

# **General Conference**

GC(58)/16 Date: 5 August 2014

**General Distribution** 

Original: English

#### Fifty-eighth regular session

Item 17 of the provisional agenda (GC/(58)/1, Add.1 and Add.2)

# Strengthening the Effectiveness and Improving the Efficiency of Agency Safeguards

Report by the Director General

#### A. Introduction

1. The General Conference, in resolution GC/57/RES/13 entitled "Strengthening the Effectiveness and Improving the Efficiency of Agency Safeguards", requested the Director General to report on the implementation of the resolution to the General Conference at its fifty-eighth (2014) regular session. This report responds to that request and updates the information in last year's report to the General Conference (document GC(57)/17).

# **B.** Safeguards Agreements and Additional Protocols

# **B.1. Conclusion and Entry into Force of Safeguards Agreements and Additional Protocols**

2. Between 1 July 2013 and 30 June 2014, additional protocols (APs) based on the Model Additional Protocol<sup>1</sup> entered into force for three States.<sup>2</sup> During the same period, one further State<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> The text of the Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards is contained in document INFCIRC/540 (Corrected).

<sup>&</sup>lt;sup>2</sup> Antigua and Barbuda, Bosnia and Herzegovina, and Saint Kitts and Nevis.

<sup>&</sup>lt;sup>3</sup> Myanmar.

signed an AP. In addition, small quantities protocols (SQPs) were amended for three States<sup>4</sup> in keeping keeping with the Board of Governors' decision of 20 September 2005 regarding such protocols. By the end of June 2014, of the 95 States with operative SQPs<sup>5</sup>, 52 had brought modified SQPs into force.

- 3. As of 30 June 2014, 181 States<sup>6</sup> had safeguards agreements in force with the Agency, 123 of which (including 118 States with comprehensive safeguards agreements (CSAs)) also had APs in force. As of that date, 58 States had yet to bring into force APs to their safeguards agreements.
- 4. Twelve non-nuclear-weapon States Party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) have yet to bring CSAs into force. The latest update of the status of safeguards agreements and APs is published on the Agency's website. Before the status of the

# **B.2.** Promotion and Assistance in the Conclusion of Safeguards Agreements and Additional Protocols

- 5. The Agency has continued to implement elements of the plan of action outlined in resolution GC(44)/RES/19 and in the Agency's updated *Plan of Action to Promote the Conclusion of Safeguards Agreements and Additional Protocols.* Among the elements of the plan of action proposed in resolution GC(44)/RES/19 are:
  - Intensified efforts by the Director General to conclude safeguards agreements and APs, especially with those States which have significant nuclear activities;
  - Assistance by the Agency and Member States to other States on how to conclude and implement safeguards agreements and APs; and
  - Reinforced coordination between Member States and the Secretariat in their efforts to promote the conclusion of safeguards agreements and APs.
- 6. Guided by the relevant resolutions and decision<sup>10</sup> of the General Conference and decisions of the Board of Governors, and the Agency's updated Plan of Action and *Medium Term Strategy 2012–2017*<sup>11</sup>, the Agency has continued to encourage and facilitate wider adherence to the safeguards system, using primarily extrabudgetary funds. The Agency organized national workshops on safeguards in August 2013 for the Lao People's Democratic Republic and Myanmar, and in June 2014 for Brunei Darussalam, at which the Agency encouraged these States to conclude APs and to amend their SQPs. In addition, the Agency held consultations with representatives from Member and non-Member States in Geneva, New York and Vienna.

<sup>&</sup>lt;sup>4</sup> Gabon, Kuwait and New Zealand.

<sup>&</sup>lt;sup>5</sup> Excluding SQPs to safeguards agreements concluded pursuant to protocols to the Tlatelolco Treaty.

