## FIRST INTERNATIONAL SEMINAR ON IPPAS

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## INTERNATIONAL ATOMIC ENERGY AGENCY

## IAEA OVERVIEW ON NUCLEAR SECURITY

Monsieur le Secrétaire Général, Mesdames et Messieurs les Représentants, Chers Collègues, Bonjour et Bienvenue à Paris

It is for me a great pleasure to thank M. Mazauric, Haut Fonctionnaire de Défense et de Sécurité of the Ministry for Ecology, Sustainable development and Energy, and through him the Government of France, for giving the International Atomic Energy Agency the opportunity to hold this premiere: the first ever International Seminar on International Physical Protection Advisory Service (IPPAS), organized here in Paris. Already at the Nuclear Security Summit in Seoul, in March 2012 France offered to host this IPPAS Seminar, the first of its kind, and we are very pleased that we are able to do this today.

Monsieur le Secrétaire Général: thank you for your kind words and warm welcome, and also for providing us with such excellent facilities.

We have come here to share the lessons learned, and to discuss the benefits received from the conduct of International Physical Protection Advisory Service missions and follow-up activities, as well as to consider the options for further enhancement of this service by framing a vision and a strategy for the future. It is important to set the context for these discussions and I am delighted to have been given the opportunity to do so from the Agency's perspective in this overview on nuclear security.

From a historical point of view, the first IPPAS missions was organised in 1996 when experts used as their benchmark INFCIRC/225/Rev3, which at the time was the only internationally recognised, technically based guidelines on nuclear security. The first IPPAS mission was conducted in Bulgaria from 20 to 29 November 1996 where I supported the participation of Ms Marie-Gaëlle Grétéré, from my then Department at IPSN, as a member of this first IPPAS team. Out of the 61 IPPAS mission conducted so far, French experts took part in 26 IPPAS missions demonstrating the strong support of France to this important service.

Now, the international experts who form an IPPAS team can compare their findings against a whole set of IAEA nuclear security guidance documents, the 2005 Amendment to CPPNM, the fifth revision of INFCIRC/225 and the first security document ever to be endorsed by the Board of Governors, the Nuclear Security Fundamentals.

Nuclear security, like nuclear safety, is a work in progress with the ultimate goal to protect people, society and the environment against the effects of ionising radiation. The increasing and sustained focus of Member States on nuclear security is the result of multiple efforts and initiatives. In the immediate aftermath of the 2001 terrorist attacks, steps were taken to strengthen nuclear security and the Agency created the Office of Nuclear Security simultaneously with the setting up of the Nuclear Security Fund by the IAEA Board of Governors.

In his annual reports to the Board of Governors, the Director General of the IAEA has been unswerving in his commitment to initiatives designed to assist Member States improve nuclear security on a national, regional and global basis. Since 2002, two Nuclear Security Plans 2002-2005 and 2006-2009 have been implemented and the third one covering the period 2010-2013 is being completed this month. Last July, the outstanding success of the 'International Conference on Nuclear Security: Enhancing Global Efforts' provided additionally strong evidence of the commitment of Member States to nuclear security. In particular, the Ministerial Declaration adopted by the Conference emphasised the determination of the international community in its efforts to promote nuclear security worldwide.

The Ministerial declaration "Encourage States to use, on a voluntary basis, the IAEA's nuclear security advisory services and peer reviews based on internationally accepted guidance and tailored to national needs, welcome the increased recognition of the value of IAEA International Physical

Protection Advisory Service (IPPAS) missions by Member States, and encourage the IAEA to foster the sharing of experience and lessons learned from these missions".

In addition, last General Conference resolution GC(57)/RES/10, unanimously endorsed by more than 160 Member States "Encourages Member States to voluntarily use the Agency's nuclear security advisory services for exchanges of views and advice on nuclear security measures, welcomes the increased recognition of the value of IPPAS (International Physical Protection Advisory Service) missions by Member States, encourages the organization by the Agency of meetings to allow Member States to share experience and lessons learned from IPPAS missions, and welcomes in that regard the first international seminar on the sharing of lessons from IPPAS missions, to be hosted in Paris in December 2013".

In the aftermath of the Fukushima Daiichi accident, the nuclear community worked hard on the objectives of preventing accidents and, should an accident occur, mitigating its effects and avoiding long term off-site contamination. In this global frame, the European Ad hoc Group on Nuclear Security (AHGNS) recognized the IPPAS missions as the international instrument for improving nuclear security, and noted that:

- IPPAS missions should become the norm for nuclear security evaluation for EU Member States with established and planned NPPs.
- · IPPAS missions should be carried out in all EU Member States with NPPs on a regular basis.
- All missions should have a follow-up mission.

