

Safeguards

Objective

To provide credible assurance to the international community that nuclear material and other items placed under safeguards are not diverted or misused; for States with comprehensive safeguards agreements, to provide credible assurance that all nuclear material remains in peaceful activities; and to support the efforts of the international community in connection with nuclear disarmament.

Safeguards Conclusions for 2008

At the end of each year, the Agency draws a safeguards conclusion for each State with a safeguards agreement in force, based upon the evaluation of all information available to it for that year. 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: (i) there are no indications of diversion of declared nuclear material from

peaceful activities (including no misuse of declared facilities or other locations to produce undeclared nuclear material); and (ii) there are no indications of undeclared nuclear material or activities for the State as a whole.

In order 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 Secretariat considers the results of its verification activities under CSAs and the results of its evaluation and verification activities under additional protocols (APs) (Figs 1 and 2). Therefore, for the Agency to draw such a broader conclusion, both a CSA and an AP must be in force, and the Agency must have been able to conduct

all necessary verification and evaluation activities. For States that have CSAs in force but no APs, the Agency does not have sufficient tools to provide credible assurance regard-

ing the absence of undeclared nuclear material and activities in a State, and therefore only draws a conclusion for a given year with respect to whether declared nuclear material remained in peaceful activities.

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FIG. 1. Sealing of nuclear material by Agency inspectors.



FIG. 2. Verification of spent fuel using a digital Cerenkov viewing device.

In 2008, safeguards were applied for 163 States with safeguards agreements in force with the Agency. Eighty-four States had both CSAs and APs in force. For 51 of these States,¹ the Agency concluded that all nuclear material remained in peaceful activities. For 33 of the States, the Agency had not yet completed all the necessary evaluations and could therefore only conclude that the declared nuclear material remained in peaceful activities. Similarly, for 70 States with CSAs in force but without APs, the Agency was only able to draw that conclusion.²

Three States had in force item specific safeguards agreements which require the application of safeguards to specified nuclear material, facilities and other items or material. For these States, the Secretariat concluded that nuclear material, facilities or other items to which safeguards had been applied remained in peaceful activities.

Five nuclear weapon States had voluntary offer safeguards agreements in force. Safeguards were implemented with regard to declared nuclear material in selected facilities in four of the five States. For these four States, the Agency concluded that nuclear material to which safeguards had been applied in selected facilities remained in peaceful activities or

had been withdrawn as provided for in the agreements.

As of 31 December 2008, 30 non-nuclear-weapon States party to the NPT had yet to bring CSAs into force pursuant to the Treaty. For these States, the Secretariat could not draw any safeguards conclusions.

A broader conclusion was drawn for the first time for four States and was reaffirmed for 47 States.³

Conclusion of Safeguards Agreements, Additional Protocols and Small Quantities Protocols

The Agency continued to facilitate the conclusion of safeguards agreements and APs, and the amendment of small quantities protocols (SQPs). APs entered into force for two States during 2008, bringing the number of States with APs in force to 88 by the end of the year (Fig. 3). One State signed a CSA and three States signed APs in 2008, and the Board of Governors approved a CSA for one State and APs for four States.

In order to implement the Board's 2005 decision on SQPs⁴, the Agency continued to communicate

¹ And for Taiwan, China.

² The 70 States do not include the DPRK as the Agency was not able to implement safeguards in that State and, therefore, could not draw any conclusion.

³ See footnote 1.

⁴ Many States with minimal or no nuclear activities have concluded a small quantities protocol to their CSA. Under SQPs, the implementation of most of the safeguards procedures of CSAs is held in abeyance as long as certain criteria are met. In 2005, the Board of

