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DIRECTORATE-GENERAL FOR ENERGY

DIRECTORATE E - Nuclear Safeguards
E.1 - Design, planning & evaluation of inspections; logistical support

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Meeting with Member States on
IMPLEMENTING EURATOM TREATY SAFEGUARDS

Luxembourg, 9 – 10 October 2013

1. INTRODUCTION

The Safeguards Directorate DG ENER-E held its Member States Meeting which is scheduled every eighteen months to inform the representatives of the national authorities in the Member States about current affairs in-house in DG ENER-E and about relations with the IAEA and other safeguards actors. Seventeen Member States (MS) were represented. Of the MS with significant nuclear programs only four did not send delegates.

This time the Safeguards Directorate redesigned the agenda to inform delegates extensively about consultations and reflections on the evolution of EURATOM safeguards. The aim was to make the meeting as informative and interactive as possible and to encourage MS representatives to ask questions and formulate considerations on behalf of important stake-holders in their state.

2. SCOPE

These are the summary minutes of the Member States Meeting to be provided for the information of all Member States' representatives.

3. SUMMARY MINUTES

3.1. Welcome Address by the Safeguards Director

The Director of DG ENER-E opened the meeting with a welcome address. He underlined that EC and Member States (MS) are part of the same Community, with a common goal of making safeguards in the EU more efficient. He explained the current challenges and the reasons for which DG ENER-E has undertaken a review of its mission and the way it implemented Safeguards. EURATOM wants to shape its strategy 'to go from a mission to a vision'. The EC wants the MS to be part of this process and the Safeguards Director stressed the importance of MS consultation in the shaping of future EU safeguards.

3.2. Summary of operational activities 2012 - 2013

The first presentation gave a summary overview of 2012 operational activities of DG ENER-E. The 2012 Annual Report of DG ENER-E can be consulted using the following link: <http://ec.europa.eu/energy/nuclear/safeguards>. The presentation concluded that the challenge of the future will intensify as DG ENER-E will have to do more with less.

3.2.1. Question and Answers on the operational activities

One delegate asked whether the budget of 20.4 million € included salaries or buildings and it was clarified that neither are included in the annual operational budget.

3.3. Cooperation with the IAEA

In a presentation on co-operation of with the IAEA, the roles of the High and Low Level Liaison Committees (HLLC/LLLC) and the various LLLC Working Groups, as well as the New Partnership Arrangements (NPA) and Partnership Approach (PA) papers were explained.

The revision of Subsidiary Arrangements (SA) and the priority list for drafting of new Facility Attachments (FA) and updating old FAs were of particular importance. The presentation concluded that all parties involved have noted improvements in safeguards cooperation over the last five years.

3.3.1. Question and Answers on the cooperation with the IAEA

One delegate asked if the SAs which were under revision could be sent to MS. The General Part of the Subsidiary Arrangements could be sent, but it would be more difficult to forward amendments and annexes due to frequent updates.

Delegates were then informed of an intended change in the communication channels for announcing inspections. Both EC and IAEA intended to move from fax to e-mail communication for inspection announcements to state authorities and operators.

3.4. Safeguards Training

The safeguards training activities were presented, including the MS training which is offered to operators and representatives of national authorities. The EC invited MS to open courses they offer to IAEA under their support program equally to EURATOM participants.

3.4.1. Question and Answers on Safeguards Training

A comment was made that it is difficult to find organisational information on MS training courses and EC said they will improve on this and publish the info on the EUROPA website.

3.5. Accountancy and Nuclear Cooperation Agreements

Accountancy and nuclear cooperation agreements, reporting of incidents of illicit trafficking of NM, transmission of electronic advance notifications, sending electronic declarations under AP and an update on Cooperation Agreements were presented.

3.5.1. Question and Answers on Accountancy and Nuclear Cooperation Agreements

The provisions for reporting cases of 'Accidental Loss' were of particular interest to a number of delegates and the need to prepare a Special Report was emphasised by EC.

One delegate wanted to know how frequently the MBA code for vagabonding material (WVAG) was used (5-10 times a year.)

3.6. Health and Safety

The presentation on 'Health and Safety' touched upon the legal basis, H&S issues and training, providing examples of H&S best practices in nuclear facilities, e.g. operators submitting prevention plans to the safeguards directorate.

3.6.1. Question and Answers on Health and Safety

A delegate asked who the addressee was for a 'prevention plan' when IAEA was involved. The Partnership Approach (PA) Paper on Health & Safety and Radiation Protection (H&S and RP) covers compliance of inspectors with operator's rules on H&S. While the EC is the correct addressee for a prevention plan, details of H&S issues should involve both EC and IAEA.

