Safeguards

Objective

To draw independent, impartial and timely safeguards conclusions, in order to provide credible assurances to the international community that States are abiding by their safeguards obligations. To contribute, as appropriate and as requested, to verifying nuclear arms control and reduction agreements.

Implementation of Safeguards in 2011

At the end of each year, the Agency draws a safeguards conclusion for each State for which safeguards are applied. This conclusion is based on a continuous, iterative State evaluation process that integrates and assesses all safeguards relevant information available to the Agency. By basing the planning, conduct and evaluation of safeguards on an ongoing analysis of all such information, the Agency is able to more effectively focus verification activities in the field and at Headquarters.

With regard to States with comprehensive safeguards agreements (CSAs), the Agency seeks to conclude that all nuclear material has remained in peaceful activities. To draw such a conclusion, the Secretariat must ascertain that: first, there are no indications of diversion of declared nuclear material from peaceful activities (including no misuse of declared facilities or other declared locations to produce undeclared nuclear material); and second, there are no indications of undeclared nuclear material or activities in the State as a whole.

To ascertain that there are no indications of undeclared nuclear material or activities in a State, and ultimately to be able to draw the broader conclusion that *all* nuclear material has remained in peaceful activities, the Agency assesses the results of its verification and evaluation activities under CSAs and additional protocols (APs). Thus, for the Agency to draw such a broader conclusion, both a CSA and an AP must be in force in the State, and the Agency must have completed all necessary verification and evaluation activities.

For States that have a CSA but with no AP in force, the Agency draws a conclusion for a given year only with respect to whether *declared* nuclear material remained in peaceful activities, as the Agency does not have sufficient tools to provide credible assurances regarding the absence of undeclared nuclear material and activities in a State as a whole.

For those States for which the broader conclusion has been drawn and a State level integrated safeguards approach has been approved, the Agency implements integrated safeguards: an optimized combination of measures available under CSAs and APs to maximize effectiveness and efficiency in fulfilling the Agency's safeguards obligations. In

"In 2011, safeguards were applied for 178 States ... with safeguards agreements in force with the Agency ..."

accordance with the State level safeguards approach and annual implementation plan approved for each individual State, by the end of 2011 integrated safeguards were implemented for 51 States.¹

In 2011, safeguards were applied for 178 States² with safeguards agreements in force with the Agency.^{3,4} Of the 109 States that had both a CSA and an AP in force, the Agency concluded that *all* nuclear material remained in peaceful activities in 58 States⁵; for the remaining 51 States, as all the necessary evaluations had yet to be completed, the Agency was unable to draw the same conclusion. For these 51 States, and for the 61 States with a CSA but with no AP in force, the Agency concluded only

¹ Armenia, Australia, Austria, Bangladesh, Belgium, Bulgaria, Burkina Faso, Canada, Chile, Croatia, Cuba, the Czech Republic, Denmark, Ecuador, Estonia, Finland, Germany, Ghana, Greece, the Holy See, Hungary, Iceland, Indonesia, Ireland, Italy, Jamaica, Japan, the Republic of Korea, Latvia, Libya, Lithuania, Luxembourg, Madagascar, Mali, Malta, Monaco, the Netherlands, Norway, Palau, Peru, Poland, Portugal, Romania, Seychelles, Singapore, Slovakia, Slovenia, Spain, Sweden, Uruguay and Uzbekistan.

² The 178 States do not include the Democratic People's Republic of Korea, where the Agency did not implement safeguards and, therefore, could not draw any conclusion.

³ And Taiwan, China.

⁴ The status with regard to the conclusion of safeguards agreements, APs and small quantities protocols (SQPs) is given in the Annex to this report.

⁵ And Taiwan, China.

that *declared* nuclear material remained in peaceful activities.

Safeguards were also implemented with regard to declared nuclear material in selected facilities in the five nuclear-weapon States under their respective voluntary offer agreements. For these five States, the Agency concluded that nuclear material to which safeguards were applied in selected facilities remained in peaceful activities or had been States, the Secretariat could not draw any safeguards conclusions.