<sup>&</sup>lt;sup>6</sup> And Taiwan, China,

<sup>&</sup>lt;sup>7</sup> Benin, Cabo Verde, Djibouti, Equatorial Guinea, Eritrea, Guinea, Guinea-Bissau, Liberia, the Federated States of Micronesia, Sao Tome and Principe, Somalia and Timor-Leste.

<sup>&</sup>lt;sup>8</sup> See: http://www.iaea.org/safeguards/documents/sir\_table.pdf.

<sup>&</sup>lt;sup>9</sup> The Plan of Action is available on the Agency's website: http://www.iaea.org/safeguards/documents/sg\_actionplan.pdf.

<sup>&</sup>lt;sup>10</sup> (GC/(55)/DEC/11)

<sup>&</sup>lt;sup>11</sup> The Medium Term Strategy 2012–2017 is available at: http://www.iaea.org/About/mts2012 2017.pdf.

# C. Implementation and Further Development of the Safeguards System

#### C.1. Strategic Planning

- 7. The Secretariat carries out long-range planning to ensure that safeguards implementation will continue to be both effective and efficient in the future. The long term strategic planning process of the Department of Safeguards addresses the framework for safeguards implementation, legal authority, technical capabilities (expertise, equipment and infrastructure) and also human and financial resources necessary for Agency verification activities. It also considers communication, cooperation and partnerships with the Agency's stakeholders. Medium-term planning is guided by the *Medium Term Strategy 2012–2017*, which the Agency has continued to implement since last year's report.
- 8. Research and development (R&D) are essential to meet future anticipated safeguards needs. The report *Development and Implementation Support Programme for Nuclear Verification 2014–2015*, published in December 2013, aligns ongoing projects with the priorities of *IAEA Department of Safeguards Long-Term R&D Plan, 2012–2023*, which was published in January 2013. The structure of this plan also provides the basis for the technical programme of the Symposium on International Safeguards: Linking Strategy, Implementation and People, which will take place at Agency Headquarters in Vienna from 20 to 24 October 2014. To remain informed of technological developments with potential safeguards applications, in January 2014, the Agency held a 'Technology Foresight Workshop' in Vienna, attended by participants from 18 States and the Agency. Thirty-four presentations were delivered on a broad range of topics, including active neutron interrogation, X-ray fluorescence, statistical methods and robotics.
- 9. The Agency continued to rely on Member State Support Programmes (MSSPs) in addressing its safeguards research, development and implementation support needs. At the end of June 2014, 20 Member States and the European Commission (EC) had formal support programmes in place with the Agency engaged in over 300 tasks valued at over €20 million. In February 2014, the Agency held its biennial MSSP Coordinators meeting. Thirty-nine participants representing all 21 MSSPs attended the meeting, where a number of presentations were given on current and future safeguards challenges. Tours of Agency laboratories and demonstrations of equipment and tools were provided. The meeting format encouraged dialogue and information exchange among the internal and external participants.

## C.2. Safeguards Implementation at the State Level

- 10. The General Conference in operative paragraph 21 of resolution GC(56)/RES/13, requested the Director General to report to the Board of Governors on the conceptualization and development of the State-level concept for safeguards. In August 2013, in response to that request, the Director General submitted a report to the Board of Governors entitled *The Conceptualization and Development of Safeguards Implementation at the State Level*. The Board of Governors, inter alia, took note of the report. On 20 September 2013, the General Conference adopted resolution GC(57)/RES/13 which noted, inter alia, that the Director General would produce, after consulting with Member States, a supplementary document for consideration and action by the Board of Governors before the fifty-eighth (2014) regular session of the General Conference, providing further clarification and information to address questions and issues raised on different aspects of the State-level concept.
- 11. Consultations with Member States began in November 2013 with correspondence to Member States sent by the Secretariat, followed by five technical meetings on ten specific topics related to the State-level concept and a sixth technical meeting on the structure and outline of the supplementary document. The Secretariat presentations at those meetings were made available to States. Additionally,

the Secretariat held bilateral discussions with those Member States that had expressed interest in doing so.

