Vienna, Austria, 1–5 July 2013

President's Summary

5 July 2013

Introduction

The International Conference on Nuclear Security: Enhancing Global Efforts was convened at the IAEA's headquarters in Vienna on 1–5 July 2013. This was the first occasion that a conference of this type had been convened by the IAEA. It included government ministers; senior officials and policy makers responsible for nuclear security; experts and representatives from a wide range of technical disciplines and specialist organizations that contribute to nuclear security; representatives of intergovernmental and non-governmental organizations with relevant competencies; regulatory bodies and other national competent authorities; national security and crisis management agencies; law enforcement and border control agencies; and industry and other entities engaged in activities relevant to nuclear security.

The conference attracted more than 1300 registered participants from 125 Member States, 34 of which were represented at ministerial level, and 21 organizations. This high level of participation is a reflection of the importance of the conference and the value placed on it by interested parties worldwide. It also implies recognition of the fact that, while activities relating to nuclear security are the responsibility of individual States, there are regional and global interests in nuclear security matters which could be greatly enhanced through collective actions and international cooperation.

The conference provided a forum where experiences could be discussed and ideas exchanged to identify emerging trends and to consider medium and long term objectives for international nuclear security efforts, as well as to inform the development of the IAEA's Nuclear Security Plan 2014–2017. This plan will provide a blueprint for the IAEA's nuclear security activities over this period and will facilitate the evaluation of the IAEA's nuclear security programmes.

In his opening remarks, the President of the Conference, HE János Martonyi, the Minister of Foreign Affairs of Hungary, emphasized that the fight against nuclear terrorism requires all States to stand together, fulfilling their responsibilities nationally and coordinating their efforts internationally.

In his remarks, the IAEA Director General, Yukiya Amano, stressed the enduring threat of nuclear or other radioactive material falling into the hands of those who might use it for malicious acts. Both the Conference President and the Director General recognized the progress that has been made in nuclear security, but emphasized the need to avoid complacency, the need to continue to strengthen nuclear security worldwide and the need to remain vigilant against credible threats.

The conference began with a ministerial session. A total of 69 Ministers and other Heads of Delegation delivered statements.

A Ministerial Declaration, adopted by consensus in the ministerial session, is available on the conference web site.

The ministerial session was followed by 6 substantive main sessions addressing broad areas associated with nuclear security, and 12 parallel technical sessions which provided more in-depth discussions of a range of topics relevant to nuclear security.

To tie the various strands of the conference together, rapporteurs reported the main conclusions and key issues from each of the technical sessions to a relevant main session. The co-chairs of the main sessions then compiled the main conclusions and key issues from their respective sessions — taking account of the reports from the technical sessions — which were then reported to the final plenary session. This President's Summary highlights the main conclusions and key issues, drawing on the reports from the main and technical sessions.

The technical sessions

The technical sessions delved more deeply into specific issues, including information and cyber security, the enhancement of nuclear security regimes, the security of radioactive sources, capacity building, safety–security interfaces, threat characterization and assessment (including security in the transport of nuclear and radioactive material), education and training, detection and response architecture, nuclear forensics, and nuclear security at nuclear facilities.

The participants endorsed the IAEA's commitment to each of these areas, as well as noting the valuable exchanges of information during these sessions, which combined technical presentations, questions and answer sessions and lively discussion in panels and with the audience.

Rapporteurs captured the main conclusions and key issues from each technical session. Their full reports will be included in the conference proceedings, and were summarized in brief presentations to a relevant main session. The following brief summary observations give a flavour of the discussions in each technical session.

Regarding information and cyber security (Session TA2), the IAEA was encouraged to develop additional guidance level documents, including Recommendation level guidance, to provide the basis for implementing regulations on information and cyber security.

Regarding the enhancing of nuclear security regimes (Sessions TA3 and TB2), participants supported efforts to strengthen the IAEA's nuclear security programme's response to Member States' requests for advisory missions, such as International Physical Protection Advisory Service (IPPAS) missions, and to follow-up requests to enhance and sustain effective nuclear security regimes.

