes, able to bridge the gap from spent fuel discharge to its eventual disposition.

Outcomes	Performance Indicators
• Substantial participation in Action Plan activities.	• Number of Member States participating in Action Plan activities related to spent fuel management. • Publication of documentation as part of the Action Plan response.
• Information on spent fuel management is used by Member States and the general public.	• Number of Member States quoting documents published by the Agency. • Number of audio and video files on spent fuel management downloaded.
• Information on spent fuel recycling is used by Member States.	• Presentation of results at international conferences by Agency staff or on behalf of Agency activities. • Release of publications.

Programmatic changes and trends: To improve the overall efficiency and effectiveness of Programme 1.2, this subprogramme now incorporates spent fuel related aspects of the previous biennium's Subprogramme 1.2.4.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 31% (€316 915) in 2014, as compared with 2013, and an increase of 8% (€104 122) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.2.3.001 Spent fuel storage	Proceedings of an international conference; public information brochures, leaflets, audio files and video files; technical document of a CRP; and technical document on current deployed and available options.
1.2.3.002 Spent fuel recycling	Development and sharing of knowledge and information on closed fuel cycles.
1.2.3.003 AP support related to spent fuel	Collection and analysis of data from spent fuel storage facilities on site, advice on management of severely damaged spent fuel and corium, coordinate research projects on severely damaged spent fuel and corium, examination of design basis scenarios for spent fuel storage facilities.

Programme 1.3 Capacity Building and Nuclear Knowledge for Sustainable Energy Development

Rationale: All independent analyses and forecasts of global energy needs project persistent and large increases. The principal drivers are global population growth and economic development in today's developing countries. Expanding energy access requires planning. Programme 1.3 helps Member States to improve their abilities to analyse their energy systems and options. It develops and transfers planning models and data; trains local experts; and helps to establish local expertise to chart national energy paths to sustainable development. It seeks to ensure a 'level playing field' for nuclear power by providing authoritative objective information on nuclear energy to international deliberations and studies that set the stage on which nuclear power competes.

More generally, the safe, secure and profitable introduction of nuclear power programmes in interested countries, and the safe, secure and profitable operation of existing programmes, benefit from widespread easy access to all relevant nuclear information and from effective management of nuclear knowledge.

Nuclear information and knowledge will continue to expand through ever increasing operational experience, technological and scientific advances, research and development, and improvements in the technology to collect, store, disseminate and manage information. Without good management, this expanding information and knowledge risks overwhelming those it could benefit. With good management, its value will be multiplied. Through the International Nuclear Information System (INIS), the IAEA Library and Subprogramme 1.3.3 on Nuclear Knowledge Management, Programme 1.3 assists all Member States — whatever their level and area of interest — to benefit fully from the continuing expansion of nuclear information and knowledge.

Objectives:

— To strengthen Member State capacities to use energy and nuclear power planning to elaborate sustainable energy strategies and conduct studies for energy system and electricity supply options, energy investment planning and energy environment policy formulation.
— To build Member State capacities to manage nuclear knowledge and provide knowledge management services and assistance.
— To procure and provide printed and electronic information in the area of nuclear science and technology to the IAEA Secretariat and Member States.

Outcomes	Performance Indicators
• Wide use of the Agency's analytical energy modelling tools and experts in interested Member States who are well trained in their use.	• The number of requests by Member States and other international organizations for the Agency's analytical energy modelling tools.
• The Agency considered by Member States and other international organizations as a competent partner in addressing sustainable energy development issues and as an objective and up to date source of information on nuclear technology in the context of sustainable energy and economic development.	• Number of instances where the Agency's economic or Energy Economy Environment (3E) analyses are requested, or are incorporated into the decision making process of Member States or other agencies or offices.
• Increased application by Member States of nuclear knowledge management methods and tools, and unrestricted and easy access for Member States and the Agency to high quality, relevant and reliable information in INIS and the Library on peaceful uses of nuclear energy.	• Number of Member States using Agency methodology and guidance in their nuclear knowledge management projects. • Number of INIS Collection searches and document downloads.

Lessons learned from reviews, assessment, evaluations: In response to evaluations by the Office of Internal Oversight Services (OIOS), Programme 1.3 will revise the manuals for its energy planning models, develop initial data sets for trainees to use with the models, continue developing distance learning packages, continue developing and testing simpler models, organize meetings for trainers to share lessons learned, work with TC on a tiered training approach with pre-requisites for advanced courses, establish a system for tracking publications from participants in CRPs, continue outreach efforts, and establish criteria for prioritizing requests for information, support and assistance. In the preparation of documents, further efforts will be made to reduce the number of meetings by expanding the use of less expensive forms of communication.

Specific criteria for prioritization:

1. Subprogramme 1.3.3, Nuclear Knowledge Management (NKM).
2. Subprogramme 1.3.4, Nuclear Information.
3. Subprogrammes 1.3.1, Energy Modelling, Data and Capacity Building, and 1.3.2, Energy Economy Environment (3E) Analysis.

Subprogramme 1.3.1 Energy Modelling, Data and Capacity Building

Objectives:

— To strengthen the capacity and capabilities in Member States to elaborate their sustainable energy strategies and conduct studies for energy system and electricity sector development and management, energy investment planning and energy environment policy formulation.

Outcome	Performance Indicators
• Use of the Agency's analytical tools, experts trained in the use of these tools to independently conduct comprehensive energy environment analyses.	• Number of requests for Agency analytical tools (energy models) by Member States and other international organizations. • Number of experts from Member States trained in the use of Agency energy models.

Programmatic changes and trends: Subprogramme 1.3.1 will incorporate the implementation of OIOS recommendations to revise the manuals for its energy planning models, develop initial data sets for trainees to use with the models, continue developing distance learning packages, continue developing and testing simpler models, organize meetings for trainers to share lessons learned, and work with TC on a tiered training approach with prerequisites for advanced courses.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 2% (€29 284) in 2014, as compared with 2013, and a small increase of €68 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.3.1.001 Energy, electricity and nuclear power economics: Status and trends	Updated information on status and trends of energy, electricity and nuclear power development in different world regions; updated internal and external web sites; and publication of Reference Data Series No. 1.
1.3.1.002 Models and capacity building for energy and nuclear power planning	Technical support, including through TC projects, for Member State energy planning studies; enhanced analytical tools (models) applicable in widely diverse country situations; and training courses.
1.3.1.003 AP support related to energy modelling, data and capacity building	Information on economic aspects of nuclear power, particularly related to safety upgrades and life extension.

Subprogramme 1.3.2 Energy Economy Environment (3E) Analysis

Objectives:

— To improve Member States' understanding of nuclear technology's compatibility with national sustainable development objectives and its possible contributions to socioeconomic development, climate protection and energy security.

Outcome	Performance Indicator
• Agency considered by Member States and other international organizations as a competent partner in addressing sustainable energy development issues and as an objective and up to date source of information on nuclear technology in the context of sustainable energy and economic development.	• Number of instances where the Agency's economic or 3E analyses are requested or are incorporated into the decision making process of Member States or other agencies or offices.

Programmatic changes and trends: The subprogramme's changes integrate products completed in the previous biennium into work on new challenges and issues for nuclear energy in the fast changing global energy context.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 6% (€80 608) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.3.2.001 Technoeconomic analysis	Economic studies (feasibility studies, cost assessments, comparisons, cost effectiveness and cost–benefit analyses); integrated assessment of energy–water–land–climate policies; and comparative assessments of energy systems or their attributes.
1.3.2.002 Topical issues related to sustainable energy development	Reports, presentations on diverse issues of sustainable development and climate change, especially on the potential contribution of nuclear technologies; and case studies and country profiles analysing sustainable energy development strategies.
1.3.2.003 AP support related to 3E analysis	Tools to explore costs of complying with enhanced safety standards.

Subprogramme 1.3.3 Nuclear Knowledge Management (NKM)

Objectives:

— To increase Member States' application of nuclear knowledge management strategies through the development and dissemination of Agency methodology, guidance and tools, as well as their implementation in national programmes, and by providing knowledge management services and assistance.
— To enhance the synergy of the Agency's nuclear information and knowledge resources and services.

Outcome	Performance Indicators
• Application by Member States of NKM methods and tools for nuclear knowledge preservation, capacity building and innovation in the area of nuclear science and technology.	• Number of Member States using Agency methodology and guidance in their NKM projects. • Number of Member States (education and training institutions) participating in the networking of education and training activities.

Programmatic changes and trends: Subprogramme 1.3.3 will continue to expand its programmes and services in response to Member State priorities. Programme growth is also expected due to increased extrabudgetary funding from Japan and the Russian Federation, due to collaboration with the EU and due to continued expansion of TC programme initiatives. The year 2012 was the subprogramme's busiest year to date, with an unusually high number of meetings and a large number of guidance documents in development. A new CRP on knowledge management indicators will be started to help Member State organizations assess the effectiveness of their knowledge management programmes. Priority will be given to ensuring alignment across the Agency and to improved cooperation with and support to other Departments.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a small increase of €1 119 in 2014, as compared with 2013, and a small increase of €173 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.3.3.001 Implementing knowledge management in nuclear organizations	Publications, reports and proceedings on topical issues and special knowledge management tools and products (e.g. knowledge preservation systems for different reactor types).
1.3.3.002 Facilitating sustainable education in nuclear science and technology	One school on NKM and two schools on nuclear energy management per year; publications on nuclear education; yearly regional and interregional meetings to facilitate networking for nuclear education; and additional e-learning opportunities for Member States.
1.3.3.003 AP support related to NKM	New knowledge preservation system (KPS), based on experience with the KPS for major nuclear accidents, that includes other important incidents as well as the Three Mile Island, Chernobyl and Fukushima Daiichi accidents; and an NES report or TECDOC on NKM capacity building.

Subprogramme 1.3.4 Nuclear Information

Objectives:

— To procure and provide printed and electronic information in the area of nuclear science and technology to the IAEA Secretariat, delegations and other users.
— To facilitate the sustainable sharing of information generated by Member States on the peaceful uses of nuclear energy.

Outcomes	Performance Indicators
• Unrestricted and easy access for Member States and the Agency to high quality, relevant and reliable information on peaceful uses of nuclear energy stored in the INIS database.	• Number of records available in the INIS database. • Number of INIS Collection searches and document downloads.
• Unrestricted and easy access to high quality, relevant and reliable information on peaceful uses of nuclear energy for Agency staff members and other users from the Library collections.	• Number of Library services used. • Availability and ease of access to information.
• Operational International Nuclear Library Network (INLN).	• Number of members participating in the INLN. • Number of nuclear information requests from INLN members.

Programmatic changes and trends: In 2014 and 2015, Subprogramme 1.3.4 will include both INIS and the Library. It thus merges two subprogrammes that were separate in the 2012–2013 biennium. Both INIS and the Library are important Agency resources. INIS is the largest information provider for nuclear science and technology in the world. The resource reductions specified below reflect planned productivity increases to take full advantage of rapidly evolving information technologies and some rescheduling of planned information technology upgrades.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 84% (€2 214 660) in 2014, as compared with 2013, and a small decrease of €2 500 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.3.4.001 IAEA library information resources and services	Accessible, relevant and up to date collection of information resources; acquired print and electronic monographs and serial publications; and operational INLN.
1.3.4.002 INIS collection and services	Accessible, relevant and up to date collection of INIS bibliographic and full text records; good cooperation with national INIS centres; and high quality thesaurus and accompanying standards.
1.3.4.003 AP support related to nuclear information	Increased number of information resources relevant to nuclear safety available in the IAEA Library and through the INIS Collection's search application.

Programme 1.4 Nuclear Science

Rationale: Nuclear science underpins all nuclear applications, including nuclear energy. The Agency will continue to provide and maintain the nuclear, atomic and molecular data libraries crucial for nuclear energy and nuclear technology activities through international networking and specific projects that address data for medical applications, advanced fission and fusion reactors, nuclear analytical techniques and dosimetry. Research reactors have several vital applications such as isotope production and materials testing. Major concerns with operating research reactors are ageing, underutilization and the use of high enriched uranium (HEU) fuels. Programme 1.4 addresses these by facilitating the participation of Member States in research reactor coalitions to increase utilization, manage ageing equipment, manage spent fuel inventories and help to plan new facilities. International collaboration to assess the role of research reactors in the development of innovative nuclear power reactors and fuel cycles will also be promoted. Programme 1.4 will help Member States to benefit from radiation applications such as synchrotron X rays, neutrons and ion beams in the areas of materials sciences, biotechnology, environment and cultural heritage. Nuclear instrumentation, a basic support skill, will be supported through training and quality related services for sustainable applications of nuclear techniques. Quick environmental radiation mapping will be pursued through adaptive R&D. Nuclear fusion has promise as a major energy source in the future. The Agency will continue to facilitate knowledge exchange in the area of nuclear fusion and plasma physics between the ITER countries and IAEA Member States, based on recommendations of the International Fusion Research Council. Support for the International Centre for Theoretical Physics (ICTP) will be continued, and training events on subjects of relevance to the Agency will be conducted with ICTP to foster the research capabilities of scientists from developing Member States.

Objectives:

— To increase Member State capabilities in the development and application of nuclear science as a tool for their technological and economic development.
— To assist Member States in the management and effective utilization of research reactors.

Outcomes	Performance Indicators
• Increased international cooperation in nuclear sciences for technological advancement.	• Number of institutions and Member States participating in the Agency's nuclear science activities, and number of resultant products/documents.
• Increased use of Agency mechanisms and guidance for more effective use of research reactors.	• Number of Member States seeking the Agency's support in the management of research reactors.

Lessons learned from reviews, assessment, evaluations: The strong coordination established with Programmes 1.1, 1.2 and 2.5 on topics of common interest helped in efficacious implementation of the projects and services for Member States, and hence this will be continued. Holding Agency meetings along with other international events remains an effective means of achieving fruitful programme delivery, as does Agency involvement in international initiatives in nuclear science such as in EU and OECD/NEA projects. TC projects on mature nuclear techniques/instrumentation will be supported using expertise in Member States, as this is found to be highly effective and mutually beneficial.

Specific criteria for prioritization:

1. Activities to foster international cooperation and information exchange in nuclear fusion research and plasma physics.

2. Activities to strengthen research reactor management and effective utilization; laboratory services for advanced training; and resource materials for human resource development.
3. Activities to address emerging needs in nuclear power and other applications and materials science aspects; and atomic and nuclear data services; activities to reduce proliferation risks associated with using HEU.

Subprogramme 1.4.1 Atomic and Nuclear Data

Objectives:

— To increase the capabilities and expertise of Member States to ensure the safe and economic adoption of all forms of nuclear technologies by providing rapid access to reliable atomic and nuclear data for energy and non-energy applications.

Outcome	Performance Indicator
• Increased use by Member States of sets of atomic and nuclear data recommended by the Agency.	• Number of downloads of atomic and nuclear data from the Agency's web site per year.

Programmatic changes and trends: During 2014–2015 biennium, Subprogramme 1.4.1 activities will extend the most important aspects of the work of previous biennia, notably in terms of data evaluation and compilation, provision of data services to Member States, organization of CRPs, missions to collaborating centres, and support for information exchange. To increase efficiency, the number of projects has been reduced from five to three. There are many steps in the production of databases — measurements, evaluation, database production, processing, benchmarking and validation — before a database is suitable for public use. These are typically carried out by different experts, many from outside the Agency, and thus it is essential that the coordinating role of the Agency in this process is also long term. These steps usually straddle the Agency's biennial programmes, and thus many of the activities are necessarily long term.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 2% (€62 901) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.4.1.001 Provision of data services	Easy access to data via the web by improved searching and visualization tools; documentation and reports to enable efficient data use; new and improved atomic and nuclear databases; coordinated data networks and training courses.
1.4.1.002 Nuclear data developments	Updates of the Ion Beam Analysis Nuclear Data Library (IBANDL) and Reference Input Parameter Library (RIPL-3) databases; maintenance and improvement of the neutron cross section standards; validation and improvement of the dosimetry library International Reactor Dosimetry and Fusion File (IRDFF).
1.4.1.003 Atomic and molecular data developments	Improved versions of the A Labelled Atomic Data Interface (ALADDIN) and Atomic and Molecular Bibliographic Data System (AMBDAS) databases containing newly evaluated datasets as these become available.

Subprogramme 1.4.2 Research Reactors

Objectives:

— To enhance Member State potential to deal with all aspects of research reactor management including ageing management, modernization and operational management, core and target conversion, repatriation of fuel to the country of origin and planning and building new facilities.
— To increase the capabilities of Member States to safely, reliably and efficiently use research reactors for research and technology development.
— To advance arrangements for regional and international coalitions, networks and shared-user facilities.

Outcomes	Performance Indicators
• Increased use of the Agency's assistance and guidance on research reactor utilization, infrastructure, fuel cycle issues and operation and maintenance.	• Number of current Agency publications on research reactor utilization, infrastructure, fuel cycle issues and operation and maintenance.

Outcomes	Performance Indicators
• Increased networking within the global research reactor community through the use of Agency databases and via participation in supported networks and coalitions and centres of excellence.	• The number of operating, temporarily shutdown or under construction research reactors whose entries in the research reactor database have not been updated within the past five years. • Number of research reactor networks and coalitions with active joint activities and regular communications.
• Increased use of the Agency's assistance on research reactor fuel cycle issues, including assistance to minimize commerce in High Enriched Uranium (HEU) for research reactors and hence reduce proliferation risk.	• Number of Member States receiving IAEA assistance on research reactor fuel cycle issues, including assistance to minimize commerce in HEU for research reactors.

Programmatic changes and trends: The subprogramme will address (i) regional and interregional collaboration through coalitions, networking and centres of excellence to improve utilization and provide access to countries with no research reactors; (ii) improvement in operation and maintenance to maximize availability and reliability; (iii) dissemination of good practices on modernization and refurbishment; (iv) national planning or implementation of a first or new research reactor; (v) assistance to reduce underutilization, inadequate funding and over-reliance on public sector funding by supporting strategic and business planning and developing market analyses and marketing skills for research reactor goods and services; (vi) assistance with ageing issues; (vii) assistance with spent fuel management; and (viii) minimization of civilian uses of HEU.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 3% (€44 238) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.4.2.001 Enhancement of utilization and applications of research reactors	CRPs and TMs on various research reactor applications; publications on research reactor utilization and applications; international research reactor conference 2015; enhanced cooperation through research reactor networks and coalitions; and strategic and business planning for research reactors.
1.4.2.002 Research reactor infrastructure, planning and capacity building	Research reactor database, reports and training on research reactor capacity building, support of TC projects related to research reactor infrastructure and capacity building.
1.4.2.003 Addressing research reactor fuel cycle issues	Reports on high density U-Mo fuels, good practices for spent fuel storage, LEU based accelerator-driven systems and applications, production of Mo-99 without HEU and conversion of research reactors; training courses on U-Mo fuel; and return of HEU to origin.
1.4.2.004 Research reactor operation and maintenance	New CRPs, TM reports, peer review missions; report on digital instrumentation and control systems for new facilities and modernization of existing research reactors.

Subprogramme 1.4.3 Accelerator Applications and Nuclear Instrumentation

Objectives:

— To increase the capabilities of Member States to adopt and benefit from the applications of particle accelerators, spectrometric techniques and nuclear instrumentation.

Outcome	Performance Indicators
• Well functioning and optimized nuclear science infrastructure established in interested Member States and operated by qualified experts.	• Number of beneficiaries attending conferences, meetings, and training supported under the subprogramme. • Number of publications/reports resulting from utilization of accelerators, nuclear spectrometry and instrumentation.

Programmatic changes and trends: Changes in Subprogramme 1.4.3 provide better integration at all levels. Projects on accelerator applications have been merged into a single project, the activities at Headquarters and at the Nuclear Spectrometry and Applications Laboratory (NSAL) in Seibersdorf have been better integrated, and connections to Collaborating Centres and other international organizations have been expanded. The new project centred on the two beam lines at Elettra Laboratory and the Ruđer Bošković Institute (RBI) will be integrated with TC projects and workshops at ICTP, and the new project on instrumentation for environmental monitoring is part of the Action Plan, in collaboration with Programmes 1.1 and 1.2.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 1% (€28 571) in 2014, as compared with 2013 and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.4.3.001 Fostering accelerator applications in multiple disciplines	CRPs and TMs on a wide variety of accelerator applications in different disciplines, with an emphasis on materials science and energy applications, Symposium on Accelerator Applications (AccApp2015), and an accelerator database.
1.4.3.002 Facilitating experiments with accelerators	Experiments, training courses and workshops with practical components at the IAEA synchrotron beam line at ELETTRA and the ion beam line at RBI, as well as corresponding CRPs and TMs.
1.4.3.003 Nuclear instrumentation	CPRs and TMs on nuclear instrumentation, with an emphasis on applications in environmental monitoring, nuclear spectrometry, accelerator based R&D and cultural heritage; training courses and course materials; XRF Newsletter; and a nuclear instrumentation network.
1.4.3.004 AP support to development equipment for environmental monitoring	Mobile gamma spectrometry system, consisting of portable gamma spectrometry detectors, data acquisition system, analysis software and geo-information system for in situ mapping of radiological contamination; and an unmanned aerial vehicle based gamma detector system for the rapid survey of medium sized areas.

Subprogramme 1.4.4 Nuclear Fusion Research and Technology

Objectives:

— To strengthen research programmes in plasma physics, controlled nuclear fusion and nuclear fusion related technology including through facilitating information exchange among researchers in these areas.

Outcomes	Performance Indicators
• Improved infrastructure and fusion research capacity in Member States.	• Number of participants in CRPs, TMs and joint experiments.
• Improved information exchange between researchers in plasma physics, nuclear fusion and nuclear fusion related technology.	• Number of participants in Fusion Energy Conference and DEMO Workshop series.

Programmatic changes and trends: The most significant trend in this field is a shift from pure research to technology. With ITER under construction and the follow-up project DEMO on the horizon, technology questions are moving more into the focus. Following the recommendations by the International Fusion Research Council, the activities under this subprogramme are therefore expanding in the direction of fusion technology. A new series of DEMO Workshops and a CRP on inertial fusion are planned in response to this trend. Activities related to ITER are expanding at the same time, so that overall activities in this subprogramme are increasing.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 31% (€187 940) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.4.4.001 Nuclear fusion research and technology	CRPs and TMs on nuclear fusion and plasma physics; Fusion Energy Conference 2014; DEMO Workshop series; and cooperation with ITER.

Subprogramme 1.4.5 Support to the Abdus Salam International Centre for Theoretical Physics

Objectives:

— To enhance the scientific capability of, in particular, developing countries through training and exchange of knowledge between scientists from developing and developed countries in nuclear science and technology and related applications.

Outcomes	Performance Indicators
• Scientists from developing and developed Member States making use of knowledge obtained through their participation in the scientific programmes of ICTP.	• Number of scientists benefiting from ICTP programmes in fields related to Agency programmes and using the information in their home institutions. • Number of publications by scientists participating in ICTP scientific events.
• Reduced 'brain drain' from developing Member States by enabling their scientists to carry out doctoral research at an internationally renowned institute through fellowships, and, consequently, enhanced quality of scientific work in their respective home country.	• Number of Sandwich Training Educational Programme (STEP) fellowships funded (by the Agency, as well as by ICTP and others).

Programmatic changes and trends: The yearly programme of ICTP supported activities will be approved by the ICTP Steering Committee upon the recommendations of the ICTP Programme Committee or the Scientific Council. Topics for advanced training events will cover areas of interest to Agency Member States in nuclear science, nuclear energy, nuclear safety and security and various nuclear applications. In addition, topics for research and studies to be carried out by ICTP scientists and associates to support the Agency's scientific and technical programmes will be identified and implemented.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 4% (€83 267) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
1.4.5.001 Support to ICTP	Training courses and material on topics covered by workshops and seminars; scientific publications.

Major Programme 1

Medium Term Strategy (MTS)

MTS Sub-objectives	Projects
A01 Assist Member States planning nuclear power programmes as well as those establishing their first research reactor or fuel cycle facility to strengthen infrastructure development	1.1.3.001 Strengthening nuclear power infrastructure 1.1.3.002 Capacity building for the introduction of nuclear power 1.3.1.002 Models and capacity building for energy and nuclear power planning 1.3.1.003 AP support related to energy modelling, data and capacity building 1.3.2.003 AP support related to 3E analysis 1.3.3.001 Implementing knowledge management in nuclear organizations 1.3.3.002 Facilitating sustainable education in nuclear science and technology 1.3.3.003 AP support related to NKM 1.4.2.002 Research reactor infrastructure, planning, and capacity building
A02 Assist Member States with nuclear power programmes to plan expansion and to improve performance at all stages of the fuel cycle	1.1.1.002 Engineering support for expanding and new nuclear power projects 1.1.1.003 AP support related to operating nuclear facilities 1.1.2.001 Management support for nuclear power plant projects 1.1.2.002 Human resource development for nuclear power programmes 1.1.2.003 AP support related to expanding nuclear power programmes 1.2.2.001 Nuclear power reactor fuel engineering 1.2.3.001 Spent fuel storage 1.2.3.003 AP support related to spent fuel
A03 Help Member States to build capacities in nuclear science, energy systems analysis, engineering evaluations, project management and long term planning for the sustainability of nuclear power	1.1.1.001 Engineering support for operating nuclear facilities 1.1.4.001 International Project on Innovative Nuclear Reactors and Fuel Cycles 1.1.4.002 AP support related to INPRO 1.2.2.003 AP support related to nuclear power reactor fuel 1.3.1.001 Energy, electricity and nuclear power economics: Status and trends 1.3.2.001 Techno-economic analysis
A04 Support innovations in all areas of nuclear power for near term and long term deployment	1.1.5.001 Technology development for water cooled reactors 1.1.5.002 Small and medium-sized reactor technology development 1.1.5.003 Advanced technology for fast and gas cooled reactors 1.1.5.004 Non-electric applications of nuclear power 1.2.3.002 Spent fuel recycling 1.4.4.001 Nuclear fusion research and technology
A05 Assist throughout all stages of research reactor applications	1.4.2.001 Enhancement of utilization and applications of research reactors 1.4.2.003 Addressing research reactor fuel cycle issues 1.4.2.004 Research reactor operation and maintenance
A06 Enhance nuclear safety standards and security guidance, peer reviews and advisory services	1.1.5.005 AP support related to advanced reactor lines

MTS Sub-objectives	Projects
A07 Act as an objective and reliable source of information on issues related to nuclear power and nuclear science	1.3.4.001 IAEA Library information resources and services 1.3.4.002 INIS Collection and services
A08 Facilitate and assist international research and development collaboration for beneficial uses of nuclear energy	1.4.5.001 Support to ICTP
A09 Assist, upon request, in creating voluntary mechanisms for assurances of nuclear fuel supply	1.2.2.002 LEU Bank
B07 Maintain and distribute objective and reliable sources of information on atomic, molecular and nuclear data	1.4.1.001 Provision of data services 1.4.1.002 Nuclear data developments 1.4.1.003 Atomic and molecular data developments
B08 Promote applications of advanced nuclear/radiation techniques	1.4.3.001 Fostering accelerator applications in multiple disciplines 1.4.3.002 Facilitating experiments with accelerators 1.4.3.003 Nuclear instrumentation 1.4.3.004 AP support to development equipment for environmental monitoring
C05 Assist Member States in enhancing safety of nuclear installations	1.3.4.003 AP support related to nuclear information
D01 Ensure support in areas of increasing demand and interest such as nuclear power for newcomer States; safety and security infrastructure; health, water, food and agriculture; and relevant industrial applications	1.2.1.001 Uranium resources and production
D03 Advance partnerships with the United Nations and other multilateral organizations, regional development bodies and other relevant intergovernmental and non-governmental bodies	1.3.2.002 Topical issues related to sustainable energy development
F01 Under the results based management approach, seek efficiency gains in management and focus on priority areas, while meeting demands for the Agency's unique services in the use of nuclear technology without increasing the risk of proliferation	1.0.0.001 Overall management, coordination and common activities

The following MTS Sub-objectives are associated with projects only as secondary:

- D02 Facilitate cooperation among Member States bilaterally and regionally.
- D05 Promote South–South and North–South partnerships, information and technical exchanges, and capacity strengthening initiatives by building upon the expertise available in Member States and Regional Resource Centres and by the promotion of networking.
- D07 Promote best practices in project formulation, management, monitoring and evaluation.
- F13 Promote gender equality and equitable geographical representation in the Agency, especially at managerial levels.

Major Programme 1 – Nuclear Power, Fuel Cycle and Nuclear Science

Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 13

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
1.0.0.001 Overall management, coordination and common activities	1 242 563	-	-	1 235 983	-	-
1.S Corporate shared services	1 399 328	41 192	10 620	1 400 160	42 226	10 620
	2 641 891	**41 192**	**10 620**	**2 636 143**	**42 226**	**10 620**
1.1.1.001 Engineering support for operating nuclear facilities	1 092 352	-	-	1 092 352	-	-
1.1.1.002 Engineering support for expanding and new nuclear power projects	288 885	-	-	287 740	-	-
1.1.1.003 AP support related to operating nuclear facilities	222 379	-	-	222 379	-	-
1.1.1 Strengthening Integrated Engineering Support for Nuclear Power Programmes	**1 603 617**	**-**	**-**	**1 602 471**	**-**	**-**
1.1.2.001 Management support for nuclear power plant projects	469 779	70 930	-	478 599	-	-
1.1.2.002 Human resource development for nuclear power programmes	358 558	-	-	345 919	-	-
1.1.2.003 AP support related to expanding nuclear power programmes	183 568	-	-	187 978	-	-
1.1.2 Integrated Management and Human Resource Development for Nuclear Power	**1 011 905**	**70 930**	**-**	**1 012 496**	**-**	**-**
1.1.3.001 Strengthening nuclear power infrastructure	1 622 321	1 076 433	-	1 626 155	1 076 433	-
1.1.3.002 Capacity building for the introduction of nuclear power	616 694	1 070 812	-	612 582	1 052 567	-
1.1.3 Infrastructure and Planning for New Nuclear Power Programmes	**2 239 015**	**2 147 244**	**-**	**2 238 737**	**2 128 999**	**-**
1.1.4.001 International project on innovative nuclear reactors and fuel cycles	636 040	1 584 504	-	636 040	1 584 504	-
1.1.4.002 AP support related to INPRO	38 788	19 153	-	38 788	19 153	-
1.1.4 International Project on Innovative Nuclear Reactors and Fuel Cycles	**674 828**	**1 603 657**	**-**	**674 828**	**1 603 657**	**-**
1.1.5.001 Technology development for water cooled reactors	929 521	-	-	929 727	-	-
1.1.5.002 Small and medium-sized reactor technology development	317 467	-	-	317 261	-	-
1.1.5.003 Advanced technology for fast and gas cooled reactors	590 211	-	-	590 211	-	-
1.1.5.004 Non-electric applications of nuclear power	404 444	-	-	404 444	-	-
1.1.5.005 AP support related to advanced reactor lines	158 755	-	-	158 755	-	-
1.1.5 Technology Development for Advanced Reactor Lines	**2 400 397**	**-**	**-**	**2 400 397**	**-**	**-**
1.1 Nuclear Power	**7 929 763**	**3 821 831**	**-**	**7 928 930**	**3 732 657**	**-**
1.2.1.001 Uranium resources and production	1 280 196	29 882	51 173	1 251 442	29 882	51 173
1.2.1 Uranium Resources and Production	**1 280 196**	**29 882**	**51 173**	**1 251 442**	**29 882**	**51 173**
1.2.2.001 Nuclear power reactor fuel engineering	678 048	-	-	608 584	-	-
1.2.2.002 LEU Bank	-	1 185 373	-	-	1 095 722	-
1.2.2.003 AP support related to nuclear power reactor fuel	192 117	-	-	183 198	-	-
1.2.2 Nuclear Power Reactor Fuel	**870 165**	**1 185 373**	**-**	**791 782**	**1 095 722**	**-**

Major Programme 1 – Nuclear Power, Fuel Cycle and Nuclear Science
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 13

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
1.2.3.001 Spent fuel storage	426 835	47 019	-	512 794	-	-
1.2.3.002 Spent fuel recycling	263 389	-	-	274 006	-	-
1.2.3.003 AP support related to spent fuel	651 283	-	-	661 598	-	-
1.2.3 Management of Spent Fuel from Nuclear Power Reactors	**1 341 507**	**47 019**	**-**	**1 448 398**	**-**	**-**
1.2 Nuclear Fuel Cycle and Materials Technologies	**3 491 867**	**1 262 273**	**51 173**	**3 491 622**	**1 125 604**	**51 173**
1.3.1.001 Energy, electricity and nuclear power economics: Status and trends	506 211	-	-	500 231	-	-
1.3.1.002 Models and capacity building for energy and nuclear power planning	1 246 301	-	-	1 252 401	-	-
1.3.1.003 AP support related to energy modelling, data and capacity building	96 858	-	-	96 858	-	-
1.3.1 Energy Modelling, Data and Capacity Building	**1 849 370**	**-**	**-**	**1 849 489**	**-**	**-**
1.3.2.001 Technoeconomic analysis	635 047	-	-	707 651	-	-
1.3.2.002 Topical issues related to sustainable energy development	683 782	-	-	611 179	-	-
1.3.2.003 AP support related to 3E analysis	32 286	-	-	32 286	-	-
1.3.2 Energy Economy Environment (3E) Analysis	**1 351 116**	**-**	**-**	**1 351 116**	**-**	**-**
1.3.3.001 Implementing knowledge management in nuclear organizations	1 094 788	-	-	1 069 928	-	-
1.3.3.002 Facilitating sustainable education in nuclear science and technology	947 585	34 853	-	972 758	-	-
1.3.3.003 AP support related to NKM	161 866	19 861	-	161 866	-	-
1.3.3 Nuclear Knowledge Management (NKM)	**2 204 239**	**54 714**	**-**	**2 204 552**	**-**	**-**
1.3.4.001 IAEA library information resources and services	2 533 039	-	-	2 533 039	-	-
1.3.4.002 INIS collection and services	2 324 150	-	-	2 319 495	-	-
1.3.4.003 AP support related to nuclear information	64 572	-	-	64 572	-	-
1.3.4 Nuclear Information	**4 921 761**	**-**	**-**	**4 917 107**	**-**	**-**
1.3 Capacity Building and Nuclear Knowledge for Sustainable Energy Development	**10 326 485**	**54 714**	**-**	**10 322 264**	**-**	**-**
1.4.1.001 Provision of data services	1 137 808	-	-	1 200 915	-	-
1.4.1.002 Nuclear data developments	989 103	-	-	953 044	-	-
1.4.1.003 Atomic and molecular data developments	584 938	-	-	557 893	-	-
1.4.1 Atomic and Nuclear Data	**2 711 850**	**-**	**-**	**2 711 853**	**-**	**-**

Major Programme 1 – Nuclear Power, Fuel Cycle and Nuclear Science

Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 13

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
1.4.2.001 Enhancement of utilization and applications of research reactors	439 888	29 882	159 122	439 909	29 882	179 398
1.4.2.002 Research reactor infrastructure, planning, and capacity building	392 431	274 985	56 011	381 219	48 473	88 780
1.4.2.003 Addressing research reactor fuel cycle issues	424 944	305 977	27 283	424 063	305 977	61 162
1.4.2.004 Research reactor operation and maintenance	467 271	188 960	75 340	479 537	165 041	112 611
1.4.2 Research Reactors	**1 724 535**	**799 804**	**317 756**	**1 724 728**	**549 372**	**441 951**
1.4.3.001 Fostering accelerator applications in multiple disciplines	835 508	-	-	841 687	-	70 562
1.4.3.002 Facilitating experiments with accelerators	399 011	-	-	449 293	-	-
1.4.3.003 Nuclear instrumentation	898 372	-	-	842 191	-	121 263
1.4.3.004 AP support to development equipment for environmental monitoring	374 164	-	84 625	374 164	-	84 625
1.4.3 Accelerator Applications and Nuclear Instrumentation	**2 507 055**	**-**	**84 625**	**2 507 335**	**-**	**276 450**
1.4.4.001 Nuclear fusion research and technology	796 634	-	-	796 326	-	-
1.4.4 Nuclear Fusion Research and Technology	**796 634**	**-**	**-**	**796 326**	**-**	**-**
1.4.5.001 Support to ICTP	2 348 722	-	-	2 348 722	-	-
1.4.5 Support to the Abdus Salam International Centre for Theoretical Physics	**2 348 722**	**-**	**-**	**2 348 722**	**-**	**-**
1.4 Nuclear Science	**10 088 797**	**799 804**	**402 381**	**10 088 964**	**549 372**	**718 401**
Major Programme 1 - Nuclear Power, Fuel Cycle and Nuclear Science	**34 478 803**	**5 979 814**	**464 174**	**34 467 923**	**5 449 859**	**780 194**

Major Programme 1 – Nuclear Power, Fuel Cycle and Nuclear Science
Unfunded Activities within Tasks

Table 14

Project	Tasks	2014 Unfunded	2015 Unfunded
1.S.3.005 BSS MTIT Business Solutions Section (Attrib. to MP 1)	Software solutions	10 620	10 620
1.2.1.001 Uranium resources and production	General management	51 173	51 173
1.4.2.001 Enhancement of utilization and applications of research reactors	Information exchange - meetings, conferences, workshops and and related reports on research reactors utilization and applications	50 764	76 061
	Capacity building in Member States and collaboration with other organizations on research reactors	11 736	21 667
	Coordinate a CRP on Development of Integrated Approach to Routine Automation of Neutron Activation Analysis	44 533	29 833
	Coordinate a CRP on standardization of small neutron sources facilities and neutron beam condition management for medical applications	41 243	40 993
	Coordinate regional research reactor coalitions	10 846	10 846
1.4.2.002 Research reactor infrastructure, planning, and capacity building	Project management and administration	-	8 998
	Conferences, symposia and workshops on RR infrastructure, planning and capacity building	-	27 371
	Publications related to RR infrastructure, planning and capacity building as well as the RR database	56 011	52 411
1.4.2.003 Addressing research reactor fuel cycle issues	Organise and support conferences, symposia and workshops on RR fuel cycle issues	14 585	51 638
	Prepare, revise and update publications on RR fuel cycle issues	3 174	-
	Capacity building in Member States and collaboration with other organizations on RR fuel cycle issues	6 349	6 349
	CRP on innovative methods in research reactor analysis: benchmarks against experimental data on fuel burnup and material activation	3 174	3 174
1.4.2.004 Research reactor operation and maintenance	Implement conferences, symposia and workshops on RR O&M	13 944	53 666
	Publications related to RR O&M as well as the RR database	10 054	20 108
	Capacity building in Member States and collaboration with other organizations on RR O&M	12 908	12 908
	CRProject on RR core structural materials	38 435	25 930
1.4.3.001 Fostering accelerator applications in multiple disciplines	Coordinate a CRP on accelerator experiments and computer modelling towards study and development of radiation resistant materials (ACE)	-	70 562
1.4.3.003 Nuclear instrumentation	Coordinate a CRP on advances in 3D X-ray fluorescence measurements	-	60 631
	Coordinate a CRP on application of Digital Signal Processing (DSP) spectroscopy to high sensitivity applciations	-	60 631
1.4.3.004 AP support to development equipment for environmental monitoring	Project management and administration	59 439	59 439
	Provide mobile detectors for in-situ and wireless environmental monitoring	25 186	25 186

Major Programme 2
Nuclear Techniques for Development and Environmental Protection

Introduction

The overall objectives of Major Programme 2 continue to support the peaceful uses of nuclear science and applications. Building on a core foundation of adaptive and applied research and development, Major Programme 2 provides Member States with science based advice, education and training materials, standards and reference materials, and technical documents. Key areas of growing demand for assistance include non-communicable diseases, food security, water scarcity and environmental degradation. The major programme's laboratories at IAEA Headquarters, Monaco and Seibersdorf remain an important vehicle for the Agency's programme delivery. Ensuring that the laboratories are able to meet the changing needs of Member States is a priority. Investments will be made in the laboratories as part of a multistage plan to ensure that they are fit for purpose and able to respond to the needs of Member States.