12. The consultation process held in 2013–2014 as well as the questions and issues raised by Member States during the September 2013 meetings of the Board of Governors and the fifty-seventh (2013) regular session of the General Conference have provided the basis for the preparation of the supplementary document.

#### C.3. Safeguards Approaches and Technology

#### C.3.1. Safeguards Approaches for Facilities

- 13. Since last year's report, the Agency has improved the effectiveness and efficiency of safeguards implementation at several facilities, including, for example, through the introduction of remote monitoring at one facility in Germany and the use of dual containment and surveillance at one spent fuel dry storage facility in Spain and another in India. The safeguards approach for the spent fuel ponds at the La Hague reprocessing facility in France was improved to better focus Agency safeguards efforts and activities at that facility. In Canada, construction of the Fuel Packaging and Storage Facility was completed in 2013 and the Agency's safeguards equipment and remote monitoring system were installed at that facility in September 2013. In Japan, transfers of spent fuel from the damaged Unit 4 to wet storage and to a new dry storage facility were verified and short notice visits were initiated as part of the safeguards approach at the Fukushima Daiichi site. Two joint Ukraine–Agency working groups were established to consider safeguards approaches for planned facilities in Ukraine (one fuel fabrication plant and one centralized spent fuel storage facility) and to consider safeguards during the construction phase.
- 14. The Agency has remained involved in the design stage for the facilities under construction at the site of the Chernobyl nuclear power plant in Ukraine with a view to advising on the incorporation of safeguards instrumentation into the design of the facilities. The development activities associated with the implementation of safeguards at the Japan Mixed Oxide Fuel Fabrication Plant were limited due to construction delays.
- 15. The Agency has continued to prepare for implementing safeguards at new types of facilities such as geological repositories, pyroprocessing plants and laser enrichment facilities. Since last year's report, the Agency has implemented a safeguards approach at the Pyroprocess Integrated Inactive Demonstration facility in the Republic of Korea. In addition, the Agency, Finland, Sweden and the EC have established coordination mechanisms for cooperating closely in the planning of safeguards implementation at encapsulation plants and geological repositories in Finland and Sweden. In particular, significant progress has been made in defining possible safeguards measures at the encapsulation plant in Finland and defining a set of technical requirements to be incorporated by Finland in the licensing process. The Application of Safeguards to Geological Repositories (ASTOR) expert group established by the Agency continued to identify prospective safeguards technologies and equipment and share its results with Member States and the Secretariat.
- 16. To encourage the consideration of safeguards in the design and construction of nuclear facilities, the Agency is developing guidance specific to facility types that describes the general safeguards needs. The guidance is aimed at enhancing the understanding of nuclear facility vendors and designers regarding safeguards needs. Through the International Project on Innovative Nuclear Reactors and Fuel Cycles and the Generation IV International Forum, the Agency continued to develop tools to simplify and enhance assessments of proliferation resistance, and provided information about safeguards by design to States that are considering establishing nuclear power programmes.

#### **C.3.2.** Information Technology

- 17. Information technology plays an important role in the implementation of Agency safeguards. After three decades of reliance on mainframe computer-based technology, the Agency needs to modernize its current safeguards information technology. This is necessary to mitigate operational and security risks. The technology currently in use is becoming more difficult to maintain due to outdated application software, limited technical support and the retirement of those with requisite expertise. The technology is also becoming progressively less likely to recover from more serious problems. Moreover, the architecture underpinning the current safeguards information system needs to be restructured as the system is not sufficiently capable of supporting safeguards implementation processes. Importantly, the safeguards information system needs to be strengthened to enhance information security and guard against increasing and ever more sophisticated cyber-attacks.
- 18. To this end, the Agency has continued to make improvements to the overall performance and security of its safeguards information system. In support of information analysis, further enhancements were made to the analytical tools developed and introduced in 2012 in order to make them more effective and usable. Efforts to improve the Agency's capability to protect sensitive safeguards information also continued, with improvements made to security monitoring, digital forensics and the highly secure internal network deployed in 2012. Data continued to be transferred to electronic State files on this network.
- 19. In 2013, to address the Agency's continued safeguards information technology modernization needs and to bring these efforts under a comprehensive management approach, the Agency established the Modernization of Safeguards Information Technology project. The overarching objective of the project is to establish safeguards information technology that effectively supports the Agency's daily safeguards implementation activities, both in the field and at Headquarters. As of June 2014, over half of the re-engineering work necessary to replace the outdated mainframe computer-based software applications that help to record and process safeguards data had been completed. During 2014, the Agency is focusing on replacing 13 mainframe computer-based software applications with eight modern applications that will run on a new server-based platform.