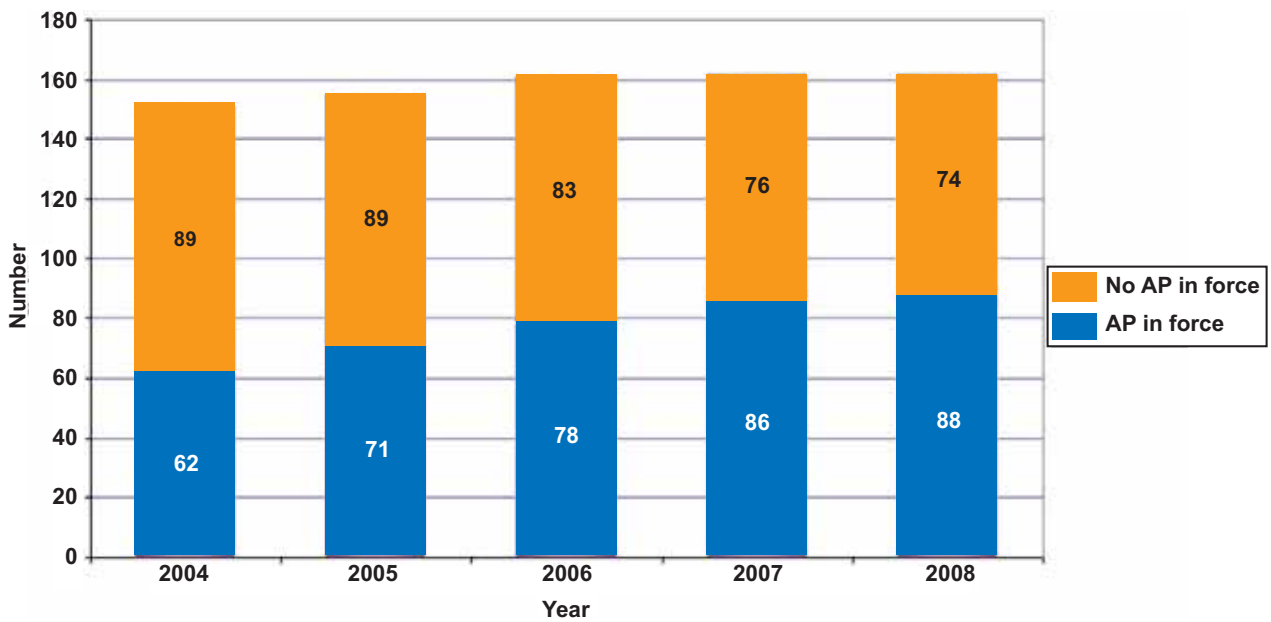


FIG. 3. Status of APs for States with safeguards agreements in force, 2004–2008 (the DPRK is not included).

with States with a view to amending or rescinding their SQPs. During 2008, SQPs were amended to reflect the modified text for eight States and an operative SQP was rescinded for one State.

Implementation of Integrated Safeguards

Integrated safeguards are defined as the optimum combination of all safeguards measures available to the Agency under CSAs and APs to achieve maximum effectiveness and efficiency in meeting the Agency's safeguards obligations. They are implemented in a State for which the Agency has drawn the broader conclusion. Integrated safeguards were implemented during the whole of 2008 in 25 States.⁵ Safeguards

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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. 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.

⁵ Australia, Austria, Bangladesh, Bulgaria, Canada, the Czech Republic, Ecuador, Ghana, Greece, the Holy See, Hungary, Indonesia, Ireland, Jamaica, Japan, Latvia, Lithuania, Mali, Norway, Peru, Poland, Portugal, Romania, Slovenia and Uzbekistan.

implementation activities were carried out for these States in accordance with the State level safeguards approaches and annual implementation plans approved for each individual State.

The Secretariat concluded that the evaluation and verification activities planned for 2008 for the 25 States under integrated safeguards had been satisfactorily implemented and that the State specific technical objectives had been achieved.

Owing to the size and complexity of the fuel cycles in Canada and Japan, integrated safeguards are being introduced in a phased manner in those States. The use of low frequency unannounced inspections has substantially decreased the inspection effort needed in both States and it is further anticipated that the transition to full implementation of integrated safeguards will result in additional savings in the inspection effort.

Safeguards Implementation Issues

Implementation of Safeguards in the Islamic Republic of Iran (Iran)

During 2008, the Director General submitted four reports to the Board of Governors on the implementation of Iran's Comprehensive Safeguards Agreement and relevant provisions of United

Nations Security Council resolutions. Iran provided the Agency with access to declared nuclear material and submitted the required nuclear material accounting reports in connection with declared nuclear material and facilities. The Agency was able to verify the non-diversion of the declared nuclear material in Iran in 2008.

Since March 2007, Iran has not implemented the modified text of its Subsidiary Arrangements on the early provision of design information and has continued to object to the Agency carrying out design information verification at the Iran Nuclear Research Reactor.