Quality assurance (QA) is a key element of the safe and efficient operation of the laboratories. Enhancing QA is a priority in order to enable the laboratories to achieve and maintain high levels of proficiency, to demonstrate competence and to serve as reference laboratories for Member States. Partnerships are an increasingly effective tool for delivering the programmes of Major Programme 2, and efforts will be made to strengthen and expand them. The IAEA Collaborating Centres scheme will continue to be a valuable mechanism for working together with Member State institutions. The scheme will be further enhanced and strengthened based on lessons learned. Relationships with important partners in the United Nations system will also be a focus. In the Joint FAO/IAEA Programme of Nuclear Techniques in Food and Agriculture, the focus will be on intensifying cooperation with regional and national offices of the Food and Agriculture Organization of the United Nations (FAO).

Education and training is another important way in which this major programme supports the use of nuclear science and technologies in Member States. The global reach of the Internet and the ability to continually develop content allows the Agency to reach an ever expanding audience with timely, relevant information. There will be an increasing trend toward the development of e-learning tools and on-line education platforms to reach a wider audience and achieve costs savings.

Objectives:

— To enhance the capacity of Member States to meet basic human needs and to assess and manage the marine and terrestrial environments through the integration of nuclear and isotopic techniques, where they have comparative advantages, into sustainable development programmes.

Outcome	Performance Indicators
• Increased use by Member States of nuclear and isotopic techniques for effecting improvements in food security, human health, water resources management, managing the marine and terrestrial environments, and industrial development.	• Number of coordinated research projects (CRPs). • Number of training events.

Title	Main Planned Outputs
2.0.0.001 Overall management, coordination and common activities	Preparation of the Nuclear Technology Review relating to nuclear applications, Medium Term Strategy implementation report, Programme Performance Report, Standing Advisory Group on Nuclear Applications (SAGNA) report, briefings, and meetings with Member States and other stakeholders.
2.0.0.002 Management of the coordinated research activities	Completed CRPs, completed research, technical, doctoral contracts and research agreements; technical meetings (TMs), publications, databases and technique dissemination.
2.0.0.003 AP - Nuclear Safety Action Plan (NSAP)	Proposals for related projects, reports on the implementation of activities related to the IAEA Action Plan on Nuclear Safety.

Title	Main Planned Outputs
2.0.0.004 Enhancing capabilities of the nuclear sciences and applications laboratories at Seibersdorf	It is planned to upgrade the existing infrastructure of the laboratories to meet basic quality requirements, procure new equipment to replace ageing or obsolete hardware, and add laboratory and office space to properly accommodate existing staff and meet the growing demand for services from Member States.

Programme 2.1 Food and Agriculture

Rationale: The number of hungry people in the world is approaching nearly 870 million. The persistence of widespread food insecurity and malnutrition is exacerbated by many emerging trends that are likely to accelerate in the future. By 2050, the world's population is expected to reach 9 billion, 34% higher than today. In order to feed this larger population, food production must increase by more than 70%, despite unprecedented challenges such as the degradation of resources, climate variability, water scarcity and reduction of arable land. Food losses caused by animal and plant diseases and pests at both the pre- and post-harvest stages average 30–40% of agricultural output. This affects local and global food security and puts pressure on agricultural productive capacity and ecosystems.

The Joint FAO/IAEA Programme provides support to farmers by contributing new varieties of crops, controlling pests, diagnosing livestock disease, increasing animal production, improving soil and water management, and increasing food safety. The focus of this work is on supporting Member States in adapting, developing and transferring nuclear and related techniques for food and agriculture and on promoting good agricultural practices to ensure food security and sustainable agricultural development. Efforts will focus on food production, food protection and food safety. To address new challenges there will also be an increased emphasis on nuclear emergency preparedness and response, climate smart agriculture and advanced application of food irradiation.

Objectives:

— To contribute to sustainable intensification of agricultural production and the improvement of global food security by addressing the challenges of food production, food protection and food safety through capacity building in and technology transfer to Member States.

Outcomes	Performance Indicators
• Increased food security and sustainable use of natural resources through application of nuclear and related techniques, guidelines and information products.	• Number of Member States improving their food security and sustainable use of natural resources with notable social and economic or environmental impacts.
• Improved capacity of Member States to use nuclear techniques for sustainable intensification of agricultural production.	• Number of national agricultural research institutes using Agency recommended techniques, guidelines and products in their agricultural research and development.

Lessons learned from reviews, assessment, evaluations: Strengthening cooperation through coordinated and coherent programmes with the FAO is critical in order to address the strategic objectives of both organizations. An initiative to modernize the Department of Nuclear Science and Applications laboratories and revitalize their activities was announced by the IAEA Director General at the 56th General Conference and a resolution supporting this initiative was presented and adopted by Member States.

Specific criteria for prioritization:

1. Promote food security to increase sustainable agricultural productivity.
2. Support climate smart agriculture for effective adaptation to and mitigation of climate change.
3. Increase food safety and food control, including nuclear emergency preparedness and response.

Subprogramme 2.1.1 Sustainable Land and Water Management

Objectives:

— To enhance Member State capabilities in land and water management to ensure agricultural and environmental sustainability in a changing climate while intensifying/diversifying agricultural production system through the development and application of nuclear techniques.
— To develop and strengthen Member State capacities in the use of isotopic and nuclear techniques to assess the impacts of land and water management practices on soil and water resources for sustainable food production.

Outcomes	Performance Indicators
• Enhanced Member State capability to mitigate the impact of climate change and land use activities, land degradation, soil erosion and water scarcity on food and biomass production.	• Number of innovative land–water–plant management packages developed and adapted for improving water use efficiency, soil quality, soil resilience and crop adaptation to climate change.
• Developed and strengthened Member State capability to use isotopic and nuclear techniques to assess the impact of on-farm and area-wide land and water management practices on the conservation of soil and water resources for sustainable food production.	• Number of countries reporting on the use of isotopic and nuclear techniques to assess the impacts of on-farm and area-wide land and water management practices on the conservation of soil and water resources.

Programmatic changes and trends: This subprogramme reflects increasing Member State concern regarding the management of soil and agricultural water resources for sustainable food production and conservation of agricultural resources in the face of the impacts of climate change and variability on land degradation, desertification, water scarcity and land productivity. Climate smart agriculture for ensuring food security and conservation of agricultural resources requires the development of tools and technologies for improving on-farm and area-wide land and water management practices on both rain-fed and irrigated farmland and the assessment of their beneficial impacts on food production, soil quality, and water quantity and quality in both cropping and integrated cropping–livestock farming systems, including conservation agriculture.

Experience gained during the past biennia revealed this subprogramme to have very broad objectives which posed challenges to its effective and focused management as it consisted of two relatively separate areas, i.e. soil and water management and plant mutation breeding. To ensure the necessary emphasis on climate smart agriculture, activities relating to plant breeding and biodiversity improvement have been shifted to the newly created Subprogramme 2.1.5 (Crop Improvement for Intensification of Agricultural Production Systems). This new structure will ensure that both subprogrammes are focused on their respective fields and are able to proactively and most efficiently respond to the rapidly evolving demands of Member States.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 51% (€2 072 087) in 2014 as compared with 2013 and an increase of 3% (€60 049) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.1.1.001 Land management for climate smart agriculture	Data on critical areas of land degradation and effectiveness of improved soil management practices, strategies for food and bioenergy production, publications in journals and newsletters, support for 10 technical cooperation (TC) projects; and fellowship training.
2.1.1.002 Water management for resource saving agriculture	Datasets, methodologies and guidelines to evaluate crop–water productivity and improve agricultural water use efficiency, and to enhance the conservation of agricultural resources and external inputs; publications in journals and newsletters; support for 10 TC projects; and fellowship training.

Subprogramme 2.1.2 Sustainable Intensification of Livestock Production Systems

Objectives:

— To enhance Member State capabilities to intensify livestock production systems sustainably and to assess, control and manage risks from transboundary animal diseases (TADs) and diseases of a zoonotic nature, by developing and applying nuclear and related techniques.

Outcomes	Performance Indicators
• Increased use of Agency recommended locally available feed resources while protecting the environment.	• Number of livestock farms using Agency recommended standards and techniques in feeding and reproductive management.
• Enhanced use of reproduction and breeding strategies and practices that improve productivity in smallholder production systems.	• Number of Member States introducing animal genetic characterization and breeding strategies; and improved reproduction practices.
• Increased ability to diagnose and control TADs and those zoonotic diseases that affect human lives.	• Number of Member States reporting to the World Organisation for Animal Health (OIE) and/or obtaining recognition of freedom from TADs, and veterinary laboratories meeting QA standards.

Programmatic changes and trends: There continues to be an increasing focus on molecular and nuclear based technologies for developing and transferring early and rapid diagnostic technologies of TADs to enable Member States to respond to the risks posed by such events earlier, and with greater effectiveness and sensitivity. In addition, the use of gamma radiated inactivated/killed disease pathogens such as vaccine components, and the use of stable isotopes to follow and monitor molecules in a non-invasive way, will increasingly form the basis of activities in this biennium. The subprogramme will respond to these trends through consultation with Member States and leaders in the fields of diagnostic technologies, vaccinology and molecule tracing, molecular characterization and introgression, and climatic variations and change.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 7% (€134 892) in 2014 as compared with 2013, and a decrease of 2% (€41 973) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.1.2.001 Improving animal production and breeding	Publications; guidelines; standard operating procedures (SOPs); training courses; workshops; database for recording production data; and inputs to TC projects to improve local feed resource utilization and enhance reproduction and breeding strategies.
2.1.2.002 Decreasing transboundary animal and zoonotic disease threats	Nuclear and related technologies for the early and rapid diagnosis and control of TADs and zoonotic diseases; isotopic signatures of migratory wildlife correlated with environmental isoscapes; radiation attenuated vaccines; and guidelines and SOPs.

Subprogramme 2.1.3 Improvement of Food Safety and Food Control Systems

Objectives:

— To improve food safety and food control systems, including preparedness and response to a nuclear or radiological emergency, and to enhance international food trade through the use of nuclear and related techniques.

Outcomes	Performance Indicators
• Increased and expanded application of established and novel food irradiation technologies for sanitary and phytosanitary purposes.	• Number of Member States that allow the export/import of irradiated food. • Number of facilities treating food.
• Use of integrated food forensic, traceability and contaminant control techniques to improve food safety/quality and to strengthen domestic/international trade; improved agricultural practices related to the use of agrochemicals to optimize food production and environmental sustainability.	• Number of laboratories developing and/or applying food control techniques and methods. • Number of validated analytical methods transferred or implemented in Member States for food safety and integrity.
• Enhanced application of harmonized arrangements/procedures and international standards for preparedness and response to nuclear or radiological emergencies; development and dissemination of guidelines and protocols on agricultural countermeasures and remediation strategies for agricultural production, land and water.	• Number of harmonized administrative arrangements and procedures and international standards developed and disseminated. • Number of guidelines on agricultural countermeasures and remediation strategies, including monitoring and sampling protocols, developed and disseminated.

Programmatic changes and trends: Trends towards more specific food safety and control systems are addressed through Subprogramme 2.1.3, including new applications of machine generated food irradiation technologies (electron beam, and X ray) to provide effective means to minimize food losses and waste without the need for radioactive materials, while at the same time addressing consumer concerns related to the use of ionizing radiation.

In the area of preparedness and response to a nuclear or radiological emergency affecting food and agriculture, field and laboratory practices will be developed in relation to harmonized sampling protocols and analytical strategies (including soils, agricultural commodities and foodstuffs). Control programmes will be developed for monitoring commodities and selecting practical options for the application of agricultural countermeasures and remediation strategies to restore production and distribution systems for food, agricultural, forestry and fishery products.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 3% (€38 398) in 2014 as compared with 2013 and a small decrease of €7 475 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
2.1.3.001 Food irradiation applications using novel radiation technologies	International standards, guidelines, protocols and approaches for sanitary and phytosanitary applications of food irradiation using novel and established radiation technologies; updated databases on irradiated food authorizations and food irradiation treatment facilities.
2.1.3.002 Traceability for food safety, quality & to enhance international trade	Validated methods for food forensic, traceability and contaminant control techniques to improve food safety and quality and to strengthen international trade; trained laboratory scientists and technicians; and quality assurance/control programmes implemented in Member State laboratories.
2.1.3.003 Preparation & response to radiological emergencies (food & agriculture)	Revised Joint Radiation Emergency Management Plan of the International Organizations (JPLAN) 2015 and cooperative arrangements between the FAO and the IAEA related to nuclear and radiological emergencies; revised IAEA safety standards and Codex standard on guideline levels for radionuclides in foods; and advice on agricultural countermeasures and remediation strategies.

Subprogramme 2.1.4 Sustainable Control of Major Insect Pests

Objectives:

— To increase Member State capacity in the area-wide suppression, containment or eradication of key pests of crops, livestock and humans by developing the sterile insect technique (SIT) and integrating it with other methods of insect pest management.

Outcome	Performance Indicator
• Increased awareness and use by Member States of improved SIT and related techniques and decision support systems.	• Number of Member States using improved technologies, feasibility and decision support studies, guidelines and manuals and standards.

Programmatic changes and trends: Subprogramme 2.1.4 is subject to growing Member State demand for the environment friendly management of key plant pests that cause major economic losses, but also for the control of livestock and mosquito pests, for which there are specific General Conference resolutions. These trends were confirmed by a detailed external evaluation in 2011, which gave a very positive assessment of subprogramme outputs and outcomes. The specific recommendations have been incorporated as outputs in the 2014–2015 Programme of Work and Budget. Given the many demands and the limited resources, not all requests can be supported and activities implemented. In particular, additional resources are needed to support the mosquito project.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 3% (€100 176) in 2014 as compared with 2013 and a small increase of €82 in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.1.4.001 SIT and related technologies to manage major insect plant pests	Improved methods and strains, feasibility assessments and implementation of area-wide integrated programmes, design of rearing facilities, post-harvest treatments, guidelines, databases, models, training and technical support to TC projects.
2.1.4.002 Management of livestock insect pests for sustainable agriculture	Improved procedures to mass-rear, sterilize and release sterile flies; capacity building; geo-genetic assessments and feasibility assessments; strategy and policy advice; harmonized approaches among key international partners; and technical support to TC projects.

Title	Main Planned Outputs
2.1.4.003 Development of the SIT for control of disease transmitting mosquitoes	Methodologies for medium scale rearing and sterilization of *Aedes albopictus* and *Anopheles arabiensis*; understanding of mosquito genetics as a basis to develop sexing systems; male mosquito behaviour assessments; and training and technical support to TC projects.

Subprogramme 2.1.5 Crop Improvement for Intensification of Agricultural Production Systems

Objectives:

— Enhance Member State capabilities to ensure agricultural and environmental sustainability under climate change and variability, while intensifying and diversifying crop production systems, through developing and applying methodologies for mutation breeding and efficiency enhancing biotechnologies.

Outcome	Performance Indicator
• Member State crop breeding programmes enabled to apply methodologies integrating mutation induction and efficiency enhancing biotechnologies for breeding improved varieties.	• Number of Member States supported in the use of nuclear techniques in crop improvement.

Programmatic changes and trends: This is a new subprogramme in the biennium. The activities in Subprogramme 2.1.5 were previously included in Subprogramme 2.1.1; however they have been separated out in order to reflect the specialized nature of these activities and to address pointed requests for adaptive research and development in mutation breeding techniques and intensification of agricultural production systems. Plant breeding and genetics (PBG) addresses the problems of refurbishing and installing stand-alone mutation induction devices and of meeting new challenges in plant breeding brought about by climate change. The division into two sub-programmes handled by two separate Sections (i.e. PBG and Soil and Water Management and Crop Nutrition (SWMCN)) provides clear focus areas and tasks that fit better into the new AIPS-Hyperion system. The existing cooperation between PBG and SWMCN will be continued through co-implementation of CRPs and TC projects.

Resource changes and trends: As this is a new subprogramme, the proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of €1 948 677 in 2014, as compared with 2013, and a decrease of 1% (€10 683) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.1.5.001 Mutation induction for better adaptation to climate change	Improved mutant germplasm (yield, quality, nutrition, commercial traits) as breeding resources with broadened adaptability to climatic stresses; informational materials; and training of Member State personnel.
2.1.5.002 Integrated techniques for mutation breeding and biodiversity	Protocols for and guidelines on enhancing the efficiency of mutation detection and genetic resources; trained scientists; and characterized mutant genetic resources available for distribution.

Programme 2.2 Human Health

Rationale: Nuclear and radiation techniques are used in the diagnosis and treatment of a large number of health problems or to complement non-nuclear techniques. The programme's scope includes the use of stable isotope techniques to combat malnutrition, diagnostic imaging modalities and radiation based treatment techniques in the framework of a sustainable quality management system to ensure the safety of patients, workers and members of the public. Imaging has become important in managing non-communicable diseases, which account for more than half the causes of death worldwide.

Enhancing Member State capabilities in the clinical utilization of advanced radiotherapy technologies in the curative and palliative treatment of cancer as well as applications of radiation biology will continue to be a focus of the programme. Implementation of imaging and treatment modalities require medical physics support, including the development of harmonized QA guidelines and dosimetry protocols, and the provision of dosimetry services to ensure appropriate clinical outcomes and a reduction of risk of error, accidents and misdiagnosis.

Efforts to enhance the quality and accessibility of education materials will continue, in particular to provide the professional medical community the opportunity to keep abreast of the fast changing developments in the field. Emphasis is being placed on women's health, in particular in the area of nutrition, which contributes to gender mainstreaming. One of the programme's pillars is prevention through seeking to ensure adequate intake of nutrients during the first 1000 days after conception. A new area to be probed is the effect of climate change on nutrition.

Objectives:

— To enhance capabilities in Member States to address needs related to the prevention, diagnosis and treatment of health problems through the development and application of nuclear techniques within a QA framework.

Outcomes	Performance Indicators
• Increased use of nuclear and stable isotope based techniques in human health as a result of the support provided by the Agency.	• Number of institutions in Member States that use nuclear techniques in radiation medicine. • Number of institutions in Member States that use nuclear techniques in nutrition.
• Enhanced capabilities of Member States to implement QA programmes.	• Number of institutions in Member States that use Quality Assurance Team for Radiation Oncology (QUATRO), Quality Assurance in Nuclear Medicine (QUANUM), and Quality Assurance Audit for Diagnostic Radiology Improvement and Learning (QUAADRIL).

Lessons learned from reviews, assessment, evaluations:

- Investment in new technology is not always accompanied by adequate investment in human resource development in Member States. Additional efforts should be deployed to strengthen the central role for capacity building, especially the transition to new technology.
- The implementation of Agency guidelines to enhance QA in Member States is challenging owing to the limited resources that are dedicated to quality improvement. There is a need to increase the Agency's efforts to raise awareness of the need to promote QA in Member States.
- Agency efforts to develop curricula and didactic materials in close collaboration with educationists will be reinforced.

Specific criteria for prioritization:

1. Activities that support Member States in the safe transitioning to new and proven modalities, including those relating to capacity building of professionals.
2. Activities designed to support the implementation of existing technologies in Member States.
3. Emerging nuclear technologies that reflect priorities identified by individual Member States.

Subprogramme 2.2.1 Nutrition for Improved Human Health

Objectives:

— To enhance Member State capabilities to combat malnutrition and environment related nutrition issues for better health throughout the life cycle.

Outcomes	Performance Indicators
• Increased Member State ability to use nuclear techniques for sustainable and efficient strategies to combat malnutrition in all its forms.	• Number of institutions in Member States using nuclear techniques to develop and evaluate nutrition strategies for better health throughout the life cycle.
• Increased number of nutritionists and public health professionals using nuclear techniques in nutrition and related public health issues.	• Number of nutritionists and public health professionals trained in the application of nuclear techniques in nutrition.

Programmatic changes and trends: The subprogramme will focus on nutritional issues throughout the life cycle. There will be continued emphasis on nutrition during the first 1000 days after conception, to reflect increased attention on early life nutrition and the prevention of non-communicable diseases later in life. New areas include food based agriculture interventions for improved nutrition in collaboration with FAO and other stakeholders. In addition, attention will be given to nutrition and related environmental issues, particularly with regard to climate change. There will be a continued focus on capacity building through support to Doctoral CRPs that will contribute to training of future policy makers/leaders in nutrition. Given the current budget reduction, activities will be slightly reduced in 2015, notably in terms of CRP activities. Some tasks may be restored if extrabudgetary funds become available.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 11% (€202 161) in 2014 as compared with 2013, and a decrease of 4% (€56 644) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.2.1.001 Nutrition through the life cycle	Guidelines and on-line education resources, reports and peer reviewed publications, inputs to TC projects.

Subprogramme 2.2.2 Nuclear Medicine and Diagnostic Imaging

Objectives:

— To improve the management of cancer, cardiac and other non-communicable diseases by enhancing professional capabilities to effectively implement nuclear medicine and integrated diagnostic imaging practices.

Outcomes	Performance Indicators
• Increased capacity to manage major health conditions such as cardiovascular disease and cancer by using nuclear and imaging techniques and Agency standards/guidelines.	• Number of institutions in Member States applying nuclear medicine and diagnostic imaging procedures volunteering to participate in Agency database surveys.
• Increased capacity to provide more advanced diagnostic procedures.	• Number of studies in nuclear cardiology. • Number of positron emission tomography (PET)/ computed tomography (CT) studies in oncology.

Programmatic changes and trends: Requests to support medical applications of nuclear techniques are steadily increasing, as evidenced by the continuous increase in the number of TC projects. The subprogramme will continue its focus on integrated diagnostic medical imaging, including radiological techniques such as CT and magnetic resonance imaging (MRI) to tackle chronic diseases such as cardiac disorders and cancer, which are also becoming one of the new focuses of the WHO. Applications such as PET/CT, single-photon emission computed tomography (SPECT)/CT, CT and MRI, and their management, will be addressed from both normative and research perspectives. The main outputs will be guidance documents and web based e-learning resources; and from a research point of view, new CRPs have been planned to cover areas of interest to Member States.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 6% (€121 031) in 2014 as compared with 2013, and a small decrease of €1 678 in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.2.2.001 Nuclear medicine in diagnosis and therapy of non-communicable diseases	Guidance documents, guidelines, standard operating procedures (SOPs), international conference, and results of CRPs.
2.2.2.002 Educational resources for use of nuclear techniques in human health	Review and update of the Human Health Campus; update of the Nuclear Medicine Database (NUMDAB), establishment of a multipurpose laboratory for centralized data collection and preparation of e-learning materials; preparation of webinars and training materials; and harmonization of the nuclear medicine training curriculum.

Subprogramme 2.2.3 Radiation Oncology and Cancer Treatment

Objectives:

— To enhance Member State capabilities to establish sound policies for radiotherapy and cancer treatment, and other applications of radiation in human health, and to ensure the effective, efficient and safe utilization of current and future advanced radiotherapy technologies.

Outcome	Performance Indicators
• Improved management of cancer patients through implementation of evidence based approaches and Agency standards.	• Number of radiotherapy institutions in Member States applying Agency guides and standards through active collaboration with the Agency. • Number of modules, courses and other training materials made available to Member States.

Programmatic changes and trends: Consistent with the overall objectives of the Human Health programme, the subprogramme will pursue modern mechanisms for the delivery of training in low resource environments, including e-learning strategies. New areas include novel techniques (e.g. intensity modulated radiation therapy, image-guided radiation therapy, stereotactic radiotherapy, intra-operative radiotherapy, TomoTherapy, applied radiation biology), and their feasibility for effective use in developing countries will be explored. The subprogramme will emphasize the use of radiotherapy in paediatric oncology in developing countries and other areas of interest such as dose fractionation and brachytherapy in prostate cancer. Some activities may be undertaken if extrabudgetary funds become available.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of €8 505 in 2014, as compared with 2013, and a small decrease of €925 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
2.2.3.001 Clinical radiation oncology	Agency documents, peer reviewed publications, databases, teaching materials, and e-learning resources.
2.2.3.002 Biological effects of radiation	Production of training materials; provision of expertise to implement clinical trials utilizing novel strategies; and research progress in radiation sterilization in tissue banking.

Subprogramme 2.2.4 Dosimetry and Medical Physics for Imaging and Therapy

Objectives:

— To enhance the capability of Member States to implement radiation imaging and treatment modalities safely and effectively.

Outcomes	Performance Indicators
• Enhanced QA and dosimetry in national calibration laboratories and hospitals in Member States through the use of the Agency's dosimetry services.	• Number of facilities in Member States that use the Agency's dosimetry services.
• Increased use by Member States of Agency guidelines on dosimetry and medical radiation physics and on establishing QA systems to optimize patient diagnosis and treatment.	• Number of facilities in Member States that use the Agency's guidelines on dosimetry and QA/quality control (QC). • Number of facilities in Member States that use the Agency's guidelines on capacity building.

Programmatic changes and trends: This biennium will focus on the update of QA/QC guidance in medical physics, the consolidation of external auditing mechanisms and support to Member States for the implementation of harmonized protocols for new technology and capacity building. The Agency dosimetry services provided to Member States through laboratory activities will be enhanced with the introduction of a new dosimetry auditing technology. Support will be provided for research and coordination activities to test and improve dosimetry protocols and QA/QC guidelines. The implementation of clinical training programmes in medical physics will be strengthened through collaborative efforts with professional societies and educational institutions. Support will be provided for the development of specific training packages for medical physicists involved in nuclear or radiological emergencies, if extrabudgetary funds become available.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of €8 068 in 2014 as compared with 2013, and an increase of 2% (€59 247) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.2.4.001 Calibration and auditing services	Results of thermoluminescence dosimetry (TLD) postal audit service; resolution of discrepancies of beam calibrations in Member States; updated international dose external audits (IDEA) database.
2.2.4.002 Developments in radiation dosimetry	Agency publications and training materials on radiation dosimetry.
2.2.4.003 Clinical medical radiation physics	Publications on guidelines and education materials for medical radiation imaging and treatment, and methodologies on auditing procedures in radiation medicine.

Programme 2.3 Water Resources

Rationale: Water resources management requires multidisciplinary approaches based on physical and social sciences that must be underpinned strongly by scientific data on the occurrence and distribution of surface and groundwater resources. The need for scientifically sound water resources assessment has been recognized for more than a century, but comprehensive national assessments (including of groundwater) are still lacking, limiting the ability of Member States to fully use their water resources to meet the demand for water supply. Isotope techniques in hydrology — based upon 'fingerprints' of radioactive and stable isotopes in water — help to rapidly and cost effectively assess and manage water resources. Continued Agency activities in this field are necessitated by a lack of sufficient capacity for using isotope hydrology in most countries. Programme priorities are to increase the capacity and use of isotopes for the assessment and management of water resources.

Objectives:

— To enable Member States to use isotope hydrology for the assessment and management of their water resources, including the characterization of climate change impacts on water availability.

Outcomes	Performance Indicators
• Sustainable water resources management and related policy development in Member States increasingly based on a scientifically sound knowledge base.	• Availability and use of isotope methodologies and global isotope data for basin and groundwater management, including adaptation to climate change.
• Member States with trained human resources and related infrastructure for isotope hydrology.	• Increased access to Agency databases. • Increased ability of Member States to produce stable isotope and tritium analyses of water samples.

Lessons learned from reviews, assessment, evaluations: A key lesson has been to formulate activities based on specific gaps where isotope techniques and the Agency have an advantage and make the most important contributions to the international water agenda. Accordingly, tasks related to stable isotopes, geothermal reservoirs and dam leakage were reduced. Routine stable isotope analysis has been nearly eliminated in the IAEA Isotope Hydrology Laboratory. The reorganization of the laboratory allowed increased activities in radioisotope applications with existing resources. The use of gap analysis led to collaborative tasks with the World Bank and the Global Environment Facility (GEF).

Specific criteria for prioritization:

1. Agency's services of interest to Member States, as expressed in General Conference resolutions.
2. Comparative advantages of nuclear technology compared with non-nuclear alternatives for the proposed application.
3. Member States' prioritization of their development needs and efforts.

Subprogramme 2.3.1 Isotope Data Networks for Hydrology and Climate Studies

Objectives:

— To provide Member States access to global isotope data and mapping products, and to disseminate isotope hydrology information through publications and training.

Outcome	Performance Indicators
• Increased ability of Member State institutions to utilize isotope techniques in water resources management.	• Member State access and contribution to the Agency's global isotope networks. • Enhanced capacity of Member States to use isotope hydrology techniques.

Programmatic changes and trends: Subprogramme 2.3.1 maintains its focus on the operation of global water isotope networks and the strengthening of Member State capacity for conducting stable isotope analyses by laser absorption spectrometry. The changes introduced in this cycle include facilitating easier access to global and regional isotope maps, on-line access to water isotope data and related products, publication of technical documents on isotope hydrology, and access to the proceedings of the quadrennial Isotope Hydrology Symposium, planned for spring 2015. The subprogramme retains other activities related to training, e-learning and information exchange.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 1% (€6 046) in 2014 as compared with 2013, and an increase of 10% (€87 568) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.3.1.001 IAEA isotope data networks for precipitation, rivers and groundwater	Updates of the Water Isotope System for Data Analysis, Visualization, and Electronic Retrieval (WISER) databases and new spatial analysis/mapping products.
2.3.1.002 Synthesis and dissemination of global isotope and related data	Mapping products, newsletters, atlases, training programmes/e-learning products with the UNESCO-IHE Institute for Water Education (UNESCO-IHE).

Subprogramme 2.3.2 Isotope Based Assessment and Management of Water Resources

Objectives:

— To enable Member States to use isotope techniques for local scale to national scale water resources assessment and surface or groundwater management.

Outcome	Performance Indicators
• Increased use of isotope hydrology by Member States as part of their water resources assessment efforts.	• Number of Member States using isotopes as part of their water resources assessment and management efforts within the TC programme. • Tested and/or improved isotope methods for understanding river hydrology and managing elevated nutrient levels.

Programmatic changes and trends: Subprogramme 2.3.2 has been reformulated for this biennium to focus on the growing Member State need for integrated water resources assessments at the national and regional scales. This reformulation is consistent with the recent OIOS comparative assessment, which emphasized the Agency's beneficial role in helping to conduct assessments through the promotion of isotope techniques through TC projects, as well as collaborative projects with other United Nations agencies and non-governmental organizations (NGOs). Given the current resources available and consistent with the OIOS review recommendations, dam safety, geothermal, and coastal aquifer salinity problems will be phased out.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 23% (€328 511) in 2014 as compared with 2013 and a decrease of 7% (€76 898) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.3.2.001 Comprehensive assessment of resources	National assessment reports for participating Member States.
2.3.2.002 Management strategies for groundwater and surface water resources	Transboundary assessment reports.

Subprogramme 2.3.3 Radioisotope Applications for Hydrology

Objectives:

— To enable Member State use of radioisotopes of carbon and noble gases for river and groundwater management.
— To strengthen Member State capacity for the analysis of environmental tritium in water samples.

Outcomes	Performance Indicators
• Improved assessment and management of river and groundwater systems using radioisotopes.	• Completion of CRPs and TC projects where noble gas isotopes are used with Agency assistance.
• Improved Member State capacity for the analysis of environmental tritium in water samples.	• Ability of Member States to produce high quality tritium isotope data in their own laboratories.

Programmatic changes and trends: Subprogramme 2.3.3 includes a major focus on radionuclide applications for water resources management, consistent with the recommendations of the OIOS comparative assessment. New activities related to long lived and short lived radionuclides for groundwater dating and recharge assessments, and pollution vulnerability studies make up the core of this subprogramme. Three CRPs (including two new CRPs) are included to improve radionuclide methods in hydrology and utilize current methods to address major surface water and groundwater resource issues in Member States. Stable isotopes are no longer a focus of this subprogramme.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 24% (€275 230) in 2014 as compared with 2013, and a decrease of 1% (€10 670) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.3.3.001 Characterization of fossil groundwater using long-lived radionuclides	Expanded network of Member State laboratories providing isotope analysis for TC projects; and measurement protocols for isotope sampling and analysis.
2.3.3.002 Noble gas isotopes for groundwater recharge and pollution studies	Improved sampling methods for helium isotope analysis; and use of helium and other noble gases for water resource assessments.

Programme 2.4 Environment

Rationale: Understanding and protecting the ability of the natural environment to deliver essential services is considered in the Millennium Development Goals (MDGs) as an integral part of the development process. In particular, MDG 7 has the mandate to "Ensure environmental sustainability". Major and cumulative pressures on the environment such as overexploitation, habitat loss, invasive species, and pollution directly threaten both terrestrial and marine ecosystems, the services they deliver, and sustainable development more broadly. As emphasized in the "Rio+20 outcome document", an increasingly important environmental issue is the impact of climate change on environmental sustainability and natural resources.

Nuclear and isotopic techniques have an important role to play in the management of the environment and in the development of mitigation/adaptation strategies. The global objective of the programme is to enhance the capacity of Member States to understand marine, terrestrial and atmospheric environmental processes and dynamics, and to identify environmental problems caused by radioactive and non-radioactive pollutants and climate change, using nuclear and isotopic techniques.