Regarding the security of radioactive sources (Session TA4), participants shared lessons learned from the unique national circumstances in which such sources are stored, used and transported. No single 'one size fits all' approach will work for every State, but the lessons

that were shared provided useful insights for States to assess those approaches that are most suitable for them.

Regarding safety–security interfaces (Session TB5), there was broad recognition that nuclear security and nuclear safety share the same fundamental objective: to protect people, property, society and the environment. Therefore, the intersection of nuclear safety and security must be accounted for at all levels, from the operator to the regulatory level. Recent advances in enhancing the interfaces between these two distinct disciplines were commended.

Regarding threat characterization and assessment (Session TB3), the IAEA was encouraged to give priority to the threat based approach to regulate the activities for the physical protection of nuclear material and nuclear facilities. The participants also emphasized that training and educational programmes are essential to increase general awareness of security in the transport of nuclear and other radioactive material. The participants welcomed the availability of INFCIRC/225/Rev. 5 and looked forward to the introduction of implementing guidance for transport security to assist in the application of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM).

Regarding structured capacity building, education and training (Sessions TA5 and TB4), the participants endorsed the concept of developing competence through education and training, and in this regard noted that Nuclear Security Support Centres can contribute to the development of sustainable nuclear security regimes. The participants strongly supported the development of Integrated Nuclear Security Support Plans (INSSPs) that address security improvements, and requested that the IAEA complete, in close cooperation with States receiving IAEA assistance, relevant INSSPs and to begin implementation as soon as possible.

Regarding detection and response architecture (Session TA6), the participants noted that for material out of regulatory control, a coordinated and cooperative approach is necessary. Such an approach would involve competent authorities at both the national and regional levels to introduce, maintain and sustain measures to prevent, detect and respond to criminal or intentional unauthorized acts. This includes the conduct of investigations and the bringing of perpetrators to account in an appropriate criminal justice system. Adequate nuclear security involves the inclusion of all entities in a State, including those outside the traditional IAEA constituency, in the planning and execution of nuclear security programmes. This includes customs officials, medical facility administrators, border guards and other law enforcement agencies.

Regarding nuclear forensics (Session TA7), the participants welcomed the IAEA's work in the area and encouraged States which have not yet done so to establish, where practicable, nuclear forensics databases drawing on assistance, available on request, from the IAEA and other relevant regional initiatives.

Regarding nuclear security at nuclear facilities (Session TB6), many Member States are considering the construction of new nuclear power plants in an effort to secure energy security and to rebalance their overall energy needs, with a greater emphasis placed on nuclear energy as part of their energy mix. It is important that security performance meet the needs and expectations of the international community.

Regarding detection and response architecture linked to major public events and new technologies (Session TB7), participants highlighted the importance of international cooperation and assistance during the implementation of nuclear security measures at major public events, keeping pace with technological advances and being fully aware of the current challenges in detecting and responding to potential nuclear security events.

The main sessions

The conference reaffirmed the principle that the responsibility for nuclear security within a State rests entirely with that State but equally, it recognized the importance of international cooperation and the central role of the IAEA. The six substantive main sessions of the conference developed these principles under the titles which follow.

Session M3: Implementing and Enhancing the International Nuclear Security Framework

The CPPNM is a key international instrument supporting nuclear security. Its 2005 Amendment would significantly extend its scope and the benefit that it can provide. However, it has not yet been ratified by the required two thirds of States Parties and has thus not entered into force. It is clear that the IAEA and Member States must continue their efforts to support the entry into force of the Amendment to this critical international instrument, which greatly strengthens the framework for protecting nuclear material. While the international legal framework for nuclear security includes several other instruments which build confidence in nuclear security, practices remain an important factor and the 2005 Amendment to the CPPNM is needed to close a significant gap.