In 2008, Iran and the Agency continued to address issues related to Iran's past nuclear activities. By the end of 2008, there remained a number of outstanding issues regarding possible military dimensions to Iran's nuclear programme. These issues relate to the alleged studies on the green salt project, high explosives testing, the design of a missile re-entry vehicle; procurement and R&D activities of military related institutes and companies that could be nuclear related; and the production of nuclear equipment and components by companies belonging to defence industries. Iran has not provided the access to information, locations or individuals that would have allowed the Agency to make substantive progress on these issues. As Iran did not implement the AP as required by the Security Council, the Agency remained unable to provide credible assurance about the absence of undeclared nuclear material and activities in Iran. Also, in this context, and contrary to the decisions of the Security Council, in 2008 Iran did not suspend its enrichment related activities, having continued with the operation of the Pilot Fuel Enrichment Plant and the construction and operation of the Fuel Enrichment Plant at Natanz. It also continued its work on heavy water related projects, including the construction of the IR-40 heavy water moderated research reactor at Arak. There was no indication of reprocessing related activities at any declared facilities in Iran.

Implementation of Safeguards in the Syrian Arab Republic (Syria)

In November 2008, the Director General submitted a report to the Board of Governors on the implementation of the NPT safeguards agreement in Syria. In April 2008, the Agency was provided with information alleging that an installation destroyed by Israel at Dair Alzour in Syria in September 2007

had been a nuclear reactor under construction. In June 2008, the Agency held discussions with Syria in Damascus and visited the Dair Alzour site, where it took environmental samples. Syria informed the Agency that Dair Alzour was a military site and was not involved in any nuclear activities. While this cannot be excluded, the features of the building and site were similar to what may be found in connection with a reactor site. By the end of 2008, Syria had not provided the requested documentation in support of its declarations concerning the nature or function of the destroyed building.

Analysis of environmental samples from the Dair Alzour site revealed a significant number of natural uranium particles that had been produced as a result of chemical processing. By the end of 2008, the Agency was still investigating Syria's explanations about the possible origin of the uranium particles and had requested Syria to provide further access to the Dair Alzour site and any other locations where the debris and equipment from the building had been stored. Also, the Agency suggested — as a matter of transparency — a visit to other locations that might help it in its verification activities. At the end of 2008, the Agency's verification work in Syria was continuing. For 2008, the Agency found no indication of the diversion of declared nuclear material in Syria. Therefore, the Agency was able to conclude for Syria that all declared nuclear material remained in peaceful activities.

Implementation of Safeguards in the Libyan Arab Jamahiriya (Libya)

Following Libya's disclosure of its undeclared nuclear activities, the Director General submitted to the Board of Governors — for the first time — in December 2003, a report on the implementation of Libya's CSA. Several progress reports were submitted thereafter. In 2008, the Director General reported to the Board that the issues which had been previously reported were no longer outstanding. For 2008, the Agency found no indication of the diversion of declared nuclear material or of undeclared nuclear material or activities in Libya. Therefore, the Agency was able to conclude for Libya that all nuclear material remained in peaceful activities.

Implementation of Safeguards in Egypt

Following Agency enquiries, Egypt, between 2004 and 2005, disclosed past undeclared nuclear

activities and material to the Agency, as reported to the Board in February 2005. Between 2004 and 2006, Egypt made available to the Agency nuclear material that it had failed to report. It also submitted design information for three additional facilities. Egypt gave the Agency access to information, such as logbooks and operating records, as well as access to personnel and locations related to its conversion and irradiation experiments and its preparatory activities related to reprocessing.

Once its State system of accounting for and control of nuclear material was given the required authority through Presidential and Ministerial decrees in 2006, Egypt undertook a State-wide investigation of its nuclear material holdings, during which additional, previously unreported, nuclear material was identified. The Agency received relevant nuclear material accounting reports, and has been able to verify all declared nuclear material in Egypt. Egypt has also clarified issues relating to its past undeclared activities. The Agency concluded that Egypt's statements are consistent with the Agency's findings, and that the issues raised in the report to the Board are no longer outstanding. For 2008, the Agency found no indication of the diversion of declared nuclear material in Egypt. Therefore, the Agency was able to conclude for Egypt that all declared nuclear material remained in peaceful activities.