The activities of the programme support international trade, ecological sustainability, effective environmental risk assessment and remediation of polluted environments, with corresponding improvements in the analytical capabilities of Member State laboratories involved through CRPs, Collaborating Centres and TC projects at the national, regional and interregional levels. The programme further enhances capacity building in Member States dealing with elevated levels of radioactive or other environmental contaminants, whether of natural or anthropogenic origin, for sustainable management of terrestrial, marine and atmospheric environments and their natural resources. It also provides scientific information and assistance to international organizations such as Food and Agriculture Organization (FAO), the Organisation for Economic Co-operation and Development (OECD), United Nations Environment Programme (UNEP), UNESCO Intergovernmental Oceanographic Commission, United Nations Development Programme (UNDP), United Nations Industrial Development Organization (UNIDO), World Health Organization (WHO) and World Meteorological Organization (WMO).

Objectives:

— To identify environmental problems caused by radioactive and non-radioactive pollutants and climate change, using nuclear, isotopic and related techniques, and to propose mitigation/adaptation strategies and tools.
— To enhance the capability of Member States to develop strategies for the sustainable management of terrestrial, marine and atmospheric environments and their natural resources, in order to address effectively and efficiently their environment related development priorities.

Outcomes	Performance Indicators
• Enhanced capability of Member States to use nuclear, isotopic and related techniques for identifying environmental problems caused by radioactive and non-radioactive pollutants and climate change and for developing mitigation/adaptation strategies and tools.	• Number of Member States participating in national and regional projects of the 2014–2015 TC cycle. • Number of new certified materials produced and analytical methodologies published and/or validated.
• Enhanced capability of Member States to develop strategies for the sustainable management of terrestrial, marine and atmospheric environments and their natural resources in order to address effectively and efficiently their environment related development priorities.	• Number of scientific communications in international conferences, workshops and meetings, number of newly published scientific papers related to management of terrestrial, marine and atmospheric environments and their natural resources in climate and environmental change scenarios. • Implementation rate of Programme 2.4 during the 2014–2015 biennium.

Lessons learned from reviews, assessment, evaluations: The delivery of the sub-programmes will be further enhanced through strengthening their activities.

This includes:

- Expanding reference materials to respond to the needs of Member States as expressed by steeply increasing sales.
- Further integrating land, coastal, marine and atmospheric environmental studies to improve understanding of environmental processes.
- Strengthening environmental proxy studies to better understand climate and environmental changes, track sources of pollution, and better understand the related safety and socioeconomic impact on environmental sustainability and seafood management. Particular attention will be paid to the multi-stressor approach (ocean acidification, warming and hypoxia) and harmful algal blooms (HABs).
- Strengthening the capacity to respond to radiological emergencies.

These activities will be assisted by the establishment of a quality system that will provide a model for Member State laboratories.

Specific criteria for prioritization:

1. Activities that make a significant contribution to reaching the MDGs, with a special emphasis on MDG 7.
2. Activities that assist Member State laboratories through networking and development of guidelines, and enhance their environmental awareness using nuclear techniques.
3. Activities that support lowering technical barriers to trade and support the competitiveness of least developed and developing Member States (e.g. ocean acidification and HAB issues). Efforts are being made to focus on increasing the efficiency of programme delivery, in part by working more closely with Member State institutions via networks (e.g. Analytical Laboratories for the Measurement of Environmental Radioactivity (ALMERA)) as well as through IAEA Collaborating Centres and other partnerships at the national, regional and international levels. Quality of services will be emphasized and ensured through, for example, the development of guidelines and standards and the production of reference materials.

Subprogramme 2.4.1 IAEA Reference Products for Science and Trade

Objectives:

— To enhance the reliability and comparability of measurement results obtained by nuclear analytical techniques in Member State laboratories.

Outcome	Performance Indicators
• Enhanced capability of Member State laboratories to carry out sampling and measurement with the assistance of reference materials provided by the Agency.	• Number of Agency reference materials provided per year to Member State laboratories as an indicator of the acceptance and importance of IAEA activities. • Number of IAEA reference materials available on the web page of the Reference Products for Science and Trade subprogramme.

Programmatic changes and trends: The restructuring of projects across the Programme resulted in an increase in the number of activities under Subprogramme 2.4.1. Reference materials and proficiency tests are core activities of the subprogramme. An additional feature is the preparatory work to establish an internal laboratory quality system at the Agency and to achieve accreditation of first analytical methods. This will enhance the credibility of the Agency as a provider of QA and QC products in the field of environmental related nuclear techniques.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 46% (€735 881) in 2014, as compared with 2013, and a small increase of €7 672 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
2.4.1.001 Provision of reference products and laboratory performance support	Production and sales of reference materials; conduct of proficiency tests; provision of reference procedures; consolidated Agency web site for customer interaction; and harmonization of Agency reference materials production and reference materials certification process.
2.4.1.002 Quality management and supporting network activities	Establishment of quality management at IAEA laboratories with full accreditation of a first analytical procedure; assistance and advice to Member State laboratories regarding their analytical performance; and operational ALMERA network of laboratories; and personnel trained.

Subprogramme 2.4.2 Nuclear Techniques to Understand Climate and Environmental Change

Objectives:

— To enhance the capability of Member States to develop and apply nuclear, isotopic and related techniques to assess climate and environmental changes and their effects on marine contamination by radioactive and non-radioactive pollutants.
— To enhance the capability of Member States to develop and apply nuclear and related techniques for identifying, monitoring and mitigating impacts of climate and environmental changes on marine and coastal resources.

Outcomes	Performance Indicators
• Enhanced capability of Member States to use nuclear, isotopic and related techniques for identifying, assessing and monitoring changes in pollution trends in relation to climate and environmental changes and for risk based assessment of impacts of carbon cycle changes and related ocean acidification.	• Number of Member States participating in national and regional projects of the 2014–2015 TC cycle and using nuclear and isotopic techniques to assess changes in pollution trends in relation to climate/environmental changes and risk based impacts of carbon cycle changes and related ocean acidification.
• Improved knowledge of climate and environmental changes and of impacts of ocean acidification on pollution levels and trends, bioaccumulation pathways of contaminants in coastal organisms, and ecological and socioeconomic vulnerability of ecosystems and organisms of ecological and economic value.	• Number of scientific communications in international conferences and newly published scientific papers on climate and environmental changes, and on impacts of ocean acidification, including ecological and socioeconomic vulnerability of ecosystems and biota. • Number of representatives in Member States actively searching for information on ocean acidification and potential socioeconomic impacts.

Programmatic changes and trends: The strengthened integration of the activities of Subprogramme 2.4.2 is reflected in the reorganized structure of its projects.

In particular:

- Nuclear and isotopic techniques continue to play a predominant role in radioecological and radiochemical studies for better understanding climate and environmental changes and related effects on pollution trends.

- Radioecological technologies are strengthened to better understand the safety and socioeconomic impacts of climate change on marine resource vulnerability; particular attention will be paid to ocean acidification, which remains one of the most threatening consequences for the marine environment associated with global warming; investigations on acidification processes and environmental and socioeconomic impacts will be strengthened and will support the activities of the Ocean Acidification – International Coordination Centre (OA-ICC) established at NAEL with the support of the Peaceful Uses Initiative (PUI).

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 7% (€92 404) in 2014 as compared with 2013, and a small decrease of €2 072 in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.4.2.001 Isotopic tools to study climate and environmental change	Publications (technical reports, Agency and non-Agency publications).
2.4.2.002 Assessing carbon cycle and impacts of ocean acidification	Agency and non-Agency publications, newsletters, RCM report, TC projects backstopping, training course reports, contributions to joint activities under international projects, and cooperation with other United Nations agencies and ocean acidification programmes.

Subprogramme 2.4.3 Nuclear Techniques for Development of Land, Coastal and Marine Ecosystems

Objectives:

— To enhance the capability of Member States to develop and apply nuclear, isotopic and related techniques for monitoring marine contamination by radioactive and non-radioactive pollutants, including the assessment of their origins and dispersion capacities in relation to oceanographic processes.
— To enhance the capability of Member States to develop and apply nuclear and related techniques for identifying, monitoring and mitigating impacts of marine contaminants and assessing the impacts and fate of radioactive and non-radioactive contaminants and HAB toxins on coastal resources, fisheries and aquaculture.

Outcomes	Performance Indicators
• Enhanced capability of Member States to use nuclear and related techniques for monitoring the occurrence and dispersion of radioactive and non-radioactive pollution and for risk based assessment of impacts of radioactive and non-radioactive contaminants, including biotoxins, in their marine and coastal environments.	• Number of Member States participating in national and regional projects of the 2014–2015 TC cycle and using nuclear and isotopic techniques to assess radioactive and non-radioactive pollution and risk-based assessment of impacts of contaminants, including biotoxins, in their marine and coastal environments.
• Improved knowledge of pollutant origin identification, dispersion predictive models, contaminant pathways, transfer factors and rates of radionuclides, trace metals, biotoxins and organic contaminants in marine and coastal organisms, including species of commercial value and potential biomonitors.	• Number of scientific communications in international conferences, workshops and meetings; number of newly published scientific papers on experimentally derived transfer factors, uptake pathways, behaviour and fate of radionuclides, trace metals, biotoxins and organic contaminants in marine organisms.

Programmatic changes and trends: The restructuring of projects across the Programme has resulted in a decrease in the number of activities in Subprogramme 2.4.3.

This integration of activities is reflected in the reorganized structure of the projects. In particular:

- Nuclear and isotope techniques will play a predominant role in radioecological and chemical studies for monitoring of the environment and for management of marine resources and seafood.
- Radioecological and environmental tracer studies have been strengthened to better understand changes in environments and the related safety and socioeconomic impacts on environmental sustainability and seafood resource management; particular attention will be paid to HAB toxins.
- The use of stable isotopes has been expanded to include environmental assessment studies and tracking of sources of environmental pollution by organic and inorganic contaminants.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 31% (€698 446) in 2014 as compared with 2013, and a decrease of 3% (€53 375) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.4.3.001 Radioactive and non-radioactive pollution and impact on environment	Published reports, papers, manuals and guidelines on radionuclide techniques in coastal environmental studies reflecting increased knowledge of land–ocean interaction in the water cycle; and isotopic methods for environmental studies.

Title	Main Planned Outputs
2.4.3.002 Nuclear techniques for marine resource management and seafood safety	Agency and non-Agency publications, RCM report, TC projects backstopping, training course reports, contributions to joint activities under international projects, and cooperation with other United Nations agencies and HABs programmes.

Subprogramme 2.4.4 Applying Analytical Techniques for the Marine and Terrestrial Environment

Objectives:

— To provide technical support and expertise to Member States on the application of nuclear and isotopic techniques for environmental monitoring studies, and to increase Member State capacity to understand transfer processes, behaviour and impact of pollutants and radionuclides in terrestrial, aquatic and atmospheric ecosystems.
— To increase the number of methods for determination of nuclear and non-nuclear pollutants in terrestrial and marine environmental samples for monitoring purposes.
— To develop recommended procedures for determination of nuclear and non-nuclear pollutants in the environment and to provide guidelines on the behaviour and impact of radionuclides in the environment.

Outcomes	Performance Indicators
• Improved capacity of Member State laboratories to apply nuclear and non-nuclear techniques for terrestrial and marine monitoring.	• Number of training courses with participation of Member States on the application of nuclear and non-nuclear techniques for marine and terrestrial monitoring.
• Improved capacity of Member States to understand transfer processes, behaviour and impact of pollutants and radionuclides in various terrestrial, aquatic and atmospheric ecosystems.	• Number of publications on the behaviour and impact of contaminants in the environment. • Number of Member States that have improved their capacity to understand transfer processes, behaviour and impact of pollutants and radionuclides in various terrestrial, aquatic and atmospheric ecosystems.
• New recommended procedures for determination of nuclear and non-nuclear pollutants in the environment; and guidelines on the behaviour and impact of radionuclides in the environment.	• Number of novel low level, high accuracy and high precision analytical procedures developed to produce 'fit for purpose' monitoring results.

Programmatic changes and trends: Focus will continue on assessment of the behaviour and transport of radionuclides in the terrestrial environment; and on remediation activities in contaminated areas. Also included is the study of contaminants in the marine and coastal area, including contaminants such as radionuclides, persistent organic pollutants and trace elements. Understanding the application of nuclear techniques and methodologies for monitoring contaminants in the environment is a key component of this subprogramme. Information transfer and preparation of guideline documents will be a high priority for the subprogramme.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 3% (€24 566) in 2014, as compared with 2013, and an increase of 6% (€47 775) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.4.4.001 Developing methodologies for environmental monitoring and assessment	Analytical methodologies for determination of nuclear and non-nuclear contaminants; capacity building in Member States to improve knowledge of environmental monitoring, assessment and remediation.

Programme 2.5 Radioisotope Production and Radiation Technology

Rationale: Radioisotope products and radiation technology applications continue to contribute significantly to improved health care, food safety, a cleaner environment and industrial growth. This programme will cater to the needs of Member States in the above areas, with an emphasis on accreditation and capacity building for the production of radioisotopes and radiopharmaceuticals, and radiation technology applications. The guidelines, technical documents, and web based educational materials on QC/QA practice produced will strengthen Member State capabilities to locally produce radiopharmaceuticals, and to apply radiation technology. In health care, projects on diagnostic (technetium-99m (^{99m}Tc), and gallium-68 (^{68}Ga)) and therapeutic (lutetium-177 (^{177}Lu)) radiopharmaceuticals addressing neurodisorders, infections and cancer will be carried out in close coordination

with Programme 2.2. The potential of accelerator produced ^{99m}Tc will be explored as an option to combat supply shortages.

Radiation processing is a proven effective mode of new material development and microbe inactivation. In this programme, development of new high performance materials for food packaging, health care and tissue engineering will be pursued in coordination with Programmes 1.4, 2.1 and 2.2. Radiation processing is a 'green technology', yielding clean, sterile products devoid of toxic additives used in conventional processes. It is used in the mitigation of bacterial contamination for treating wastewater for reuse in industrial, agricultural and horticultural sectors; for countering threats from biohazard contamination introduced either deliberately or inadvertently into areas of public exposure; and for preserving cultural heritage objects. Radiation based techniques are powerful tools for QA and for optimization of industrial processes. Use of emerging techniques in multi-phase systems and 3-D imaging in petrochemical and mining industries will be addressed.

Objectives:

— To strengthen national capabilities to produce radioisotope products and radiopharmaceuticals and to apply radiation technology, thus contributing to improved health care and safe, clean industrial development in Member States.

Outcome	Performance Indicators
• Enhanced Member State capability to apply radioisotopes/radiopharmaceuticals and radiation technology as tools for improved health care management and sustainable industrial practices.	• Number of Member State laboratories adapting/contributing to developing and improving the methodologies for various products, techniques and applications. • Number of technical publications, databases, guidelines and training materials made available to Member States.

Lessons learned from reviews, assessment, evaluations: The project activities under this programme will have a strong focus on supporting human resources development and QA measures by providing guidelines, protocols, procedures and training materials to foster the application of radioisotope products and radiation technology, as well as capacity building for local production capabilities in Member States. Close coordination of activities in the areas of radiopharmaceuticals with the Human Health programme and with the Food and Agriculture programme in the use of radiation processing technology to enhance food safety and trade will be further pursued and strengthened to deliver holistic support to Member States. Establishment of emerging radiation based techniques for industrial applications continues to be an area of importance for developing Member States.

Specific criteria for prioritization:

1. Activities where nuclear techniques have an established utility and a distinct advantage in meeting the needs and interests of Member States.
2. Projects that support emerging radioisotopes and radiation technology and to providing associated services and transfer of know-how.

Subprogramme 2.5.1 Radioisotope Products for Cancer Management and Non-communicable Diseases

Objectives:

— To improve Member State capabilities to locally produce radioisotopes and radiopharmaceuticals and to use them for supporting the management of cancer and other non-communicable diseases.

Outcome	Performance Indicators
• Enhanced benefit to a greater number of patients in developing Member States through increased availability of radioisotopes and radiopharmaceuticals for user centres.	• Number of Member State laboratories involved in developing and utilizing the methodologies for radioisotope and radiopharmaceutical production. • Number of technical documents on the above topics made available to Member States.

Programmatic changes and trends: Subprogramme 2.5.1 will focus on radioisotope products that can be produced locally, for example, accelerator based production of ^{99m}Tc as an alternative source of ^{99m}Tc in the event of interruptions in the supply of ^{99}Mo; it will also focus on ^{68}Ga, a PET radionuclide produced from ^{68}Ge/^{68}Ga generators that has had a significant impact in diagnostic nuclear medicine; and on the development of diagnostic and therapeutic radiopharmaceuticals with potential clinical applications. Joint activities on radiopharmaceuticals with the Human Health programme will be pursued. The functions will be normative to strengthen QA and regulatory compliance, for example, course delivery through web based accredited training in operational radiopharmacy, an increased focus on the publication of technical manuals, harmonized guidelines

and sharing of best practices, and efforts to address issues to encourage the worldwide availability of identified products and techniques.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 4% (€41 770) in 2014, as compared with 2013, and an increase of 3% (€29 453) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.5.1.001 Development and production of medical radioisotopes	Improved practices and guidelines on production of emerging radioisotopes using cyclotrons and non-HEU (high enriched uranium) based molybdenum-99 (^{99}Mo) or ^{99m}Tc production; and development of web based accredited training in operational radiopharmacy.
2.5.1.002 Development of diagnostic and therapeutic radiopharmaceuticals	Methodologies and protocols for the development and production of diagnostic and therapeutic radiopharmaceuticals having potential clinical applications (in coordination with NMDI/NAHU).

Subprogramme 2.5.2 Radiation technology for health care and industrial applications.

Objectives:

— To strengthen Member State capabilities to adopt and use radiation technology for the development of products for health care and for cleaner industrial processes and practices.

Outcome	Performance Indicators
• Increased national capabilities to use radioisotope techniques and radiation technology for efficient production of advanced materials for use in health care, food safety, and cleaner industrial processes.	• Number of Member State laboratories involved in developing and utilizing the methodologies for radiation processing, compositional analysis and industrial applications of radioisotope techniques. • Number of technical documents on the above topics made available to Member States.

Programmatic changes and trends: Greater support will be pursued to provide efficient services to Member States in establishing or improving quality management systems in electron beam and gamma facilities. There will be more activities aimed at: (i) demonstration of new radiation technologies proven in a limited number of countries for wider dissemination; (ii) provision of guidelines, protocols, procedures and training materials on radiation techniques and radiotracer applications; and (iii) capacity building in these areas in the Member States.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 2% (€25 871) in 2014, as compared with 2013, and a decrease of 2% (€29 453) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
2.5.2.001 Industrial applications of radioisotopes and radiation techniques	Manuals and training materials on sealed radiation source applications in industry and methodologies for application of large sample neutron activation analysis techniques for archaeological and art objects based on CRP findings.
2.5.2.002 Radiation technology for health care and environmental applications	Methodologies and standard procedures for production of radiation processed products for application for food safety and in healthcare and industry; to enhance Member State capabilities to apply radiation technology for remediation of pollutants and decontamination of biological agents.

Medium Term Strategy

MTS Sub-objectives	Projects
B01 Improve human health by supporting: the use of nuclear techniques in nutrition; the safe and effective use of radiation medicine for the diagnosis and treatment of patients; the development of integrated, comprehensive national programmes through partnerships, especially the WHO–IAEA Joint Programme on Cancer Control; and the education and training of practitioners	2.2.1.001 Nutrition through the life cycle 2.2.2.001 Nuclear medicine in diagnosis and therapy of non-communicable diseases 2.2.2.002 Educational resources for use of nuclear techniques in human health 2.2.3.002 Biological effects of radiation 2.2.3.001 Clinical radiation oncology 2.2.4.002 Developments in radiation dosimetry 2.2.4.001 Calibration and auditing services 2.2.4.003 Clinical medical radiation physics
B02 In partnership with FAO, facilitate the use of nuclear technologies in Member States to contribute to global food security	2.1.1.001 Land management for climate smart agriculture 2.1.1.002 Water management for resource-saving agriculture 2.1.2.001 Improving animal production and breeding 2.1.2.002 Decreasing transboundary animal and zoonotic disease threats 2.1.3.001 Food irradiation applications using novel radiation technologies 2.1.3.002 Traceability for food safety, quality & to enhance international trade 2.1.3.003 Preparation & response to radiological emergencies (food & agriculture) 2.1.4.001 SIT and related technologies to manage major insect plant pests 2.1.4.002 Management of livestock insect pests for sustainable agriculture 2.1.4.003 Development of the SIT for control of disease transmitting mosquitoes 2.1.5.001 Mutation induction for better adaptation to climate change 2.1.5.002 Integrated techniques for mutation breeding and biodiversity
B03 Assist Member States in the use of isotopic techniques for water resources mapping and assessment to enhance water security	2.3.1.001 IAEA isotope data networks for precipitation, rivers and groundwater 2.3.1.002 Synthesis and dissemination of global isotope and related data 2.3.2.001 Comprehensive assessment of resources 2.3.2.002 Management strategies for groundwater and surface water resources 2.3.3.001 Characterization of fossil groundwater using long-lived radionuclides 2.3.3.002 Noble gas isotopes for groundwater recharge and pollution studies

MTS Sub-objectives	Projects
B04 Facilitate the utilization of isotopes and nuclear techniques to gain a better understanding of the environment and to support efforts to address environmental sustainability	2.4.1.001 Provision of reference products and laboratory performance support 2.4.1.002 Quality management and supporting network activities 2.4.2.001 Isotopic tools to study climate and environmental change 2.4.2.002 Assessing carbon cycle and impacts of ocean acidification 2.4.3.001 Radioactive and non-radioactive pollution and impact on environment 2.4.3.002 Nuclear techniques for marine resource management and seafood safety 2.4.4.001 Developing methodologies for environmental monitoring and assessment
B05 Support capacity building in the areas of radioisotope and radiopharmaceutical production and application of radiation technologies	2.5.1.001 Development and production of medical radioisotopes 2.5.1.002 Development of diagnostic and therapeutic radiopharmaceuticals 2.5.2.001 Industrial applications of radioisotopes and radiation techniques 2.5.2.002 Radiation technology for health care and environmental applications
B06 Ensure that Agency laboratories are able to meet the needs of Member States and upgrade and modernize the laboratories as needed.	2.0.0.004 Enhancing capabilities of the nuclear sciences and applications laboratories at Seibersdorf
B08 Promote applications of advanced nuclear/radiation techniques	2.0.0.001 Overall management, coordination and common activities 2.0.0.002 Management of the coordinated research activities
C01 Enhance the global nuclear safety and security framework	2.0.0.003 AP - IAEA Action Plan on Nuclear Safety

The following MTS Sub-objectives are associated to projects only as secondary:

- D06 Promote regional cooperation among Member States in response to transboundary development challenges.
- F06 Use the International Public Sector Accounting Standards (IPSAS) to provide transparent reporting to Member States on the exact cost of operations and projects.

Major Programme 2 – Nuclear Techniques for Development and Environmental Protection
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 15

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
2.0.0.001 Overall management, coordination and common activities	1 766 720	-	-	1 992 868	-	-
2.0.0.002 Management of the coordinated research activities	708 758	-	-	708 758	-	-
2.0.0.003 AP - Nuclear Safety Action Plan (NSAP)	116 887	969 296	-	116 887	969 296	-
2.0.0.004 Enhancing capabilities of the nuclear sciences and applications laboratories at Seibersdorf	514 000	-	-	514 000	-	-
2.S Corporate shared services	4 042 608	49 539	12 772	3 815 960	50 784	12 772
	7 148 972	**1 018 836**	**12 772**	**7 148 473**	**1 020 080**	**12 772**
2.1.1.001 Land management for climate smart agriculture	1 094 812	110 765	13 366	1 139 553	121 214	185 490
2.1.1.002 Water management for resource saving agriculture	925 303	187 644	49 344	942 291	187 644	69 106
2.1.1 Sustainable Land and Water Management	**2 020 115**	**298 409**	**62 710**	**2 081 843**	**308 858**	**254 597**
2.1.2.001 Improving animal production and breeding	874 207	52 134	-	948 138	52 134	-
2.1.2.002 Decreasing transboundary animal and zoonotic disease threats	1 381 077	392 593	-	1 263 997	392 593	-
2.1.2 Sustainable Intensification of Livestock Production Systems	**2 255 283**	**444 728**	**-**	**2 212 135**	**444 728**	**-**
2.1.3.001 Food irradiation applications using novel radiation technologies	357 979	28 229	-	469 186	28 229	-
2.1.3.002 Traceability for food safety, quality & to enhance international trade	1 048 174	529 682	-	928 716	370 794	-
2.1.3.003 Preparation & response to radiological emergencies (food & agriculture)	141 097	28 229	436 138	141 097	28 229	536 440
2.1.3 Improvement of Food Safety and Food Control Systems	**1 547 250**	**586 139**	**436 138**	**1 538 999**	**427 252**	**536 440**
2.1.4.001 SIT and related technologies to manage major insect plant pests	1 739 527	312 328	-	1 730 216	312 328	-
2.1.4.002 Management of livestock insect pests for sustainable agriculture	1 141 100	199 473	-	1 104 129	199 473	-
2.1.4.003 Development of the SIT for control of disease transmitting mosquitoes	611 719	56 205	130 952	658 086	56 205	272 684
2.1.4 Sustainable Control of Major Insect Pests	**3 492 346**	**568 007**	**130 952**	**3 492 431**	**568 007**	**272 684**
2.1.5.001 Mutation induction for better adaptation to climate change	955 486	253 368	125 620	934 490	253 368	84 500
2.1.5.002 Integrated techniques for mutation breeding and biodiversity	1 024 554	208 053	331 220	1 034 570	208 053	84 500
2.1.5 Crop Improvement for Intensification of Agricultural Production Systems	**1 980 040**	**461 421**	**456 840**	**1 969 060**	**461 421**	**169 000**
2.1 Food and Agriculture	**11 295 034**	**2 358 704**	**1 086 640**	**11 294 468**	**2 210 265**	**1 232 721**
2.2.1.001 Nutrition through the life cycle	1 665 791	-	50 708	1 608 233	-	144 238
2.2.1 Nutrition for Improved Human Health	**1 665 791**	**-**	**50 708**	**1 608 233**	**-**	**144 238**
2.2.2.001 Nuclear medicine in diagnosis and therapy of non-communicable disease	1 403 367	-	192 976	1 484 825	-	145 976
2.2.2.002 Educational resources for use of nuclear techniques in human health	644 138	119 997	-	560 899	119 997	-
2.2.2 Nuclear Medicine and Diagnostic Imaging	**2 047 504**	**119 997**	**192 976**	**2 045 723**	**119 997**	**145 976**

Major Programme 2 – Nuclear Techniques for Development and Environmental Protection

Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 15

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
2.2.3.001 Clinical radiation oncology	1 196 314	-	25 000	1 235 515	-	25 000
2.2.3.002 Biological effects of radiation	604 810	55 589	-	564 153	59 420	-
2.2.3 Radiation Oncology and Cancer Treatment	**1 801 123**	**55 589**	**25 000**	**1 799 669**	**59 420**	**25 000**
2.2.4.001 Calibration and auditing services	1 107 304	-	76 540	1 065 925	-	93 477
2.2.4.002 Developments in radiation dosimetry	450 275	-	-	529 126	-	56 215
2.2.4.003 Clinical medical radiation physics	1 104 875	-	66 521	1 128 211	-	-
2.2.4 Dosimetry and medical physics for imaging and therapy	**2 662 454**	**-**	**143 061**	**2 723 262**	**-**	**149 692**
2.2.5.001 Programme management, coordination and assessment	-	-	-	-	-	-
2.2.5.002 Resource mobilization for cancer control	-	-	-	-	-	-
2.2.5.003 Outreach and partnerships for cancer control	-	-	-	-	-	-
2.2.5 Programme of Action for Cancer Therapy	**-**	**-**	**-**	**-**	**-**	**-**
2.2 Human Health	**8 176 873**	**175 586**	**411 745**	**8 176 887**	**179 417**	**464 905**
2.3.1.001 IAEA isotope data networks for precipitation, rivers, and groundwater	547 987	-	-	552 449	-	-
2.3.1.002 Synthesis and dissemination of global isotope and related data	344 163	-	-	429 441	-	-
2.3.1 Isotope Data Networks for Hydrology and Climate Studies	**892 150**	**-**	**-**	**981 890**	**-**	**-**
2.3.2.001 Comprehensive assessment of resources	604 844	-	88 832	605 124	-	88 832
2.3.2.002 Management strategies for groundwater and surface water resources	477 822	-	29 611	398 967	-	29 611
2.3.2 Isotope Based Assessment and Management of Water Resources	**1 082 666**	**-**	**118 442**	**1 004 091**	**-**	**118 442**
2.3.3.001 Characterization of fossil groundwater using long-lived radionuclides	534 168	-	-	541 796	-	-
2.3.3.002 Noble gas isotopes for groundwater recharge and pollution studies	928 034	-	178 563	909 381	-	178 563
2.3.3 Radioisotope Applications for Hydrology	**1 462 202**	**-**	**178 563**	**1 451 177**	**-**	**178 563**
2.3 Water Resources	**3 437 018**	**-**	**297 005**	**3 437 158**	**-**	**297 005**
2.4.1.001 Provision of reference products and laboratory performance support	1 467 925	108 140	186 932	1 449 170	108 140	151 186
2.4.1.002 Quality management and supporting network activities	903 617	47 243	187 425	930 168	47 243	-
2.4.1 IAEA Reference Products for Science and Trade	**2 371 542**	**155 383**	**374 356**	**2 379 338**	**155 383**	**151 186**
2.4.2.001 Isotopic tools to study climate and environmental change	680 713	9 449	442 827	616 481	9 449	403 908
2.4.2.002 Assessing carbon cycle and impacts of ocean acidification	736 735	178 729	511 719	798 836	178 729	320 601
2.4.2 Nuclear Techniques to Understand Climate and Environmental Change	**1 417 448**	**188 179**	**954 546**	**1 415 318**	**188 179**	**724 509**

Major Programme 2 – Nuclear Techniques for Development and Environmental Protection
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 15

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
2.4.3.001 Radioactive and non-radioactive pollution and impact on environment	776 735	49 322	525 504	804 913	49 322	102 270
2.4.3.002 Nuclear techniques for marine resource management and seafood safety	844 688	42 677	248 757	761 601	42 677	-
2.4.3 Nuclear Techniques for Development of Land, Coastal and Marine Ecosystems	**1 621 423**	**91 999**	**774 262**	**1 566 513**	**91 999**	**102 270**
2.4.4.001 Developing methodologies for environmental monitoring and assessment	790 765	74 187	321 781	839 862	74 187	262 878
2.4.4 Applying Analytical Techniques for the Marine and Terrestrial Environment	**790 765**	**74 187**	**321 781**	**839 862**	**74 187**	**262 878**
2.4 Environment	**6 201 177**	**509 748**	**2 424 945**	**6 201 031**	**509 748**	**1 240 842**
2.5.1.001 Development and production of medical radioisotopes	404 080	-	-	479 947	-	-
2.5.1.002 Development of diagnostic and therapeutic radiopharmaceuticals	595 101	-	-	549 483	-	-
2.5.1 Radioisotope Products for Cancer Management and Non-communicable Diseases	**999 181**	**-**	**-**	**1 029 430**	**-**	**-**
2.5.2.001 Industrial applications of radioisotopes and radiation techniques	473 810	-	-	463 394	-	-
2.5.2.002 Radiation technology for health care and environmental applications	750 937	-	-	731 076	-	-
2.5.2 Radiation technology for health care and industrial applications	**1 224 747**	**-**	**-**	**1 194 469**	**-**	**-**
2.5 Radioisotope Production and Radiation Technology	**2 223 928**	**-**	**-**	**2 223 900**	**-**	**-**
Major Programme 2 - Nuclear Techniques for Development and Environmental Protection	**38 483 002**	**4 062 873**	**4 233 107**	**38 481 917**	**3 919 510**	**3 248 245**

Major Programme 2 – Nuclear Techniques for Development and Environmental Protection
Unfunded Activities within Tasks

Table 16

Project	Tasks	2014 Unfunded	2015 Unfunded
2.S.3.005 BSS MTIT Business Solutions Section (Attrib. to MP 2)	Software solutions	12 772	12 772
2.1.1.001 Land management for climate-smart agriculture	Enhancing soil resilience to drought and flooding events through ecosystem approaches accounting for soil-plant-animal interactions	13 366	92 750
	Soil fertility and quality enhancement using cover crops and strategic fertiliser and animal manure applications: Role of nuclear techniques	-	92 740
2.1.1.002 Water management for resource-saving agriculture	Approaches to improving crop genotypes with high water and nutrient use efficiency for water scarce environments	49 344	69 106
2.1.3.003 Preparation & response to radiological emergencies (food & agriculture)	General management	66 820	66 820
	Services and advice to Member States	11 859	11 859
	Information exchange	71 022	71 022
	Capacity building	90 377	90 377
	CRP Emergency preparedness and response	106 066	206 368
	Laboratory research and development	89 994	89 994
2.1.4.003 Development of the SIT for control of disease transmitting mosquitoes	Fostering information exchange	-	141 732
	Applied research and technical development (insect pest control laboratory activities)	82 314	82 314
	Promoting capacity building and technology transfer to Member States	48 638	48 638
2.1.5.001 Mutation induction for better adaptation to climate change	Providing services and advice to Member States	41 120	-
	Applied research and technical development (laboratory activities)	84 500	84 500
2.1.5.002 Integrated techniques for mutation breeding and biodiversity	Providing services and advice to Member States	41 120	-
	Applied research and technical development (laboratory activities)	84 500	84 500
	Promoting capacity building and technology transfer for Member States	205 600	-
2.2.1.001 Nutrition through the lifecycle	Maternal, newborn and child nutrition	25 000	36 000
	Nutrition and noncommunicable diseases	-	36 000
	Nutrition and the environment including agriculture	-	46 529
	Outreach and partnership with UN agencies and other organizations	25 708	25 708
2.2.2.001 Nuclear medicine in diagnosis and therapy of non-communicable disease	Gated-SPECT in the planning of ischemia guided PCI in STEMI patients	84 296	84 296
	Strengthening the role of Lu177 and Y90 in cancer treatment	108 680	61 680

Major Programme 2 – Nuclear Techniques for Development and Environmental Protection
Unfunded Activities within Tasks

Table 16

Project	Tasks	2014 Unfunded	2015 Unfunded
2.2.3.001 Clinical radiation oncology	Establishing strategies and standards in clinical radiation oncology	25 000	25 000
2.2.4.001 Calibration and auditing services	Support to national audit networks for radiotherapy dosimetry	-	42 637
	Development and extension of dosimetry laboratory services to Member States	76 540	50 840
2.2.4.002 Developments in radiation dosimetry	Development of techniques for the dissemination of absorbed dose to water standards in kilovoltage X ray range through the network of SSDLs	-	56 215
2.2.4.003 Clinical medical radiation physics	Education and clinical training in medical radiation physics	66 521	-
2.3.2.001 Comprehensive assessment of resources	Implement the IWAVE in pilot countries: IAEA water enhancement project for building national capacity to conduct comprehensive water resources survey	88 832	88 832
2.3.2.002 Management strategies for groundwater and surface water resources	The use of stable isotope tracers to quantify the impact of anthropogenic nutrient enrichment on the aquatic productivity of riverine and lacustrine systems	29 611	29 611
2.3.3.002 Noble gas isotopes for groundwater recharge and pollution studies	The use of stable- and radio- isotope tracers to assess the ground water and surface water interactions and their impact on river water quality	105 662	105 662
	Strengthen Member States capacity for radioisotope and noble gas analysis	72 901	72 901
2.4.1.001 Provision of reference products and laboratory performance support	Capacity building	25 700	-
	Production of IAEA reference materials	134 586	98 840
	Development of recommended methods for analysis of radionuclides and other analytes	26 646	52 346
2.4.1.002 Quality management and supporting network activities	Capacity building related to analytical quality assurance means in support of Member States laboratories	83 186	-
	Developing of an internal Quality Management System (QMS)	61 680	-
	Support to international networks like the network of Analytical Laboratories for the Measurement of Environmental Radioactivity (ALMERA)	23 685	-
	Metrology in chemistry - implementation of quality assurance and metrological principals in Member States laboratories	18 874	-
2.4.2.001 Isotopic tools to study climate and environmental change	General management of the sub-programme isotopic tools to study climate and environmental change	100 353	51 400
	Capacity Building, in Member States, for studying the climate and environmental changes	77 100	88 408
	Application of nuclear and isotopic methods to study climate and environmental changes	88 226	86 274
	Nuclear analytical techniques and applications to marine samples to study climate trends and variability	80 734	81 412
	CRP on "Benchmark ocean models for the dispersion and radiological impact of released radionuclides from the nuclear power stations at Fukushima Daiichi"	96 413	96 413

Major Programme 2 – Nuclear Techniques for Development and Environmental Protection
Unfunded Activities within Tasks

Table 16

Project	Tasks	2014 Unfunded	2015 Unfunded
2.4.2.002 Assessing carbon cycle and impacts of ocean acidification	General management	123 360	-
	Improving knowledge and tools for assessing carbon cycle and impacts of ocean acidification	55 331	50 907
	Coordination of the Ocean Acidification International Coordination Center (OA-ICC)	199 212	193 972
	Joint activities with other international programmes	58 093	-
	CRP on economic impact of ocean acidification	75 722	75 722
2.4.3.001 Radioactive and non-radioactive pollution and impact on environment	Capacity building, in Member States, for measurement and assessment of radioactive and non-radioactive pollution and its impact on land, coastal and marine ecosystems	54 302	53 693
	Capacity building, in Member States, for measurement and assessment of radioactive and non-radioactive pollution and its impact on land, coastal and marine ecosystems	424 162	-
	Study of global temporal trends of pollution in selected coastal areas by the application of isotopic and nuclear tools	47 040	48 576
2.4.3.002 Nuclear techniques for marine resource management and seafood safety	General management of project 2.4.3.002	174 760	-
	Capacity building, in Member States, for improving management and safe use of ecosystem	25 700	-
	Improving knowledge and tools for sustainable and safe use of environmental resources in Member States	27 992	-
	Joint activities with other international programmes	20 305	-
2.4.4.001 Developing methodologies for environmental monitoring and assessment	Capacity building, in Member States, for improving knowledge in environmental monitoring, assessment and remediation	51 400	25 700
	Development of tools for environment monitoring	24 672	-
	Development of analytical methodology for determination of non-nuclear and nuclear contaminants and knowledge improvement	130 914	155 316
	Joint activities with other international programmes	51 022	51 022
	CRP on development of radionuclide transfer factors to farm animals (soil-pasture-herd)	63 774	30 840

Major Programme 3
Nuclear Safety and Security

Introduction

Major Programme 3 promotes the worldwide achievement and maintenance of high levels of nuclear safety and security to protect people, society and the environment. It implements both strategic objective C "Improving nuclear safety and security" of the Medium Term Strategy 2012–2017 and the IAEA Action Plan on Nuclear Safety endorsed at the 55th General Conference.