#### C.3.3. Information Analysis

- 20. In order to draw soundly based safeguards conclusions, the Agency evaluates State declarations, data generated from Agency verification activities, and other safeguards relevant information available to the Agency. Throughout the reporting period, the Agency enhanced and diversified its capabilities to acquire and process data, analyse and evaluate information, and securely distribute information internally, as an essential contribution to the State evaluation process and the drawing of safeguards conclusions. It also continued to investigate new tools and methodologies to streamline and prioritize workflows and processes. To improve continuously the quality of the information on which it must rely, the Agency monitored laboratory and measurement systems' performance and organized international Technical Meetings, training courses and workshops for various States on nuclear material accounting, including measurement and material balance evaluation.
- 21. Since last year's report, material balance evaluations were performed by the Agency to support the drawing of conclusions on the non-diversion of nuclear material from declared facilities. In support of this process, the Agency relies on data from verification activities performed in the field and at Headquarters, including the results of destructive analysis and non-destructive assay (NDA) measurements of nuclear material. The evaluation of analytical results from environmental and nuclear material samples continue to play an essential role in assessing the absence of undeclared nuclear material and activities. In 2013, the Agency received and reviewed approximately 700 000 declarations and reports provided by States; prepared 212 nuclear material balance evaluation reports;

and integrated and interpreted the results from more than 420 environmental samples taken in 36 States. Approximately 30 000 safeguards relevant open source information items were collected by the Agency and reviewed, resulting in over 700 summaries of safeguards relevant information in support of State evaluations for 171 States.<sup>6, 12</sup>

- 22. The Agency has continued to utilize high resolution commercial satellite imagery from aerial and satellite-based sensors to improve its ability to monitor nuclear facilities and sites worldwide. Since last year's report, the Agency acquired 460 commercial satellite images from 22 different Earth observation satellites. Imagery analysis, including the use of the Agency's Geospatial Exploitation System, has continued to provide great benefits, particularly in the planning and implementation of infield verification activities. During this same reporting period, the Agency produced 110 internal imagery analysis reports, including several imagery-derived and geographical information system products.
- 23. Since last year's report, open source and trade information was routinely used by the Agency to support analysis of nuclear related trade. A number of Member States voluntarily provided the Agency with information concerning 62 denied nuclear trade related procurement enquiries. This information was used to assess the consistency of nuclear activities declared by States to the Agency. From this and other data, 80 trade analysis reports were produced for State evaluation purposes.