Other Verification Activities

Democratic People's Republic of Korea

Since December 2002, the Agency has not implemented safeguards in the DPRK and, therefore, cannot draw any safeguards conclusion. In the context of the ad hoc monitoring and verification arrangement as agreed between the Agency and the DPRK and foreseen in the Initial Actions agreed at the Six-Party Talks, in 2008 the Agency continued implementing monitoring and verification measures related to the shutdown of four installations located at the Yongbyon nuclear facility and one in Taechon. These activities were partially discontinued at the request of the DPRK from 22 September to 13 October 2008, resulting in a lack of access for Agency inspectors to the Radiochemical Laboratory (reprocessing plant) and

in the removal of Agency seals and surveillance equipment at this facility. When the Agency resumed its verification activities on 14 October 2008, including the monitoring of fuel discharge from the 5 MW(e) reactor, such activities revealed no indication that the Radiochemical Laboratory had processed nuclear material during the period when monitoring and verification activities had been suspended.

The Nuclear Fuel Fabrication Plant, the 5 MW(e) Experimental Nuclear Power Plant, the 50 MW(e) Nuclear Power Plant and the 200 MW(e) Nuclear Power Plant remained shut down in 2008.

Implementation of Information Driven Safeguards and Development of Safeguards Approaches

Key to the process by which safeguards conclusions are drawn is the State evaluation process, including the preparation of a State evaluation report (SER) and its evaluation by the Agency's

internal Information Review Committee. The process of preparing and updating State evaluation reports continued in 2008. During the year, SERs covering 98 States⁶

were completed and reviewed. A full description of the State evaluation process is given in the description of the Agency's safeguards system (http://www.iaea.org/OurWork/SV/Safeguards/safeg_system.pdf).

The Agency continued to develop and implement more efficient approaches for verification of spent fuel transfers, approaches involving unattended monitoring and surveillance systems, and approaches based on verification through short notice and unannounced inspections. During 2008, integrated safeguards approaches for facilities in European Union non-nuclear-weapon States, including LWRs, spent fuel storage, research reactors and critical assemblies and depleted, natural and low enriched uranium (DNLEU) conversion and fuel fabrication plants were implemented. A safeguards approach for the transfer of spent fuel from Kazakhstan's shutdown BN350 fast breeder reactor to temporary storage has been completed and all equipment tested and installed. Two integrated safeguards approaches

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⁶ See footnote 1 at the beginning of this section.

for specific nuclear facility types in Japan (DNLEU conversion and fabrication and LWRs without MOX fuel) were updated and approved. An integrated safeguards procedure for conversion and fuel fabrication plants in Canada was approved. A site level integrated safeguards approach was introduced at the Tokai complex in Japan, which comprises several large scale plutonium processing facilities. As part of another site level approach in Japan, an integrated safeguards approach for the Rokkasho Reprocessing Plant (RRP) was approved in 2008. The RRP approach will be evaluated as the plant moves from its commissioning phase to commercial operation, and will be reviewed in 2011.

In September 2008, an expert group meeting on the application of safeguards to geological repositories was conducted to address comments from States on model integrated safeguards approaches for spent fuel conditioning plants and geological repositories.

Detecting Undeclared Nuclear Material and Activities: Improved Technical Capabilities and Methods

Development of Safeguards Equipment

In 2008, development activities included a non-destructive assay (NDA) system combining a plutonium neutron coincidence collar with high resolution gamma spectrometry developed for a MOX fuel fabrication plant, an optical fibre probe system, an upgrade of the cascade header enrichment meter system, a UF₆ cylinder verifier with portable electrically cooled high purity germanium detectors, a portable low resolution gamma spectrometer and a tunable diode laser spectrometry system. The feasibility of another system, UF₆ laser spectroscopy, for accurate enrichment determination was demonstrated as an efficient alternative to destructive analysis. Significant financial and human resources were spent in preventive maintenance and equipment upgrades to ensure the reliability of the Agency's standard equipment systems. During 2008, 50 digital surveillance systems were installed as part of the ongoing effort to replace old surveillance systems. Phase 3 of the Next Generation Surveillance System (NGSS) was completed in September 2008 (Fig. 4). The final camera and system prototypes