Conclusion of Safeguards Agreements and APs, and Amendment of SQPs

The Agency continued to facilitate the conclusion of safeguards agreements and APs, and the amendment or rescission of small quantities

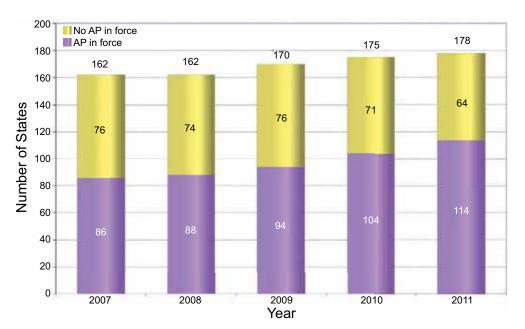


FIG. 1. Number of APs for States with safeguards agreements in force, 2007–2011 (the Democratic People's Republic of Korea is not included).

withdrawn from safeguards as provided for in the agreements.

For the three States in which the Agency implemented safeguards pursuant to safeguards agreements based on INFCIRC/66/Rev.2, the Secretariat concluded that the nuclear material, facilities or other items to which safeguards were applied remained in peaceful activities.

"... consultations on the amendment of SQPs and the conclusion and entry into force of safeguards agreements and APs were held throughout the year with representatives from Member and non-Member States ..."

As of 31 December 2011, 14 non-nuclear-weapon States party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) had yet to bring CSAs into force pursuant to Article III of the Treaty. For these protocols (SQPs)⁶. During 2011, CSAs entered into force for three States⁷, and APs entered into force for ten States⁸. The status of safeguards agreements and APs as of 31 December 2011 is shown in Table A6. During the year, one State⁹ signed a CSA and an AP.

⁶ Many States with minimal or no nuclear activities have concluded an SQP to their CSA. Under an SQP, the implementation of most of the safeguards procedures in Part II of a CSA is held in abeyance as long as certain criteria are met. In 2005, the Board of Governors took the decision to revise the standardized text of the SQP and change the eligibility criteria for an SQP, making it unavailable to a State with an existing or planned facility and reducing the number of measures held in abeyance (GOV/INF/276/Mod.1 and Corr.1). The Agency initiated exchanges of letters with all States concerned in order to give effect to the revised SQP text and the change in the criteria for an SQP.

⁷ Republic of the Congo, Montenegro and Mozambique.

⁸ Andorra, Bahrain, Republic of the Congo, Costa Rica, Gambia, Kyrgyzstan, Mexico, Montenegro, Morocco and Mozambique.

⁹ Guinea.

The Secretariat continued to implement the Plan of Action to Promote the Conclusion of Safeguards Agreements and Additional Protocols, which was updated in September 2010. During the year, the Secretariat convened four outreach events on the subject of Agency safeguards: an interregional seminar for States in Southeast and South Asia with limited nuclear material and activities, and a regional seminar for States in Southeast Asia with significant nuclear activities (both held in Singapore in March 2011); and briefings for a number of Permanent Missions (in Geneva in May and in New York in October). In addition, consultations on the amendment of SQPs and the conclusion and entry into force of safeguards agreements and APs were held throughout the year with representatives from Member and non-Member States in Berlin, Geneva, New York and Vienna, and also during training events organized in Vienna and elsewhere by the Secretariat.

Amendment of SQPs

The Secretariat continued to communicate with States in order to implement the Board's 2005 decisions regarding the amendment or rescission of SQPs to reflect the revised standardized text and changed eligibility criteria. During the year, SQPs with seven States¹⁰ were amended and three States¹¹ brought into force SQPs based on the revised text.

Implementing Safeguards in the Islamic Republic of Iran (Iran)

During 2011, the Director General submitted four reports to the Board of Governors entitled *Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran* (GOV/2011/7, GOV/2011/29, GOV/2011/54 and GOV/2011/65).