3.7. DG ENER-E's Integrated Management System (IMS)

The afternoon session of day 1 began with a presentation on DG ENER's Integrated Management System (IMS).

3.8. DG ENER-E Safeguards Approaches and Priorities

The presentation on 'Safeguards Approaches and Priorities' described the motivation for a comprehensive safeguards review and explained the steps: a) internal review b) consultations with Member States and c) an independent review by a group of external experts.

3.8.1. Question and Answers on DG ENER-E Safeguards Approaches and Priorities

The subsequent discussion on inherent risk and supervisory control was animated and EC provided additional clarification to better illustrate the heuristic nature of its intended approach.

The difference in the approaches between EC and IAEA to inherent risks and their evaluation was clarified recalling that EC's approach was based on the performance of an installation and the verification of nuclear material processed by operators and not countries as a whole, as in the IAEA's state level concept (SLC).

3.9. Enhanced cooperation with the IAEA

Further to the presentation in the morning, covering cooperation with the IAEA at an operational level, another presentation was given on the 'Enhanced Cooperation with the IAEA' explaining the work of the Joint Reflection Group. This presentation also touched on enhanced exchange with EU and extra-EU stakeholders.

3.10. Round Table Discussion

The Safeguards Director opened the round table discussion and proposed the expectations on the part of the Member States representatives as the key topic of discussion. He invited Member States representatives to indicate what they would ideally expect from ENER-E; he provided examples of what he assumed MS expectations might be and invited MS to communicate and collaborate and to advance their ideas or requests.

3.10.1. Contributions of MS representatives to the Round Table Discussion

- Two MS invited the EC to consider using the capabilities in their states.
- One delegate wanted to be informed on the stages and steps for the introduction of State Level Concept (SLC) by the IAEA and the measures taken in EC for its implementation.
- The importance of communication was consensus amongst all participants and delegates emphasised that transparency, objectivity and independence were all equally crucial to maintaining credibility of safeguards. Two delegates suggested dedicating effort to informing and asking support as well as endorsement at political level.

The Safeguards Director took up the point and asked MS national authorities how they might raise awareness of nuclear safeguards to their domestic politicians and how political support could be raised at EU level.

- Delegates conceded that safeguards was specific, technical and quite isolated, but emphasised that without safeguards nuclear energy would not be an option in any EU country.

- One delegate referred to evolution and changes along with geopolitical developments and said that more attention should be given to the 3S (safety, security, safeguards) concept because all three dimensions were closely linked. One should equally look into technical and political solutions to confront the current challenges.

EC agreed on the existence of synergies between the 3Ss and added that Nuclear Security has been receiving more attention since 2010, perhaps to the detriment of safeguards. This may be as a result of the emergence of risks and threats not in existence when the EURATOM Treaty was established.

- The Safeguards Director commented that regarding political support for nuclear safeguards, it was a challenge to have safeguards very high on the agendas of our EU political masters. He added that the Atomic Questions Group (AQG) was the forum where safeguards was occasionally discussed. Another channel was the nuclear industry. He said that one could strive to inject safeguards in the briefings of CEOs and industry leaders and he concluded inviting MS representatives to provide feedback on DG ENER-E's Annual Report.

3.11. Coping with Increasing Cask Loading Activities

The 2nd day began with a presentation on the approach to handling the increased cask loading activities in MS where spent fuel is stored awaiting future decision and

conceptualisation of final storage. The use of 'unattended digital Cerenkov view device' and operators placing seals on verified casks were EC's method of choice for coping with the growing demand for these safeguards tasks.

3.11.1. Question and Answers on Coping with Increasing Cask Loading Activities

One delegate reported on positive experience in his country with the cooperation in cask loading verification and subsequent sealing by operators. He said that operators find the approach less invasive and more flexible than the previous procedure requiring inspector presence. He added that the EC presentation was quite detailed and fully correct and that he recommended to other MS, the alternative verification method for cask loading.

Another delegate welcomed the technical solution but expressed reservations regarding the increased responsibilities assigned to operators placing seals. EC underlined the technical solutions and the demonstrable reliability, and confirmed that independent but less frequent verifications during inspection would continue.

3.12. Safeguards Approach for Consolidating Nuclear Material

A presentation on NM consolidation in the UK explained why consolidation was necessary in an aging nuclear industry, where programs are abandoned, sites are closed, and legacy material has to be administrated and stored, having regard to safety and security. The presentation illustrated best practice of involving EC in the early planning stages.