This major programme meets the demand for a higher level of safety of the growing number of nuclear installations, including uranium mining facilities, as well as of the existing nuclear power plants and research reactors, whose average age continues to increase. It also addresses the wider use of ionizing radiation in industry, medicine and agriculture; the continuous threat of nuclear terrorism; and the accumulation of radioactive waste and spent fuel.

Major Programme 3 performs the Agency's statutory functions of establishing standards of safety and providing for their application. The Agency assists Member States in building national capacities and promoting international cooperation, and in transferring knowledge from countries with mature nuclear energy programmes to countries with emerging nuclear energy programmes through knowledge networks. The security of nuclear and other radioactive material and facilities remains a high priority. The Agency develops and publishes nuclear security recommendations and guidance and maintains an effective information platform for their application. At the request of a State, the Agency assists in developing and implementing a robust nuclear security infrastructure, including prevention, detection and response.

Despite the nuclear safety and security arrangements in place, the risk of a serious nuclear accident and the threat of nuclear terrorism cannot be entirely eliminated. Therefore, this major programme also provides for national and international capacities to prepare to effectively respond to and mitigate the consequences of a nuclear or radiological incident or emergency, including nuclear terrorism.

Objectives:

- To continuously improve global safety and security through the establishment and wide application of safety standards and security guidelines, worldwide subscription to international legal instruments, integrated and modular peer reviews and services, capacity building and networking.
- To continuously enhance national, regional and international capabilities and arrangements for ensuring a high level of safety and security and emergency planning and response.

Outcomes	Performance Indicators
• Improved nuclear safety and security capabilities at the national, regional and international levels.	• Increase in the number of good practices and positive conclusions of reviews and services.
• A current, comprehensive and complete suite of safety standards and security guidelines.	• Number of new or revised safety standards per year.
• A global communications and knowledge sharing network.	• Increase in the number of issues resolved through communication networks.

Title	Main Planned Outputs
3.0.0.001 Enhancing the global nuclear safety and security framework	Policies, standards and guidelines; databases and promotional products (e.g. web site, brochures); integrated national capacity building plans; knowledge networking platforms; and compliance of in-house practices with the radiation safety regulations.
3.0.0.002 Nuclear Safety Action Team	Missions to Japan and recommendations on how to include lessons learned from the accident at the Fukushima Daiichi nuclear power plant; International Experts Meeting; and promotional products (e.g. IAEA Action Plan on Nuclear Safety restricted platform for Member States, brochures, DVDs).

Programme 3.1 Incident and Emergency Preparedness and Response

Rationale: Despite the best efforts of the nuclear community, radiation incidents and emergencies continue to occur and may affect the public, workers, patients, property and/or the environment. These can range from severe accidents at nuclear power plants to events with no radiological consequences, but with considerable media and public interest and concern. Criminal acts involving radioactive material are also scenarios that must be addressed. Member States and the international community have to be prepared to efficiently respond to such events. Effective national and global response capabilities and arrangements are essential to minimize the impacts of radiation events.

The use of nuclear energy cannot be sustainable without enhanced national, regional and international emergency preparedness and response (EPR) capabilities and arrangements. Sound national capabilities and arrangements for EPR are a prerequisite for an effective national nuclear power programme.

The provision of technical assistance, sharing of information from past events, and development of effective international EPR arrangements will benefit all Member States. An effective response to an emergency requires a coherent initial assessment followed by adequate emergency management, all of which can only be achieved through coordinated EPR activities. However, not all Member States have adequate EPR capabilities. The Agency has specific obligations and functions under the Convention on Early Notification of a Nuclear Accident (the Early Notification Convention), the Convention on Assistance in Case of a Nuclear Accident or Radiological Emergency (the Assistance Convention) and the Convention on the Physical Protection of Nuclear Material (CPPNM) related to the EPR area. The Agency also has a statutory function to develop safety standards in the area of EPR and to provide for their application. Finally, the Agency has an important role in assessing radiation events and helping in the communication of the significance of these events to the public.

Objectives:

— To maintain and enhance effective and compatible Agency, national and international EPR capabilities and arrangements for early warning of and effective response to incidents and emergencies, independent of whether they arise from an accident, natural disaster, negligence or criminal act.
— To improve provision/sharing of information on nuclear or radiological incidents and emergencies among Member States, international stakeholders and the public/media.

Outcomes	Performance Indicators
• Enhanced EPR capabilities and arrangements at the national and international levels.	• Number of deficiencies/lessons identified per year in EPR capabilities and arrangements at the national and international levels.
• Enhanced Agency EPR capabilities and arrangements.	• Number of identified deficiencies/lessons per year in the Agency's Incident and Emergency System (IES) capabilities and arrangements.
• Improved provision/sharing of information on nuclear or radiological incidents and emergencies.	• Number of incidents and emergencies reported per year to the Incident and Emergency Centre (IEC).

Lessons learned from reviews, assessment, evaluations: This programme takes into account Member State needs as expressed in relevant General Conference resolutions, in Board of Governors decisions and in Emergency Preparedness and Response Expert Group recommendations. It also takes into account lessons identified during the previous programmatic cycle.

It is evident that EPR is a cross-cutting area, explicitly or implicitly part of most of the Agency’s programmes; therefore, the IEC is continuously seeking a consistent in house approach to EPR through effective coordination.

Specific criteria for prioritization:

1. Activities necessary to fulfil obligations under the Early Notification and Assistance Conventions.
2. Activities that are linked to, but not required by, the Conventions (e.g. in-house EPR activities, Response and Assistance Network).
3. Activities introducing or enhancing EPR for Member States embarking on a nuclear power programme.

Subprogramme 3.1.1 Strengthening National and International Emergency Preparedness

Objectives:

— To strengthen national EPR arrangements and capabilities through development and assistance in application of the safety standards, operational guidelines and tools, and through EPR peer reviews.

— To strengthen the EPR framework at the international level and to establish a sustainable process for further and continuous improvement of international preparedness and response.

Outcomes	Performance Indicators
• Strengthened national EPR arrangements and capabilities.	• Number of EPR training events conducted per year. • Number of Emergency Preparedness Review (EPREV) peer reviews performed per year.
• Strengthened EPR framework at the international level and a sustainable process for continuous improvement.	• Number of IEC meetings with international stakeholders.

Programmatic changes and trends: This is a follow-up subprogramme which represents a continuation and consolidation of relevant activities from the previous two year programme cycle. It was prepared based on needs and lessons identified through the assessment and evaluation of national and international EPR as well as lessons identified in the accident at the Fukushima Daiichi nuclear power plant. It also takes into account long term recommendations of the International Action Plan for Strengthening the International Emergency Preparedness and Response System for Nuclear and Radiological Emergencies.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a small increase of €3 156 in 2014, as compared with 2013, and an increase of 7% (€98 795) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.1.1.001 Improving member states emergency preparedness	New or revised EPR publications; trained trainers, trained national experts/planners/responders; new or revised standard training materials; national self-assessment reports, EPREV and Integrated Regulatory Review Service (IRRS) reports; and country specific EPR action plans.
3.1.1.002 Enhancing international emergency management	Joint Radiation Emergency Management Plan of the International Organizations (JPLAN), Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE) reports, bilateral operational agreements, operational procedures, web site, and outreach/promotional materials.

Subprogramme 3.1.2 IAEA IES and Operational Arrangements with Member States and International Organizations

Objectives:

— To respond effectively to any incident or emergency.
— To enhance training on operational arrangements.

Outcome	Performance Indicators
• Improved response to incidents and emergencies.	• Number of Agency's staff trained per year. • Number of training events with Member States on operational arrangements.

Programmatic changes and trends: This subprogramme represents a follow-up and amalgamation of activities from the preceding two year cycle. It was prepared based on an assessment and evaluation of needs to further improve the IES and operational arrangements with Member States and the international organizations co-sponsoring the Joint Radiation Emergency Management Plan of the International Organizations.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 7% (€144 941) in 2014, as compared with 2013, and a decrease of 5% (€98 911) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.1.2.001 Execute, maintain and enhance the Secretariat's response capabilities	Response records, assistance reports, yearly training programme, schedule and training records, maintained and enhanced response arrangements (Response Plan for Incidents and Emergencies (REPLIE), procedures, checklists), and improved response and assessment capabilities.
3.1.2.002 Maintain/enhance response and assistance arrangements with MS and IOs	Operations Manual for Incident and Emergency Communication documents and related workshops, ConvEx exercises, enhanced Contact Point Database, protocols with international organizations, enhancement of the Unified System for Information Exchange in Incidents and Emergencies (USIE) and International Radiation Information Exchange (IRIX), International Radiation Monitoring Information System (IRMIS) (initial version), enhanced assistance arrangements through the Response and Assistance Network (RANET), and maintenance of the International Nuclear and Radiological Event Scale (INES) methodology.

Subprogramme 3.1.3 Nuclear Safety Action Plan (NSAP)

Objectives:

— To strengthen EPR in the framework of the IAEA Action Plan on Nuclear Safety.
— To enhance transparency and effectiveness of emergency communication and improve dissemination of information in the framework of the IAEA Action Plan on Nuclear Safety.

Outcomes	Performance Indicators
• Strengthened national and international EPR arrangements in the framework of the IAEA Action Plan on Nuclear Safety.	• Number of deficiencies/lessons identified per year in EPR capabilities and arrangements at the national and international levels.
• Strengthened Agency arrangements and capabilities in emergency communications within the framework of the IAEA Action Plan on Nuclear Safety.	• Number of identified deficiencies/lessons per year in Agency EPR capabilities and arrangements.

Programmatic changes and trends: Subprogramme 3.1.3 is a new subprogramme created to efficiently implement the Secretariat's activities related to EPR in the framework of the IAEA Action Plan on Nuclear Safety (Action plan).

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, are €428 228 in 2014, and no increase is proposed in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.1.3.001 Nuclear Safety Action Plan (NSAP)	New or enhanced national and international EPR arrangements in the framework of the IAEA Action Plan on Nuclear Safety; and strengthened Agency arrangements and capabilities in emergency communications within the framework of the Action Plan.

Programme 3.2 Safety of Nuclear Installations

Rationale: In the aftermath of the Fukushima Daiichi accident, the nuclear safety activities planned for 2014–2015 are in line with the actions identified by the IAEA Action Plan on Nuclear Safety approved by the Board of Governors in 2011. Assessment of lessons learned and conclusions drawn have contributed to programme development. In spite of the accident, for economic and ecological reasons, Member State interest in developing new, or expanding existing, nuclear power programmes continues to grow. Member States must be supported in building capacity and developing safety infrastructure through enhanced international cooperation and in line with the global nuclear safety and security regime. Renewed interest in nuclear power and long term operation of existing installations requires strong safety assessment capabilities consistent with advances in technology, safety assessment methods and tools, strong safety design requirements and management systems, leadership and safety culture. The need to evaluate new and existing nuclear installation safety against natural hazards, human induced events including sabotage and site related environmental aspects requires state of the art methods. The

Agency will strengthen linkages between the Convention on Nuclear Safety (CNS), IAEA safety standards and the Code of Conduct on the Safety of Research Reactors so that all are applied in a strategic and synergistic manner. In the light of lessons learned from the Fukushima Daiichi accident, all safety standards will be reviewed and revised as necessary and new safety standards will be developed. Promoting the application of the safety standards and reviewing their implementation through safety and peer review services are important components for Member States to ensure a solid safety infrastructure and continued improvements in the safety of nuclear installations and regulatory body effectiveness. Strengthening of operating experience and prevention of events is achieved through the sharing of best practices, i.e. on identification, analysis and implementation of corrective actions. The IAEA's international events reporting systems for nuclear installations support the sharing of operating experience with regulatory bodies and nuclear organizations in Member States.

Objectives:

— To continuously improve the safety of nuclear installations during site evaluation, design, construction and operation through the availability of set safety standards and their application.
— To support Member States in developing the appropriate safety infrastructure.
— To assist adherence to and implementation of the CNS and the Code of Conduct on the Safety of Research Reactors and to strengthen international cooperation.

Outcomes	Performance Indicators
• Global safety regime strengthened through acceptance of Agency safety standards relevant to legal and governmental infrastructure and nuclear installations.	• Number of new or revised safety standards relevant to Governmental organizations and nuclear installations approved by the Commission on Safety Standards (CSS).
• Improved safety of nuclear installations in Member States based on the implementation of recommendations and suggestions of safety services based on Agency safety standards.	• Percentage of Agency recommendations and suggestions from safety services adequately addressed in regulatory authorities and nuclear installations.

Lessons learned from reviews, assessment, evaluations: The background and basis for this programme take into consideration the Medium Term Strategy, Member State recommendations provided during Agency conferences, General Conference resolutions and the results of the Second Extraordinary Meeting of the CNS (August 2012). Lessons and feedback from safety review services are incorporated. However, implementation of this programme very much depends on extrabudgetary resources.

Specific criteria for prioritization:

1. Projects dealing with capacity building and strengthening in information exchange.
2. Projects establishing safety standards and servicing conventions and codes of conduct.
3. Projects related to the application of the standards.

Subprogramme 3.2.1 Governmental, Regulatory Framework and Safety Infrastructure Development

Objectives:

— To have effective, independent and sustainable governmental, regulatory and safety frameworks in place for nuclear installations based on the IAEA safety standards.
— To enhance the global nuclear safety framework by applying a consistent development, review and revision process for up to date and high quality safety standards for a governmental and regulatory framework for nuclear installations.
— To have an enhanced regulatory and safety capacity building process in place in line with the IAEA safety standards.

Outcomes	Performance Indicators
• Effective, independent and sustainable regulatory bodies in Member States, with an adequate governmental, regulatory and safety framework to ensure effective regulatory control during the entire lifetime of the nuclear installations, in accordance with the Agency's safety standards.	• Number of safety review missions (e.g. IRRS and expert assistance missions). • Percentage of Agency recommendations and suggestions adequately addressed by the Member States.
• New and/or revised safety standards related to the governmental and regulatory framework areas, submitted for approval by the Nuclear Safety Standards Committee (NUSSC).	• Percentage of document preparation profiles approved by the CSS.

Outcomes	Performance Indicators
• Improved competency of regulatory bodies supporting the safe use of nuclear installations in Member States for emerging and mature nuclear programmes.	• Number of Member States using Agency training programmes in regulatory area to support sustainable education and training programmes. • Number of Member States utilizing the Guidelines for Systematic Assessment of Regulatory Competence Needs (SARCon) tool and methodology for competency building.

Programmatic changes and trends: In line with the increasing trend of countries either restarting or introducing nuclear power programmes, the projects under this subprogramme were modified and consolidated to build upon the Agency's work on assisting countries in developing their governmental and regulatory frameworks. Capacity building for nuclear installations has become increasingly important and is specifically addressed.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 1% (€16 829) in 2014, as compared with 2013, and a decrease of 6% (€170 649) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.2.1.001 Strengthening regulatory effectiveness and regulatory networking	Safety standards, information exchange, mission reports, information in the International Regulatory Network (RegNet).
3.2.1.002 Improve safety standards, support CNS and INSAG	Safety standards and reports.
3.2.1.003 Capacity building for installations safety and regulatory functions	Reports, training materials, enhanced web platforms and multimedia products.

Subprogramme 3.2.2 Safety Assessment of Nuclear Installations

Objectives:

— To provide Member States with up to date safety assessment and design safety standards based on current technology and best practices.
— To support Member States with advice and review services in the implementation of safety assessment and design safety standards.
— To develop safety assessment knowledge requirements and provide support to Member States in safety assessment competency and capacity building.

Outcome	Performance Indicators
• Enhanced and harmonized nuclear safety assessment capability for design, licensing and operation of nuclear facilities, as well as enhanced collaboration and information sharing on safety assessment among the Member States.	• Number of Member States using Agency safety assessment and design standards, and technical cooperation (TC) and safety assessment knowledge resources. • Number of Member States embarking on nuclear power that have established comprehensive and timely safety assessment capacity building programmes.

Programmatic changes and trends: Key safety standards on the level of requirements for design have been developed (IAEA Safety Standards Series No. SSR-2/1); however, standards addressing specific systems, such as instrumentation and control, as well standards for assessment of fire protection, safety goals and safety indicators need to be developed. The review of requirements (IAEA Safety Standards Series Nos GSR Part 4 and SSR-2/1) following the Fukushima Daiichi accident has led to proposed enhancements and has identified areas where safety standards can be clarified; the priority is on standards for reactor cooling systems, containment and severe accident management. With many Member States embarking on nuclear energy programmes, the Agency's design safety and safety assessment activities are focussed on helping these newcomers in the development of safety assessment competency and capacities as the key tool for their decision making. Standards and their applicability to innovative designs will be planned and developed to support the design and safety assessment of these reactors.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 7% (€164 459) in 2014, as compared with 2013, and a small decrease of €3 648 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.2.2.001 Evaluation of design and safety assessment of nuclear facilities	Review reports, training and workshop sessions, training materials, and advisory reports.
3.2.2.002 Sustainable design and safety assessment competency, methods and tools	Operational Global Safety Assessment Network (GSAN); two international exercises organized per year; and training means, materials and workshops.

Subprogramme 3.2.3 Safety and Protection against Internal and External Hazards

Objectives:

— To enhance Member State capabilities to assess and monitor their nuclear installations with respect to site safety and design related to internal and external hazards, engineering aspects of sabotage and radiological impact on the environment through an integrated approach.
— To assist Member States, especially embarking countries, with site selection, site evaluation and installation design against internal and external hazards using the IAEA safety standards in a harmonized way as a part of the TC programme and special missions requested by Member States.
— To assist Member States in resolving new technical issues resulting from the occurrence of natural events affecting nuclear installations and supporting operating organizations and regulatory bodies during the crisis and aftermath of major external events.

Outcomes	Performance Indicators
• Increased awareness of International Seismic Safety Centre (ISSC) activities in the areas of safety guideline development, and external event notification and international cooperation utilizing the resources from the regular and extrabudgetary programmes.	• Number of requests from Member States for support with information on safety documents and external event notification systems and similar services of the ISSC.
• Updated Agency safety standards in the areas of installation safety in the conduct of Site and External Events Design (SEED) review missions and provision of recommendations to Member States in alignment with the guidance provided in these documents.	• Number of SEED safety review services requested by Member States.
• Updated methodologies for external and internal hazard safety analysis, installation design, protective measures against external hazards, communication and information dissemination tools.	• Number of supporting documents (Safety Reports and Technical Documents (TECDOCs)).

Programmatic changes and trends: There will be a greater focus on safety review services, and training activities on site and design safety issues in the light of the Fukushima Daiichi accident for operating and new nuclear power programmes.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, remain at the same level as compared with 2013, in both 2014 and 2015.

Projects

Title	Main Planned Outputs
3.2.3.001 Promoting an integrated approach for site and installation safety	New and updated Safety Guides corresponding to site selection, evaluation, protection against external hazards and installation design; TC mission reports and special reports on missions requested by Member States to evaluate safety performance of installations against external events.
3.2.3.002 Competency, methods and tools for installations safety assessments	New or updated TECDOCs required for implementation of Safety Guides; Safety Reports/TECDOCs in areas that need guidance and not addressed by other IAEA publications; and workshops on capacity building activities and information dissemination at international forums.

Subprogramme 3.2.4 Safe Operation of Nuclear Power Plants

Objectives:

— Improved operational safety in Member States based on the implementation of recommendations and suggestions of Operational Safety Review Team (OSART) missions and other related operational safety review services.
— To strengthen Member State capability to enhance operational safety performance through the exchange and utilization of operating experience feedback by encouraging self-assessment and Agency safety reviews of their programmes.
— Strengthened safety of long term operation of nuclear power plants through IAEA Safety Aspects of Long Term Operation of Water Moderated Reactors Peer Review Service (SALTO) and other specific SALTO related expert missions.

Outcomes	Performance Indicators
• Improved operational safety in Member States based on the implementation of recommendations and suggestions of OSART missions and other safety review services performed using OSART guidelines.	• Number of OSART missions requested by Member States annually. • Percentage of Agency recommendations and suggestions on operational safety improvements adequately addressed in nuclear power plants in Member States.
• Operational safety improvements based on the implementation of recommendations and suggestions from the Peer Review of Operational Safety Performance Experience (PROSPER) safety review service.	• Number of PROSPER missions requested by Member States and percentage of Agency recommendations and suggestions adequately addressed.
• Strengthened nuclear power plant preparation for long term operation based on SALTO and other SALTO related expert missions performed according to SALTO guidelines and relevant safety standards.	• Number of SALTO peer review missions requested, including specific expert missions in support of solving previous missions' safety issues.

Programmatic changes and trends: In the frame of the IAEA Action Plan on Nuclear Safety, there will be greater focus on: (i) improving and integrating operational safety review services; (ii) developing tools and training programmes for Member States to improve in leadership, management for safety and safety culture; (iii) strengthening the systematic approach to interactions between individuals, technology and organizations; (iv) supporting Member States in the development of long term operation programmes; and (v) reinforcing the use of operating experience through the IRS. In this biennium, the project "Supporting long term operation safety", previously funded from Major Programme 1, will be funded from this subprogramme.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 23% (€686 509) in 2014, as compared with 2013, and an increase of 7% (€151 959) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.2.4.001 Enhancing the operational safety performance	OSART mission reports; updated database of OSART mission results; revision of safety standards for operational safety; publication of OSART mission highlights; and report on the evaluation of the effectiveness of the OSART missions.
3.2.4.002 Strengthening sharing and use of international operating experience	The overall planned output is to enhance learning in Member States in order to improve nuclear safety by sharing events with other Member States, which will then take corrective actions to prevent a similar event occurring.
3.2.4.003 Effective leadership, management for safety and safety culture in MSs	Safety Guides on leadership for safety, management for safety, safety culture, and interaction between individuals, technology and organizations; Safety Report on ITO analysis; and syllabus and training materials for training modules.
3.2.4.004 Supporting long term operation safety	SALTO mission reports, expert mission reports on specific issues related to management of ageing; introduction of the International Generic Ageing Lessons Learned (IGALL) Safety Report into nuclear power plant practice and into IAEA safety services.

Subprogramme 3.2.5 Safety of Research Reactor and Fuel Cycle Facilities

Objectives:

— To enhance the safety of research reactors and fuel cycle facilities in Member States through effective application of the Code of Conduct on the Safety of Research Reactors, and by developing and applying safety standards, conducting safety review services and sharing operating experience.
— To support Member State building capacity for developing a safety infrastructure for research reactors and fuel cycle facilities, and for fostering international cooperation and sharing of knowledge and operating experience.

Outcomes	Performance Indicators
• Enhanced safety of research reactors and fuel cycle facilities in Member States.	• Percentage of Member States with research reactors in line with the provisions of the Code of Conduct on the Safety of Research Reactors and IAEA safety standards. • Percentage of recommendations from safety review services addressed by Member States as measured in follow-up missions.
• Enhanced exchange of information on operating experience and issues for research reactors and fuel cycle facilities.	• Percentage of Member States participating in the Incident Reporting System for Research Reactors (IRSRR) and international meetings. • Percentage of Member States participating in the Fuel Incident Notification and Analysis System (FINAS) and meetings.
• Enhanced safety status of research reactors under project and supply agreements.	• Percentage of Member States participating in the follow-up system and fulfilling their obligations.

Programmatic changes and trends: There will be a greater focus on safety review services, and training activities on specific safety issues addressed by the Code of Conduct on the Safety of Research Reactors, as well as on addressing the implications of the Fukushima Daiichi accident on research reactor safety.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 7% (€92 777) in 2014, as compared with 2013, and a small increase of €1 368 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.2.5.001 Enhancing the safety of research reactors	Safety standards and supporting publications, meeting/mission reports, conference proceedings, training materials, Member State self-assessments, and the IRSRR database.
3.2.5.002 Enhancing the safety of fuel cycle facilities	Safety standards and supporting publications, meeting/mission reports, training materials, and the FINAS database.

Subprogramme 3.2.6 Nuclear Safety Action Plan (NSAP)

Objectives:

— Incorporation of lessons learned from the Fukushima Daiichi accident in the IAEA Safety Standards Series publications.
— Provision of Agency services based on the lessons learned, and hence, an upgrade in the safety of nuclear installations worldwide.
— Provision of training to Member States based on upgraded safety standards in the light of lessons learned from the Fukushima Daiichi accident.

Outcomes	Performance Indicators
• Upgraded safety of nuclear installations worldwide based on the services provided by the IAEA incorporating lessons learned from the Fukushima Daiichi accident.	• Number of safety review services missions carried out each year in connection with the IAEA Action Plan on Nuclear Safety. • Number of recommendations addressed by Member States in accordance with mission reports as measured in follow-up missions.

Outcomes	Performance Indicators
• Availability of a set of up to date safety standards containing revisions based on the lessons learned from the Fukushima Daiichi accident.	• Number of safety standards revised per year in the light of the Fukushima Daiichi accident.
• Provision of training to Member States on revised safety standards in the light of lessons learned from the Fukushima Daiichi accident.	• Number of training courses/workshops provided per year.

Programmatic changes and trends: This is a new subprogramme in support of the IAEA Action Plan on Nuclear Safety.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, are €642 065 in 2014, and an increase of 3% (€20 570) is proposed in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.2.6.001 Nuclear Safety Action Plan (NSAP)	Missions, safety reports, training materials, and workshops.

Programme 3.3 Radiation and Transport Safety

Rationale: This programme focuses on the protection of people from the detrimental effects attributed to radiation exposure. The programme covers the establishment of safety standards and provision for their application — both being statutory functions of the Agency. Capacity building, including education and training, and networking are cross-cutting key elements of the global safety framework, and they are included throughout the programme. The importance of international undertakings as an element of the safety framework is also recognized. The activities within the programme are mainly on-going with some changes of emphasis, remaining cognizant of General Conference resolutions. The target audience includes national bodies and relevant international organizations dealing with radiation and transport safety issues. The beneficiaries are governments, regulators, workers, patients, members of the public, and users and operators.

The IAEA safety standards and guides will continue to be reviewed, including, inter alia, consideration of lessons learned from the Fukushima Daiichi accident. This includes providing for the application of Agency safety standards and the Code of Conduct on the Safety and Security of Radioactive Sources. This is done through various means that include, inter alia, peer review and advisory services, outreach and information exchange, guidance and training materials. These activities provide essential feedback and assurances on the overall effectiveness of the programme, as well as facilitating planning and anticipating future issues.

Objectives:

— To achieve global harmonization of the development and application of the Agency's safety standards in this area, and to increase the safety of radiation sources and thereby raise the levels of protection of people, including Agency staff, against the harmful effects of radiation.

Outcome	Performance Indicators
• International acceptance and application of IAEA radiation and transport safety standards and international undertakings.	• Number of radiation and transport safety standards and guides approved through the IAEA safety standards committees for the period 2014–2015. • Number of States hosting IAEA review or appraisal mission over the period of 2014–2015.

Lessons learned from reviews, assessment, evaluations: Considerable time and effort needs to be devoted to creating awareness and promoting the use of international safety standards and the relevant international undertakings, and maintaining approaches to demonstrate compliance with them. International harmonization, especially in the application of the safety standards and of the Code of Conduct with its supplementary import/export guidance is required.

Specific criteria for prioritization:

1. Strengthening the global safety framework through establishing safety standards and international undertakings, and by assisting Member States with their application.

Subprogramme 3.3.1 Radiation Safety and Monitoring

Objectives:

— To provide for improved radiation safety in Member States.
— To ensure a high level of radiation protection for the Agency's own operations and for all operations making use of materials, services, equipment, facilities and information made available by the Agency, including TC projects.

Outcomes	Performance Indicators
• Improved radiation safety in Member States through the establishment and global acceptance of the Agency safety standards.	• Number of States providing input to the development of the Agency safety standards for the period 2014–2015.
• Provision of radiation safety technical services for the Agency's own operations that comply with the Agency's safety standards and can serve as a model for Member States.	• Number and type of services provided to other IAEA Departments/Divisions/Sections for the period 2014–2015.
• Provision of radiation safety technical services for the Agency's operations performed through activities under TC.	• Number of technical courses attended by the Radiation Safety and Monitoring Section provided through cooperation with TC for the period 2014–2015.

Programmatic changes and trends: This subprogramme focuses on ensuring that the fundamental basis for radiation safety is in place, paying particular attention to the radiation protection of patients and workers, including technical services. The Agency's safety standards are receiving increased attention around the world, as more organizations, regulatory authorities and users look to them as international benchmarks. In 2014–2015, the Agency will continue to encourage and assist Member States on the implementation of the revised requirements in the International Basic Safety Standards and associated Safety Guides, and will further elaborate on related concepts and approaches. In the medical area, the increased uses of radiation need to be properly justified and controlled, and patients and medical professionals need to be properly addressed by the Agency's activities. The Agency will also continue to place emphasis on the protection of workers and the public. The budget for this subprogramme shows an increase because radiation safety technical services, which previously were funded as a shared service, will be funded under Major Programme 3.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect an increase of 33% (€918 354) in 2014, as compared with 2013, and a small decrease of €15 500 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.3.1.001 Radiation protection criteria and standards	Development and publication of Safety Guides and meetings/workshops for Member States to support implementation of the International Basic Safety Standards (IAEA Safety Standards Series No. GSR Part 3).
3.3.1.002 Radiation protection of patients	Safety related publications on radiation protection of patients; reporting systems for radiological procedures and radiotherapy; and web site with updated information on dose reduction in medical exposure for health professionals and patients.
3.3.1.003 Occupational radiation protection	Draft and published safety documents; expanded and new radiation protection networks; upgraded and new training packages; reports and self-assessment tools for the Occupational Radiation Protection Appraisal Service (ORPAS); expanded and operation of Occupational Radiation Protection Networks (ORPNET); project implementation for thematic safety area 2 (TSA2); Information System on Occupational Exposure (ISOE) symposium and reports; data and analysis for the Information System on Occupational Exposure in Medicine, Industry and Research (ISEMIR); and Second International conference on occupational radiation protection (ORP).

Title	Main Planned Outputs
3.3.1.004 Radiation safety technical services	Technical reports; fellows and scientific training; monitoring, protection, training services; testing methods accreditation; assistance to the Department of Safeguards (SG), TC, the Department of Nuclear Sciences and Applications (NA) and to the Department of Nuclear Energy (NE); and support to Seibersdorf and Monaco.

Subprogramme 3.3.2 Regulatory Infrastructure and Transport Safety

Objectives:

— To strengthen radiation and transport safety in Member States.

Outcomes	Performance Indicators
• Comprehensive and up to date suite of safety standards and supporting guidance covering transport safety, regulatory infrastructure and education and training.	• Number of safety standards approved during 2014–2015.
• International undertakings agreed by, and implemented by, Member States.	• Number of States expressing support for the Code of Conduct on Safety and Security of Sources. • Number of States expressing support for the Import/Export Guidance.
• Increased application of IAEA safety standards and guidance by Member States.	• Relative percentage increase in performance indicators for TSAs 1, 6 and 7 in the Radiation Safety Information Management System (RASIMS) from the beginning of 2014.

Programmatic changes and trends: The programme recognizes the increasing importance of the globalization of the safety framework to maximize synergies and improve effectiveness. There will be more demands from Member States for independent peer reviews and advisory missions supported by self-assessments, especially in the area of regulatory infrastructure. In terms of technical assistance to Member States, a more focused approach to those with weak or no safety regulatory infrastructure must be adopted. In addition, an international agreement on transboundary movements of radioactive material is being developed. In the transport safety area, the revision of IAEA Safety Standards Series No.TS-R-1 has been completed and steps have been taken to mitigate problems associated with denials of shipment.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 5% (€163 007) in 2014, as compared with 2013, and an increase of 1% (€15 500) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.3.2.001 Control of radiation sources	Member States and their national regulatory bodies have knowledge and expertise to establish/improve their national regulatory infrastructure for radiation safety to ensure adequate control of radiation sources.
3.3.2.002 Transport safety	A comprehensive set of transport safety standards and supporting guides; support for the implementation of guides; and denial of shipment action plan delivery.
3.3.2.003 Technical assistance and information management	Updated radiation safety infrastructure profiles for Member States receiving IAEA assistance; reports from RASIMS meetings; radiation safety clearance of procurements of sources; and reports from the Steering Committee on Education and Training in radiation, transport and waste safety, and the post-graduate education course (PGEC) directors meetings.

Subprogramme 3.3.3 Nuclear Safety Action Plan (NSAP)

Objectives:

— To implement activities in the IAEA Action Plan on Nuclear Safety related to radiation and transport safety for which extrabudgetary funds have been made available.

— To provide effective hands-on technical assistance and support based on state of the art international experience and best practices in assessing the radiological situation in the territories of the Fukushima Prefecture affected by the Fukushima Daiichi accident.

Outcomes	Performance Indicators
• Provision of an international forum to discuss radiological protection after the Fukushima Daiichi accident.	• Number of IAEA Action Plan on Nuclear Safety activities implemented for which extrabudgetary funds have been provided.
• Optimized solutions that consider all factors influencing decisions in the area of radiation protection, with effective public communication as a cornerstone.	• Number of sustainable programmes in place in the Fukushima Prefecture in the areas of radiation protection and health issues, with effective public communication.

Programmatic changes and trends: This subprogramme consists of the implementation of activities related to radiation and transport safety included in the IAEA Action Plan on Nuclear Safety for which extrabudgetary funds have been made available. An International Experts Meeting on Radiological Protection after the Fukushima Daiichi Accident — Analyses and Consequences is planned. In addition, the subprogramme includes the provision of direct assistance to the Fukushima Prefecture.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, are €250 357 in 2014, and no increase is proposed in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
3.3.3.001 Nuclear Safety Action Plan (NSAP)	Improved communication between the central and local governments and residents in the areas affected the Fukushima Daiichi accident by raising awareness and improving knowledge about radiation and its effects; International Experts Meeting on radiological protection after the Fukushima Daiichi accident — analyses and consequences; and proceedings of the meeting.

Programme 3.4 Management of Radioactive Waste

Rationale: Fuel cycle facilities and the handling, use and processing of radioactive material generate radioactive waste and may give rise to discharges to the environment. Radioactive waste must be carefully managed, discharges controlled and facilities carefully decommissioned, which may require remediation of sites. Radioactive waste must be immobilized and safely stored and eventually disposed of in appropriate facilities. These activities require safety standards of high quality.

It is of great importance that the Agency's programme on radioactive waste management (RWM) promotes a global safety regime for use by the Member States. RWM projects typically last for decades, continuity and sustainability in programme activities is important. Thus, most of the proposed projects are a continuation of existing ones.