In 2011, contrary to the relevant binding resolutions of the Board of Governors and the United Nations Security Council, Iran did not: implement the provisions of its Additional Protocol; implement the modified Code 3.1 of the Subsidiary Arrangements General Part to its Safeguards Agreement; suspend its enrichment related activities; suspend its heavy water related activities; or address the Agency's serious concerns about possible military dimensions to Iran's nuclear programme, in order to establish international confidence in the exclusively peaceful nature of Iran's nuclear programme.

While the Agency continued throughout 2011 to verify the non-diversion of declared nuclear material at the nuclear facilities and locations outside facilities (LOFs) declared by Iran under its Safeguards Agreement, as Iran did not provide the necessary cooperation, including not implementing its Additional Protocol, as required in the binding resolutions of the Board of Governors and the United Nations Security Council, the Agency was

"During the year, the Secretariat convened four outreach events on the subject of Agency safeguards ..."

unable to provide credible assurance about the absence of undeclared nuclear material and activities in Iran and, therefore, was unable to conclude that all nuclear material in Iran was in peaceful activities.

The Director General decided that the time was right to provide the Board of Governors with the Secretariat's detailed analysis of the information available to the Agency which had given rise to concerns about possible military dimensions to Iran's nuclear programme. This analysis was published in an Annex to the Director General's November 2011 report to the Board. The Secretariat's analysis indicates that Iran has carried out activities relevant to the development of a nuclear explosive device. It also indicates that prior to the end of 2003, these activities took place under a structured programme and that some activities may still be ongoing.

On 18 November 2011, the Board of Governors adopted by a vote resolution GOV/2011/69 in which, inter alia, the Board expressed deep and increasing concern about the unresolved issues regarding the Iranian nuclear programme, including those which need to be clarified to exclude the existence of possible military dimensions, and stressed that it is essential for Iran and the Agency to intensify their dialogue aiming at the urgent resolution of all outstanding substantive issues for the purpose of providing clarifications regarding those issues, including access to all relevant information, documentation, sites, material and personnel in Iran.

¹⁰ El Salvador, Gambia, Guatemala, Panama, Republic of Moldova, San Marino and Zimbabwe.

¹¹ Republic of the Congo, Montenegro and Mozambique.

Implementing Safeguards in the Syrian Arab Republic (Syria)

During 2011, the Director General submitted two reports to the Board of Governors on the implementation of Syria's NPT Safeguards Agreement. On 6 June 2011, the Director General reported to the Board of Governors that, based on all the information available to the Agency, it was very likely that a building destroyed at the Dair Alzour site was a nuclear reactor which should have been declared to the Agency by Syria.

On 9 June 2011, the Board of Governors adopted by a vote a resolution in which it, inter alia, decided to report, as provided for in Article XII.C of the Statute, through the Director General, Syria's noncompliance with its Safeguards Agreement to all Members of the Agency and to the Security Council and General Assembly of the United Nations.

In May 2011, Syria indicated its readiness to fully cooperate with the Agency to resolve issues related to the Dair Alzour site. Following that, in August 2011, Syria informed the Agency of its readiness to have a meeting with the Agency in order to resolve the outstanding issues regarding the Dair Alzour site. In October 2011, a delegation from the Agency visited Damascus with the aim of advancing the Agency's verification mission in Syria. A number of questions, in particular concerning other locations that may be functionally related to the Dair Alzour site, remain to be resolved.

In 2011, Syria cooperated with the Agency in addressing the Agency's concerns in relation to previously unreported conversion activities at the Miniature Neutron Source Reactor and the origin of anthropogenic natural uranium particles found there. The Agency decided that the matter would henceforth be addressed in the routine implementation of safeguards.

For 2011, the Agency was able to conclude for Syria that declared nuclear material remained in peaceful activities.

Implementing Safeguards in the Democratic People's Republic of Korea (DPRK)

In September 2011, the Director General submitted a report to the Board of Governors and General Conference on the application of safeguards in the DPRK, which provided a historical overview and update on those recent developments of direct relevance to the Agency, along with

information on the DPRK's nuclear programme (GOV/2011/53-GC(55)/24).