#### C.3.4. Safeguards Analytical Services

- 24. The collection and analysis of nuclear material and environmental samples are essential safeguards activities. The analysis of such samples is performed at the Agency's Safeguards Analytical Laboratories (SAL) in Seibersdorf, which consist of the Nuclear Material Laboratory (NML) and the Environmental Sample Laboratory. Analyses are also performed at the other laboratories of the Agency's Network of Analytical Laboratories (NWAL) (see paragraph 26 below). In 2013, the Agency collected 455 nuclear material samples and seven heavy water samples. It also collected 423 environmental samples, including 371 swipe samples and 52 other samples. The timeliness of environmental sample analysis improved during 2013, with median analysis time reduced to 58 days in 2013 from 70 days in 2012.
- 25. The Enhancing Capabilities of the Safeguards Analytical Services (ECAS) project was threequarters complete at the end of May 2014. The remaining principal tasks in the project include the transition of laboratory functions and facilities management; construction of the new main gate (pedestrian arrival and goods screening buildings, traffic control lanes, internal roads and parking); implementation of security guard services to meet Agency nuclear security recommendations on the physical protection of nuclear material and nuclear facilities (contained in document INFCIRC/225/Revision 5 and its revisions); design and construction of the NML building's final wing, comprising office and training space; and procurement of certain analytical instruments and equipment for use in the new NML. The remaining construction is planned to begin in the second half of 2014 and to conclude before the middle of 2015.
- 26. The NWAL currently consists of the Agency's SAL in Seibersdorf and 20 other qualified laboratories in nine Member States and the EC. NWAL expansion continues for both nuclear material analysis and environmental sample analysis. In order to ensure adequate backup for the analysis of nuclear material samples currently being performed only at the SAL, the Agency has qualified and contracted the EC's Institute for Transuranium Elements in Karlsruhe, Germany. Laboratories for environmental or nuclear material sample analysis are in the process of qualification in several States.

<sup>&</sup>lt;sup>12</sup> Including the Democratic People's Republic of Korea.

Laboratories in China, the Czech Republic, Hungary and the Republic of Korea are undergoing qualification for environmental sample analysis. Laboratories in Belgium, Canada, France, Germany, the Netherlands and the United States of America are undergoing qualification for nuclear material analysis. A laboratory in Argentina is undergoing qualification for heavy water analysis.

#### C.3.5. Safeguards Equipment

- 27. Since last year's report, the use of safeguards instruments has been further enhanced with regard to both installed and portable equipment. At the end of June 2014, 283 installed systems in 236 States were remotely connected to Agency Headquarters. Additionally, the Agency had 1342 surveillance cameras connected to 629 systems operating at 251 facilities in 34 States. There were 157 unattended monitoring systems operating in 22 States. More than 890 portable and resident NDA systems were prepared and delivered to the field for use during inspections. Since last year's report, significant financial and human resources were dedicated to preventive maintenance and performance monitoring to ensure the reliability of the Agency's standard equipment systems. The reliability of digital surveillance systems, unattended monitoring systems and electronic seals exceeded the target reliability goal of 150 months for mean time between failures. This reliability at the system level was achieved through redundancy to mitigate potential single component failures. More than 7000 pieces of verification equipment were dispatched to support verification activities in the field over the reporting period.
- 28. Technology foresight activities identify promising new developments with potential for safeguards application. Technologies currently under evaluation include replacements for helium-3 thermal neutron detectors, laser based analysis methods and indoor positioning systems. Since last year's report, Technical Meetings were also held to evaluate techniques such as image processing and inertial navigation.

### C.4. Cooperation with, and Assistance to, State and Regional Authorities

- 29. The effectiveness and efficiency of Agency safeguards depend, to a large extent, on the effectiveness of State and regional systems of accounting for and control of nuclear material (SSACs/RSACs) and on the level of cooperation between the State or regional authorities responsible for safeguards implementation (SRAs) and the Agency.
- 30. State and regional authorities responsible for safeguards implementation need legislative and regulatory systems to be able to exercise the necessary oversight and control functions. In order to enable States to fulfil their safeguards obligations, each SRA also needs resources and technical capabilities commensurate with the size and complexity of its State's nuclear fuel cycle. However, in some States, SSACs have yet to be established, and not all SRAs have the necessary authority, resources or technical capabilities to implement the requirements of safeguards agreements and APs. In particular, some SRAs do not provide sufficient oversight of nuclear material accounting and control systems at nuclear facilities and at locations outside facilities (LOFs) where nuclear material is customarily used to ensure adequate quality of the data being transmitted to the Agency.
- 31. The effectiveness and efficiency of Agency safeguards have continued to be enhanced through the actions undertaken by a number of States in safeguards implementation. Examples of such actions include: participating in field trials of new safeguards instruments or measures; performing national inspections at facilities and LOFs; validating operator data and assuring the quality of records, reports and declarations prior to submitting information to the Agency; providing information, in addition to that required under the safeguards agreement or AP, that facilitates safeguards implementation; conducting activities to strengthen safeguards implementation in a region; making facilities available