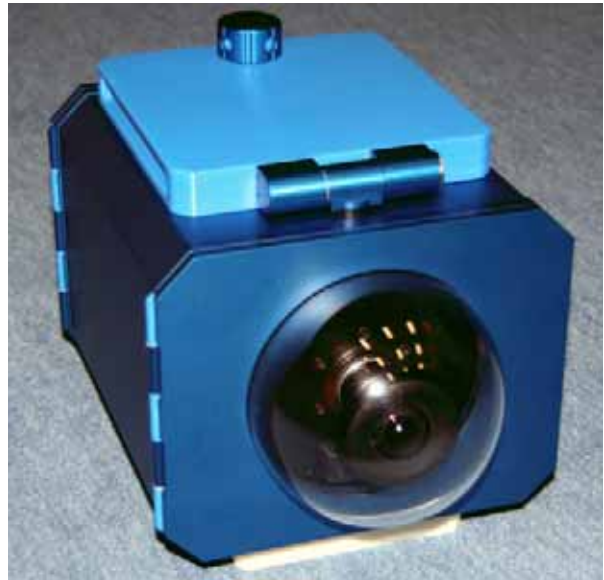


FIG. 4. The camera for the Next Generation Surveillance System.

were delivered to the Agency, with development of the NGSS entering its final phase.

The Agency made significant progress in 2008 in feasibility studies and implementation of new sealing systems and containment verification techniques. Development of the VOID-3 adhesive seal is continuing. Electronic optical sealing system implementation arrangements were finalized and are being implemented to replace old generation electronic (VACOSS) seals in most applications.

By the end of 2008, there were 118 unattended monitoring systems (UMSs) installed in 21 States and 46 facilities. In the area of UMSs, new systems and component configurations for applications in future installations were designed, developed and tested.

Sample Analysis

The safeguards analytical services organize the analysis of nuclear material and environmental samples, and other samples collected by inspectors. The service involves the provision of sampling devices, transport of samples from the field to Agency Headquarters, analysis of samples, evaluation of analytical results and quality control. Samples are analysed by the Agency's Safeguards Analytical Laboratory (SAL) and the other 14 laboratories of the Network of Analytical Laboratories (NWAL) (Fig. 5). The Secretariat

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is expanding NWAL for the analysis of nuclear material samples. Some Member States (Belgium, the Czech Republic, Finland, France, Hungary and the Russian Federation) have informed the Agency of their wish to provide additional support in this regard. Laboratories in Brazil, China and the Republic of Korea are currently undergoing qualification to become part of NWAL for environmental sample analysis. The average shipping and evaluation time has improved; however, analysis times are still higher than planned goals. In order to improve process performance, additional laboratories are undergoing qualification in order to enlarge NWAL.

Design Information Verification

During 2008, in States⁷ with CSAs and significant nuclear activities, the Agency exercised its continuing right to verify design information throughout the life cycle of a facility. Design information verification (DIV) was conducted at facilities under construction and in operation, and at shutdown facilities and facilities being decommissioned, for the purposes described in paragraph 46 of INFCIRC/153 (Corr.) and improves the Agency's ability to provide assurance that no undeclared activities are taking place at declared facilities (Fig. 6). During 2008, 640 DIVs were performed.

Remote Monitoring

Twenty-two new safeguards systems with remote monitoring mode were implemented during 2008. The IAEA Remote Monitoring Data Centre was enhanced by upgrading communication lines and enhancing 'state of health' reporting. The centre is now able to monitor the systems on a near real time basis. Safeguards approaches using remote monitoring systems for safeguards data transmission result in enhanced effectiveness and efficiency of safeguards implementation (Fig. 7).

At the end of 2008, 168 surveillance and radiation monitoring systems with remote transmission capabilities (comprising 106 surveillance and 62 unattended radiation monitoring systems) were authorized for inspection use. By the end of 2008, remote monitoring systems installed at 84 facilities

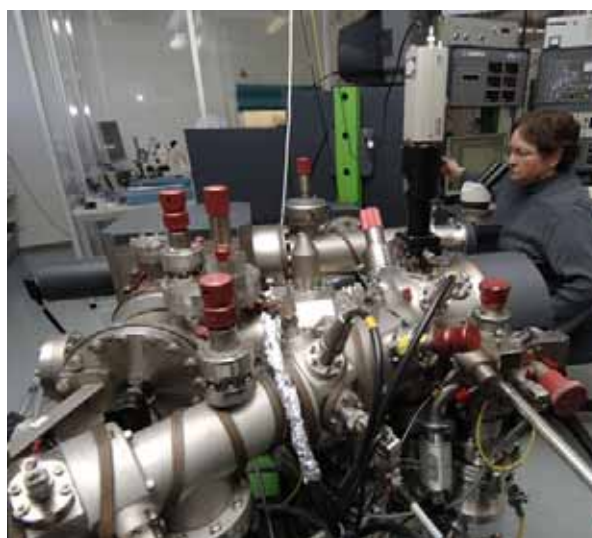


FIG. 5. The secondary ion mass spectrometer at SAL.