Use of good practices and sound technologies in RWM are necessary for achieving a high level of safety. An important objective of the programme is to help Member States in finding solutions for radioactive waste, and for decommissioning and remediation of sites. The programme assists Member States in sharing experience, good practices and technological approaches for safe and efficient RWM. Assistance is provided to countries with disused radioactive sources and to newcomers to address RWM and to develop infrastructure in a timely manner.

The beneficiaries of the programme are national organizations with RWM responsibilities such as regulatory bodies, operators of RWM facilities or facilities generating radioactive waste, and technical support organizations.

Objectives:

— To achieve harmonization in policies and standards governing waste safety and public and environmental protection, together with provisions for their application, including sound technologies and good practices.

Outcomes	Performance Indicators
• Strengthened global safety regime through internationally harmonized application of waste related safety standards and use of sound technologies and international good practices for achieving a high level of safety in waste management, decommissioning and environmental remediation.	• New or revised waste related safety standards approved by the CSS. • Peer reviews at the request of Member States. • Number of Contracting Parties to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (the Joint Convention). • Recommendations from the International Radioactive Waste Technical Committee (WATEC).

Lessons learned from reviews, assessment, evaluations: The number of facilities being decommissioned continues to increase, and continuous efforts are needed to maintain safety standards of high quality. It is equally important to provide Member States with up to date knowledge on good practices and to facilitate exchange of experience. Implementation of disposal of radioactive waste (in particular, high level waste (HLW) and spent fuel) remains a substantial challenge. Therefore, the Agency needs to continue to give high priority to disposal. There is a growing interest in uranium production, and new or revised recommendations on safety and appropriate technologies are needed in order to prevent new legacy sites. The Agency's networks and international projects have proven to be successful mechanisms for sharing information and transferring knowledge among and between both developing and developed countries.

Specific criteria for prioritization:

1. Establishing safety standards and international undertakings, assisting Member States with their application, servicing of the Joint Convention and transfer of technology.

Subprogramme 3.4.1 Waste and Environmental Safety

Objectives:

— To establish and maintain a comprehensive set of international safety standards and support for such, including Safety Reports, TECDOCs, software and other relevant instruments.
— To promote the application of the IAEA safety standards and supporting instruments relevant to waste, decommissioning, remediation and environmental safety in Member State programmes.

Outcomes	Performance Indicators
• International consensus achieved on the IAEA radioactive waste safety standards.	• New or revised waste safety standards approved by the CSS.
• Member States strengthening their capabilities and enhancing safety in their practices in radioactive waste management, decommissioning, remediation and environmental protection.	• Requests from Member States for services such as peer reviews; continuation of safety harmonization and demonstration projects; and demonstrated application of the safety standards. • Number of Contracting Parties to the Joint Convention.

Programmatic changes and trends: The programme structure retains the same two subprogrammes as for the 2012–2013 biennium. Subprogramme 3.4.1 consists of projects concerned with the safety of spent fuel and radioactive waste management. Together the projects cover pre-disposal and disposal of spent fuel and radioactive waste, decommissioning, environmental remediation and assessment and management of radioactive releases to the environment. Efforts will continue in the area of disposal of HLW and will address the development and review of safety cases for both operational and post-closure safety of disposal facilities.

There is a growing interest in uranium production, and new or revised recommendations and training materials will be developed to support newcomers (countries and organizations). Decommissioning is increasing worldwide and it is important to continue activities in this area in order to provide Member States with updated guidance and to facilitate exchange of information and lessons learned.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 10% (€348 367) in 2014, as compared with 2013, and a small increase of €5 868 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.4.1.001 Radioactive waste and spent fuel management	Development of safety standards; application of safety standards (international harmonization projects and working groups, peer reviews and appraisal, TC assistance, Asian Nuclear Safety Network (ANSN) activities); organization of the 5th Review Meeting of the Joint Convention; and Waste Safety Standards Committee (WASSC) coordination.
3.4.1.002 Assessment and management of environmental releases	Safety Guides, TECDOCs, peer review reports.
3.4.1.003 Decommissioning and remediation safety	Safety standards and supporting publications; training materials; strengthened International Working Forum on Regulatory Supervision of Legacy Sites (RSLS) and safety harmonization/demonstration projects (International Project on Decommissioning Risk Management (DRiMa)); TC Fund and extrabudgetary commitments met; and initiative for remediation of former uranium sites in Central Asia (e.g. technical coordination).

Subprogramme 3.4.2 Technology for RWM, Decommissioning & Environmental Remediation

Objectives:

— To assist and support Member States in strengthening their capabilities and improving their practices in RWM, decommissioning of installations and remediation of contaminated sites.
— Provide support to countries embarking on nuclear power and developing countries, to plan and develop necessary RWM infrastructure, RWM policies and strategies, and human resource capacities and capabilities to deal with waste issues.
— To facilitate experience sharing and knowledge transfer on effective applications of practical solutions in RWM, decommissioning of installations and environmental remediation of contaminated sites.

Outcomes	Performance Indicators
• Member States strengthening their capabilities and improving their practices in RWM, decommissioning of nuclear installations and remediation of contaminated sites.	• Number of Member States having developed a national policy and strategy for RWM. • Implementation rate (per cent) of recommendations proposed by WATEC at its annual meeting.
• Increased awareness among newcomers of the importance of addressing the RWM issue early on.	• Number of Member States embarking on nuclear power and having developed a national policy and strategy for RWM.
• Increased international cooperation and improved national competence in RWM, decommissioning of nuclear installations and environmental remediation of sites.	• Number of Member States participating in network activities.

Programmatic changes and trends: The structure of Subprogramme 3.4.2 remains unchanged from the previous cycle. It consists of five projects that deal with technological aspects of RWM and that are thematically organized, covering pre-disposal, disposal of radioactive waste, disused source management, decommissioning and environmental remediation, and information exchange and dissemination of knowledge for capacity building. Since the activities directly related to post-accident management of waste, decommissioning and environmental remediation have been moved to Subprogramme 3.4.3, this subprogramme covers activities related to the development of new publications, the further development of e-training materials and the enhancement of waste management information systems and databases, as well as international cooperation and coordination activities. Owing to the very limited budget, the intensity of planned activities is not optimal and has been extended over longer periods to comply with available resources.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, reflect a decrease of 7% (€248 480) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
3.4.2.001 Pre-disposal management of radioactive waste	Effective implementation of predisposal activities in Member States assisted by publication of relevant technical documents reflecting best practices, development of lecture materials (e-learning) and conduct of training courses in the framework of the Regular Budget and TC projects.
3.4.2.002 Managing disposal of radioactive waste and spent fuel	Four documents sent to the NE Document Coordination Team and four documents initiated, a set of lecture materials (e-learning), conduct of ten training events and courses, and 12 TC projects.
3.4.2.003 Managing disused sealed radioactive sources (DSRS)	The successful conclusion of source recovery operations and the promotion of a consistent methodology for managing DSRS throughout Member States.
3.4.2.004 Decommissioning of nuclear facilities and environmental remediation	Real (effective) implementation of decommissioning and remediation projects in Member States assisted by the Agency.
3.4.2.005 Knowledge sharing for capacity building in RWM, decommissioning and ER	Maintained, updated and improved web based systems; improved implementation of recommended best practices in RWM; and better access to information supporting the safety of RWM.

Subprogramme 3.4.3 Nuclear Safety Action Plan (NSAP)

Objectives:

— To implement activities related to radioactive waste management included in the IAEA Action Plan on Nuclear Safety for which extrabudgetary funds are made available.
— To assist in enhancing capabilities to manage decommissioning of nuclear facilities, environmental remediation of contaminated sites and management of radioactive waste from nuclear accidents.

Outcomes	Performance Indicators
• Raise awareness among the international community of lessons learned from nuclear accidents.	• Number of IAEA Action Plan on Nuclear Safety activities implemented related to RWM for which extrabudgetary funds have been made available.
• Improved recovery effectiveness and optimized solutions that consider all factors influencing decisions in the areas of waste management, decommissioning and environmental remediation.	• Number of sustainable programmes in place in the Fukushima Prefecture in waste management, decommissioning and environmental remediation.

Programmatic changes and trends: The subprogramme consolidates actions related to RWM in the IAEA Action Plan on Nuclear Safety for which extrabudgetary funds have been made available for their implementation. The subprogramme is divided into two projects, one related to waste and environmental safety and the other to waste technology. The subprogramme also covers the provision of direct assistance to the Fukushima Prefecture. With the exception of the Modelling and Data for Radiological Impact Assessments (MODARIA) project, all activities rely exclusively on the provision of extrabudgetary funding.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, are €465 416 in 2014 and a small decrease of 1% (€5 868) in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
3.4.3.001 Nuclear Safety Action Plan (NSAP) waste safety	Report on MODARIA; programmes in the Fukushima Prefecture to provide long term assistance to those living and working in the affected area through a sustainable plan on public information and involvement in decision making related to waste management.
3.4.3.002 Nuclear Safety Action Plan (NSAP) waste technology	Nuclear Energy Series report and TECDOCs resulting from implemented projects.

Programme 3.5 Nuclear Security

Rationale:

The risk that nuclear or other radioactive material could be used in malicious acts has not diminished and continues to be a serious threat to international peace and security. Although much progress has been made in recent years in countering it, more needs to be done. The primary responsibility for ensuring nuclear security lies with national governments, but international cooperation has been recognized as, and will remain, vital to facilitating the peaceful use of nuclear energy and to enhancing global efforts to combat criminal or terrorist acts. The security of nuclear material and associated facilities and activities has always been of the very highest priority and a long term imperative. The understanding of potential threats involving the malicious use of other radioactive materials and associated facilities and activities has significantly increased, as has the priority given to improving the security of such materials.

The programme is designed to assist Member States, upon request, in meeting the requirements of the legally binding and non-binding international instruments, to establish and maintain effective nuclear security. The programme has been restructured to respond to lessons learned from the implementation of the Nuclear Security Plan 2010–2013, feedback from Member States, General Conference resolutions and International Forums, including the International Conference on Nuclear Security: Enhancing Global Efforts. Greater emphasis is being placed on production of current, comprehensive and complete global nuclear security guidance in accordance with direction provided by the Nuclear Security Guidance Committee; provision for its application through peer reviews and advisory services, and capacity building including education and training and collective professional networks; and ensuring coordination of and promoting international cooperation activities in nuclear security while avoiding duplication and overlap. Extrabudgetary funds will be required to fund the majority of programmatic activities.

Objectives:

— To contribute to global efforts to achieve effective nuclear security, by establishing current, comprehensive and complete global nuclear security guidance and providing for its application through peer reviews and advisory services and capacity building, including education and training.
— To assist in adherence to and implementation of nuclear security related international instruments, and to strengthen the international cooperation and coordination of assistance in a way that underpins the use of nuclear energy and applications.
— To lead and enhance international cooperation in nuclear security, in response to General Conference resolutions and Board of Governors directions.

Outcomes	Performance Indicators
• Continued improvement in the global security of nuclear material, other radioactive material, nuclear and radiological facilities, locations and transports.	• Number of Member States that have established or improved national nuclear security measures and systems on the basis of advice or assistance from the Agency. • Number of IAEA Nuclear Security Series publications produced and used in Member States, and entry into force of the Amendment to the CPPNM.
• Improved capacity among Member States to implement national nuclear security systems.	• Number of Member States implementing systems on the basis of Agency assistance.
• Improved global coordination and cooperation in the delivery of support to national efforts to improve nuclear security.	• Number of activities duplicated by other initiatives, number carried out in conjunction with the IAEA.

Lessons learned from reviews, assessment, evaluations: Programme 3.5 has been prioritized to complete a comprehensive and updated set of IAEA Nuclear Security Series publications and to provide applicable services to promote their use. However, resources from the Regular Budget are insufficient to meet all of the requests for support, and implementation of the programme will continue to be dependent on Nuclear Security Fund (NSF) contributions and conditions attached to those contributions.

Specific criteria for prioritization:

1. Completion and maintenance of universally applicable IAEA Nuclear Security Series recommendations and guidance, and provision of assessment and evaluation services at the request of Member States. The provision of assistance in capacity building, human resources development programmes and risk reduction activities.

Subprogramme 3.5.1 Information Management

Objectives:

— To maintain a comprehensive information platform providing a good understanding of global nuclear security needs and supporting implementation of the Nuclear Security Plan.
— To improve cyber and information security capabilities of Member States.

Outcomes	Performance Indicators
• Comprehensive and maintained databases and tools which meet the requirements of States without duplicating other national, bilateral or multilateral programmes.	• Number of databases developed by the Agency to support the global nuclear security community.
• Improved cyber security capabilities at the State and facility levels to support the prevention and detection of, and response to, computer security incidents that have the potential to either directly or indirectly adversely impact nuclear safety and security.	• Number of countries requesting assistance to improve cyber and information security capabilities.
• Planned and implemented Integrated Nuclear Security Support Plans (INSSPs).	• Number of INSSPs agreed by States and agreement by them of correctness and relevance of the information for their support needs.

Programmatic changes and trends: In the previous programme and budget cycle, there has been a growing interest by Member States in computer and information security at nuclear power plants and nuclear facilities. Cyber security attacks have increased worldwide and there is a need for information sharing meetings, consultancies, technical guidance publications and training for the global community.

Agency assistance provided to Member States under INSSPs has increased quite dramatically owing to the greater awareness of Agency nuclear security activities on the part of the international nuclear security community.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, are €1 331 720 in 2014, and a decrease of 1% (€7 884) is proposed in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
3.5.1.001 Assessing nuclear security needs, priorities and threats	Development and implementation of INSSPs, development of a self-assessment mechanism or tool for States' use.
3.5.1.002 Partnerships on information sharing on incident & trafficking database	Information sharing, technical meetings and training of appropriate partner professionals to improve the effectiveness of the Agency-wide programme on nuclear security.
3.5.1.003 Information and cyber security, and information technology services	Information and cyber security guidance publications, situation awareness and technical training, technical assistance for Member State, coordinated research, and the development and deployment of information technology tools to support the activities of the Office of Nuclear Security.

Subprogramme 3.5.2 Nuclear Security of Materials and Facilities

Objectives:

— To establish international guidance and provide for its application, upon request; and to develop or enhance, implement and maintain a physical protection regime for nuclear material and other radioactive material, and associated facilities and activities including transport.
— To improve States' institutional, regulatory and technical security capabilities to protect nuclear and radioactive materials and associated facilities including transport.
— To reduce the risk of malicious acts involving nuclear and other radioactive materials, associated facilities and activities including transport.

Outcomes	Performance Indicators
• Increased number of technical guidance publications prepared and used by States in the establishment and maintenance of their national nuclear security regime.	• Number of document preparation profiles approved by the NSGC on nuclear security of materials, facilities and activities. • Number of guidance documents published and used for training events and advisory services.
• Increased knowledge and capacity building for nuclear security of material, facilities and activities in States through, inter alia, the development and provision of training.	• Number of professionals trained and who are used for effective capacity building in States.
• Reduced global risk associated with nuclear power and non-nuclear power applications in medicine, agriculture, research, industry and other applications.	• Number of international peer review, advisory and evaluation missions requested by States and feedback from States on implementation of their recommendations.

Programmatic changes and trends: An increase in demand is anticipated for the development of practical technical security guidance and training on physical protection of nuclear fuel cycles facilities, in particular for nuclear power plants. Security requirements for medical facilities and other users of the radioactive material will become essential in the life cycle of radioactive sources and associated facilities. Nuclear material control and accounting systems at nuclear facilities for security purposes will be a fundamental security element for their protection. An increase in Member State requests for advisory services and assessment missions on physical protection of materials, facilities and activities is also anticipated; these services and missions will be given on a modular basis and tailored to meet the needs of the requesting State. As in previous programmes and Nuclear Security Plans, full account of activities and relevant synergies with other Agency programmes will be considered.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, are €1 289 039 in 2014, and no increase is proposed in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
3.5.2.001 Integrated nuclear security approaches for the nuclear fuel cycle	Availability of a comprehensive set of guidance, procedures, methodologies, assistance programmes and resources in harmony with international instruments and consistent with IAEA Nuclear Security Series No. 13 to maximize the effectiveness of the security of the nuclear fuel cycle.
3.5.2.002 Enhancing nuclear materials security using accounting and control	A comprehensive set of guidance, procedures, methodologies, and programmes to assist States, upon request, to meet their obligations under international instruments and the recommendations on nuclear material accounting and control set out in IAEA Nuclear Security Series No. 13.
3.5.2.003 Upgrading security of radioactive material and associated facilities	A complete set of guidance, in accordance with the programme agreed by the NSGC, for Member States and competent authorities on how to develop and enhance, and to implement and maintain a nuclear security regime for radioactive material, associated facilities and associated activities.
3.5.2.004 Nuclear security in transportation of nuclear and radioactive material	Physical protection technical guidance, procedures, methodologies and training for transport activities; improved national nuclear regulatory and security infrastructure and capabilities for transport security; and enhanced sustainability of national transport security systems.

Subprogramme 3.5.3 Nuclear Security of Material outside of Regulatory Control

Objectives:

— To assist Member States in establishing and sustaining an effective institutional infrastructure to strengthen national efforts to protect people, property, the environment and society from the unauthorized use of nuclear and other radioactive material.
— To assist Member States in detecting, locating and interdicting nuclear and other radioactive material out of regulatory control, and in providing an effective response.
— To assist Member States in strengthening the framework for managing radiological crime scenes, collecting evidence for use in subsequent legal proceedings, undertaking nuclear forensics examinations to support investigations and determining the origin of material to address nuclear security vulnerabilities.

Outcomes	Performance Indicators
• Increased awareness of the need for an effective institutional infrastructure in a State to ensure national and international obligations are met.	• Number of relevant IAEA Nuclear Security Series publications available in all official IAEA languages and used by States. • Number of staff or consultants trained and using the knowledge and lessons learned through institutional infrastructure awareness courses held.
• Increased probability that any nuclear and other radioactive material that is out of regulatory control is detected and appropriately responded to.	• Number of relevant IAEA Nuclear Security Series publications available in all official IAEA languages and used by States. • Number of staff or consultants trained and using the knowledge and lessons learned through relevant training courses held.
• Improved capability of States to support criminal investigations involving nuclear and other radioactive material, and to determine the origin of such material and address nuclear security vulnerabilities.	• Number of relevant IAEA Nuclear Security Series publications available in all official IAEA languages and used by States. • Number of staff or consultants trained and using the knowledge and lessons learned through relevant training courses held.

Programmatic changes and trends: As earlier Nuclear Security Plans (NSPs) have been implemented and as lessons have been learned from coordination and cooperation activities with Member States — such as International Nuclear Security Advisory Service (INSServ) missions, major public events, and capacity building at borders, including through the Border Monitoring Working Group (BMWG) — it has become necessary to concentrate more on the coordination aspects between the various State institutions dealing with the security of nuclear and other radioactive material out of regulatory control. As nuclear security is a global problem, this development will also help to ensure an effective worldwide nuclear security framework. The initiation of the Institutional Infrastructure Project, supported by the two technical project areas of 'Detection and Response Architecture' and 'Radiological Crime Scene Management and Nuclear Forensics', is aimed at addressing this identified need.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, are €1 320 261 in 2014, and an increase of 1% (€8 000) is proposed in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
3.5.3.001 Institutional infrastructure for material out of regulatory control	Joint action plans, practical arrangements, border plans on border monitoring, peer review mission reports, INSSPs tailored to Member State needs, development and publication of relevant guidance, coordination meetings, associated awareness and capacity building events.
3.5.3.002 Nuclear security detection and response architecture	CRPs; missions; training courses, seminars and workshops; development and publication of guidance; provision of radiation detection equipment; strategic documents development; and optimization of resources through effective coordination with other major assistance programmes in the area.
3.5.3.003 Radiological crime scene management and nuclear forensics science	IAEA Nuclear Security Series, nuclear security training programme, assessment missions, coordination and cooperation with professional bodies and Member States, and CRPs.

Subprogramme 3.5.4 Programme Development and International Cooperation

Objectives:

— To ensure that the NSP is implemented in a coordinated manner within the Office of Nuclear Security with other international organizations, initiatives and assistance, in order to reduce duplication of effort.
— To assist in the development and promotion of a comprehensive and global nuclear security framework, including the production and use of comprehensive guidance in the IAEA Nuclear Security Series.
— To provide a coordinated education and training programme that meets the requirements of Member States and to facilitate delivery of those programmes through the International Nuclear Security Education Network (INSEN) and Nuclear Security Support Centre (NSSC) networks and the Nuclear Security Information Portal (NUSEC).

Outcomes	Performance Indicators
• Improved nuclear security through the production of current, comprehensive and complete global nuclear security guidance involving all Member States.	• Number of Member States participating in NSGC, number of publications produced in the IAEA Nuclear Security Series, entry into force of the Amendment to the CPPNM.
• Strengthened Member States' capacity building through implementation of a global nuclear security education and training programme, available to all Member States through the INSEN and NSSC networks and the NUSEC.	• Number of Member States using IAEA developed education and training courses, number of Member States and institutions participating in INSEN and NSSC networks.
• Coordinated delivery of IAEA programmes with those of other initiatives with a reduction of duplication and overlap.	• Number of activities duplicated by other initiatives, number carried out in conjunction with the IAEA.

Programmatic changes and trends: This subprogramme aims to continue and further strengthen the process of greater Member State involvement in nuclear security activities through facilitating participation in the development of education and training networks, in accordance with standard Agency oversight mechanisms, and, in particular, nuclear security publications through membership of the NSGC.

Resource changes and trends: The proposed Regular Budget resource requirements, at 2013 prices, are €1 106 456 in 2014, and no increase is proposed in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
3.5.4.001 International nuclear security framework, networks and partnerships	Practical arrangements, contribution agreements, reports to the Policy-making Organs.
3.5.4.002 Education and training programmes for human resource development	Textbooks and course materials covering the Master's degree in nuclear security; and modular training programmes covering all aspects of nuclear security.
3.5.4.003 Coordinating nuclear security guidance and advice services	Consensus nuclear security guidance publications approved by Member States; and expert advice to the Director General on the Agency's nuclear security programme, and to the Director General and the wider community on current and emerging nuclear security issues.

Medium Term Strategy

MTS Sub-objectives	Projects
A01 Assist Member States planning nuclear power programmes as well as those establishing their first research reactor or fuel cycle facility to strengthen infrastructure development	3.4.2.004 Decommissioning of nuclear facilities and environmental remediation
C01 Enhance the global nuclear safety and security framework	3.0.0.001 Enhancing the global nuclear safety and security framework 3.0.0.002 Nuclear Safety Action Team 3.3.3.001 Nuclear Safety Action Plan (NSAP) 3.4.1.001 Radioactive waste and spent fuel management 3.4.1.002 Assessment and management of environmental releases 3.4.3.001 Nuclear Safety Action Plan (NSAP) Waste Safety 3.4.3.002 Nuclear Safety Action Plan (NSAP) Waste Technology 3.5.1.002 Partnerships on information sharing on incident & trafficking database 3.5.3.001 Institutional infrastructure for material out of regulatory control 3.5.4.001 International nuclear security framework, networks and partnerships
C02 Establish and continuously improve standards and guidance	3.1.1.001 Improving member states emergency preparedness 3.2.1.002 Improve safety standards, support CNS and INSAG 3.3.1.001 Radiation protection criteria and standards 3.3.2.002 Transport safety 3.4.1.003 Decommissioning and remediation safety 3.5.4.003 Coordinating nuclear security guidance and advice services
C03 Assist Member States to develop and strengthen safety and security capacity building	3.2.1.003 Capacity building for installations safety and regulatory functions 3.2.2.002 Sustainable design and safety assessment competency, methods and tools 3.5.4.002 Education and training programmes for human resource development
C04 Help to build national, regional and international capacity to respond to nuclear and radiological incidents and emergencies and assist in case of a nuclear or radiological incident or emergency	3.1.0.001 Nuclear Safety Action Plan (NSAP) 3.1.1.002 Enhancing international emergency management 3.1.2.001 Executing, maintaining and enhancing the Secretariat's response capabilities 3.1.2.002 Maintain/enhance response and assistance arrangements with MS and IOs

MTS Sub-objectives	Projects
C05 Assist Member States in enhancing safety of nuclear installations	3.2.6.001 Nuclear Safety Action Plan (NSAP) 3.2.1.001 Strengthening regulatory effectiveness and regulatory networking 3.2.2.001 Evaluation of design and safety assessment of nuclear facilities 3.2.3.001 Promoting an integrated approach for site and installation safety 3.2.3.002 Competency, methods and tools for installations safety assessments 3.2.4.001 Enhancing the operational safety performance 3.2.4.002 Strengthening sharing and use of international operating experience 3.2.4.003 Effective leadership, management for safety and safety culture in MSs 3.2.4.004 Supporting long term operation safety 3.2.5.001 Enhancing the safety of research reactors
C06 Assist Member States in strengthening the control of radioactive sources, and in mitigating the effects of unauthorized disposal	3.3.2.001 Control of radiation sources
C07 Assist Member States in enhancing their national radiation and transport safety	3.2.5.002 Enhancing the safety of fuel cycle facilities 3.3.1.002 Radiation protection of patients 3.3.1.003 Occupational radiation protection 3.3.1.004 Radiation safety technical services 3.3.2.003 Technical assistance and information management
C08 Assist Member States in enhancing waste and environmental safety and developing and enhancing waste management infrastructure	3.4.2.001 Pre-disposal management of radioactive waste 3.4.2.002 Managing disposal of radioactive waste and spent fuel 3.4.2.003 Managing disused sealed radioactive sources (DSRSs) 3.4.2.005 Knowledge sharing for capacity building in RWM, decommissioning and ER
C09 Strengthen international cooperation in nuclear security	3.5.3.003 Radiological crime scene management and nuclear forensics science
C10 Help Member States to enhance their nuclear security infrastructure	3.5.1.001 Assessing nuclear security needs, priorities and threats 3.5.1.003 Information and cyber security, and information technology services 3.5.2.001 Integrated nuclear security approaches for the nuclear fuel cycle 3.5.2.002 Enhancing nuclear materials security using accounting and control 3.5.2.003 Upgrading security of radioactive material and associated facilities 3.5.2.004 Nuclear security in transportation of nuclear and radioactive material 3.5.3.002 Nuclear security detection and response architecture

The following MTS Sub-objective is associated to projects only as secondary:

- D02 Facilitate cooperation among Member States bilaterally and regionally.

Major Programme 3 – Nuclear Safety and Security
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 17

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
3.0.0.001 Enhancing the global nuclear safety and security framework	1 131 072	1 291 813	-	1 131 072	1 291 813	-
3.0.0.002 Nuclear Safety Action Team	1 484 469	-	97 229	1 480 826	-	-
3.S Corporate shared services	1 752 702	48 172	12 420	1 753 663	49 382	12 420
	4 368 243	**1 339 985**	**109 649**	**4 365 562**	**1 341 195**	**12 420**
3.1.1.001 Improving member states emergency preparedness	796 357	659 017	186 705	844 121	610 550	186 705
3.1.1.002 Enhancing international emergency management	564 782	403 318	-	618 175	477 911	-
3.1.1 Strengthening National and International Emergency Preparedness	**1 361 139**	**1 062 335**	**186 705**	**1 462 296**	**1 088 461**	**186 705**
3.1.2.001 Execute, maintain and enhance the Secretariat's response capabilities	1 429 938	407 157	-	1 295 537	200 495	-
3.1.2.002 Maintain/enhance response and assistance arrangements with MS and IOs	551 516	481 241	-	583 770	318 726	-
3.1.2 IAEA IES and Operational Arrangements with MSs and IOs.	**1 981 454**	**888 399**	**-**	**1 879 308**	**519 221**	**-**
3.1.3.001 Nuclear Safety Action Plan (NSAP)	430 228	423 118	-	430 228	423 118	-
3.1.3 Nuclear Safety Action Plan (NSAP)	**430 228**	**423 118**	**-**	**430 228**	**423 118**	**-**
3.1 Incident and Emergency Preparedness and Response	**3 772 821**	**2 373 852**	**186 705**	**3 771 831**	**2 030 801**	**186 705**
3.2.1.001 Strengthening regulatory effectiveness and regulatory networking	1 288 313	2 105 441	87 303	1 300 112	2 012 921	83 506
3.2.1.002 Improve safety standards, support CNS and INSAG	1 167 241	115 972	35 980	990 079	115 972	-
3.2.1.003 Capacity building for installations safety and regulatory functions	281 696	28 968	42 344	271 776	28 968	39 219
3.2.1 Governmental Regulatory Framework and Safety Infrastructure Development	**2 737 250**	**2 250 381**	**165 627**	**2 561 966**	**2 157 861**	**122 726**
3.2.2.001 Evaluation of design and safety assessment of nuclear facilities	1 198 722	382 412	90 070	1 194 034	382 412	85 383
3.2.2.002 Sustainable design and safety assessment competency, methods and tools	979 771	5 255 142	62 803	980 708	5 255 142	63 740
3.2.2 Safety Assessment of Nuclear Installations	**2 178 493**	**5 637 553**	**152 873**	**2 174 743**	**5 637 553**	**149 123**
3.2.3.001 Promoting an integrated approach for site and installation safety	652 600	-	71 138	652 600	-	71 138
3.2.3.002 Competency, methods and tools for installations safety assessments	191 795	3 655 140	-	192 206	3 655 140	-
3.2.3 Safety and Protection Against Internal and External Hazards.	**844 395**	**3 655 140**	**71 138**	**844 806**	**3 655 140**	**71 138**
3.2.4.001 Enhancing the operational safety performance	841 199	221 242	43 028	939 237	221 242	25 372
3.2.4.002 Strengthening sharing and use of international operating experience	852 486	14 805	42 800	862 189	14 805	43 735
3.2.4.003 Effective leadership, management for safety and safety culture in MSs	321 086	102 800	38 360	323 030	102 800	50 596
3.2.4.004 Supporting long term operation safety	334 938	138 165	51 245	381 466	138 165	63 648
3.2.4 Safe Operation of Nuclear Power Plants	**2 349 708**	**477 013**	**175 432**	**2 505 922**	**477 013**	**183 351**

Major Programme 3 – Nuclear Safety and Security
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 17

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
3.2.5.001 Enhancing the safety of research reactors	863 773	-	143 394	869 198	-	115 878
3.2.5.002 Enhancing the safety of fuel cycle facilities	299 349	349 617	125 795	295 831	349 617	110 068
3.2.5 Safety of Research Reactor and Fuel Cycle Facilities	**1 163 122**	**349 617**	**269 189**	**1 165 029**	**349 617**	**225 946**
3.2.6.001 Nuclear Safety Action Plan (NSAP)	642 984	453 235	-	664 130	412 228	-
3.2.6 Nuclear Safety Action Plan (NSAP)	**642 984**	**453 235**	**-**	**664 130**	**412 228**	**-**
3.2 Safety of Nuclear Installations	**9 915 952**	**12 822 938**	**834 259**	**9 916 596**	**12 689 412**	**752 283**
3.3.1.001 Radiation protection criteria and standards	993 459	159 078	-	1 001 486	148 798	-
3.3.1.002 Radiation protection of patients	895 444	-	-	903 283	-	-
3.3.1.003 Occupational radiation protection	517 447	226 160	-	484 888	226 160	-
3.3.1.004 Radiation safety technical services	1 319 384	-	-	1 319 387	-	-
3.3.1 Radiation Safety and Monitoring	**3 725 734**	**385 238**	**-**	**3 709 045**	**374 958**	**-**
3.3.2.001 Control of radiation sources	1 140 918	221 206	47 059	1 145 945	309 038	32 500
3.3.2.002 Transport safety	939 846	183 267	-	945 513	177 886	-
3.3.2.003 Technical assistance and information management	939 020	-	59 583	944 011	-	59 583
3.3.2 Regulatory Infrastructure and Transport Safety	**3 019 784**	**404 473**	**106 642**	**3 035 469**	**486 924**	**92 083**
3.3.3.001 Nuclear Safety Action Plan (NSAP)	252 109	-	-	252 109	-	-
3.3.3 Nuclear Safety Action Plan (NSAP)	**252 109**	**-**	**-**	**252 109**	**-**	**-**
3.3 Radiation and Transport Safety	**6 997 627**	**789 711**	**106 642**	**6 996 624**	**861 882**	**92 083**
3.4.1.001 Radioactive waste and spent fuel management	1 322 196	-	-	1 343 042	-	102 800
3.4.1.002 Assessment and management of environmental releases	781 975	-	41 526	778 024	-	37 332
3.4.1.003 Decommissioning and remediation safety	1 067 345	330 502	-	1 057 295	330 502	-
3.4.1 Waste and Environmental Safety	**3 171 516**	**330 502**	**41 526**	**3 178 361**	**330 502**	**140 132**
3.4.2.001 Pre-disposal management of radioactive waste	766 739	54 981	39 065	761 680	64 276	48 608
3.4.2.002 Managing disposal of radioactive waste and spent fuel	891 696	89 905	-	891 696	86 550	-
3.4.2.003 Managing disused sealed radioactive sources (DSRS)	318 954	157 328	15 889	285 190	157 328	-
3.4.2.004 Decommissioning of nuclear facilities and environmental remediation	717 565	78 852	-	726 341	81 611	-
3.4.2.005 Knowledge sharing for capacity building in RWM, decommissioning and ER	633 151	17 481	95 160	663 515	17 481	95 160
3.4.2 Technology for RWM, Decommissioning & Environmental Remediation	**3 328 104**	**398 546**	**150 114**	**3 328 422**	**407 245**	**143 768**

Major Programme 3 – Nuclear Safety and Security
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 17

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
3.4.3.001 Nuclear Safety Action Plan (NSAP) waste safety	330 378	-	-	337 346	-	-
3.4.3.002 Nuclear Safety Action Plan (NSAP) waste technology	139 368	128 602	-	125 803	135 102	-
3.4.3 Nuclear Safety Action Plan (NSAP)	**469 746**	**128 602**	**-**	**463 149**	**135 102**	**-**
3.4 Management of Radioactive Waste	**6 969 365**	**857 650**	**191 640**	**6 969 933**	**872 849**	**283 900**
3.5.1.001 Assessing nuclear security needs, priorities and threats	436 301	506 009	-	436 301	497 785	-
3.5.1.002 Partnerships on information sharing on incident & trafficking database	379 175	669 632	-	379 175	669 632	-
3.5.1.003 Information and cyber security, and information technology services	527 474	765 004	-	519 370	717 631	-
3.5.1 Information Management	**1 342 950**	**1 940 644**	**-**	**1 334 846**	**1 885 047**	**-**
3.5.2.001 Integrated nuclear security approaches for the nuclear fuel cycle	647 057	906 979	-	647 057	869 971	-
3.5.2.002 Enhancing nuclear materials security using accounting and control	127 022	430 315	-	127 022	421 063	-
3.5.2.003 Upgrading security of radioactive material and associated facilities	265 779	7 831 488	-	265 779	7 803 732	-
3.5.2.004 Nuclear security in transportation of nuclear and radioactive material	259 343	460 409	-	259 343	441 905	-
3.5.2 Nuclear Security of Materials and Facilities	**1 299 201**	**9 629 191**	**-**	**1 299 201**	**9 536 671**	**-**
3.5.3.001 Institutional infrastructure for material out of regulatory control	528 321	4 793 226	-	528 321	4 756 218	-
3.5.3.002 Nuclear security detection and response architecture	324 198	222 647	-	324 198	177 415	-
3.5.3.003 Radiological crime scene management and nuclear forensics science	476 194	607 654	-	484 418	562 422	-
3.5.3 Nuclear Security of Material Outside of Regulatory Control	**1 328 713**	**5 623 528**	**-**	**1 336 937**	**5 496 056**	**-**
3.5.4.001 International nuclear security framework, networks and partnerships	412 306	766 070	-	412 306	766 070	-
3.5.4.002 Education and training programmes for human resource development	357 182	811 282	-	357 182	811 282	-
3.5.4.003 Coordinating nuclear security guidance and advice services	349 627	254 206	-	349 627	149 091	-
3.5.4 Programme Development and International Cooperation	**1 119 115**	**1 831 558**	**-**	**1 119 115**	**1 726 443**	**-**
3.5 Nuclear Security	**5 089 980**	**19 024 921**	**-**	**5 090 100**	**18 644 217**	**-**
Major Programme 3 - Nuclear Safety and Security	**37 113 988**	**37 209 057**	**1 428 895**	**37 110 646**	**36 440 356**	**1 327 391**