for training of Agency staff; and providing experts to contribute to the development of guidance documents on safeguards implementation and safeguards by design principles.

- 32. In October 2013, to assist States in building capacity for complying with their safeguards obligations, the Agency translated the publication *Safeguards Implementation Guide for States with Small Quantities Protocols* (Services Series No. 22) into French and Spanish and early in 2014 distributed copies of this publication to all States with SQPs. The Agency further enhanced the safeguards pages of its website<sup>13</sup> providing SRAs and others with access to safeguards-related videos, photos, guidance and reference documents, forms and templates.
- 33. The IAEA SSAC Advisory Service (ISSAS) provides States, at their request, with advice and recommendations on the establishment and strengthening of SSACs. Since last year's report, the Agency conducted ISSAS missions in Kyrgyzstan, the Republic of Moldova, Tajikistan and the United Arab Emirates. As of the end of June 2014, 19 ISSAS missions had been conducted since the service's inception in 2004.
- 34. The Agency also provides training to personnel of SRAs as well as facility operators. Since last year's report, the Agency has conducted six training courses at the international, regional and national levels. One international SSAC course was conducted in the United States of America and one interregional course was held in Japan. More specific training included a regional course in Kazakhstan on safeguards implementation under an AP and two basic national workshops on safeguards implementation (one in the Lao People's Democratic Republic and one in Myanmar). In addition, a national training course on the preparation and submission of AP declarations by Denmark with respect to Greenland was held in Vienna for experts from Denmark.
- 35. The Agency provided lecturers to support topical training courses on safeguards implementation organized by the United States of America and held in Bangladesh, Jordan, the Republic of Korea and Myanmar. In 2013, safeguards-related issues were discussed with officials from Turkey during an Agency-led Integrated Nuclear Infrastructure Review (INIR) mission. Safeguards staff also contributed their expertise to the preparation of integrated work plans for States where INIR missions had already been conducted and participated in bilateral meetings with newcomer States. Similar to INIR missions, the Department of Safeguards also contributed to a project to develop an Agency advisory service addressing integrated research reactor infrastructure assessments.
- 36. To familiarize new members of Permanent Missions with Agency safeguards, the Agency held a one-day Seminar on IAEA Safeguards in January 2014. Seventy-eight participants from 47 Member States, and delegations of the European Union and of the League of Arab States attended the event, which featured presentations by the Secretariat, a tour of the safeguards technology laboratories and a demonstration of satellite imagery analysis.

#### C.5. Safeguards Workforce

37. Since last year's report, the Introductory Course on Agency Safeguards (ICAS) was held for 20 new inspectors. Training for inspectors included two comprehensive inspection exercises at a light water reactor, courses on NDA techniques, enhanced observational skills, design information verification, negotiation skills and enhanced communication skills.

38. Internal training on safeguards activities at facilities and Agency Headquarters was complemented by the following new courses: a training course on a link analysis tool to assist in State evaluation; advanced refresher training on NDA techniques; the new 'next generation surveillance

<sup>&</sup>lt;sup>13</sup> See: http://www.iaea.org/safeguards/resources-for-states/guidance-documents.html.

system'; training on software for use in information analysis; and systems engineering for technical staff. Courses under development and which are scheduled to be held in 2015 include a course on the basics of laser isotope separation techniques; an NDA refresher course; and a course on detection of plutonium diversion.