Since 1994, the Agency has not been able to conduct all necessary safeguards activities provided for in the DPRK's NPT Safeguards Agreement. From the end of 2002 until July 2007, the Agency was not able, and since April 2009 has not been able, to implement any verification measures in the DPRK and, therefore, could not draw any safeguards conclusion regarding the DPRK.

Since April 2009, the Agency has not implemented any measures under the ad hoc monitoring and verification arrangement agreed between the Agency and the DPRK and foreseen in the Initial Actions agreed at the Six-Party Talks. Reports received about the construction of a new uranium enrichment facility and of a light water reactor in the DPRK are deeply troubling.

Although not implementing any verification activities in the field, the Agency continued to monitor the DPRK's nuclear activities by using open source information, satellite imagery and trade information. The Agency also continued to further consolidate its knowledge of the DPRK's nuclear programme with the objective of maintaining operational readiness to resume safeguards implementation in the DPRK.

State Level Concept for the Planning, Conduct and Evaluation of Safeguards

In 2011, the Agency continued to evolve the State level concept for the planning, conduct and evaluation of safeguards. Safeguards implementation, pursued in accordance with the State level concept, is based on a comprehensive evaluation of all safeguards relevant information regarding a State.

Efforts during the year focused on ways to better link verification activities at Headquarters and in the field with those related to the evaluation of all safeguards relevant information available to the Agency. All such information regarding a State's nuclear programme, including feedback from inspection related activities, is evaluated, not only to draw safeguards conclusions but also to determine the safeguards activities to be conducted with respect to that State in order to maintain those conclusions. This helps the Agency to customize and focus its verification activities.

Cooperation with State and regional safeguards authorities

The effectiveness and efficiency of Agency safeguards depend, to a large extent, on the effectiveness of State systems of accounting for and control of nuclear material (SSACs) and, where relevant, regional systems of accounting for and control of nuclear material, and on the level of cooperation of State and regional safeguards authorities with the Agency. The Secretariat routinely meets State and regional authorities to address safeguards implementation issues, such as the quality of operator systems for the measurement of nuclear material, the timeliness and accuracy of State reports and declarations, and support for the Agency's verification activities.

To help States build their capacity to comply with their safeguards obligations, the Agency in 2011 conducted two IAEA SSAC Advisory Service (ISSAS) missions in Kazakhstan and Mexico. It also held seven international, regional and national training courses for personnel responsible for oversight and implementation of the SSAC, and participated in meetings supporting development of national infrastructures.

Information analysis

Throughout 2011, the Agency continued to enhance and diversify its capabilities to acquire and process data, analyse and evaluate information, generate knowledge, and securely distribute information to contribute to an effective safeguards system. The analysis of all safeguards relevant information has become an essential part of evaluating a State's nuclear activities and drawing safeguards conclusions.

In drawing its safeguards conclusions, the Agency processes, evaluates and conducts a consistency analysis between State declarations, verification data, and open source information. In support of this process, the Agency draws on a diverse range of open sources, including satellite imagery and nuclear trade related procurement data. It continues to invest in new tools and methods to streamline and prioritize workflows and processes.

Information analysts are also responsible for evaluating an increasing amount of field data, including non-destructive assay (NDA) measurement results, as well as laboratory analysis of destructive assay and environmental samples — essential contributions to the State evaluations.

In an effort to continuously improve the quality of reporting, Agency staff: monitored laboratory and measurement systems performance; organized international technical meetings; and provided training and workshops to States on nuclear material accounting, including measurement and material balance evaluation concepts. Workshops on the procurement outreach programme yielded reports on suspicious procurement attempts and current procurement trends. Ongoing reviews of technical cooperation projects and procurements provided relevant safeguards input to decision making. Information analysts made important contributions to ongoing State evaluations using State files, satellite imagery analysis, material balance evaluations, safeguards approaches, environmental sample analysis, trade analysis, and the analysis of scientific and technical literature.