Major Programme 3 – Nuclear Safety and Security
Unfunded Activities within Tasks

Table 18

Project	Tasks	2014 Unfunded	2015 Unfunded
3.S.3.005 BSS MTIT Business Solutions Section (Attrib. to MP 3)	Software solutions	12 420	12 420
3.0.0.002 Nuclear Safety Action Team	Overall management and coordination	42 979	-
	Coordination of in-house activities related to the NSAP	54 251	-
3.1.1.001 Improving member states emergency preparedness	EPR standards, guidelines and tools	44 924	44 924
	Providing EPR services to Member States	141 782	141 782
3.2.1.001 Strengthening regulatory effectiveness and regulatory networking	Develop, review and revise safety standards and related documents on governmental and regulatory framework for nuclear installations	11 511	11 511
	Implement the Integrated Regulatory Review Services (IRRS) and assist Member States in the implementation of recommendations made	34 833	36 716
	Support the implementation of the nuclear safety infrastructure based on SSG-16 for Member States embarking on a new nuclear power programme	16 979	16 979
	Support international cooperation, coordination and information exchange by organizing, participating in and supporting international conferences and forums, regulatory networks, international WGs and institutions and other international activities in the regulatory area	23 980	18 300
3.2.1.002 Improve safety standards, support CNS and INSAG	Organize review meetings of the contracting parties, including maintain the CNS secure website	35 980	
3.2.1.003 Capacity building for installations safety and regulatory functions	Develop, deliver and maintain regulatory training courses, seminars and training material based on the IAEA safety standards and enhance the web-based platform for disseminating training materials and on-line courses	20 958	17 834
	Provide support and assistance for regulatory training networks and implement the education and training peer review service	21 385	21 385
3.2.2.001 Evaluation of design and safety assessment of nuclear facilities	Revision of safety standards	31 903	31 903
	Safety assessment review services	48 266	43 578
	International cooperation	9 902	9 902
3.2.2.002 Sustainable design and safety assessment competency, methods and tools	Design and safety assessment approaches	24 818	25 756
	Safety Assessment Education and Training (SAET)	21 146	21 146
	Design and safety assessment capacity and competency building	16 839	16 839
3.2.3.001 Promoting an integrated approach for site and installation safety	Develop review and revise safety standards and supporting technical documents on safety assessment of nuclear activities and facilities and on the design of nuclear power plants	16 458	16 458
	Conduct SEED review and advisory services missions, assist Member States in the implementation of the recommendations made and support capacity building	27 335	27 335
	Support external events notification system and tools for assessment of external hazards to provide information to IEC	17 583	17 583
	Support international co-operation, co-ordination and information exchange by participating in and supporting international conferences, international working groups and institutions and other international activities	9 762	9 762
3.2.4.001 Enhancing the operational safety performance	Develop, review and revise safety standards and supporting documents on operational safety of nuclear power plants	34 985	17 329
	Implement the OSART programme and assist Member States in the implementation of recommendations made	8 043	8 043

Major Programme 3 – Nuclear Safety and Security
Unfunded Activities within Tasks

Table 18

Project	Tasks	2014 Unfunded	2015 Unfunded
3.2.4.002 Strengthening sharing and use of international operating experience	Develop, review and revise safety standards and supporting documents on operating experience feedback	7 944	7 944
	Conduct operating experience programme review (PROSPER) and assist Member States in the implementation of recommendations made	12 096	17 087
	Coordinate the Incident Reporting System (IRS) program and foster international exchange of information and knowledge sharing on operating experience	16 829	12 774
	Support international cooperation, coordination and information exchange by participating in and supporting international conferences, international working groups and institutions and other international activities	5 930	5 930
3.2.4.003 Effective leadership, management for safety and safety culture in MSs	Develop review and revise safety standards and supporting documents on effective leadership, management for safety and safety culture	14 929	32 349
	Conduct missions and advisory services for safety culture self-assessment and improvement and assist Member States in the implementation of recommendations made	6 138	-
	Support international cooperation, coordination and information exchange by participating in and supporting international conferences, international working groups and institutions and other international activities	17 293	18 247
3.2.4.004 Supporting long term operation safety	Develop, review and revise safety standards and supporting documents on Safety Aspects of Long Term Operation (SALTO) and foster international exchange of information and knowledge sharing on International Generic Ageing Lessons Learned (IGALL)	30 162	38 205
	Conduct Safety Aspects of Long Term Operation (SALTO) missions and assist Member States in the implementation of recommendations made	18 119	22 478
	Support international cooperation, coordination and information exchange by participating in and supporting international conferences, international working groups and institutions and other international activities	2 965	2 965
3.2.5.001 Enhancing the safety of research reactors	Develop, review and revise safety standards and supporting documents in the area of research reactor (RR) safety and assist Member States in the application of the IAEA code of conduct on the Safety of RRs and the support of safety standards	9 930	7 944
	Conduct safety review and advisory services missions and assist Member States in the implementation of the recommendations made	14 922	14 922
	Support capacity building for research reactor safety infrastructure	89 584	-
	Monitor and enhance the safety of research reactors under project and supply agreements	14 922	43 358
	Operate the Incident Reporting System for Research Reactors (IRSRR) and foster international exchange of information and knowledge sharing	8 894	27 608
	Organize the "International Conference on Research Reactors: Safe Management and Effective Utilization"	-	14 335
	Conduct Coordinated Research Rroject (CRP) on establishment of material properties database for irradiated core structure components for continued safe operation and life-time extension of research reactors	5 140	7 710
3.2.5.002 Enhancing the safety of fuel cycle facilities	Develop, review and revise safety standards and supporting documents on fuel cycle facilities and assist Member States in their application	41 323	30 073
	Conduct safety review and advisory services missions and assist Member States in the implementation of the recommendations made	23 200	23 200
	Support capacity building for fuel cycle facilities' safety infrastructure	46 222	46 222
	Operate the incident reporting system for fuel cycle facilities (FINAS) and foster international exchange of information and knowledge sharing	15 050	10 573
3.3.2.001 Control of radiation sources	To develop, update and translate training material related to control of sources, delivery of training courses for regulatory bodies	47 059	32 500

Major Programme 3 – Nuclear Safety and Security
Unfunded Activities within Tasks

Table 18

Project	Tasks	2014 Unfunded	2015 Unfunded
3.3.2.003 Technical assistance and information management	Maintaining radiation safety profiles for Member States receiving IAEA assistance	59 583	59 583
3.4.1.001 Radioactive waste and spent fuel management	Secretariat of the joint convention on the safety of spent fuel management and on the safety of radioactive waste management	-	102 800
3.4.1.002 Assessment and management of environmental releases	Assessment of impacts from NORM, design of systems for environmental monitoring	41 526	37 332
3.4.2.001 Pre-disposal management of radioactive waste	General management	10 280	10 280
	New documents on specific topics in predisposal waste management	12 688	-
	Management of CRP on HLW, initiating CRP on alpha bearing waste, publishing report of CRP on treatment of irradiated graphite	7 517	29 747
	Network of Laboratories for Nuclear Waste Characterization Activities (LABONET)	8 581	8 581
3.4.2.003 Managing disused sealed radioactive sources (DSRS)	DSRS management capacity building	15 889	-
3.4.2.005 Knowledge sharing for capacity building in RWM, decommissioning and ER	International coordination	95 160	95 160

Major Programme 4
Nuclear Verification

Introduction

Major Programme 4 supports the Agency's statutory mandate to establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities and information made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose; and to apply safeguards, at the request of the parties, to any bilateral or multilateral arrangement, or at the request of a State, to any of that State's activities in the field of atomic energy. To this end, the Agency concludes safeguards agreements with States which confer upon the Agency the legal obligation and authority to apply safeguards to nuclear material, facilities and other items subject to safeguards. Under this Major Programme, the Agency carries out verification, information analysis and evaluation activities, and provides safeguards instrumentation as well as analytical services required for implementing safeguards. These activities enable the Agency to establish a comprehensive set of information upon which safeguards conclusions can be drawn. The Agency is also supporting other verification tasks for example in relation to the process of nuclear arms control and disarmament when requested. Development and strategic planning activities allow the Agency to enhance and improve its information base, to anticipate and prepare for future technological requirements, and to improve overall effectiveness and efficiency of the safeguards system. The programmatic and financial forecasts provided in this document are based on currently available information regarding States' nuclear infrastructure, nuclear material and activities. The resource impact of new, additional tasks, as well as of tasks which are expected to be completed during the upcoming biennium, was taken into account. The impact of tasks of an uncertain nature and their potential resource requirements was assessed to the extent possible.

Objectives:

— Deter the proliferation of nuclear weapons by early detection of the misuse of nuclear material or technology, and by providing credible assurances that States are honouring their safeguards obligations.
— Contribute to nuclear arms control and disarmament by responding to States' requests for verification and other technical assistance associated with related agreements and arrangements.
— Continually improve and optimize departmental operations and capabilities to effectively carry out the Agency's verification mission.

Outcomes	Performance Indicators
• Safeguards conclusions regarding the peaceful use of all nuclear material in States or the peaceful use of declared nuclear material and, where applicable, of nuclear material, facilities and other items to which safeguards are applied.	• Percentage of States with safeguards agreements in force, for which safeguards activities were conducted and safeguards conclusion were drawn.
• Increased effectiveness and efficiency of the safeguards system through the implementation of strengthening measures in all States.	• Percentage of States with safeguards agreements and an additional protocol (AP) in force.
• Appropriate contribution to the verification of the process of nuclear arms control and disarmament, upon request.	• Technical readiness and appropriate support provided for verification of fissile material no longer used in weapons, and other fissile materials, as requested by States.

Title	Main Planned Outputs
4.0.0.001 Overall management and coordination	Policies and directives, reporting documents; country-specific safeguards information; action and follow-up plans for implementation of management mechanisms and tools; overarching communication plan; and inputs for the Annual Report.
4.0.0.002 Quality management	Trained staff on quality management (QM); document management system, valid safeguards (SG) documents; managed QM information technology (IT) tools; SG performance indicators; OIOS audits/evaluations implemented in SG, recommendations processed; SG audit programmes and reports; SG cost methodology; and knowledge management programme.

Title	Main Planned Outputs
4.0.0.003 Resources management	Inputs to the Programme and Budget, Programme Performance Report and Mid-Term Progress Report; inputs to the Safeguards Implementation Report (SIR); annual staffing plans; recruited and designated inspectors; occupational health and safety standards and procedures; and website and training on safety and radiation protection.
4.0.0.004 Security	New security policies and procedures; monitored and addressed physical and information security related incidents; security awareness campaigns; and trained staff.

Programme 4.1 Safeguards Implementation

Rationale: The effective implementation of the safeguards system requires the Agency to conduct a variety of activities to verify the correctness and completeness of States' declarations. The activities include accessing safeguards relevant information and locations in States; providing and utilizing appropriately prepared, calibrated, tested and well maintained equipment; information analysis; developing safeguards approaches to be implemented in specific States and at specific types of facility; and providing staff with the skills and training that they require for effective and efficient safeguards implementation. This programme includes projects that enable the Agency to establish a comprehensive set of information upon which safeguards conclusions can be drawn.

Objectives:

— To establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose.
— To apply safeguards, pursuant to the safeguards agreements concluded with the Agency, or other bilateral or multilateral arrangement, or at the request of a State, to any of that State's activities in the field of nuclear energy.
— To provide credible assurances that all nuclear material remains in peaceful activities in States with comprehensive safeguards agreements (CSAs) and additional protocols in force;
— To provide credible assurances that declared nuclear material remains in peaceful activities in States with comprehensive safeguards agreements in force;
— To provide credible assurances that nuclear material, facilities and other items to which safeguards are applied under agreements pursuant to INFCIRC/66/Rev.2 remain in peaceful activities;
— To provide credible assurances that nuclear material to which safeguards are applied in selected facilities pursuant to voluntary offer agreements remains in peaceful activities unless withdrawn as provided for in the agreements;
— To enhance the effectiveness and efficiency of safeguards implementation.

Outcome	Performance Indicator
• All safeguards relevant information is evaluated for each State.	• Number of States for which a state evaluation was conducted.

Lessons learned from reviews, assessment, evaluations: The programme incorporates activities identified in the Medium Term Strategy 2012–2017 and addresses recommendations from external programme evaluations and the implementation of safeguards and internal audits. There is significant staff turnover and the Agency must compete with others in the context of the limited availability of nuclear professional staff. Priorities therefore include knowledge management, staff planning and development. Gender mainstreaming and activities to ensure equitable geographical representation will also be integrated through training of personnel from Member States and specific recruitment policies.

Specific criteria for prioritization:

1. Projects responding directly to the Agency's statutory and legal obligations, and decisions of the Board of Governors. The Agency must conduct these projects and cannot defer their implementation.
2. Projects enhancing the Agency's ability to conduct mandatory activities effectively and efficiently: providing technological, methodological, information management and research infrastructure.
3. Non-mandatory projects carried out at the request of Member States.

Subprogramme 4.1.1 Concepts and Planning

Objectives:

— Ensure that the safeguards programme's strategic objectives are met.
— Ensure that State evaluations, State level safeguards approaches and Departmental processes will provide for effective and efficient safeguards implementation.
— Ensure that safeguards activities are carried out in an effective and efficient manner through the provision of appropriate and up to date training.

Outcomes	Performance Indicators
• Effective and efficient safeguards implementation through sound State evaluation, safeguards approaches and measures.	• Percentage of safeguards implementation documents developed, reviewed and/or revised based on departmental needs.
• Safeguards core processes are documented, updated and periodically reviewed.	• Percentage of approved safeguards processes not updated or no longer valid.
• Staff able to perform safeguards activities effectively and efficiently.	• Percentage of formalized safeguards training carried out, as and when required.

Programmatic changes and trends: The subprogramme is dedicated to high priority direct operational support activities critical to ensuring that the Agency's mandatory safeguards obligations can be carried out effectively and efficiently. These activities cover strategic planning; process design and improvement; review and implementation of required safeguards approaches and measures; and training. Activities and resources associated with strategic planning including research and development (R&D) support from Member States have been combined into a new project, *Strategic planning* (4.1.1.004). Activities and resources under Project 4.3.1.001, *Safeguards concepts*, have been adjusted accordingly and former Project 4.3.3.005, *Member State Support Programme Coordination*, has been entirely subsumed under the new project.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 43% (€1 956 775) in 2014, as compared with 2013, and a decrease of 4% (€280 285) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.1.001 Safeguards approaches	State evaluation report reviews; State level safeguards approach reviews; safeguards approach and measure reviews and advice; subsidiary arrangement and facility attachment reviews.
4.1.1.002 Process design	Improved processes, process descriptions/maps, performance indicators, procedures and guides; knowledge retention plans and knowledge management strategy, and IT tools design to support QM activities
4.1.1.003 Training	Training needs analysis; training curricula; evaluation procedures; about 50 training courses; reports and assessment of training courses; teaching materials and training tools; traineeship programme for six trainees.
4.1.1.004 Strategic planning	Strategic planning documents, workshop and technical reports; biennial D&IS programme and report; facility specific safeguards by design documents; new and revised policies, concepts, approaches and processes; Standing Advisory Group on Safeguards Implementation (SAGSI) reports, Member State Support Programme (MSSP) task proposals, application reports, meeting documents and records.

Subprogramme 4.1.2 Safeguards Implementation in States under the Responsibility of Division SGOA

Objectives:

— To provide credible assurances that all nuclear material remains in peaceful activities in States with comprehensive safeguards agreements (CSAs) and additional protocols (APs) in force and that declared nuclear material remains in peaceful activities in States with comprehensive safeguards agreements in force.

— To provide credible assurances that nuclear material to which safeguards are applied in selected facilities pursuant to voluntary offer agreements (VOAs) remain in peaceful activities unless withdrawn as provided for in the agreements.

Outcomes	Performance Indicators
• The timely detection of: the diversion of nuclear material from peaceful nuclear activities; and undeclared nuclear material and activities at the State level.	• For States with safeguards agreements in force, the percentage of States for which safeguards objectives were addressed. • Percentage of States with comprehensive safeguards agreement and additional protocol in force, for which the broader conclusion has been drawn.
• Evaluated information based upon continuous informed analysis on nuclear material, nuclear activities and other safeguards relevant issues at the State level.	• Percentage of States with safeguards agreements in force for which safeguards-relevant information was received, collected, verified and analysed.
• Verification activities performed at the State, site, facility and other locations.	• Percentage of States for which State-level safeguards approaches are prepared, approved and implemented. • Percentage of States for which an annual implementation plan was prepared and implemented.

Programmatic changes and trends: The in-field effort in some States has been reduced with the implementation of integrated safeguards; however, the current level of in-field effort is expected to be maintained in States without an AP in force. The development and implementation of State level approaches will impact evaluation and in-field effort, resulting in increased effectiveness and efficiency.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 17% (€3 182 408) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.2.001 Verification in States with CSA and AP in force	State evaluation reports; State evaluation documents; State level approaches; annual implementation plans; design information verification (DIV) plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections, complementary access (CA) and DIVs.
4.1.2.002 Verification in States with CSA	State evaluation reports; State evaluation documents; State level approaches; annual implementation plans; DIV plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections and DIVs.
4.1.2.003 Verification in States with VOA: China	State evaluation reports; State evaluation documents; annual implementation plans; DIV plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections and DIVs.

Subprogramme 4.1.3 Safeguards Implementation in States under the Responsibility of Division SGOB

Objectives:

— To provide credible assurances that all nuclear material remains in peaceful activities in States with CSAs and APs in force and that declared nuclear material remains in peaceful activities in States with CSAs in force.

— To provide credible assurances that nuclear material, facilities and other items to which safeguards are applied under agreements pursuant to INFCIRC/66/Rev.2 remain in peaceful activities.

— To provide credible assurances that nuclear material to which safeguards are applied in selected facilities pursuant to VOAs remain in peaceful activities unless withdrawn as provided in the agreements.

Outcomes	Performance Indicators
• The timely detection of the diversion of nuclear material from peaceful nuclear activities; and undeclared nuclear material and activities at the State level.	• For States with safeguards agreements in force, the percentage of States for which safeguards objectives were addressed. • Percentage of States with CSAs and APs in force for which the broader conclusion has been evaluated.
• Evaluated information based upon continuous informed analysis on nuclear material, nuclear activities and other safeguards relevant issues at the State level.	• Percentage of States with safeguards agreements in force for which safeguards relevant information was received, collected, verified and analysed.
• Verification activities performed at the State, site, facility and other locations.	• Percentage of States for which State level safeguards approaches were prepared, approved and implemented. • Percentage of States for which an annual implementation plan was prepared and implemented.

Programmatic changes and trends: The in-field effort in some States has been reduced with the implementation of integrated safeguards; however, the current level of in-field work is expected to be maintained in States without an AP in force. The development and implementation of State level approaches will impact evaluation and in-field effort, resulting in increased effectiveness and efficiency. An 'Iran Task Force' has been established within Project 4.1.3.002, *Verification in States with CSA*, reflecting the high priority given to safeguards activities in the Islamic Republic of Iran. The effort in India continues to increase. All activities in the United States of America are funded by extrabudgetary funding. Verification activities related to the Plutonium Management and Disposition Agreement (PMDA), which were previously covered by Project 4.1.3.004, *Verification in States with VOA: United States of America*, in the planning stage have been moved to a newly created separate Project 4.2.1.002, *Verification activities related to the PMDA*.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 15% (€2 505 556) in 2014, as compared with 2013, and an increase of €10 070 in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.3.001 Verification in States with CSA and AP in force	State evaluation reports; State evaluation documents; State level approaches; annual implementation plans; DIV plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections, CAs, and DIVs.
4.1.3.002 Verification in States with CSA	State evaluation reports; State evaluation documents; State level approaches; annual implementation plans; DIV plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections and DIVs.
4.1.3.003 Verification in States with INFCIRC/66-type agreement	State evaluation reports; State evaluation documents; annual implementation plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections.
4.1.3.004 Verification in States with VOA: United States of America	State evaluation reports; State evaluation documents; annual implementation plans; DIV plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections, CAs, and DIVs.

Subprogramme 4.1.4 Safeguards Implementation in States under the Responsibility of Division SGOC

Objectives:

— To provide credible assurances that all nuclear material remains in peaceful activities in States with CSAs and APs in force and that declared nuclear material remains in peaceful activities in States with CSAs in force.

— To provide credible assurances that nuclear material, to which safeguards are applied in selected facilities pursuant to VOAs remains in peaceful activities unless withdrawn as provided for in the agreements.

Outcomes	Performance Indicators
• The timely detection of: the diversion of nuclear material from peaceful nuclear activities; and undeclared nuclear material and activities at the State level	• For States with safeguards agreements in force, the percentage of States for which safeguards objectives were addressed. • Percentage of States with comprehensive safeguards agreement and additional protocol in force, for which the broader conclusion has been evaluated.
• Evaluated information based upon continuous informed analysis on nuclear material, nuclear activities and other safeguards relevant issues at the State level.	• Percentage of States with safeguards agreements in force for which safeguards relevant information was received, collected, verified and analysed.
• Verification activities performed at the State, site, facility and other locations.	• Percentage of States for which State-level safeguards approaches were prepared, approved and implemented. • Percentage of States for which an annual implementation plan was prepared and implemented.

Programmatic changes and trends: All verification activities related to the Plutonium Management and Disposition Agreement (PMDA), which were previously covered by Project 4.1.4.003, *Verification in States with VOA: France, Russian Federation and United Kingdom*, in the planning stage have been moved under a newly created Project 4.2.1.002, *Verification activities related to the PMDA*. Similarly, all activities related to the development and implementation of safeguards approaches for a spent fuel (SF) encapsulation plant and geological repository (EPGR) in Finland and Sweden, which were previously covered by Project 4.1.4.001, *Verification in States with CSA and AP in force*, have been moved under a new separate Project 4.3.3.006, *Develop and Implement SG approaches for a SF EPGR in Finland/Sweden*. The development and implementation of State level approaches for all States will impact evaluation and in-field effort, resulting in increased effectiveness and efficiency.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 4% (€589 660) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.4.001 Verification in States with CSA and AP in force	State evaluation reports; State evaluation documents; State level approaches; annual implementation plans; DIV plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections, CAs and DIVs.
4.1.4.002 Verification in States with CSA	State evaluation reports; State evaluation documents; State level approaches; annual implementation plans; DIV plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections and DIVs
4.1.4.003 Verification in States with VOA: France, Russian Federation and UK	State evaluation reports; State evaluation documents; annual implementation plans; DIV plans; safeguards approaches and inspection procedures; statements and documentation on activities, results and conclusions of inspections, CAs, as applicable, and DIVs

Subprogramme 4.1.5 Information Analysis

Objectives:

— To provide the knowledge to draw credible safeguards conclusions through collecting, evaluating, analysing, structuring, securing and disseminating necessary information in a timely manner.

Outcomes	Performance Indicators
• Effective verification and credible safeguards conclusions through the provision of adequate information and analytical added value.	• Number of instances where additional information challenges a safeguards conclusion in such a way that the conclusion needs to be revised.
• Timely availability of information and competence contributing to departmental collaborative processes (State evaluation and in field activities implementation).	• Percentage of information available on time.
• Have necessary methodologies, approaches, processes, tools and procedures in place.	• Number of newly approved methodologies, approaches, processes, tools and procedures in place.

Programmatic changes and trends: This subprogramme has been split into four projects in line with the reorganization of the Department of Safeguards in 2011. It continues to group all projects dedicated to ongoing safeguards relevant information collection, advanced technical expert's evaluation, and all-source analysis required to draw soundly based safeguards conclusions from mandatory verification activities. It also includes an effort in the development of methodologies and analytical processes formerly covered by the project Integrated Analysis (formerly 4.3.1.3).

The two projects dedicated to information communication technology, ICT Architecture management and ICT operations and security have been grouped in a separate new subprogramme (4.1.9).

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 53% (€12 276 831) in 2014, as compared with 2013, and a decrease of 1% (€148 053) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.5.001 State infrastructure analysis	Analytical reports or other electronic vehicles from commercially available satellite imagery and other sources providing geo-referenced information; analytical reports on advanced fuel cycle issues; contributions to State evaluation, field activities and other safeguards analysis.
4.1.5.002 Declared information analysis	Up-to-date State declared information in databases compliant with analytical needs; official statements to States; analytical reports backing verification activities and State evaluation; contribution to Safeguards Implementation Report (SIR); improved methodologies; training support for State and regional systems of accounting for and control of nuclear material (SSACs/RSACs).
4.1.5.003 State factors analysis	Reports or other electronic vehicles with; analysis from open source information and from commercially available databases; Analytical reports based on information on nuclear procurement activities; contributions to State evaluation, field activities and other safeguards analysis.
4.1.5.004 Nuclear fuel cycle information and analysis	Evaluation reports on sample results; evaluation reports on measurement results; reports on uncertainty estimation; material balance evaluation; documented methods and IT solutions; trained Agency staff and external partners; consultant services; extensive contributions to field activities and general safeguards implementation.

Subprogramme 4.1.6 Provision of Safeguards Instrumentation

Objectives:

— To enable and improve the implementation of safeguards through the timely provision of appropriate and reliable safeguards instruments with adequate field support.
— To enable and maintain a system of asset management and operational equipment tracking compliant with International Public Sector Accounting Standards (IPSAS).
— To ensure safety in the handling of portable equipment through properly organized equipment flow, contamination checking and decontamination measures.

Outcomes	Performance Indicators
• Timely availability of appropriate and reliable safeguards instruments for inspections and adequate field support.	• Percentage of inspector equipment requests for portable and resident equipment completed in a timely manner. • Reliability of safeguards instruments measured by mean time between failures.
• IPSAS compliant asset management and real-time tracking of equipment maintained.	• Number of findings from internal and external auditors. • Ratio of equipment with lost tracking information compared to the overall equipment pool.
• Absence of contaminated equipment items issued for inspection use.	• Number of contaminated items issued to inspectors.

Programmatic changes and trends: The subprogramme addresses core verification activities of the Department. No significant programmatic changes have been envisaged other than a general trend in reducing dependency on extrabudgetary funding.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 2% (€232 144) in 2014, as compared with 2013, and an increase of 6% (€973 442) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.6.001 Portable and resident non-destructive assay equipment	Portable non-destructive assay (NDA) instruments provided to inspectors; transportable attended measurement and other systems; direct field support to inspectors; maintained expertise; and measurement results.
4.1.6.002 Unattended safeguards instrumentation	Prepared, installed and tested surveillance and unattended monitoring systems; field support to inspectors; and in-house data review and analysis support.
4.1.6.003 Equipment logistics and storage	Received and contamination-checked safeguards equipment; stored equipment; delivered inspection items; IPSAS compliant equipment inventory management data and system; and equipment performance and reliability data.
4.1.6.004 Systems integration and coordination	Engineering solutions for complex systems; reliably operating remote monitoring infrastructure; hardware/software security and containment verification; up-to-date procedures and tools; and equipment documentation and authorization records.

Subprogramme 4.1.7 Safeguards Analytical Services

Objective: To maintain and improve capabilities, capacity and services for destructive analysis and environmental sample analysis in order to strengthen the Agency's verification capabilities.

Outcome	Performance Indicators
• Precise, accurate and timely analysis of nuclear material and environmental safeguards samples.	• Degree of usage of laboratory analysis capacity. • Percentage of safeguards samples analysed within agreed timeline.

Programmatic changes and trends: The main tasks covered by this subprogramme as provider of analytical services remain unchanged. Two operational projects in the 2012–2013 biennium, Samples analysis (previously 4.1.7.1) and Analytical support (previously 4.1.7.2), have been merged into one Project 4.1.7.001, *Analytical services and sample analysis*. The quantity and quality of analytical services provided should improve as a result of the new facilities in Seibersdorf.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 10% (€978 511) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.7.001 Analytical services and sample analysis	Nuclear material and environmental sample analytical results; shipment and logistics of samples; Network of Analytical Laboratories (NWAL) management; stockpile and provision of sampling kits and materials.

Subprogramme 4.1.8 Effectiveness Evaluation

Objectives:

— To ensure that key safeguards activities are subject to quality control reviews in order to validate that the safeguards implementation activities met their objectives and support the safeguards conclusions.
— To ensure that the Board of Governors is informed annually on the results of, and conclusions from, safeguards implementation during the previous year.

Outcomes	Performance Indicators
• Confirmation that safeguards activities meet the safeguards objectives and support the safeguards conclusions.	• Percentage of quality control reviews not performed as scheduled in the Safeguards Effectiveness Evaluation annual plan for quality control reviews.
• Submission of a high quality Safeguards Implementation Report (SIR) annually to the Board of Governors.	• Number of inaccuracies identified in the Safeguards Implementation Report. • Number of days after the scheduled distribution date by which the Safeguards Implementation Report is distributed to Permanent Missions.

Programmatic changes and trends: This subprogramme on effectiveness evaluation will further strengthen the independent quality control reviews it performs on the results from safeguards implementation and evaluation activities conducted.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 20% (€438 896) in 2014, as compared with 2013, and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.8.001 Safeguards effectiveness evaluation	Reports on results of quality control reviews of safeguards implementation and evaluation activities; Data Evaluation Report; and Safeguards Implementation Report.

Subprogramme 4.1.9 Information Communication Technology (ICT)

Objectives:

— To provide the necessary information and communication tools to meet the Department's evolving business process needs.
— To provide reliable and fully available ICT services.
— To ensure the security of safeguards information.

Outcomes	Performance Indicators
• Increased number of applications and databases using the Integrated Safeguards Environment (ISE).	• Percentage of applications operating in the ISE. • Percentage of databases integrated in a single repository inside the Integrated Safeguards Environment.
• Increased efficiency of maintenance and support services for safeguards applications.	• Average time between a problem report and a problem closure.
• Improved information security through implementation of the safeguards information security policy.	• Compliance of procedures against information security policy.

Programmatic changes and trends: This subprogramme was newly created to ensure that there is a clear focus on ICT solutions rather than information management. Future changes might be due to technology evolution, which might impact IT development, infrastructure and support.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, are €11 334 677 in 2014 and an increase of 28% (€3 144 070) is proposed in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.1.9.001 ICT development	Departmental IT systems implemented (developed in-house or utilizing commercial products); software provided to Member States to support their safeguards reporting responsibilities; migration of Departmental unstructured data.
4.1.9.002 ICT infrastructure and support	Help desk, email, file storage, network, database, IT security and applications hosting services; desktop/laptop design services; equipment standards and evaluation and life cycle management; mobile devices management; mobile platform, disaster recovery and next generation security implementation.

Programme 4.2 Other Verification Activities

Rationale: In the past, the Agency has been tasked with special missions involving the verification of dismantled nuclear weapons programmes. To ensure that it is ready to contribute to the process of nuclear arms control and disarmament when requested, including through verification of material no longer required for defence purposes and verification of cessation of production of fissile material for use in nuclear weapons or other nuclear explosive devices, the Agency will enhance its capability to contribute and respond to requests from States for verification and technical assistance in this field.

Objectives:

— To maintain readiness to implement verification tasks which contribute to the process of nuclear arms control and disarmament, such as verification measures in connection with nuclear material no longer required for defence purposes, as requested.

Outcome	Performance Indicators
• Readiness to provide for verification measures and technical assistance.	• Percentage of verification tools and techniques and funding available.

Lessons learned from reviews, assessment, evaluations: Among the medium and long term strategic goals identified in the area of nuclear verification, the Agency must remain ready to assist, in accordance with its Statute, with verification tasks so as to contribute to the process of nuclear disarmament or arms control, that it may be requested to carry out. The Agency was requested in 2010 to undertake a verification role under the *Agreement between the Government of the Russian Federation and the Government of the United States of America Concerning the Management and Disposition of Plutonium Designated as No Longer Required for Defense Purposes and Related Cooperation (PMDA)*, as amended. Hence, the Agency will need to be prepared to assist the international community upon request.

Specific criteria for prioritization:

1. Projects responding directly to the Agency's statutory and legal obligations, and decisions of the Board of Governors. The Agency must conduct these projects and cannot defer their implementation.
2. Projects enhancing the Agency's ability to conduct mandatory activities effectively and efficiently: providing technological, methodological, information management and research infrastructure.
3. Non-mandatory projects carried out at the request of Member States.

Subprogramme 4.2.1 Other Verification Activities

Objectives:

— To prepare and be ready to verify that the Democratic People's Republic of Korea (DPRK) is fulfilling its obligations under its NPT Safeguards Agreement (INFCIRC/403), and the abandonment of the DPRK nuclear programme in a complete, verifiable and irreversible manner, when requested by the Board of Governors.

— To prepare and be ready to verify the disposition of plutonium designated as no longer required for defence purposes, in accordance with an agreement to be concluded between the Agency, the Russian Federation and the United States of America, as approved by the Board of Governors.

Outcomes	Performance Indicators
• Maintain readiness and preparedness to implement safeguards under INFCIRC/403 and to conduct other verification activities in the DPRK, as approved by the Board of Governors.	• Percentage of required documents and plans in place to allow for verification activities in the DPRK.
• Have the necessary legal framework, verification approaches and equipment to conduct verification related to the PMDA	• Percentage of required arrangements, approaches and systems in place to allow for verification of the PMDA.

Programmatic changes and trends: The activities related to the Agency's readiness to conduct verifications in the DPRK are continuing as in the previous biennium and as approved by the Board of Governors. A new project, 4.2.1.002 *Verification activities related to the Plutonium Management and Disposition Agreement (PMDA)*, has been added to this subprogramme. The verification activities related to the PMDA will require negotiation between the Agency, the Russian Federation and the United States of America, and the approval by the Board of Governors.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 3% (€14 957) in 2014, as compared with 2013 and no increase in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.2.1.001 Verification activities in the Democratic People's Republic of Korea	State evaluation report for the DPRK; plans to implement safeguards or other monitoring and/or verification measures under different scenarios.
4.2.1.002 Verification activities related to the PMDA	Verification approaches; inspection procedures; statements and documentation on activities, results and conclusions of inspections; equipment requirements; installed and tested equipment.

Programme 4.3 Development

Rationale: Development activities permit the Agency to optimize the breadth and quality of information upon which safeguards conclusions can be drawn, to anticipate and prepare for future technological requirements, and to improve the overall effectiveness and efficiency of the safeguards system. This programme includes projects addressing the development of safeguards concepts and the hardware, software and infrastructure required for effective and efficient information processing and analysis; the evaluation of appropriate inspection strategies, supported by suitable methods and verification technologies, as well as the development of instrumentation and communications infrastructure. It also covers training and support to enable States to fulfil their safeguards obligations.

Objectives:

— To optimize the Agency's capabilities to effectively carry out the safeguards verification mission.

Outcome	Performance Indicator
• Enhanced safeguards capabilities, techniques, equipment, software and other required tools.	• Implementation, in accordance with approved plans, in the field and at headquarters of improved and new safeguards concepts, approaches, techniques, equipment, software and other required tools.

Lessons learned from reviews, assessment, evaluations: The Agency must have adequate technologies, methods and capabilities to meet current and future verification mandates effectively. This requires sufficient financial resources as well as long term research, development and planning. Evolving safeguards implementation through the application of State-level safeguards approaches has streamlined processes, introduced efficiencies, and made safeguards more effective**.**

Specific criteria for prioritization:

1. Projects responding directly to the Agency's statutory and legal obligations, and decisions of the Board of Governors. The Agency must conduct these projects and cannot defer their implementation.
2. Projects enhancing the Agency's ability to conduct mandatory activities effectively and efficiently: providing technological, methodological, information management and research infrastructure.
3. Non-mandatory projects carried out at the request of Member States.

Subprogramme 4.3.1 Evolving Safeguards Implementation

Objectives:

— To develop concepts and safeguards approaches for verification activities, in order to better implement safeguards at the State level, to safeguard new facility types, to enhance the ability to detect undeclared nuclear material and activities, and to address deficiencies in approaches.
— To develop, enhance and maintain an ICT infrastructure satisfying the needs for functionality, performance and capacity required for the integrated analysis of information.
— To strengthen the effectiveness and efficiency of, and enhance cooperation with, State and regional systems of accounting for and control of nuclear material (SSACs/RSACs).

Outcomes	Performance Indicators
• Enhanced safeguards implementation and guidance on the development of safeguards approaches, measures, and technology needed for further evolving safeguards implementation.	• Safeguards concept development, policy and guidance development tasks are completed to meet established milestone dates.
• Safeguards relevant information available in a timely manner.	• Rate of satisfaction of the inspectors and evaluators with the timeliness and availability of relevant safeguards information.
• Effective and efficient SSACs in all States with safeguards agreements in force.	• Percentage of States that meet their reporting obligations.