Going back just a few years from today, the first line of the communiqué issued after the Nuclear Security Summit in 2010 stated that:

'Nuclear terrorism is one of the most challenging threats to international security, and strong nuclear security measures are the most effective means to prevent terrorists, criminals, or other unauthorised actors acquiring nuclear material'

The International Atomic Energy Agency is an observer at the Summits, however this statement has in many ways spurred on all the Agency' efforts over the last three years as we have sought to match the rhetoric of international conferences with tangible and enduring results on the ground, which have contributed to the development of "*strong nuclear security measures*".

As a first step, the Agency has sought to introduce sensible, relevant and focussed internal changes to promote the nuclear security agenda. It has been a delicate path for the Agency to tread: our mandate makes it possible for us to set standards in nuclear safety and guidance for nuclear security, but since we have always accepted that security, like safety, is the responsibility of individual Member States, we can only make recommendations with regard to how nuclear material and nuclear facilities should be protected. Notwithstanding this, I believe that we have a good story to tell.

Within the Agency, the profile of nuclear security has been raised and most Member States now regard the discipline as making a significant contribution in its own right to the safe, secure and peaceful use of nuclear technology. This development has been driven from the top and its implications have been felt throughout the Agency.

The Board of Governors confirmed this change in 2012 when, for the first time, it endorsed a key document in the Nuclear Security Series, "**The Nuclear Security Fundamentals**". This ground-breaking document, which describes the "Objectives and Essential Elements of a State's Nuclear Security Regime", was first approved by the Nuclear Security Guidance Committee after careful deliberations to achieve consensus amongst Member States. Its endorsement by the Board of Governors signalled the importance now being accorded to the establishment of nuclear security guidance for the international community by the Agency's policy making organs, and the significance of this development cannot be under-estimated. Since 2010, I have insisted that the Senior Regulators' Meeting, organised in the margins of the General Conference, brings together all nuclear regulators around subjects addressing both safety and security and their interface.

The Director General approved the establishment of the Nuclear Security Guidance Committee. The NSGC is a standing body of senior experts in the area of nuclear security, open to all Member States, and the purpose of the Committee is to make recommendations to me, as the Deputy Director General and Head of the Department of Nuclear Safety and Security, on the development and review of IAEA Nuclear Security Series publications. The objective is to contribute to greater transparency, consensus, quality, coherence and consistency by engaging more Member States in the development of international publications for nuclear security. More than 50 Member States now participate in the NSGC.

The establishment of the NSGC has enabled a much wider involvement by Member States in the drafting process of guidance which is broadly accepted as the international community's consensus on the physical protection of nuclear material and nuclear facilities. As you know, the Nuclear Security Series now comprise more than 20 publications (and rising) and represents a comprehensive suite of recommendations for Member States, regulators and nuclear operators for an effective and proportionate nuclear security regime. The Agency has in place a 'roadmap' both to capture the vision of the series and to coordinate the definition, drafting and adoption of each Nuclear Security Series publication, thereby providing the direction and timetable for this important initiative.

The Agency also recognises that there may be occasions when the priorities for security may not always be in step with those of safety. Many Member States have now set up mechanisms to resolve such possible conflicts within their internal regulatory structures, and reflecting this trend, the Agency has established the Interface Group to enable regular liaison between the NSGC and the Chairs of the Agency's Safety Standards Committees. The Interface Group is proving to be an effective tool in resolving potential conflicts between security and safety and achieving sensible compromises.

The establishment of the NSGC and the associated Interface Group has allowed reviewing the role of the Director General's Advisory Group on Nuclear Security, or AdSec. The Group has passed many of its former responsibilities to NSGC and in August 2012, new Terms of Reference from the Director General now require the Group to provide him with timely advice on current and emerging nuclear security issues and also to monitor the Agency's policy, activities and priorities in the nuclear security area. The Director General is currently considering proposals about how AdSec might discharge these roles and we hope that these proposals will be adopted when the Nuclear Security Plan 2014 to 2017 takes effect in January 2014.

This is the precise time when the Office of Nuclear Security will be upgraded to the status of a 'Division', following the agreement of the Board of Governors. This is a logical development reflecting ONS's growing authority and scope of activity.

During 2013, the Agency drafted a Nuclear Security Plan for the period 2014 to 2017 which was approved by the Board of Governors in August 2013. This plan was to be goal-setting, rather than prescriptive in its approach, and the change allowed to create a greater level of flexibility for the Agency in responding to fast-changing scenarios, particularly in the area of cyber security, over the four year period covered by the plan. Amongst the new plan's provisions is the need to promote nuclear security through Peer Reviews provided through IPPAS. This seminar's conclusions and recommendations on the IPPAS service will be extremely useful for us to improve and strengthen as necessary IPPAS missions.

Elsewhere, ONS has continued to support various initiatives promoting nuclear security both regionally and globally. These have included the reporting of illicit trafficking of nuclear material through the Incident and Trafficking Data Base; more than 2400 incidents have now been recorded and 124 participating Member States now participate in the programme.