In 2011, in response to the earthquake and tsunami in Japan, the Agency acquired and analysed imagery of the Fukushima Daiichi nuclear power plant on a daily basis and provided extensive analysis of

"To help States build their capacity to comply with their safeguards obligations, the Agency ... held seven international, regional and national training courses for personnel responsible for oversight and implementation of the SSAC, and participated in meetings supporting development of national infrastructures. "

radionuclide inventories. This information played a critical role in helping to inform Member States, as well as the public, about the crisis.

Information systems

In 2011, the Agency made improvements to the overall performance, stability and security of its safeguards information systems. The software for all desktops was modernized, and laptops were reconfigured to provide more secure alternatives for remote computing. The information technology (IT) service desk processed an average of 530 service requests per month. Industry standard best practices and process improvements were implemented.

To deliver a secure collaborative platform for information analysis, an Integrated Safeguards Environment (ISE) was designed, and the Safeguards

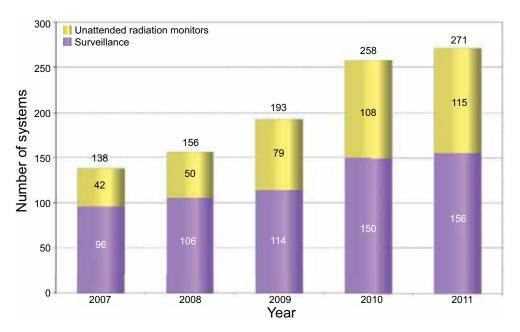


FIG. 2. Implementation of safeguards systems in remote monitoring mode, 2007–2011.

Analytical Laboratory IT network was integrated with the rest of the safeguards area. Upgrades were implemented to the IT systems at the safeguards regional offices.

During 2011, numerous other software related upgrades were implemented, including the provision of new capabilities for the dedicated safeguards

"In 2011, the Agency made improvements to the overall performance, stability and security of its safeguards information systems."

> internet portal, an internal communication tool to support information sharing and collaboration, and the email infrastructure. Other areas of improvement included expanding internal IT forensics capabilities and strengthening system monitoring tools to ensure high availability.

> Significant improvements were made to IT governance, standards and quality assurance policies. A role based access control solution was designed to facilitate access to safeguards data, and architectural documents were updated to promote standard software development best practices.

The safeguards area's portal site was deployed to facilitate access to all State related data for collaborative analysis, a search engine to retrieve data in any format was deployed, and a new system to manage follow-up actions was developed. The latter will track key activities for the annual implementation plan and State evaluation.

Equipment development and provision

A significant technical support effort was required as part of the recovery efforts following the major earthquake and tsunami in Japan and the Fukushima Daiichi accident.

In measurable terms, achievements in the area of equipment provision are best illustrated by the following statistical data, which reflect both current status and major trends. In the area of NDA, during 2011, 2254 separate pieces of equipment were prepared and assembled into 897 portable and attended NDA systems. By the end of 2011, a total of 154 unattended monitoring systems were in operation worldwide and the Agency had 1199 cameras connected to 589 systems operating at 252 facilities in 33 States. The total number of electronic seals transmitting remote data to IAEA Headquarters in 2011 increased to 172 (from 147 in 2010). In 2011, 271 safeguards systems with remote monitoring were installed at 109 facilities in 21 States¹². Figure 2 illustrates the increased use of remote monitoring over the past five years.

In the provision of equipment for field applications, 2011 saw a concentration on the maintenance and upgrade of existing installations. For instance, the Agency began to prepare for

¹² And Taiwan, China.



FIG. 3. CAMECA IMS 1280-HR Large Geometry Secondary Ion Mass Spectrometer in service in the Clean Laboratory extension, Seibersdorf.

the replacement of instrumentation with the next generation surveillance system (NGSS).