Programmatic changes and trends: The activities covered by the previous Project 4.3.1.3 *Integrated analysis* were moved under Subprogramme 4.1.5 *Information analysis* and split between all four projects in this subprogramme. Project 4.3.1.4, *ICT infrastructure* development and security, was moved under the newly created Subprogramme 4.1.9 *Information Communication Technology*. A new project 4.3.1.002, *IAEA safeguards information system*, was established as successor of the IAEA Safeguards Information System (ISIS) transitioning phase that is planned to be completed in 2013.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 5% (€247 316) in 2014, as compared with 2013, and a decrease of 63% (€3 282 385) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.3.1.001 Safeguards concepts	New and revised policies, approaches, methodologies and guidelines for State level safeguards implementation. Generic safeguards approaches for new types of nuclear facilities.
4.3.1.002 Safeguards information system	Software (SW) modernized (mainframe (MF) SW redesigned and non-MF SW relocated); information repository implemented (MF and non-MF data migrated, capability to access ISE); analytical tools and capabilities implemented (SW for analysis of data, State file, Geospatial Exploitation System).
4.3.1.004 Development of SSAC	Guidance documents with baseline requirements and recommendations for effectiveness of SSACs; implemented training and workshops for SSAC personnel; IAEA SSAC Advisory Service (ISSAS) missions and other technical assistance and follow-up conducted; and annual evaluation of SSAC performance.

Subprogramme 4.3.2 Development of Safeguards Instrumentation

Objectives:

— To ensure the availability of effective, up to date, and cost efficient instrumentation for the verification of nuclear material and other items placed under safeguards.
— To develop innovative approaches and upgrades in traditional safeguards technologies, and to evaluate the application of novel technologies for the detection of undeclared activities.
— To ensure synergy between safeguards equipment development and nuclear security applications through provision of technical expertise and testing and evaluation services.

Outcomes	Performance Indicators
• Timely availability of state-of-the-art non-destructive assay (NDA) instruments, sealing systems, systems for containment verification, surveillance, unattended and remote monitoring authorized for inspection use.	• Number of completed authorization actions. • Number of development tasks (internal and MSSP) delayed more than two years against schedule.
• Identification and evaluation, including testing and specifications analysis, of technologies potentially addressing gaps in the technologies used in safeguards implementation.	• Number of novel technologies selected for evaluation.

Outcomes	Performance Indicators
• Technical adequacy and quality of radiation measurement equipment installed or distributed under the nuclear safety and security programmes.	• Number of equipment installation missions, testing campaigns and/or training events with participation of the Nuclear Security Team.

Programmatic changes and trends: The instrumentation development subprogramme addresses sustainability of technical and scientific support to the core verification mission, and is designed to be flexible enough to cope with dynamic changes in the requirements. The general trend may be characterized as certain shifts of emphasis on developing technologies and methods for the detection of undeclared material and activities compared to traditional material accountancy techniques. The composition of the projects within the subprogramme was changed to better reflect common features in managing tasks of different nature.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 1% (€36 700) in 2014, as compared with 2013, and an increase of 2% (€41 298) in 2015, as compared with 2014.

Projects

Title	Main Planned Outputs
4.3.2.001 Development of equipment components and stand-alone instruments	Deployment of instruments and components either for replacing outdated items or allowing innovative approaches and solutions.
4.3.2.002 Development of instrumentation systems and methodology	Introduction of new and improved methods and their realization in new safeguards equipment systems available for use by Agency inspectors.

Subprogramme 4.3.3 Special Projects

Objectives:

— To ensure the timely implementation of effective and efficient safeguards approaches for special projects in Member States requiring significant capital investments.
— To maintain and further develop effective and efficient analytical services for safeguards samples through timely and efficient completion of the Nuclear Material Laboratory (NML).

Outcomes	Performance Indicators
• Effective and efficient safeguards approaches and verification systems available and implemented for all special projects in States facilities.	• Extent to which verification equipment, software systems and associated information are made available in accordance with planned schedules.
• An upgraded and renovated NML facilitating expanded analytical work and meeting relevant security and safety.	• NML completed in accordance with the detailed conceptual design; commissioning of the facility on time and within budget.

Programmatic changes and trends: This subprogramme now groups four complex, multi-year projects requiring capital investment. In addition to the three previous projects, a new Project 4.3.3.006 *Develop and implement SG approaches for a spent fuel (SF) encapsulation plant and geological repository (EPGR) in Finland and Sweden* was added. Tasks of Project 4.3.3.005 *Member States support programme coordination* were moved under Project 4.1.1.004 *Strategic planning*. The Project 4.3.3.004 *Preparation for new mandates* was removed from this Subprogramme, and related activities were split among other relevant projects in safeguards. Anticipated funding requirements for Project 4.3.3.001 *Develop and implement SG approaches for Mixed Oxide Fuel Fabrication Plant in Japan (JMOX)* have been reduced significantly compared to previous estimates due to uncertainty of the future of the Japanese nuclear energy programme. Should construction and commissioning of the facility continue, additional funding will be made available, in line with previous projections.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 71% (€1 889 642) in 2014 as compared with 2013 and no increase in 2015 as compared with 2014.

Projects

Title	Main Planned Outputs
4.3.3.001 Develop and implement a safeguards approach for JMOX	Project plan and schedule updated in line with construction plan; further development of safeguards approach and related equipment and documentation as required and contingent upon necessary additional funding.
4.3.3.003 Develop and implement safeguards approaches for the Chernobyl NPP	Safeguards approaches, equipment requirements defined; Installed and tested equipment for verification of the new safe confinement (shelter) and transfer of irradiated fuel to dry storage.
4.3.3.005 Enhancing capabilities of the safeguards analytical services (ECAS)	Project management documentation; constructed and commissioned new NML; old NML vacated and equipment transferred to the new NML; security and infrastructure improvement work.
4.3.3.006 Develop and implement SG approaches for a spent fuel (SF) encapsulation plant and geological repository (EPGR) in Finland and Sweden	Safeguards approaches; equipment requirements defined and installed; and tested equipment for verification of the EPGR.

Medium Term Strategy

MTS Sub-objectives	Projects
E01 Seek to enhance the ability of the safeguards system to draw independent and soundly based safeguards conclusions, and strengthen the system's capability for early detection of possible misuse of nuclear material and facilities for proscribed purposes	4.0.0.002 Quality management 4.1.1.001 Safeguards approaches 4.1.1.002 Process design 4.1.2.001 Verification in States with CSA and AP in force 4.1.2.002 Verification in States with CSA 4.1.2.003 Verification in States with VOA: China 4.1.3.001 Verification in States with CSA and AP in force 4.1.3.002 Verification in States with CSA 4.1.3.003 Verification in States with INFCIRC/66-type agreements 4.1.3.004 Verification in States with VOA: United States of America 4.1.4.001 Verification in States with CSA and AP in force 4.1.4.002 Verification in States with CSA 4.1.4.003 Verification in States with VOA: France, Russian Federation and UK 4.1.5.002 Declared Information Analysis 4.1.5.004 Nuclear Fuel Cycle Information and Analysis 4.3.3.001 Develop and implement a safeguards approach for J-MOX
E02 Assist, in accordance with its Statute, with verification tasks under nuclear disarmament or arms control agreements when requested by the States Parties to such agreements	4.2.1.001 Verification activities in the DPRK 4.2.1.002 Verification activities related to the PMDA
E03 Encourage States to conclude safeguards agreements and additional protocols and to accept the revised standardized text for small quantities protocols; provide States with associated assistance, guidance and training on the implementation of their agreements, and fully exercise the Agency's mandate and authority	4.0.0.001 Overall management and coordination
E04 Further evolve the State level concept for the planning, conduct and evaluation of safeguards activities for all States in accordance with their safeguards agreements, and develop and implement State level approaches for all States with CSAs in force	4.3.1.001 Safeguards concepts
E05 Further diversify the sources of safeguards relevant information and maximise the use of this information in the planning, conduct and evaluation of safeguards activities; reach out to States to increase voluntary sharing of safeguards relevant and reliable information	4.1.5.001 State infrastructure analysis 4.1.5.003 State factors analysis
E06 Strengthen physical and information security to protect safeguards information, confidentiality and integrity; employ modern and secure safeguards information systems	4.0.0.004 Security

MTS Sub-objectives	Projects
E07 Strengthen the Agency's technical capabilities, applying technology foresight to identify scientific and technological innovations with promising potential for verification purposes; strengthen the Agency's R&D planning and build effective partnerships with Member States.	4.1.1.004 Strategic planning 4.3.2.001 Development of equipment components and stand-alone instruments 4.3.2.002 Development of instrumentation systems and methodology
E08 Deploy state of the art equipment and advanced information and communication technologies; increase the use information and communication technologies to enhance the efficiency of the Agency's daily operations, both in the field and at Headquarters; strengthen the analytical capabilities of the Safeguards Analytical Laboratories and expand the Agency's Network of Analytical Laboratories.	4.1.6.001 Portable and resident non-destructive assay equipment 4.1.6.002 Unattended safeguards instrumentation 4.1.6.003 Equipment logistics and storage 4.1.6.004 Systems integration and coordination 4.1.7.001 Analytical services and sample analysis 4.1.9.001 ICT development 4.1.9.002 ICT infrastructure and support 4.3.1.002 Safeguards information system 4.3.3.005 Enhancing capabilities of the safeguards analytical services (ECAS)
E09 Deploy and implement strategies to ensure that a capable safeguards workforce can be maintained through appropriate knowledge management and recruitment policies.	4.1.1.003 Training
E10 Ensure that States have competent State safeguards authorities and support States in establishing State or regional systems of accounting for and control of nuclear material (SSACs/RSACs) and in making them more effective; enhance the cooperation between the Agency and SSACs/RSACs.	4.3.1.004 Development of SSACs
E11 Provide guidance to States on the incorporation of safeguards relevant features into new facilities.	4.3.3.003 Develop and implement safeguards approaches for the Chernobyl NPP 4.3.3.006 Develop and implement safeguards approaches for a SF EPGR in Finland/Sweden
E12 Report safeguards conclusions and other information on safeguards and verification matters in a transparent and timely manner; build States' knowledge of the processes for drawing safeguards conclusions	4.1.8.001 Safeguards effectiveness evaluation
F02 Provide overarching guidance, direction and support in relation to the planning, and efficient and effective implementation of the Agency's programme	4.0.0.003 Resources management

The following MTS sub-objectives are associated with projects only as secondary:

- F04 Ensure targeted prioritization of the Agency's activities to derive maximum benefit from the Agency's programme, with activities closely focused on areas in which the Agency can make a unique impact by inter alia strengthening strategic and policy planning and policy coordination.
- F13 Promote gender equality and equitable geographical representation in the Agency, especially at managerial levels.

Major Programme 4 – Nuclear Verification
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 19

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
4.0.0.001 Overall management and coordination	2 373 957	-	-	2 370 334	-	-
4.0.0.002 Quality management	1 147 543	-	-	1 147 543	-	-
4.0.0.003 Resources management	1 383 421	99 297	-	1 393 701	99 297	-
4.0.0.004 Security	676 380	-	192 406	514 823	-	-
4.S Corporate shared services	7 707 188	169 096	43 596	7 396 417	173 344	43 596
	13 288 489	**268 393**	**236 002**	**12 822 818**	**272 641**	**43 596**
4.1.1.001 Safeguards approaches	2 001 995	-	-	2 001 995	-	-
4.1.1.002 Process design	512 434	99 297	-	563 834	99 297	-
4.1.1.003 Training	2 466 594	422 158	79 764	2 136 426	422 158	215 516
4.1.1.004 Strategic planning	1 552 380	518 363	1 131	1 545 535	516 186	11 788
4.1.1 Concepts and Planning	**6 533 404**	**1 039 818**	**80 895**	**6 247 791**	**1 037 641**	**227 304**
4.1.2.001 Verification in States with CSA and AP in force	14 537 464	-	555 122	14 537 464	-	555 122
4.1.2.002 Verification in States with CSA	234 405	-	-	234 405	-	-
4.1.2.003 Verification in States with VOA: China	587 394	-	-	587 394	-	-
4.1.2 Safeguards Implementation in States under Responsibility of Division SGOA	**15 359 263**	**-**	**555 122**	**15 359 263**	**-**	**555 122**
4.1.3.001 Verification in States with CSA and AP in force	7 534 656	-	109 435	7 528 488	-	109 435
4.1.3.002 Verification in States with CSA	9 468 086	-	82 972	9 484 606	-	82 972
4.1.3.003 Verification in States with INFCIRC/66 - type agreements	2 435 403	-	-	2 435 403	-	-
4.1.3.004 Verification in States with VOA: United States of America	-	391 836	-	-	391 836	-
4.1.3 Safeguards Implementation in States under Responsibility of Division SGOB	**19 438 144**	**391 836**	**192 406**	**19 448 496**	**391 836**	**192 406**
4.1.4.001 Verification in States with CSA and AP in force	14 841 005	-	130 576	14 841 005	-	130 576
4.1.4.002 Verification in States with CSA	283 596	-	-	283 596	-	-
4.1.4.003 Verification in States with VOA: France, Russian Federation and UK	1 081 002	189 704	-	1 081 002	189 704	-
4.1.4 Safeguards Implementation in States under Responsibility of Division SGOC	**16 205 603**	**189 704**	**130 576**	**16 205 603**	**189 704**	**130 576**
4.1.5.001 State infrastructure analysis	3 188 130	718 263	619 619	3 114 104	718 263	619 619
4.1.5.002 Declared information analysis	2 425 951	148 053	270 762	2 351 925	148 053	270 762
4.1.5.003 State factors analysis	2 633 607	550 589	801 353	2 633 607	550 589	801 353
4.1.5.004 Nuclear fuel cycle information and analysis	2 854 650	468 240	350 951	2 854 650	377 218	350 951
4.1.5 Information Analysis	**11 102 339**	**1 885 145**	**2 042 686**	**10 954 286**	**1 794 123**	**2 042 686**

Major Programme 4 – Nuclear Verification
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 19

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
4.1.6.001 Portable and resident non-destructive assay equipment	3 444 552	435 001	1 455 196	3 301 989	435 001	716 598
4.1.6.002 Unattended safeguards instrumentation	5 898 262	139 847	7 293 290	6 864 325	139 847	6 237 817
4.1.6.003 Equipment logistics and storage	2 834 056	-	360 897	2 787 796	-	407 157
4.1.6.004 Systems integration and coordination	3 590 418	307 195	958 886	3 813 176	-	762 273
4.1.6 Provision of Safeguards Instrumentation	**15 767 288**	**882 043**	**10 068 268**	**16 767 287**	**574 848**	**8 123 844**
4.1.7.001 Analytical services and sample analysis	10 836 322	207 958	59 764	10 836 322	-	59 764
4.1.7 Safeguards Analytical Services	**10 836 322**	**207 958**	**59 764**	**10 836 322**	**-**	**59 764**
4.1.8.001 Safeguards effectiveness evaluation	1 722 079	-	-	1 722 079	-	-
4.1.8 Effectiveness Evaluation	**1 722 079**	**-**	**-**	**1 722 079**	**-**	**-**
4.1.9.001 ICT development	4 425 219	158 755	1 241 480	6 786 074	198 236	3 840 841
4.1.9.002 ICT infrastructure and support	7 122 546	566 450	1 634 150	7 904 994	566 450	9 523 467
4.1.9 Information Communication Technology (ICT)	**11 547 765**	**725 205**	**2 875 630**	**14 691 067**	**764 685**	**13 364 308**
4.1 Safeguards Implementation	**108 512 207**	**5 321 708**	**16 005 347**	**112 232 194**	**4 752 837**	**24 696 011**
4.2.1.001 Verification activities in the Democratic People's Republic of Korea	530 249	-	-	530 249	-	-
4.2.1.002 Verification activities related to the PMDA	-	436 139	-	-	483 334	-
4.2.1 Other Verification Activities	**530 249**	**436 139**	**-**	**530 249**	**483 334**	**-**
4.2 Other Verification Activities	**530 249**	**436 139**	**-**	**530 249**	**483 334**	**-**
4.3.1.001 Safeguards concepts	378 604	-	-	378 604	-	-
4.3.1.002 Safeguards information system	4 246 653	311 758	523 679	924 050	370 979	513 832
4.3.1.004 Development of SSAC	612 002	174 808	947 252	646 352	174 808	964 543
4.3.1 Evolving Safeguards Implementation	**5 237 260**	**486 566**	**1 470 930**	**1 949 007**	**545 787**	**1 478 374**
4.3.2.001 Development of equipment components and stand-alone instruments	1 434 144	64 572	102 257	1 434 144	34 962	131 868
4.3.2.002 Development of instrumentation systems and methodology	1 236 987	189 644	352 585	1 279 406	108 750	376 089
4.3.2 Development of Safeguards Instrumentation	**2 671 131**	**254 217**	**454 842**	**2 713 550**	**143 712**	**507 957**

Major Programme 4 – Nuclear Verification
Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 19

Programme / Subprogramme / Project	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
4.3.3.001 Develop and implement a SG approach for J-MOX	435 103	-	-	435 103	-	-
4.3.3.003 Develop and implement SG approaches for the Chernobyl NPP	354 440	-	-	354 440	-	-
4.3.3.005 Enhancing capabilities of the safeguards analytical services (ECAS)	-	116 539	-	-	-	-
4.3.3.006 Develop and implement SG approaches for a SF EPGR in Finland/Sweden	-	-	-	-	-	-
4.3.3 Special Projects	**789 543**	**116 539**	**-**	**789 543**	**-**	**-**
4.3 Development	**8 697 933**	**857 322**	**1 925 773**	**5 452 099**	**689 499**	**1 986 331**
Major Programme 4 - Nuclear Verification	**131 028 878**	**6 883 562**	**18 167 122**	**131 037 360**	**6 198 311**	**26 725 938**

Major Programme 4 – Nuclear Verification
Unfunded Activities within Tasks

Table 20

Project	Tasks	2014 Unfunded	2015 Unfunded
4.S.3.005 BSS MTIT Business Solutions Section (Attrib. to MP 4)	Software solutions	43 596	43 596
4.0.0.004 Security	Conduct security awareness campaign for the department of safeguards	30 398	-
	Manage access control in seibersdorf	37 480	-
	Manage access control in the VIC	87 048	-
	Manage information security issues	37 480	-
4.1.1.003 Training	Implement the yearly safeguards training programme	59 764	200 516
	Implement the traineeship programme	20 000	-
	Conduct training needs assessment and develop training curricula and training programmes	-	15 000
4.1.1.004 Strategic planning	Coordinate strategic planning processes including long-term R&D plan, provide analysis and policy support and guidance to States	1 131	2 446
	Coordinate the member state support programme activities	-	9 342
4.1.2.001 Verification in states with CSA and AP in force	Verification of states with a CSA and an AP in force in SGOA	555 122	555 122
4.1.3.001 Verification in states with CSA and AP in force	Verification in states with comprehensive safeguards agreements and additional protocol in force	109 435	109 435
4.1.3.002 Verification in states with CSA	Verification of states with a CSA in force in SGOB	82 972	82 972
4.1.4.001 Verification in states with CSA and AP in force	Verification of states with a CSA and an AP in force in SGOC	130 576	130 576
4.1.5.001 State infrastructure analysis	Collecting and analyzng commercial satellite imagery	239 782	239 782
	Spatial Data Processing, Analysis & Product Generation	136 310	165 921
	Technology assessments	21 449	21 449
	Research, development and integration activities	222 079	192 468
4.1.5.002 Declared information analysis	Receive, process analyse and maintain nuclear material accounting information	168 598	168 598
	Conduct business analysis and implement new processes and tools to develop new solutions	80 715	80 715
	Provide a comprehensive service regarding the receipt, processing, analysis and dissemination of additional protocol information	21 449	21 449
4.1.5.003 State factors analysis	Information analysis and support to the departmental state evaluation process	742 892	742 892
	Implementation and management of the procurement outreach programme	37 013	37 013
	Evaluation of TC projects for safeguards relevance	21 449	21 449

Major Programme 4 – Nuclear Verification
Unfunded Activities within Tasks

Table 20

Project	Tasks	2014 Unfunded	2015 Unfunded
4.1.5.004 Nuclear fuel cycle information and analysis	Evaluation and comparison of data from state declarations and from IAEA in-field verification activities, i.e. NDA measurements and analysis of sample staken for ES, DA and impurity analysis	107 959	107 959
	Development and upgrade of methodologies and management of R&D in the field of ES, impurity analysis, DA,NDA ,MBE and statistical methodologies for safeguards.	185 066	185 066
	Support tasks carried out in support of departmental and external partners	57 927	57 927
4.1.6.001 Portable and resident non-destructive assay equipment	Provision and maintainance of portable and resident non-destructive assays	1 455 196	716 598
4.1.6.002 Unattended safeguards instrumentation	Provision and maintenance of surveillance instrumentation	3 520 170	2 650 714
	Provision of unattended monitoring systems	3 773 120	3 587 103
4.1.6.003 Equipment logistics and storage	Manage assets, store and track safeguards verification equipment and system components	43 949	43 949
	Receive and deliver new and used equipment and supplies for safeguards verification purposes	316 948	363 208
4.1.6.004 Systems integration and coordination	Provide and maintain seals and containment equipment	657 088	414 027
	Provide and maintain remote monitoring instrumentation	161 508	25 700
	Develop safeguards technical and scientific services project engineeering	140 290	322 546
4.1.7.001 Analytical services and sample analysis	Coordination of sample logistics and management of NWAL	59 764	59 764
4.1.9.001 ICT development	Develop and maintain the SG core business ICT system	1 211 840	3 811 201
	Manage the ICT business analysis, architecture, quality assurance and project management	29 640	29 640
4.1.9.002 ICT infrastructure and support	Provide ICT infrastructure operations and security services	1 489 606	6 730 590
	Provide ICT users support	144 544	2 792 877
4.3.1.002 Safeguards information system	Establish a single integrated and secure information system for the department of safeguards	523 679	513 832
4.3.1.004 Development of SSAC	Develop and implement SSAC training courses	947 252	949 822
	Prepare, conduct and follow-up ISSAS missions	-	14 721
4.3.2.001 Development of equipment components and stand-alone instruments	Portable and resident non-destructive assay instruments/components development	19 859	19 859
	Development of unattended monitoring hardware	30 998	30 998
	Development of surveillance instruments/components	51 400	51 400
	Development of sealing and containment instruments/components	-	29 611

Major Programme 4 – Nuclear Verification
Unfunded Activities within Tasks

Table 20

Project	Tasks	2014 Unfunded	2015 Unfunded
4.3.2.002 Development of instrumentation systems and methodology	Development of unattended instrumentation systems	25 700	-
	Development of integrated SG instrumentation systems	61 300	-
	Technological foresight and evaluation of innovations	151 185	151 185
	Quality management in development activities (processes, standards, procedures, documentation)	57 859	168 364
	Data infrastructure	56 540	56 540

Major Programme 5
Policy, Management and Administration Services

Introduction

Under the leadership, direction and authority of the Director General, the Agency's programme seeks to achieve the goals and objectives of its Member States. This requires effective coordination to ensure a one house approach, particularly with respect to: overall policies; interactions with Member States; policy and strategic planning, including risk management in line with the Medium Term Strategy; the development and implementation of programmes; the setting of priorities; the evaluation and assessment of performance; and the management of interchange of information within the Secretariat, between the Secretariat and Member States, and for the benefit of the media and the general public. A wide range of administrative and legal services will continue to be provided to support Agency programmes in efficiently and effectively fulfilling the organization's mandate. In 2014–2015, this major programme will continue to have a leadership role in respect to implementation of the Agency-wide Information System for Programme Support (AIPS).

Major Programme 5 will pay even more attention to coordinating security efforts through a centralized security coordination function within the Agency.

The Agency will continue to strengthen its focus on results, efficiency, effectiveness, quality, accountability and risk management. The oversight activities of the Agency will continue to strengthen accountability, efficiency and effectiveness through audits, evaluations, investigations and the provision of advisory support to senior management and the Board of Governors.

Objectives:

— To fully institute the one house and results based approach to ensure the relevance, effectiveness and efficiency of all Agency programmes and the use of resources.
— To improve and enhance understanding of the work of the Agency and to ensure timely access by stakeholders to relevant scientific and technical information.

Outcomes	Performance Indicators
• Planning, formulation, implementation, assessment and evaluation of the Agency's programme in a fully coordinated manner.	• Absence of duplication in the Agency's programme.
• Timely and appropriate administrative and legal services provided to the scientific and technical programmes of the Agency.	• Degree of satisfaction regarding the efficiency of administrative and legal services.
• Efficient and effective information support services and communications strategies.	• Ease of access to Agency information by the Secretariat, Member States, the media and the general public.

5.0.1 Executive Leadership and Policy

Objectives:

— To provide leadership and coordination of policy for all Agency activities at the executive level for meeting Member State needs and achieving a one house culture and a results based management approach.

Outcome	Performance Indicator
• Effective, efficient and transparent execution of Agency programmes and activities relevant to Member States.	• Satisfaction of Member States with the efficiency, effectiveness and transparency of the programme delivered.

Programmatic changes and trends: Policy planning and strategy formulation were strengthened to ensure that the Agency's activities are in line with the guidance of Member States, including the Medium Term Strategy. The policy coordination and implementation activities will continue to ensure timely and effective policy implementation and programme delivery. An Agency-wide risk management system was integrated with strategic planning, programme and budget development and work planning, to ensure consistent identification, consideration and mitigation of risks in decision making.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 10% (€737 896) in 2014 as compared with 2013 and a decrease of 1% (€107 400) in 2015 as compared with 2014.

Subfunctions

Title	Main Planned Outputs
5.0.1.001 Executive leadership	Direction and issuance of policy; coordination of Secretariat activities; and liaison with Member States and inter- and non-governmental organizations.
5.0.1.002 Policy-making Organs	Meetings of the Policy-making Organs; documents for meetings of the Policy-making Organs; and briefing sessions for Member States on the Agency's programme.
5.0.1.003 General coordination and management	Providing overarching direction for all support services and related internal communication; establishment/monitoring of action plans; liaison with United Nations system organizations and the Host Government; coordination of programme and budget; and reviews of security and coordination with other VIC based organizations.

5.0.2 Legal Services

Objectives:

— To achieve higher quality in programme implementation following timely and appropriate legal advice.

Outcomes	Performance Indicators
• Highest standard of legal advice provided to the Director General, the Secretariat and the organs and bodies of the Agency, and on request to Member States.	• Appropriateness and timeliness of the legal support provided to all clients.

Programmatic changes and trends: The increase is expected to continue for general legal support and substantial work in connection with strengthened safeguards and other verification activities, for protection against nuclear terrorism and for technical cooperation. This is also true for the demand from Member States for assistance in the preparation of national legislation, in particular relating to the implementation of international agreements to which they are a party. In addition, the areas of personnel and management continue to require an increasing amount of legal advice.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 3% (€84 756) in 2014 as compared with 2013, and no increase is proposed in 2015 as compared with 2014.

Subfunction

Title	Main Planned Outputs
5.0.2.001 Legal services	To provide the highest standard of legal services to the Director General, Secretariat, Policy-making Organs and Member States in the development and implementation of Agency activities.

5.0.3 Oversight Services

Objectives:

— To provide independent and objective assurances to the Director General, senior management and other stakeholders that the activities of the Agency are carried out efficiently, effectively and in compliance with regulations, rules and policies.

Outcomes	Performance Indicators
• Recognition of the quantity of OIOS work by the Director General and other stakeholders. • Assessment by stakeholders of the quality and utility of OIOS results.	• Percentage of OIOS assignments commencing according to the Work Plan. • Percentage of positive responses to the OIOS Customer Satisfaction Survey Questionnaire in terms of the quality and utility of OIOS assignments.

Programmatic changes and trends: The Agency's focus on results, efficiency, effectiveness, quality, accountability and risk management, and its dependency on information technology systems in delivering its programmes, coupled with the increased emphasis on oversight functions in most organizations and agencies of the United Nations, mean that the Agency's oversight activities will continue to be strengthened.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 7% (€181 286) in 2014 as compared with 2013 and no increase is proposed in 2015 as compared with 2014.

Subfunction

Title	Main Planned Outputs
5.0.3.001 Oversight services	High quality reports on the efficiency; effectiveness and compliance of the work of the Agency as defined in the work plan of the Office of Internal Oversight Services.

5.0.4 Public Information and Communications

Objectives:

— To promote clear public understanding, positive public engagement and accurate media reporting of nuclear issues and the Agency's work, including the role of the Director General, to enhance public and Member State support.

Outcome	Performance Indicators
• The media and the public know of and support the Agency's work, while the size of the supportive audience and its demographic/geographic scope increases as does positive feedback.	• Number of media interviews (with the Director General and others), news conferences, briefings, written replies and information visits provided to the media per year. • Number of video and audio downloads by broadcasters and others from the Agency's FTP server per year. • Number of visits, readers of Agency public information material in hard copy and electronic formats, visits to the Agency's web site; positive social media metrics.

Programmatic changes and trends: The Agency is widely acknowledged as the major global source of authoritative assessments concerning nuclear related issues. Expectations have increased for transparent communication in all of the Agency's areas of expertise, particularly in the wake of the accident at the Fukushima Daiichi nuclear power plant. Member States, the media, the public and staff members expect and rely upon timely, consistent, easily understandable and actionable information that is presented in an integrated manner. The Agency will therefore need to ensure that its wide range of activities is promoted at a high level and in the regions where it is active. At the same time, the Agency needs to keep pace in a quickly expanding technological environment, making sure that web governance is in place to deal with an increasing flow of information and to be prepared for emergency communication.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 7% (€225 015) in 2014 as compared with 2013, and no increase is proposed in 2015 as compared with 2014.

Subfunction

Title	Main Planned Outputs
5.0.4.001 Public information and communications	Enhanced public understanding of the benefits of the Agency's work; and stronger public support for the Agency's work and for its mandate.

5.0.5 Information Communication Technology

Objectives:

— To meet, in the most efficient and effective way, the information and communication technology (ICT) needs of Agency programmes and Member States.

Outcome	Performance Indicators
• ICT services and infrastructure delivered and optimized to meet Agency programmatic requirements and those of the Member States.	• Percentage of Service Level Agreement (SLA) results met per year. • Availability — defined as a percentage of uptime per month outside scheduled maintenance windows — of critical ICT applications and infrastructure services.

Programmatic changes and trends: The Agency's ICT services will need to continue to adapt not only to changes in the technology and in the requirements of the Agency's programmes, but also to industrial trends and best practices towards centralization of the information used to plan and manage the resources of an organization, in order to reduce costs by leveraging economies of scale and to eliminate duplication and rework. The Agency has constructed a secure and reliable technical area to serve as the Agency's computer centre. To avoid duplication of effort, it will support the ICT infrastructure for the entire Agency while meeting the security

standards necessary for confidential information. ICT security continues to be — and will remain — a challenge, due to the escalating sophistication of threats and attacks.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a small decrease of 2% (€216 231) in 2014 as compared with 2013, and no increase is proposed in 2015 as compared with 2014.

Subfunction

Title	Main Planned Outputs
5.0.5.001 Information communication technology	ICT end-user services; ICT infrastructure services; ICT solutions; programme management, information architecture; and ICT policy.

5.0.6 Financial Management and Services

Objectives:

— To ensure the continued confidence of Member States in the financial management of the Agency, and to deliver relevant services efficiently and effectively in support of all Agency programmes.

Outcomes	Performance Indicators
• Sound and timely financial planning and budgeting, accurate and reliable financial reporting.	• Timeliness and extent of use of budgetary and financial documents and reports. • Policies, rules and regulations and systems to support financial practices and reporting reviewed and updated as necessary.
• Efficient financial administration of the Agency.	• Timely payments related to payroll, staff entitlements, travel and procurement of goods and services.
• External Auditor endorsement of the Agency's financial statements.	• Unqualified opinion of the External Auditor.

Programmatic changes and trends: In 2011, the Agency issued its first International Public Sector Accounting Standards (IPSAS) compliant financial statements, utilizing AIPS. Improving and streamlining the business processes supporting IPSAS, including focusing on effective and efficient internal controls, continues to be a focus. Supporting the implementation of future AIPS plateaus is an additional focus.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a small decrease of 2% (€115 250) in 2014 as compared with 2013, and no increase is proposed in 2015 as compared with 2014.

Subfunction

Title	Main Planned Outputs
5.0.6.001 Financial management and services	The Agency's programme and budget; the Agency's financial statements; reports to governing bodies and donors; effective management of funds entrusted by Member States; and timely payments to all vendors and staff.

5.0.7 Human Resources Management

Objectives:

— To provide effective human resources management advice and support through the recruitment, development and performance management of fully competent and diverse staff; to optimize the health and well-being of staff.

Outcomes	Performance Indicators
• Staff of the Agency, individually and collectively, fully meet programmatic requirements.	• Percentage of professionals fully matching job profile requirements per year. • Improved versatility of staff within the context of the mobility policy.
• Gender equality within the Agency's staff, and geographical distribution in accordance with its Statute.	• Increased number of women in senior managerial positions per year. • Reduction in the number of underrepresented Member States.

Outcomes	Performance Indicators
• Optimal health and well-being of staff.	• Increased number of medical examinations per year. • Increased number of medical clearances per year processed within 24 hours, taking advantage of enhanced IT tools.

Programmatic changes and trends: The subprogramme is affected by: increasing global demand for talented staff, particularly in the nuclear industry; decreasing competitiveness of United Nations salaries, especially at senior levels; funding pressures on the Agency in the context of the worldwide financial crisis; a new enterprise resource planning (ERP) system, with go-live risks and benefits; enhanced emphasis on quality management; and demands for efficiency gains and accountability. All these will have a strong impact on the delivery of programmes. In turn, this will significantly affect demands on human resources management services. The major focus is a shift toward high value services, including organizational development and workforce planning to optimize human resource capacity with restricted resources, greater demands on policy development, resolution of staff problems, use of best practices and streamlining of processes.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 19% (€965 862) in 2014 as compared with 2013 and an increase of 2% (€107 618) in 2015 as compared with 2014.

Subfunction

Title	Main Planned Outputs
5.0.7.001 HR advisory and administration services	Staffing plans; talent acquisition and outreach actions; selection tools; gender equality reports and action plans; staff from different Member States; and medical examinations.

5.0.8 General Services

Objectives:

— To enable the Agency to perform its function by providing an efficient and effective general administrative and support services infrastructure.

Outcomes	Performance Indicators
• Highest quality and effective customer service in provision and delivery of general support and administrative services. • Delivery of support service in a coordinated, customer oriented and timely manner.	• Customer satisfaction with the quality of general support services provided. • Cost efficiencies achieved in delivering general administrative services.

Programmatic changes and trends: Continued emphasis will be placed on the streamlining and simplification of work processes in order to achieve efficiencies and guarantee a more streamlined and controlled environment. This will apply to all areas of general administrative and support services. The implementation of AIPS should have a positive impact on travel and transportation issues, and on property and equipment management, allowing efficiency gains and improving management information systems. The rapidly evolving travel industry will continue to be a challenge, and particular efforts will be made to maintain travel costs at an acceptable level. Incoming and outgoing official correspondence will continue to be stored in the Agency's electronic records management system. The steady increase in requests for videoconferencing services is expected to continue. Some challenging facility management projects will be undertaken, such as the maintenance of security installations and the construction of new laboratories in Seibersdorf.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 4% (€1 009 342) in 2014 as compared with 2013, and no increase is proposed in 2015 as compared with 2014.

Subfunctions

Title	Main Planned Outputs
5.0.8.001 General services management	To enable the Agency to perform its function by providing efficient and effective general administrative and support services.
5.0.8.002 Disaster recovery infrastructure and incident management capability	Building a secure and safe data centre facility to host and operate the ICT and operational disaster recovery sites for the Agency; and a facility to be used by the Crisis Management Group in case of crisis.
5.0.8.003 Building management services capital fund	Request of contributions to match the budget request from the United Nations Industrial Development Organization/Buildings Management Services (UNIDO/BMS).

5.0.9 Conference, Languages and Publishing Services

Objectives:

— To enable effective exchange and dissemination of information relevant to the Agency's work and mandate between the Secretariat and Member States by organizing meetings and conferences, issuing documents in the six official languages of the Agency, and preparing and distributing publications.

Outcome	Performance Indicators
• Enhanced and efficient multilingual dialogue and communication between the Agency and major stakeholders and Member States.	• Languages services: Productivity as measured by number of words translated per hour worked. • Conference services: Client satisfaction (Member States and meeting organizers) as measured against the baseline of 2012–2013. • Publishing services: Satisfaction of customers (internal and external) with the services provided.