The Agency has also invested significant effort in the development and use of Integrated Nuclear Security Support Plans (INSSP) to help Member States identify and meet their nuclear security needs. There are now about 80 INSSPs which have either been approved; are awaiting formal approval; or are at various stages of finalization with Member States. INSSPs have played an important role in applying a structured and holistic approach to nuclear security capacity building, as well as enabling increased coordination amongst the Agency, the states concerned and potential donors.

We have also encouraged nuclear security education and training through the International Nuclear Security Education Network and the Nuclear Security Training and Support Centres. This is an important aspect to our efforts to improve Member States' capability building for nuclear security in general, and to encourage the development of the knowledge and experience to enable Member States to conduct self-assessment in particular.

But it has not all been plain sailing. A hugely significant milestone continues to elude us as we seek to achieve ratification of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material. It remains a source of great frustration to us that insufficient numbers of Member States have yet to commit to the Amendment to allow it to come into force, but we acknowledge the practical difficulties which have slowed down the ratification process. However, the 2005 Amendment is an essential "building block" to the security of nuclear material and nuclear facilities and the Agency looks forward to the day when its ratification will contribute to creating those strong nuclear security measures which I mentioned at the beginning of this address.

Let me close now with a few thoughts about this Seminar, which is the first of its kind to address International Physical Protection Advisory Service missions and which I hope will become an enduring part of the Agency's business. In my view, there is merit in repeating this Seminar every three years and I would ask you to consider making a recommendation about the need for, and frequency of, future Seminars as part of your conclusions and recommendations.

In his closing speech to the International Conference on Nuclear Security in July 2013, the Director General urged all Member States to invite a peer review of their nuclear security arrangements by international experts. He made the point that peer reviews have proved to have an excellent track record in improving safety at nuclear power plants and he challenged us to do the same for nuclear security. You may well want to consider how the Agency should meet the demand for IPPAS missions particularly if Member States respond in numbers to the Director General's recommendation: it will be a challenge to provide suitably qualified experts, many of whom will be very busy people coping with the demands of their 'day jobs'. We would welcome your thoughts on how to address this, whether we should be trying to identify 'pools' of experts on a regional basis to conduct peer reviews? We would like to hear from you.

In broadly the same context, we also need to be thinking about how IPPAS should respond to the expansion of the use of nuclear technology, especially among those Member States which are embarking on nuclear power or developing their nuclear capability with perhaps little or no previous experience of the technology. Their requests for support are likely to be significant and we cannot afford to fall short in meeting their requests. Your thoughts and advice on this are welcome.

And finally, do we also need to be thinking about how the Agency itself provides support and coordination for such missions?

I hope that you will all agree with me that there is now a broad consensus over the value of peer review. You may wish to consider how peer reviews of nuclear security could inform Nuclear Safety and vice versa. It will be important to ensure that the synergies between safety and security, which are recognised and acknowledged in both the Nuclear Security Fundamentals and the Nuclear Safety Fundamentals, can be harnessed to our efforts to protect people, the environment and society from accidental and malicious acts involving nuclear and other radioactive materials.

My final thoughts revolve around how we might be able to use the observations and information which emerge from IPPAS missions.

I remember in March 2005 coming from Moscow to take part in the IAEA London Conference on Nuclear Security: Global Directions for the Future and reminding that:

"if in Nuclear Safety, transparency is an obligation, in Physical Protection, it is an offence." But I then went on to state that "We owe the public and the wider international community a fair, unbiased view of protection levels against terrorism, at the same time we owe them a strict protection of sensitive information: The path is narrow..." The Agency recognises and respects the sensitivity of recommendations and suggestions included in a typical IPPAS mission report, but we need to consider how we might be able to promote a measure of wider feedback, from which other Member States might benefit. I was indeed extremely interested by Dr Robert Floyd's thought-provoking presentation to the Senior Regulators Meeting in Vienna in September 2012, in which he made some fascinating observations on how we could be more open about nuclear security without compromising sensitive information. I believe that this is an area we should be considering over the next two days and reflect in our conclusions.

Also in this context for example, would it be possible to devise a way to share experiences on best practices for the common good? And in following up the recommendations and suggestions from an IPPAS mission, is there a role for NSSCs and Technical Support Organisations in implementing IPPAS recommendations and suggestions? At their October 2010 conference in Tokyo, Japan, TSO representatives noted the increasing importance of the interdependence of nuclear safety and security in the light of emerging threats, including cyber-security issues, and recommended that, as appropriate, TSO functions be extended to providing technical support to competent authorities in the field of nuclear security. You may wish to consider this proposal before the same conference reconvenes in 2014 in Beijing, China.

Ladies and Gentlemen, I am grateful for your attention. Perhaps the greatest challenge for us in the next 2 days is to propose a vision for the IPPAS missions so that the Service can continue to provide the quality of peer review which is making a difference where it matters. I am convinced that you will keep this perspective in mind throughout your deliberations so that we can agree a game-changing vision for the future.

I very much look forward to taking part in your deliberations and studying your conclusions and recommendations.

Merci de votre attention, et bon travail!