FIG. 6. Inspectors observing the design features of an empty reactor core.



FIG. 7. Remote monitoring data satellite receiving station at Agency Headquarters.

⁷ See footnote 1 at the beginning of this section.

in 18 States⁸ (in 12 of them⁹ with full transmission of safeguards data) were transmitting to Headquarters or to an Agency regional office data required for the timely detection of the diversion of nuclear material during interim inspections.

Research and Development Programme

The Research and Development Programme for Nuclear Verification 2008–2009 reflects high priority needs for further enhancement of the efficiency and effectiveness of safeguards activities. These needs are addressed by 24 essential projects in such areas as the development of verification technologies, safeguards concepts, information processing and analysis, and training. Member State Support Programmes (MSSPs) continued to make substantial contributions to Agency safeguards. As of 31 December 2008, 20 States and 1 organization had formal support programmes.¹⁰

Information Management and Analysis

The objective of the Agency's Integrated Safeguards Information System Re-engineering Project (IRP) is to increase the effectiveness and efficiency of information processing by replacing the current obsolete systems with a modern integrated one. The project will ensure better support and accessibility of data, including remote access by field offices and inspectors. Phase III of the IRP continued in 2008 with implementation of the reengineered, redeveloped and custom developed applications. The implementation projects are grouped into four streams consisting of related applications grouped by business area (State supplied data, analysis, verification and support). This phase has been revised to take into consideration Agency needs and to ensure the integration and consistency of

the IRP. The first task in this phase is to analyse and review the business processes in each stream before developing the new system. Phase III comprises 16 projects, including six that were closed at the end of 2008. The years 2009 and 2010 will be dedicated to developing and testing the new software.

Information from open sources, commercial satellite imagery, in-house databases and other sources has been collected, analysed and used extensively to support the evaluation of State nuclear activities in 2008. The Agency continued to analyse safeguards relevant information on possible covert trade in nuclear material. In addition, the

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procurement outreach programme gathered information, provided on a voluntary basis, on procurement enquiries and export denials of nuclear related equipment, materials

and technology in order to detect early proliferation indicators.

In 2008, the Agency continued to receive reports from Member States on incidents of illicit trafficking and related unauthorized activities involving nuclear and other radioactive material.

Proliferation Resistant Nuclear Energy Systems

Progress was made during the year by INPRO and the GIF Proliferation Resistance and Physical Protection Expert Group in addressing the compatibility and use of the INPRO and GIF assessment methodologies with regard to proliferation resistance in order to understand more fully the range of applicability and the potential for synergy in their application. In addition, the Agency participated in a collaborative project on acquisition/diversion pathway analysis. It also hosted a workshop on 'safeguards by design' to facilitate the inclusion of proliferation resistant features in future facilities.

Neptunium and Americium

In 1999, the Board of Governors endorsed the implementation of a scheme to monitor separated neptunium and decided that the Director General should report to the Board, when appropriate, on information from States regarding separated americium. This information complements the initial

⁸ See footnote 1 at the beginning of this section.

⁹ See footnote 1 at the beginning of this section.

¹⁰ Argentina, Australia, Belgium, Brazil, Canada, China, the Czech Republic, Finland, France, Germany, Hungary, Japan, the Republic of Korea, the Netherlands, the Russian Federation, South Africa, Spain, Sweden, the United Kingdom and the USA, and the European Commission.

reports and the annual export reports received from relevant States under the neptunium and americium voluntary reporting scheme. By the end of 2008, six States had still not responded to the Secretariat's requests for information about neptunium or americium. The Secretariat received information from ten States, Euratom and Taiwan, China, about exports of neptunium or americium. Evaluation of the information provided by States under the monitoring scheme indicates that the quantities of separated neptunium and americium in the non-nuclear-weapon States remain small and only small quantities are being exported. This evaluation, therefore, does not indicate that a proliferation risk currently exists. Flow sheet verification (FSV) for neptunium was carried out at a European Commission laboratory to confirm that the facility was operating in accordance with the design information and with its annual operating plan. FSV activities were performed during 2008 at large scale reprocessing plants in Japan.