Programmatic changes and trends: The ever increasing application of information technologies in tasks related to conference, translation and publishing services is seen as a key factor now and in the future. The shared services cost allocation methodology adopted on a pilot basis for 2012–2013 has been further refined, resulting now in a standard budgetary feature for 2014–2015. The focus will be on improving the quality and consistency of documentation and correspondence submitted to Member States. The outsourcing of appropriate jobs in the publishing area will continue at the current level. As a result of the impending retirement of many senior staff, succession planning has become a top priority.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 5% (€237 481) in 2014 as compared with 2013, and a small increase of €317 is proposed in 2015 as compared with 2014.

Subfunction

Title	Main Planned Outputs
5.0.9.001 Conference, languages and publishing services	Approximately 27 000 pages of translated documents and summary records in the six official languages of the IAEA; organizational support and administrative and logistical services to approximately 1860 Agency meetings; and production of approximately 250 publications and items of advocacy materials.

5.0.10 Procurement Services

Objectives:

— To procure goods and services in order to support the achievement of the goals and objectives of the Agency.

Outcome	Performance Indicators
• Achievement of the best value for money for the Agency in procuring goods and services by considering this element in every phase of the procurement process and through fair, transparent and effective international competition.	• Best value for money achieved according to key performance indicators established in procurement plans approved for significant Agency procurements (those over €150 000). • Compliance with the Financial Rules and Regulations.

Programmatic changes and trends: Innovations include: reduced transactional costs for low value procurements; reduced risk for critical procurements through considered planning and risk reduction measures by Agency-wide procurement teams; reduced staffing through direct procurement of low value and standard items; best value for money improvements as measured by the performance indicators in significant procurement projects.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect a decrease of 7% (€129 116) in 2014 as compared with 2013, and a small increase of €346 is proposed in 2015 as compared with 2014.

Subfunction

Title	Main Planned Output
5.0.10.001 Contracting services and strategic supply management	Purchase orders; contracts; and low value purchase transactions.

Medium Term Strategy

MTS Sub-objectives	Subfunctions
F02 Provide overarching guidance, direction and support in relation to the planning, and efficient and effective implementation of the Agency's programme	5.0.1.001 Executive leadership 5.0.1.002 Policy-making Organs 5.0.1.003 General coordination and management 5.0.3.001 Oversight services 5.0.10.001 Contracting services and strategic supply management
F03 Provide effective coordination within the Secretariat, for example by sharpening lines of authority and accountability, with due regard to quality and risk management	5.0.8.002 Disaster recovery infrastructure and incident management capability
F05 Implement and manage the range of functions provided by the Agency's enterprise resource planning system (the Agency-wide Information System for Programme Support (AIPS)), thereby establishing a common information and management system for support functions	5.0.1.004 AIPS
F07 Using best practice tools, including comprehensive application of quality management and benchmarking, improve the Agency's efficiency in its programme activities and management practices	5.0.6.001 Financial management and services 5.0.8.001 General services management
F09 Adopt advances in information technology in areas such as translation, printing and outreach to the media and the public, and ensure the continued security of the information with which the Agency is entrusted, especially in connection with safeguards and nuclear security	5.0.4.001 Public information and communications 5.0.4.001 Internet and print communications 5.0.5.001 Information communication technology 5.0.5.002 Provision for IT infrastructure investment 5.0.9.001 Conference, language and publishing services 5.0.9.003 Publishing services
F10 While reducing administrative costs, adopt more innovative techniques in finding and justifying additional sources of funds	5.0.8.003 Building management services capital fund
F11 Apply more targeted recruitment procedures, and adopt more attractive non-monetary conditions of employment in accordance with standards set by the International Civil Service Commission (ICSC)	5.0.7.001 Human resources advisory and administration services
F12 Adopt enhanced policies and guidelines to sharpen lines of authority and accountability	5.0.2.001 Legal services

The following MTS Sub-objectives are associated with projects only as secondary:

- F04 Ensure targeted prioritization of the Agency's activities to derive maximum benefit from the Agency's programme, with activities closely focused on areas in which the Agency can make a unique impact by inter alia strengthening strategic and policy planning and policy coordination.
- F06 Use the International Public Sector Accounting Standards (IPSAS) to provide transparent reporting to Member States on the exact cost of operations and projects.
- F08 Reinforce the Agency's commitment to a more systematic approach to identifying, quantifying and reporting on efficiency gains by inter alia improving coordination between staff and the programme, and introducing greater flexibility in meeting emerging programmatic challenges.
- F13 Promote gender equality and equitable geographical representation in the Agency, especially at managerial levels.

Major Programme 5 – Policy, Management and Administration Services
Summary of programme structure and resources
(excluding Major Capital Investments)

Table 21

Function / Subfunction	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
5.0.1.001 Executive leadership	4 535 834	-	-	4 535 834	-	-
5.0.1.002 Policy-making Organs	2 526 969	-	-	2 526 969	-	-
5.0.1.003 General coordination and management	1 229 193	-	393 673	1 118 786	-	393 673
5.0.1 Executive Leadership and Policy	**8 291 996**	**-**	**393 673**	**8 181 589**	**-**	**393 673**
5.0.2.001 Legal services	2 654 968	576 760	-	2 654 968	477 463	-
5.0.2 Legal Services	**2 654 968**	**576 760**	**-**	**2 654 968**	**477 463**	**-**
5.0.3.001 Oversight services	2 965 185	-	-	2 965 185	-	-
5.0.3 Oversight Services	**2 965 185**	**-**	**-**	**2 965 185**	**-**	**-**
5.0.4.001 Public information and communications	2 891 651	-	-	2 891 651	-	-
5.0.4 Public Information and Communications	**2 891 651**	**-**	**-**	**2 891 651**	**-**	**-**
5.0.5.001 Information communication technology	9 166 842	355 149	77 100	9 166 842	468 229	-
5.0.5 Information Communication Technology	**9 166 842**	**355 149**	**77 100**	**9 166 842**	**468 229**	**-**
5.0.6.001 Financial management and services	6 768 750	732 877	-	6 768 750	732 877	-
5.0.6 Financial Management and Services	**6 768 750**	**732 877**	**-**	**6 768 750**	**732 877**	**-**
5.0.7.001 HR advisory and administration services	6 211 344	-	-	6 321 795	-	-
5.0.7 Human Resources Management	**6 211 344**	**-**	**-**	**6 321 795**	**-**	**-**
5.0.8.001 General services management	27 540 114	255 904	102 800	27 539 511	255 904	-
5.0.8.002 Disaster recovery infrastructure and incident management capability	-	-	2 056 000	-	-	2 056 000
5.0.8.003 Building management services capital fund	-	-	1 439 200	-	-	1 439 200
5.0.8 General Services	**27 540 114**	**255 904**	**3 598 000**	**27 539 511**	**255 904**	**3 495 200**
5.0.9.001 Conference, languages and publishing Services	4 939 211	-	-	4 938 195	-	-
5.0.9 Conference, Languages and Publishing Services	**4 939 211**	**-**	**-**	**4 938 195**	**-**	**-**
5.0.10.001 Contracting services and strategic supply management	1 846 192	729 261	-	1 847 027	729 261	-
5.0.10 Procurement Services	**1 846 192**	**729 261**	**-**	**1 847 027**	**729 261**	**-**
5.S Corporate Shared Services	**3 667 742**	**122 476**	**31 577**	**3 670 351**	**125 553**	**31 577**
Major Programme 5 - Policy, Management and Administration Services	**76 943 995**	**2 772 426**	**4 100 350**	**76 945 863**	**2 789 286**	**3 920 450**

Major Programme 5 – Policy, Management and Administration Services
Unfunded Activities within Tasks

Table 22

Subfunction	Tasks	2014 Unfunded	2015 Unfunded
5.0.1.003 General coordination and management	General management and coordination	393 673	393 673
5.0.5.001 Information communication technology	Provide IT training to IAEA staff members	77 100	-
5.0.8.001 General services management	Overall management and coordination	102 800	-
5.0.8.002 Disaster recovery infrastructure and incident management capability	DRIMC overall management and coordination	2 056 000	2 056 000
5.0.8.003 Building management services capital fund	Building management services capital fund	1 439 200	1 439 200
5.S.3.005 BSS MTIT Business Solutions Section (Attrib. to MP 5)	Software solutions	31 577	31 577

Major Programme 6
Management of Technical Cooperation for Development

Introduction

Major Programme 6 encompasses the development, implementation and management of technical cooperation (TC) projects in the framework of biannual TC programmes, as well as of the Programme of Action for Cancer Therapy (PACT). This includes facilitating Member State access to nuclear technologies, techniques and applications through capacity building measures and equipment support in areas such as nuclear power, nuclear safety and security, health, water, environment, food, agriculture and industry, with a view to addressing socioeconomic goals in a long term, strategic manner, based on the needs and priorities identified by Member States. Activities under Major Programme 6 include facilitating Member State access to affordable, safe and reliable radiotherapy technology by supporting its integration into national cancer control programmes. As of September 2012, 126 Member States were participating in the TC programme, including 32 least developed countries.

Through Major Programme 6, the Secretariat, guided by the Agency's Medium Term Strategy 2012–2017, works closely with Member States to formulate and implement the TC programme and PACT. This requires intensive interaction with a wide spectrum of stakeholders, including relevant Member States, competent organizations of the United Nations system, multilateral financial institutions, regional development bodies, and relevant inter-governmental and non-governmental organizations. The Medium Term Strategy establishes a clear link between the TC programme, PACT and the Agency's other activities. While Major Programme 6 contributes mainly to Strategic Objective D "Providing effective technical cooperation" of the Medium Term Strategy, it also contributes, at least partially, to objectives A, B, C and F. In line with the priorities of the Medium Term Strategy, the increased participation of women in TC activities at the national and Secretariat levels remains a priority.

Objectives:

— To enhance the relevance, socioeconomic impact and efficiency of the TC programme by planning and implementing a need based and responsive TC programme and by enhancing the technical capacities of Member States in the peaceful application of nuclear technologies.

Outcomes	Performance Indicators
• Development and implementation of an effectively and efficiently coordinated TC programme.	• Percentage of completed TC projects during the previous year that fully achieved the established objectives at the output level. • Percentage of TC projects that are completed within the approved time frame.
• Continuously improved quality of the TC programme.	• Percentage of projects with an annual progress assessment report.
• Enhanced engagement of Member States in the TC programme, with commitment to the principles of ownership, relevance and sustainability, as well as strengthened relations with partners.	• Percentage of Member States with national TC programmes that have valid Country Programme Frameworks (CPFs). • Number of valid partnership agreements.
• Increased Member State capacity to implement and manage self-sustaining comprehensive cancer control plans.	• Percentage of Member States having requested and received PACT assistance in cancer control. • Number of cancer control activities funded and implemented in Member States through mobilized extrabudgetary resources.

Programmatic changes and trends: The TC programme will be further strengthened through earlier engagement with national stakeholders. Agency field presence will be reinforced to assist in project design, and to support implementation and systematic reporting. There will be an increased focus on partnerships during the conceptualization of TC projects, including the identification and promotion of opportunities for extrabudgetary support. The parallel implementation of complementary activities will be reinforced, as will close thematic cooperation with relevant United Nations system and other international organizations. Implementing quality standards and performance monitoring measures is expected to further improve the quality of the TC programme. TC between developing countries will make enhanced use of the Agency's role as a hub of nuclear knowledge and technology. Urgent and unforeseeable needs of Member States will be addressed through out of cycle TC projects. To further enhance the performance of PACT and to make optimum use of synergies between TC and PACT activities, a new project dedicated to PACT will be included in Major Programme 6. The relocation of the PACT Programme Office as a new organizational entity — Division of PACT — to the TC Department and its inclusion under Major Programme 6 is expected to result in an enhanced programmatic performance and coordination with

relevant stakeholders, and in strengthened PACT related management and implementation within the TC Department's regional Divisions. In addition, this organizational change will facilitate the strengthening of strategic planning and governance activities related to PACT, as it brings together all relevant planning and management functions within one Department. This will improve the prioritization and structuring of PACT activities, in particular resource mobilization, programme design and reporting, and coordination with PACT key partners, in particular within the framework of the World Health Organization (WHO) – IAEA Joint Programme on Cancer Control.

Resource changes and trends: The proposed regular budget resource requirements, at 2013 prices, reflect an increase of 12% (€2 558 733) in 2014 as compared with 2013 and a small increase of €488 in 2015 as compared with 2014.

Subfunctions

Title	Main Planned Outputs
6.0.1.001 Overall management and strategic guidance	Policies; statements at major meetings and events; reports to policy making organs; travel reports; and concept notes and papers.
6.0.1.002 Coordination of and support to the TC programme	Drafted/signed CPFs; Technical Assistance and Cooperation Committee (TACC) documentation 2016–2017; TC Annual Report; briefing notes; background papers; partnership documents; extrabudgetary resources mobilized; Quality Review Reports for the TC programme 2016–2017; Project Performance and Assessment Reports (PPARs) reviewed; identified and tested key performance indicators (KPIs) for TC programme; outreach action plans/materials; and TC web site.
6.0.1.003 Management of the TC programme for Africa	Drafted/signed CPFs; TACC documentation 2016–2017; country programme notes; expert missions; fellowships; training courses; procurements requested/processed; briefing notes; programming and monitoring reports; partnership documents; and extrabudgetary resources mobilized.
6.0.1.004 Management of the TC programme for Asia and the Pacific	Drafted/signed CPFs; TACC documentation 2016–2017; country programme notes; expert missions; fellowships; training courses; procurements requested/processed; briefing notes; programming and monitoring reports; partnership documents; and extrabudgetary resources mobilized.
6.0.1.005 Management of the TC programme for Europe	Drafted/signed CPFs; TACC documentation 2016–2017; country programme notes; expert missions; fellowships; training courses; procurements requested/processed; briefing notes; programming and monitoring reports; partnership documents; and extrabudgetary resources mobilized.
6.0.1.006 Management of the TC programme for Latin America	Drafted/signed CPFs; TACC documentation 2016–2017; country programme notes; expert missions; fellowships; training courses; procurements requested/processed; briefing notes; programming and monitoring reports; partnership documents; and extrabudgetary resources mobilized.
6.0.1.007 Procurement services	Procurement plans developed and implemented; goods and services for implementing Agency programmatic activities procured and delivered on a timely and best value for money basis.
6.0.1.008 Coordination of and support to the PACT	Strategy documents, including resource mobilization strategy; Country Cancer Profiles; integrated missions of PACT (imPACT) plan; imPACT Review Mission reports; PACT Model Demonstration Sites (PMDS) plan of activities; PMDS progress reports; e-learning materials; Virtual University for Cancer Control and Regional Training Network (VUCCnet); Advisory Group on Increasing Access to Radiotherapy Technology (AGaRT) reports; bankable project documents; cancer control related background papers and briefings; partnership agreements; extrabudgetary resources mobilized; cancer control resource mobilization and outreach action plans/materials; and PACT web site.

Medium Term Strategy

MTS Sub-objectives	Subfunctions
B01 Improve human health by supporting: the use of nuclear techniques in nutrition; the safe and effective use of radiation medicine for the diagnosis and treatment of patients; the development of integrated, comprehensive national programmes through partnerships, especially the WHO–IAEA Joint Programme on Cancer Control. and the education and training of practitioners	6.0.1.008 Coordination of and support to the PACT
D01 Ensure support in areas of increasing demand and interest, such as nuclear power for newcomer States, safety and security infrastructure, health, water, food and agriculture, and relevant industrial applications	6.0.1.001 Overall management and strategic guidance 6.0.1.002 Coordination of and support to the TC programme 6.0.1.003 Management of the TC programme for Africa 6.0.1.004 Management of the TC programme for Asia and the Pacific 6.0.1.005 Management of the TC programme for Europe 6.0.1.006 Management of the TC programme for Latin America
F02 Provide overarching guidance, direction and support in relation to the planning, and efficient and effective implementation of the Agency's programme	6.0.1.007 Procurement services

The following Medium Term Strategy Sub-objectives are associated to projects only as secondary:

- D02 Facilitate cooperation among Member States bilaterally and regionally;
- D03 Advance partnerships with the United Nations and other multilateral organizations, regional development bodies and other relevant intergovernmental and non-governmental bodies;
- D04 Mobilize extrabudgetary contributions to respond to the growing needs and demands of Member States, including for footnote-a projects;
- D05 Promote South–South and North–South partnerships, information and technical exchanges and capacity strengthening initiatives by building upon the expertise available in Member States and Regional Resource Centres and by the promotion of networking;
- D06 Promote regional cooperation among Member States in response to transboundary development challenges;
- D07 Promote best practices in project formulation, management, monitoring and evaluation;
- D08 Ensure that all Member States receiving technical assistance from the Agency have signed a Revised Supplementary Agreement; and
- F13 Promote gender equality and equitable geographical representation in the Agency, especially at managerial levels.

Major Programme 6 – Management of Technical Cooperation for Development

Summary of Programme Structure and Resources
(excluding Major Capital Investments)

Table 23

Function / Subfunction	2014 at 2014 prices			2015 at 2014 prices		
	Regular Budget	Extrabudgetary	Unfunded	Regular Budget	Extrabudgetary	Unfunded
6.0.1.001 Overall management and strategic guidance	1 037 996	-	-	1 037 996	-	-
6.0.1.002 Coordination of and support to the TC programme	4 122 813	-	38 434	4 122 813	-	38 434
6.0.1.003 Management of the TC programme for Africa	4 221 935	-	147 682	4 221 935	3 482	144 200
6.0.1.004 Management of the TC programme for Asia and the Pacific	3 559 795	-	87 918	3 559 795	-	87 918
6.0.1.005 Management of the TC programme for Europe	3 164 931	291 703	297 800	3 164 931	291 703	297 800
6.0.1.006 Management of the TC programme for Latin America	2 634 699	174 808	28 154	2 634 699	174 808	28 154
6.0.1.007 Procurement services	1 570 200	-	-	1 570 279	-	-
6.0.1.008 Coordination of and support to the PACT	2 190 274	-	-	2 190 274	-	-
6.0.1 Management of the Technical Cooperation Programme	**22 502 644**	**466 512**	**599 987**	**22 502 723**	**469 994**	**596 505**
6.S Corporate Shared Services Attribution to Major Programme 6	**1 058 368**	**41 149**	**10 609**	**1 059 260**	**42 183**	**10 609**
Major Programme 6 - Management of Technical Cooperation for Development	**23 561 013**	**507 661**	**610 596**	**23 561 983**	**512 176**	**607 114**

Major Programme 6 – Management of Technical Cooperation for Development
Unfunded Activities within Tasks

Table 24

Subfunction	Tasks	2014 Unfunded	2015 Unfunded
6.0.1.002 Coordination of and support to the TC programme	General management and coordination	38 434	38 434
6.0.1.003 Management of the TC programme for Africa	General management and coordination	147 682	147 682
6.0.1.004 Management of the TC programme for Asia and the Pacific	General management and coordination	87 918	87 918
6.0.1.005 Management of the TC programme for Europe	General management and coordination	297 800	297 800
6.0.1.006 Management of the TC programme for Latin America	General management and coordination	28 154	28 154
6.S.3.005 BSS MTIT Business Solutions Section (Attrib. to MP 6)	Software solutions	10 609	10 609

ANNEXES

Annex 1. List of Acronyms

ACABQ	Advisory Committee on Administrative and Budgetary Questions
ADS	accelerator-driven system
AdSec	Advisory Group on Nuclear Security
AFROG	African Radiation Oncology Group
AGaRT	Advisory Group on Increasing Access to Radiotherapy Technology
AIPS	Agency-wide Information System for Programme Support
ALADDIN	A Labelled Atomic Data Interface
ALMERA	Analytical Laboratories for the Measurement of Environmental Radioactivity
AMBDAS	Atomic and Molecular Bibliographical Data System
ANSN	Asian Nuclear Safety Network
AP	additional protocol (applicable in the text of Major Programme 4)
	IAEA Action Plan on Nuclear Safety (applicable in the text of Major Programmes 1, 2 and 3)
ASU	AIPS Services Unit
BMS	Buildings Management Services
BMSF	Buildings Management Special Fund
BMWG	Border Monitoring Working Group
CA	complementary access
CAURB	core activity unfunded in the Regular Budget
CEB	United Nations System Chief Executives Board for Coordination
CLE	Clean Laboratory Extension
CNS	Convention on Nuclear Safety
ConvEx	Convention Exercise
COTS	commercial off-the-shelf
CPF	Country Programme Framework
CPI	consumer price index
CPPNM	Convention on the Physical Protection of Nuclear Material
CRA	coordinated research activity
CRP	coordinated research project
CSA	comprehensive safeguards agreement
CSC	common staff costs
CSD	Commission on Sustainable Development
CSS	Commission on Safety Standards
CT	computed tomography
D&IS	development and implementation support
DA	destructive analysis
DCT	Document Coordination Team
DE-TOP	Desalination Thermodynamic Optimization Program
DEEP	Desalination Economic Evaluation Program
DEMO	demonstration power plant
DGOP	Director General’s Office for Policy

DIRAC	Directory of Radiotherapy Centres
DIV	design information verification
DMAIC	define, measure, analyse, improve and control
DPP	document preparation profile
DPRK	Democratic People's Republic of Korea
DRiMa	International Project on Decommissioning Risk Management
DRIMC	disaster recovery infrastructure and incident management capability
DSP	digital signal processing
DSRS	disused sealed radioactive source
3E	energy–economy–environment
ECAS	Enhancing Capabilities of the Safeguards Analytical Services
EPGR	encapsulation plant and geological repository
EPR	emergency preparedness and response
EPREV	Emergency Preparedness Review
EPRI	Electric Power Research Institute
ER	emergency response
ERF	Equipment Replacement Fund
ERP	enterprise resource planning
ES	environmental sampling
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FaSa	International Project on Use of Safety Assessment in Planning and Implementation of Decommissioning of Facilities using Radioactive Material
FINAS	Fuel Incident Notification and Analysis System
FORATOM	European Atomic Forum
FTE	full-time equivalent
FTP	file transfer protocol
GC	General Conference
GCR	gas cooled reactor
GEF	Global Environment Facility
GIF	Generation IV International Forum
GSAN	Global Safety Assessment Network
GSR	General Safety Requirements
HAB	harmful algal bloom
HEEP	Hydrogen Economic Evaluation Program
HEU	high enriched uranium *or* highly enriched uranium
HICP	Harmonized Indices of Consumer Prices
HLCM	High-Level Committee on Management
HLW	high level waste
HR	human resources
HTGR	high temperature gas cooled reactor
I&C	instrumentation and control

IACRNE	Inter-Agency Committee on Radiological and Nuclear Emergencies
IARC	International Agency for Research on Cancer
IBANDL	Ion Beam Analysis Nuclear Data Library
ICSC	International Civil Service Commission
ICT	information and communication technology
ICTP	International Centre for Theoretical Physics
IAEA	International Atomic Energy Agency
IDEA	International Dose External Audit
IEC	Incident and Emergency Centre
IEM	international experts' meeting
IES	Incident and Emergency System
IGALL	International Generic Ageing Lessons Learned
IMF	International Monetary Fund
imPACT	integrated missions of PACT
INES	International Nuclear and Radiological Event Scale
INIG	Integrated Nuclear Infrastructure Group
INIR	Integrated Nuclear Infrastructure Review
INIS	International Nuclear Information System
INLN	International Nuclear Library Network
INPO	Institute of Nuclear Power Operations
INPRO	International Project on Innovative Nuclear Reactors and Fuel Cycles
INSAG	International Nuclear Safety Group
INSEN	International Nuclear Security Education Network
INSServ	International Nuclear Security Advisory Service
INSSP	Integrated Nuclear Security Support Plan
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPF	indicative planning figure
IPSAS	International Public Sector Accounting Standards
IRDFF	International Reactor Dosimetry and Fusion File
IRIX	International Radiation Information Exchange
IRMIS	International Radiation Monitoring Information System
IRP	IAEA Safeguards Information System Re-engineering Project
IRRS	Integrated Regulatory Review Service
IRS	Incident Reporting System for Operating Experience
IRSRR	Incident Reporting System for Research Reactors
ISE	integrated safeguards environment
ISEMIR	Information System on Occupational Exposure in Medicine, Industry and Research
ISIS	IAEA Safeguards Information System
ISO	International Organization for Standardization
ISOE	Information System on Occupational Exposure
ISSAS	IAEA SSAC Advisory Service

ISSC	International Seismic Safety Centre
IT	information technology
ITER	International Thermonuclear Experimental Reactor
JMOX	Mixed Oxide Fuel Fabrication Plant in Japan
JPLAN	Joint Radiation Emergency Management Plan of the International Organizations
JRC	Joint Research Centre
KPI	key performance indicator
KPS	knowledge preservation system
LABONET	International Network of Laboratories for Nuclear Waste Characterization
LDC	least developed country
LEU	low enriched uranium
LIMS	laboratory information management system
LMI countries	low and middle income countries
LTO	long term operation
MARIS	Marine Information System
MBE	material balance evaluation
MCI	major capital investment
MCIF	Major Capital Investment Fund
MCIP	Major Capital Investment Plan
MDG	United Nations Millennium Development Goal
MODARIA	Modelling and Data for Radiological Impact Assessments
MOSCs	management and operation costs of the laboratories
MP	Major Programme
MRI	magnetic resonance imaging
MSSP	Member State Support Programme
MTS	Medium Term Strategy
NA	Department of Nuclear Sciences and Applications
NAEL	IAEA Environment Laboratories
NAFA	Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture
NAPC	Division of Physical and Chemical Sciences
NCCP	National Cancer Control Programme
NDA	non-destructive assay
NDT	non-destructive testing
NE	Department of Nuclear Energy
NES	Nuclear Energy Series
NESA	Nuclear Energy System Assessment
NFCIS	Nuclear Fuel Cycle Information System
NFCSS	Nuclear Fuel Cycle Simulation System
NGO	non-governmental organization
NGSS	next generation surveillance system
NIRS	National Institute of Radiological Sciences
NKM	nuclear knowledge management

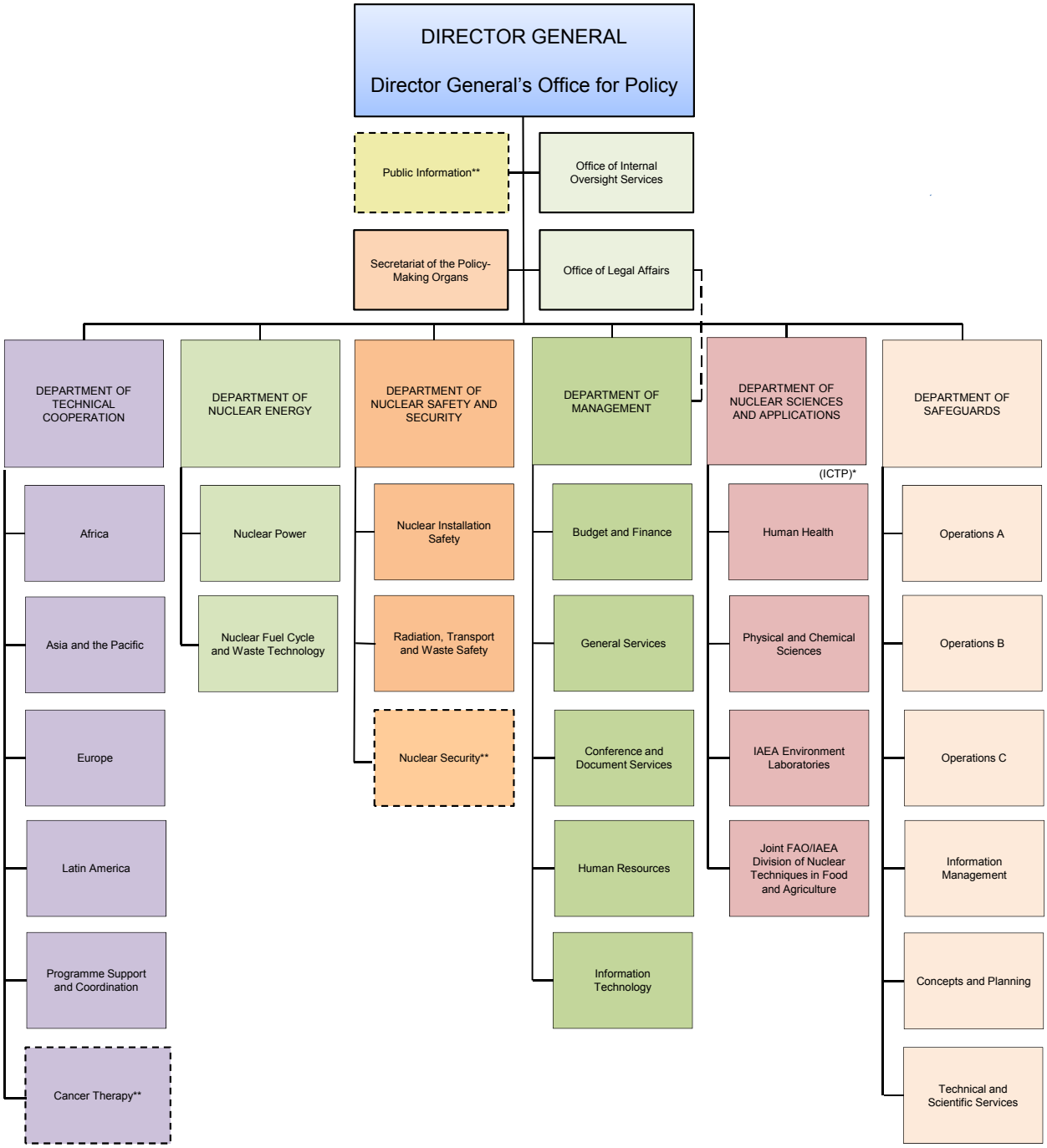
NMDI/NAHU	Nuclear Medicine and Diagnostic Imaging Section/Division of Human Health
NML	Nuclear Material Laboratory
NNWS	non-nuclear-weapon State
NORM	naturally occurring radioactive material
NP	nuclear power
NPP	nuclear power plant
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NSAL	Nuclear Spectrometry and Applications Laboratory
NSAP	Nuclear Safety Action Plan
NSF	Nuclear Security Fund
NSGC	Nuclear Security Guidance Committee
NSNS	Office of Nuclear Security
NSP	Nuclear Security Plan
NSSC	Nuclear Security Support Centre
NUMDAB	Nuclear Medicine Database
NUSEC	Nuclear Security Information Portal
NUSSC	Nuclear Safety Standards Committee
NWAL	Network of Analytical Laboratories
O&M	operation and maintenance *or* operations and maintenance
OA-ICC	Ocean Acidification International Coordination Centre
OASIS	On-line Administrative Staff Information System
OECD	Organisation for Economic Co-operation and Development
OECD/NEA	OECD Nuclear Energy Agency
OIE	World Organisation for Animal Health
OIOS	Office of Internal Oversight Services
ORP	occupational radiation protection
ORPAS	Occupational Radiation Protection Appraisal Service
ORPNET	Occupational Radiation Protection Networks
OSART	Operational Safety Review Team
PACT	Programme of Action for Cancer Therapy
PBC	Programme and Budget Committee
PBG	Plant Breeding and Genetics Section
PCI	percutaneous coronary intervention
PESS	Planning and Economic Studies Section
PET	positron emission tomography
PGEC	postgraduate educational course
PIGE	particle induced gamma ray emission
PLiM	plant life management
PMDA	Agreement between the Government of the United States of America and the Government of the Russian Federation Concerning the Management and Disposition of Plutonium Designated as No Longer Required for Defense Purposes and Related Cooperation
PMDS	PACT Model Demonstration Site

PMO	Policy-Making Organs
PPAR	project performance and assessment report
PRINCE	Projects in Controlled Environment
PRIS	Power Reactor Information System
PROSPER	Peer Review of Operational Safety Performance Experience
PUI	Peaceful Uses Initiative
QA	quality assurance
QC	quality control
QM	quality management
QMS	quality management system
QUAADRIL	Quality Assurance Audit for Diagnostic Radiology Improvement and Learning
QUANUM	Quality Assurance in Nuclear Medicine
QUATRO	Quality Assurance Team for Radiation Oncology
R&D	research and development
RANET	Response and Assistance Network
RASIMS	Radiation Safety Information Management System
RBI	Ruđer Bošković Institute
RBM	results based management
RCM	Research Coordination Meeting (Note: replaced by Technical Meeting)
RegNet	International Regulatory Network
REPLIE	Response Plan for Incidents and Emergencies
RIPL	Reference Input Parameter Library
RR	research reactor
RSAC	regional system of accounting for and control of nuclear material
RSLS	International Working Forum on Regulatory Supervision of Legacy Sites
RSM	Radiation Safety and Monitoring Section
RT	radiotherapy
RW	radioactive waste
RWfO	reimbursable work for others
RWM	radioactive waste management
SAET Programme	Safety Assessment Education and Training Programme
SAGNA	Standing Advisory Group on Nuclear Applications
SAGNE	Standing Advisory Group on Nuclear Energy
SAGSI	Standing Advisory Group on Safeguards Implementation
SAL	Safeguards Analytical Laboratory
SALTO	Extrabudgetary Programme on Safety Aspects of Long Term Operation of Water Moderated Reactors Peer Review Service
SARCoN	Guidelines for Systematic Assessment of Regulatory Competence Needs
SAT	Self-Assessment Tool
SEED	Site and External Events Design
SER	State evaluation report
SF	Spent fuel

SG	Department of Safeguards
SGOA	Division of Operations A
SGOB	Division of Operations B
SGOC	Division of Operations C
SIR	Safeguards Implementation Report
SIT	sterile insect technique
SLA	service level agreement
SMR	small and medium reactor
SOP	standard operating procedure
SPECT	single photon emission computed tomography
SQP	small quantities protocol
SR	Safety Report
SS	Safety Standard
SSAC	State system of accounting for and control of nuclear material
SSDL	secondary standards dosimetry laboratory
STEMI	ST-elevation myocardial infarction
STEP	Sandwich Training Educational Programme
STR	Safeguards Technical Report
SWMCN	Soil and Water Management and Crop Nutrition Section
TACC	Technical Assistance and Cooperation Committee
TAD	transboundary animal disease
TC	Department of Technical Cooperation
TCF	Technical Cooperation Fund
TCP	technical cooperation programme
TECDOC	publication in the IAEA-TECDOC series
ThDEPO	World Distribution of Thorium Deposits and Resources
TLD	thermoluminescence dosimetry
TM	Technical Meeting
TSA	thematic safety area
TSO	technical and scientific support organization
TWG-ND	Technical Working Group on Nuclear Desalination
UDEPO	World Distribution of Uranium Deposits
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNICC	United Nations International Computing Centre
UNICEF	United Nations Children’s Fund
UNIDO	United Nations Industrial Development Organization

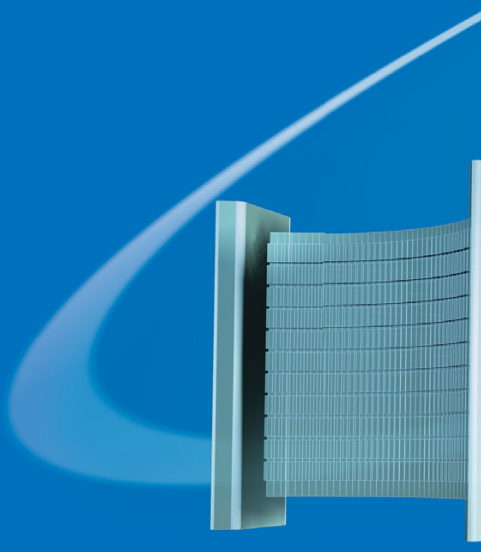
UNODC	United Nations Office on Drugs and Crime
UNSCEAR	United Nations Scientific Committee on the Effects of Atomic Radiation
UPC	uranium production cycle
UPSAT	Uranium Production Site Appraisal Team
USIE	Unified System for Information Exchange in Incidents and Emergencies
VBOs	VIC-based organizations
VIC	Vienna International Centre
VOA	voluntary offer agreement
VUCCnet	Virtual University for Cancer Control and Regional Training Network
WANO	World Association of Nuclear Operators
WASSC	Waste Safety Standards Committee
WATEC	International Radioactive Waste Technical Committee
WCF	Working Capital Fund
WG	working group
WHO	World Health Organization
WISER	Water Isotope System for Data Analysis, Visualization, and Electronic Retrieval
WMO	World Meteorological Organization
WNA	World Nuclear Association
XRF	X-ray fluorescence

Annex 2. Organizational Chart
(as of 1 January 2014)



* The Abdus Salam International Centre for Theoretical Physics (Abdus Salam ICTP), legally referred to as the "International Centre for Theoretical Physics", is operated as a joint programme by UNESCO and the Agency. Administration is carried out by UNESCO on behalf of both organizations.

** [- - -] Indicates area of proposed change.



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