Member States Support Programmes (MSSPs) continued to provide major resources to safeguards equipment innovations. During 2011, this contributed, inter alia, towards the successful completion of the NGSS project, along with numerous improvements and upgrades aimed at achieving better standardization of safeguards instrumentation.

The equipment development programme, as part of its work to support international cooperation, held a workshop in Vienna on possible alternatives to neutron detection technologies, and a practical seminar on advanced sealing technologies. Numerous technical meetings were also hosted, addressing novel approaches to safeguards techniques in areas such as image processing and inertial navigation.

In terms of infrastructure support services, activity in 2011 focused primarily on maintaining proper logistical support to inspections and refurbishing laboratory and testing premises.

Enhancing sample analysis

The Network of Analytical Laboratories (NWAL) consists of the Safeguards Analytical Laboratory (SAL) and laboratories in 18 other Member States and the European Commission. Additional laboratories in the area of environmental and/or nuclear material sample analysis are now in the process of qualification in the following countries: Argentina, Australia, Belgium, China, France, Hungary, the Republic of Korea and the USA. The entry into service of the Large Geometry Secondary Ion Mass Spectrometer (LG-SIMS) at SAL in 2011 (Fig. 3) is indicative of more widespread implementation of this technique for safeguards sample analysis throughout the NWAL.

Support

Developing the safeguards workforce

As demands on its workforce evolve, so does the Agency's training curriculum. In 2011, the Agency

"In the provision of equipment for field applications, 2011 saw a concentration on the maintenance and upgrade of existing installations."

conducted 114 safeguards training courses and, in line with its development of the State level approach

to safeguards implementation, began to restructure its training programme accordingly. Training courses were developed, improved or updated in order to provide all safeguards staff with the necessary competencies, particularly those required for conducting collaborative analysis. Examples of such training included a complementary access exercise, an analytical skills workshop, a nuclear fuel cycle indicators course and advanced training in fuel cycle facilities supporting State evaluation. Advanced training on a range of more specialized areas was also organized, including proliferation indicators for different types of nuclear fuel cycle facilities. Training on safeguards activities at facilities was complemented by a new course involving an advanced comprehensive inspection exercise at light water reactors and CANDU reactors.

Quality management

In 2011, the Agency continued to implement a quality management system in the safeguards programme. Training was provided on management system tools, such as the corrective action report system, continual process improvement methodology and document management system. Knowledge management efforts focused on retaining the critical

"In 2011, the Agency conducted 114 safeguards training courses ..."

> knowledge of retiring staff. The Agency conducted internal audits on the reporting of analytical results from SAL, computer authority files and the use of remote monitoring. The cost calculation methodology was applied to enable the Agency to estimate the cost of implementing safeguards in each State.

Standing Advisory Group on Safeguards Implementation

The Standing Advisory Group on Safeguards Implementation held two series of meetings in 2011, at which, inter alia, it considered: efforts to further the application of the State level concept for all States; guidelines for States implementing safeguards agreements and APs; the *Long-term R&D Plan* 2012–2023 and the *Development and Implementation Support Programme for Nuclear Verification* 2012–2013; safeguards at the front end of the nuclear fuel cycle; as well as guidelines for determining the decommissioned status of nuclear facilities under safeguards.

Significant Safeguards Projects

ECAS

To maintain and strengthen its capabilities to provide independent and timely analysis of environmental and nuclear material samples, the Agency continued with the project on Enhancing Capabilities of the Safeguards Analytical Services (ECAS).

In April 2011, construction of the extension of the Clean Laboratory to accommodate the LG-SIMS was completed and the spectrometer installed. Partially funded by the Agency's regular budget and with generous contributions from a number of Member States, this extension of the Environmental Sample Laboratory has afforded the Agency an independent capability in particle analysis equivalent to the best measurement methods available.

During 2011, the detailed design for the 'shell and core' of the new Nuclear Material Laboratory (NML) was completed, the lead contractor began excavating the site in preparation for the construction scheduled to begin in 2012, and the detailed design for the equipment and inner workings of the laboratory was completed. A site plan to help estimate project infrastructure and security cost requirements was further developed. The design phase of the NML and of related infrastructure and security components has been partially funded by the Agency's Regular Budget, with additional extrabudgetary contributions from certain Member States.