Significant Safeguards Projects

Japan MOX fuel fabrication plant

A draft safeguards approach was developed for the Japan MOX fuel fabrication plant (JMOX) in 2008. The approach is designed to ensure effective safeguards while achieving greater efficiency. A Joint Technical Committee, comprising representatives from the Agency and Japanese bodies, was established to coordinate development of JMOX safeguards systems across the plant. Construction of the facility has not yet commenced.

Chernobyl

Surveillance and radiation detection equipment was upgraded in 2008. This equipment will be used to monitor the transfer of spent fuel from Chernobyl units 1–3 to the existing spent fuel wet storage facility and new conditioning facility. A new spent fuel monitoring system was installed at the Chernobyl spent fuel wet storage facility. Procurement and installation of Phase 1 of the Chernobyl site data integration programme was completed. The surveillance and radiation detection data from Chernobyl units 1–3, unit 4 shelter and

spent fuel wet storage facility were integrated to a central location for ease of access by the inspectors. The conditioning of irradiated fuel from Chernobyl units 1–3 reactors and the wet storage facility for long term dry storage has been delayed until at least 2013.

Enhancing the Capability of the Safeguards Analytical Services

The Agency needs to strengthen its capability to provide independent and timely analysis of safeguards samples. The Agency has developed an overall plan with two phases. Phase 1 will address the sustainability and enhancement of the Agency's particle analysis capabilities for environmental samples and Phase 2 will address, in parallel, the future of the Nuclear Laboratory at SAL. The progress of the project was presented to the Board of Governors in November 2008. The new laboratory could be constructed at Seibersdorf on land for which the Agency holds a lease option. The estimated overall cost of strengthening the Agency's safeguards analytical capabilities is about €38 million. For Phase 1, the acquisition and installation of the ultrahigh sensitivity secondary ion mass spectrometer (UHS-SIMS) for the Clean Laboratory at SAL, and the building of a Clean Laboratory

Extension to accommodate the UHS-SIMS, would require approximately €4.5 million and €3.5 million, respectively. For Phase 2 — the construction of the new laboratory — the current

financial plan shows the conceptual design in 2010 followed by the engineering design and construction starting in 2011. The site development will occur in 2010–2011. The Government of Japan has agreed to provide extrabudgetary funding for the acquisition of the UHS-SIMS.

Novel Technology Project

The Agency project for the identification and development of effective and appropriate advanced technologies for the detection of undeclared nuclear activities continued. The Novel Technology Project is currently identifying strong indicators and signatures associated with specific nuclear fuel cycle processes. These will be used to facilitate nuclear safeguards technology gap analyses, allowing

prioritization and identification of technologies for development for future safeguards applications.

Assistance to State Systems of Accounting and Control

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 regional systems of accounting for and control of nuclear material (RSACs), and on the level of their cooperation with the Agency. The Secretariat continued to work with SSACs and RSACs on 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. The Secretariat continues to experience problems in the timeliness and quality of reports and declarations from a number of States. At the same time, improved quality and timeliness by a number of other States demonstrated the effectiveness of the Agency's efforts to improve cooperation with SSACs. Several ISSAS missions and training courses were held. Nevertheless, a few States with CSAs in force had still not established either SSACs or contact points as of the end of 2008.

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Quality Management

During 2008, the Agency continued to implement a quality management system (QMS) in its safeguards programme. All of the key processes in the programme were identified and responsibility for the process and its results was assigned to process owners. The performance of the QMS was formally reviewed on a regular basis by management. Staff training was given to raise awareness of the QMS and to increase the use of the Corrective Action Report (CAR) and Continual Process Improvement (CPI). CPI working groups were established to evaluate and make recommendations to improve processes. Five internal quality audits were conducted in the areas of corrective action, environmental sampling, procurement, complementary access, and information security.

Standing Advisory Group on Safeguards Implementation

The Standing Advisory Group on Safeguards Implementation (SAGSI) held two plenary meetings in 2008. The main safeguards implementation issues considered by SAGSI were: integrated safeguards approaches for geological repositories and centrifuge enrichment plants; State level technical objectives; and State level safeguards implementation and documentation.