In closing the session, the co-chairs thanked the speakers for their interesting and informative presentations. One of the co-chairs noted that the issues raised in the session were central to a broad area of nuclear security and that these were faced not only in the IAEA but globally. He stated that he would not put forward conclusions from the session but would work with the other co-chair to produce a balanced report of the discussion for transmission to the president of the conference. Subsequently, the following points were agreed:

- The universalization of the international legal instruments in the area of nuclear security is of the utmost importance and should be promoted, not only by the States concerned, but also by international bodies such as the IAEA, UNODC, etc.
- In this area, there now exists a working system of binding and non-binding instruments that complement and reinforce each other. The IAEA plays an indispensable role in bringing together and facilitating the work of technical, legal and political experts to develop both the binding and, in particular, the non-binding measures and guidelines for application by Member States.
- In the nuclear sphere, there is a delicate balance between transparency and confidentiality, which should be developed very carefully in order not to jeopardize the future of the peaceful use of nuclear energy; to prevent the threat to humanity caused by malicious acts; and to build confidence that nuclear security measures are applied appropriately worldwide.

Session M4: Nuclear Material and Nuclear Facilities

The IAEA's Nuclear Security Fundamentals and related Nuclear Security Series publications make recommendations with regard to national, regional and global nuclear security frameworks. In particular, Nuclear Security Series No. 13, Nuclear Security Recommendations on Physical Protection of Nuclear Material and Nuclear Facilities (INFCIRC/225/Rev. 5), recommends significant enhancements to a State's physical protection regime. Although the IAEA is in the process of preparing an Implementation Guide for this publication, more needs to be done both by the IAEA and its Member States to achieve the consistent application of these important recommendations.

Conclusions and recommendations from this session include the following:

- The IAEA should devote more resources to providing assistance requested by Member States to implement the recommendations of Nuclear Security Series No. 13.
- The IAEA should complete the nuclear security series of publications as a priority.
- The international community should recognize and encourage the concept of security by design, keeping the entire life cycle of the facility in mind.
- The international community recognizes that a strong, efficient legal and regulatory framework is an important element of a nuclear security regime. It should be complemented by a dedicated, properly resourced nuclear security authority which is underpinned by institutionalized, effective nuclear security culture.
- A nuclear material accountancy and control system is a key pillar of a facility's physical protection system and helps to deter and to detect the misuse or theft of nuclear material.
- IAEA guidance should be used as a basis for the establishment of information and cyber security policy and programmes in Member States; however, Recommendations level guidance is necessary.
- Member States should develop institutional arrangements that support the appropriate interface between nuclear safety and nuclear security.
- The IAEA should give due priority to promoting the risk informed, performance based approach and to assist Member States on the development of their regulatory infrastructures in this respect.
- Participants recognized the value of IPPAS Missions in assisting Member States to review and enhance their nuclear security regimes.
- The IAEA, with Member States, should develop and publish guidance to assist the implementation of IAEA Recommendations on transport security.

Session M5: Radioactive Sources and Associated Facilities

The Code of Conduct on the Safety and Security of Radioactive Sources is the principal international instrument for the security of radioactive sources. States are encouraged to make a political commitment to work towards meeting the principles of the code and guidance and are responsible for taking these into account in their national infrastructures. The challenges to the security of radioactive sources is unique and States, regulators and others should have the appropriate knowledge and training, and must assign adequate resources to protect these sources.

Conclusions and recommendations from this session include the following:

- Similar to the Model Project initiative that started in the early 1990s with five Member States and was completed in 2004 with the involvement of nearly 100 States, the security of radioactive sources requires a similar level of effort, commitment and resources on the part of States and the IAEA.
- The Code of Conduct, in its current form, has wide acceptance as the primary instrument for the security of sources.
- To keep States engaged and committed to the provisions of the Code, and to recognize why radioactive source security presents challenges not always found in addressing the security of nuclear material and nuclear facilities, a strategy of motivation, knowledge and resources should be utilized. All should be reminded of why sources should be protected and should be given the necessary training and guidance to implement source security. Practically speaking, properly allocated resources are an essential part of ensuring that sources can be adequately secured, regardless of the application.
- While the primary responsibility for nuclear security rests with the State, all interested parties have a responsibility to contribute in helping ensure the security of radioactive sources.
- The IAEA, in particular, should continue to play a central role in the development of guidance to assist regulators and, by extension, operators in raising awareness, and collaborating with other interested parties in the provision of physical protection and security management measures.
- Taking a regional approach enhances working relationships at regional, national, and local levels and encourages increased coordination and collaboration across borders. The success of any regional partnership relies on identifying leaders, be they States or organizations, as well as on engaging of personnel at all levels.
- Leadership is not only crucial, but it should also be recognized that there is a need for succession and institutional planning in order to maintain sustainability.