Integrated analysis

In 2011, the milestones, delivery schedules and master programme plan regarding the ISIS Re-engineering Project (IRP) had to be revised following cancellation of the contract with the main supplier. Nonetheless, some of the main project components, such as the design of the key components of the ISIS application and data migration from the mainframe to the ISE, have been largely completed.

The Agency formally accepted a geospatial exploitation system (GES) in 2011, a solution aimed at supporting the analysis of imagery and the

secure dissemination of geospatial data within the safeguards programme. The primary objective of the GES is for the imagery analysts to benefit from up to date tools supporting effective special analysis. GES is the first application specifically developed to deploy into the Agency's ISE.

MOX Fuel Fabrication Plant in Japan

The construction of the MOX Fuel Fabrication Plant in Japan (J-MOX), which began in October 2010, has been suspended following the major earthquake and resultant tsunami of March 2011. In 2011, through extensive design information examination and review, the Agency consolidated the safeguards approach and design information verification plan for J-MOX, and also started testing some of the prototype equipment that will be required at the plant.

Chernobyl

The objective of the Chernobyl safeguards project is to develop safeguards approaches and instrumentation for routine safeguards implementation at the Chernobyl facilities. The new spent fuel conditioning plant and new safe confinement over the damaged Reactor Unit 4 are expected to be in operation in 2015. Construction of the spent fuel conditioning plant (part of the new dry spent fuel storage) has been delayed due to a revision of the facility's design. The Agency is directly involved in the early design stages in order to integrate appropriate safeguards systems. During 2011, discussions took place with the Chernobyl site operator and State Authority concerning the construction schedule for the safe confinement and for the spent fuel conditioning plant, and the submission of revised design information for the latter. The conceptual safeguards approach for the spent fuel conditioning plant was drafted on the basis of the existing design information.

Preparing for the Future

In 2011, implementation began of the Agency's *Medium Term Strategy* 2012–2017 and the safeguards *Long-Term Strategic Plan* 2012–2023. The latter addresses the conceptual framework for safeguards implementation, legal authority, technical capabilities (expertise, equipment and infrastructure) as well as the human and financial resources necessary for the Agency's verification efforts. It also considers

communication, cooperation and partnerships with the Agency's stakeholders and sets in motion various improvements.

Research and development are essential to meet the safeguards needs of the future. The Agency prepared a *Long-term R&D Plan 2012–2023* that addresses the Agency's R&D requirements in areas such as equipment, information technology, physics and chemical analysis, satellite imagery, statistical analysis and workforce skills.

"The Agency formally accepted a geospatial exploitation system (GES) in 2011, a solution aimed at supporting the analysis of imagery and the secure dissemination of geospatial data ..."

To address near term development objectives and to support the implementation of its verification activities, the Agency continued to rely on MSSPs in implementing its *Research and Development Programme for Nuclear Verification 2010–2011.* At the end of 2011, there were 21 formal support programmes¹³ with the Agency, supporting over 300 tasks, valued at over \notin 20 million per annum. In preparation for the next biennium, the Agency drafted the *Development and Implementation Support Programme for Nuclear Verification 2012–2013*,¹⁴ which consists of 24 projects in such areas as verification technology development, safeguards concepts, information processing and analysis, and training.

¹³ Argentina, Australia, Belgium, Brazil, Canada, China, the Czech Republic, the European Commission, Finland, France, Germany, Hungary, Japan, the Republic of Korea, the Netherlands, the Russian Federation, South Africa, Spain, Sweden, the United Kingdom and the USA.

¹⁴ The Research and Development Programme for Nuclear Verification has been renamed and, starting in 2012, will be known as the Development and Implementation Support Programme for Nuclear Verification, as it was recognized that this biennial programme addresses, to a large extent, development and implementation support rather than actual research.