39. In February 2014, the Safeguards Traineeship Programme commenced with six participants from Cambodia, Ghana, Myanmar, Nepal, Tajikistan and Tunisia. The trainees will complete the programme at the end of November 2014.

#### C.6. Quality Management

- 40. The Department of Safeguards continued to implement and improve its quality management system. In 2013, the Department initiated activities to identify, select and determine how to use more effectively performance indicators to assess Departmental activities and results in the context of a broader performance management system under development. Four internal quality audits have been performed since last year's report, in the areas of: safeguards effectiveness evaluation; industrial safety; training needs evaluation; and maintaining the Austrian accreditation of the Department of Safeguards Office of Safeguards Analytical Services to the International Organization for Standardization 9001 quality standard. In addition to those internal quality audits, the External Auditor of the Agency performed audits on safeguards implementation and on the management of the ECAS project. Since last year's report, more than 200 quality control reviews were performed on randomly selected safeguards activities. For those where potential deficiencies were observed, the findings were further assessed and, as appropriate, a 'condition report' was initiated. During that same time period, 56 condition reports related to safeguards processes were initiated as a result of quality audits, health and safety reviews and other activities. Root causes and actions to prevent their recurrence were identified. The condition report system was also expanded to include radiation and industrial safety events at Agency Headquarters and in the field.
- 41. The Department of Safeguards' cost calculation methodology, which is used to estimate costs of safeguards activities, was updated and refined to reflect experience gained during its implementation. Since last year's report, knowledge management efforts were enhanced to support supervisors in identifying the retention of critical job-related knowledge from 30 staff members retiring or separating from the Department of Safeguards. Internal safeguards documents, forms, templates and working papers related to verification activities in the field were reviewed and redesigned to meet quality standards and updated to more accurately reflect the needs of the Department. Staff training continued on the quality management system, including managing and controlling safeguards documents, the use of the condition report system, and the principles of continual process improvement.

### C.7. Information Security

- 42. In light of today's constantly changing information security environment and advances in technology, the Agency has been reviewing its policies, procedures, and practices related to information security, with an initial focus on the classification, handling and protection of safeguards information. The aim of the review is to balance information security with making safeguards information available to staff members who need it for carrying out their official duties in connection with safeguards.
- 43. Security awareness continues to be a major priority and awareness campaigns and enhancements to the information security e-learning programme have been undertaken. Specialized briefings for inspectors and other safeguards staff continue, with information security now being taught as a module in ICAS. To familiarize Member States with this important topic, the Agency's information security

programme was presented during the fourth technical meeting on the State-level concept held on 15 April 2014.

44. The physical security of offices has continued to be improved through extension of the access control systems. All Agency servers, a mainframe computer, and disk storage and network equipment are housed in a highly secure data centre. Information security is being improved through, for example, the systematic application of security patches and upgrades to servers, switches, and laptop and desktop computers; better encryption; internal and external vulnerability reviews; the development of in-house capabilities to combat information technology threats; and the enhancement of disaster recovery and business continuity capabilities.

#### C.8. Safeguards Reporting

45. The safeguards conclusions for 2013 were reported in The Safeguards Implementation Report for 2013.14 The Safeguards Implementation Report for 2013 also provided information on the implementation and evaluation of safeguards activities, as well as data on the number of facilities and LOFs under safeguards, and the inspection effort and related cost of safeguards implementation. At its June 2014 meeting, the Board of Governors took note of The Safeguards Implementation Report for 2013 and authorized the release of the Safeguards Statement for 2013 and of the Background to the Safeguards Statement and Summary.

<sup>&</sup>lt;sup>14</sup> The Safeguards Statement for 2013 and the Background to the Safeguards Statement and Summary of *The Safeguards* Implementation Report for 2013 are published on the Agency's website at: http://www.iaea.org/safeguards/statements-pubsmedia/es/es2013.html.