Session M6: International Cooperation and Assistance and the Role of the IAEA

The conference acknowledged the contribution of a wide range of organizations and initiatives in promoting international cooperation and enhancing international efforts.

Conclusions and recommendations from this session include the following:

- Nuclear security is a national responsibility. However, States are increasingly aware of the importance of bilateral, regional and international cooperation to enhance national nuclear security regimes. Similarly, international cooperation and assistance can result in regional and global threat reduction.
- States should be encouraged to participate in the activities of international organizations and initiatives that promote the development of national capabilities to respond to nuclear security threats.

- States need to exchange accurate and verified information on nuclear security events in accordance with their international obligations and national legislation, taking into account the need to protect sensitive information.
- States should develop formal education, training and certification programmes to support structured and sustainable capacity building.
- The IAEA is recognized as the source of international nuclear security guidance, developed in conjunction with Member States.
- The IAEA should facilitate international cooperation and assistance to promote the safe, secure and peaceful uses of nuclear energy, as well as its international peer reviews and advisory services.
- The IAEA should strengthen its collaboration with other international initiatives and organizations to optimize resources, prevent duplication of effort and harmonize approaches to achieving effective nuclear security.

Session M7: Building and Sustaining a Nuclear Security Culture

Conclusions and recommendations from this session include the following:

- The constant loss of qualified personnel as a result of career development, retirement and administrative changes, combined with the increased evolution of technology and procedures creates a unique challenge for the sustainability of nuclear security regimes. A common goal is to maintain the sustainable competency of personnel.

- The education and training networks for nuclear security, hosted by the IAEA, contribute to the global improvement of nuclear security culture, and Member States are encouraged to support and promote them. A closer relationship between the networks and the Board of Governors should be considered.

- INSSPs and other capacity building initiatives and programmes developed by Member States and others contribute to the global effort in establishing and maintaining an effective nuclear security culture in States.

- A key to achieving success in the sustainability of systems and measures designed to ensure nuclear security is in having effective leadership and continuous management, and not relying solely on technology and processes.

- Lessons learned from recent initiatives should be applied for the continuous development of international capacity building support, with an emphasis on education and training, to promote further nuclear security culture in States.

Session M8: Addressing the Illicit Trafficking Threat

The use and availability of nuclear material and other radioactive material can be expected to grow, thereby increasing the risks of illicit trafficking and the potential for radioactive material to fall out of regulatory control.

It is necessary to:

- Promote self-assessment and international peer reviews, based on IAEA Nuclear Security Series guidance, to identify priorities for nuclear security infrastructure development in the key areas of prevention, detection and response.
- Encourage a strategic approach for establishing, within Member States, efficient and sustainable nuclear security detection and response systems and measures for material out of regulatory control, including nuclear security infrastructure, capacity building and sustainability.
- Further develop tailored implementation and technical guidance to Member States in relation to detection of, and response to, nuclear and other radioactive material out of regulatory control.
- Further strengthen collaborative efforts with other international initiatives related to detection and response to optimize the available resources, harmonize approaches and complement the assistance provided.
- Enhance the capability of States, through coordinated research, the application of Nuclear Security Series guidance and the provision of technical assistance and training in the context of criminal investigations and prosecutions related to nuclear security events.
- Promote the development of a national nuclear forensics library to strengthen confidence in nuclear forensics conclusions and identify and address nuclear security vulnerabilities.
- Help States appreciate the value of, and contribute effectively to, the ITDB, with particular regard to timeliness, comprehensiveness and relevance of information and the development of a best practice guide for ITDB reporting.
- Provide assistance for States in harmonizing international law and guidance in an integrated national legislative and regulatory system.
- Expand regional and sub-regional activities to build on shared experience and needs, and to develop and exercise common approaches.

The above commentary provides a summary record of the International Conference on Nuclear Security: Enhancing Global Efforts, held in Vienna, Austria 1–5 July 2013.