3.13 IT developments in DG ENER-E

The Shared Resource Directorate (SRD 4.2) covering safeguards IT developments gave an overview of the software applications for accountancy and inspection as well as the underlying services and illustrated the interdependence between applications.

The reporting software that EC provide (ENMAS, ENMAS light and the CAPE software for use under AP) were explained.

The presentation described the role and the functionalities of new software used by inspectors, referring to necessary adaptations in the IT operating environment and the need to address safeguards operational specificities arising from the confidential nature of data and the need for inspectors to use and process such data in the field and in HQ.

3.13.1 Question and Answers on IT developments in DG ENER/E

One delegate asked when a new version of the CAPE reporting software would be available. EC replied that the new CAPE version was almost finished but that no definitive deployment date could be given yet.

Delegates wanted to know how Remote Data Transmission (RDT) as presented by SRD fitted into the IT infrastructure. EC explained the split responsibility for IT between DG ENER-E and SRD, and referred to an RDT presentation later in the day.

EC explained its VARO accountancy software and asked if MS representatives could please advocate the use of electronic format for accounting and reporting emphasising the advantages of electronic recording in limiting clerical errors.

3.14 Developing a Safeguards Approach to Final Disposal

The presentation on the safeguards approach to final storage and encapsulation provided an overview on the state of play in the EU and emphasised that any approach was to be tailor-made, flexible, unattended, relevant to needs, and cost-effective. The presentation described the experience in Sweden and Finland and referred to novel challenges and how the verification strategy, developed in intensive consultation with all actors, would address these challenges. It concluded with a projection on the possible stages in a '176 year safeguards odyssey'.

3.14.1 Question and Answers on Developing a Safeguards Approach to Final Disposal

One delegate mentioned the next meeting of the ASTOR group which advises the IAEA. The meeting will be held next year in May in Oskarshamn (SE). He continued by asking if EC would decide on its own about safeguards criteria applicable to final disposal and wanted to know if a legal basis existed obliging consultations under the safeguards by design (SbD) approach.

The Safeguards Director assured the delegate that without a legal basis it was and will continue to be a policy requirement. He referred to a large number of operators that have established good practice and involve the regulators early in their consultations a long time before the limits set out in Regulation 302/2005.

It was discussed that the IAEA might pursue an initiative to make SbD a legal obligation. The EC would have to follow if the IAEA proceeded and that would oblige the EC to revise its own obligations to accommodate IAEA policy.

One delegate stated that SbD might not be a legal obligation and that did not matter because SbD was a benefit to everyone, saving resources and providing planning security for all parties involved. She added that SbD was a national legal obligation in Finland. She referred to an example where the early integration of *e.g.* C&S measures had been cost effective and concluded that the concept worked best when safeguards elements were introduced as early as possible in the planning stage, and all actors were involved in consultations from the earliest opportunity.

3.15 Safeguards Technology Current & Future Development (part I)

The presentation on the latest developments in verification techniques provided updated information on measurement systems (non-destructive assay, destructive analysis) and on R&D cooperation for upgrading instrumentation with the aim of increasing efficiency and effectiveness. A comprehensive overview of R&D projects with the JRC institutes, the IAEA and US DoE set the scene for the EC request asking the support of MS in providing access to installations for testing new methods and tools in real industrial environment

3.16 Safeguards Technology Experience with RDT (part II)

The technical presentation continued with an overview of developments for surveillance and a major part of the presentation was dedicated to the experience with remote data transmission and its implementation in cooperation with the IAEA having regard to specificities in several MS. The presentation highlighted the importance of a solid risk assessment and described how seriously EC takes aspects related to security planning.

3.16.1 Question and Answers on Safeguards Technology Current & Future Development Safeguards Technology Experience with RDT

Further to an earlier question on the role of RDT in the Safeguards Directorate's IT infrastructure, one delegate asked about the legal basis for RDT.

EC referred to Article 14 of the AP granting the right to use modern technology and to Regulation 302/2005, which stipulates that the EC and the operator have to agree on the form of communication. EC gave examples of latest Particular Safeguards Provisions (PSP), where RDT was defined as a form of communication from operator to EC and had thereby been made a legal requirement.

3.17 Dual Use Regulation: Intra-EU Nuclear Transfers and the Additional Protocol

The last presentation was given by DG ENER-D.2 on the requirements for reporting intra-EU transfers under the Dual Use Regulation covering requirements arising from AP. The topic touched upon Export Control and the Intra-EU General Licenses for exports.

3.17.1 Question and Answers on Dual Use Regulation

One delegate wanted to know, if the informal subgroup, which had been set up before the summer to examine the question of intra-EU transfers of nuclear items, had started work.

EC answered that Commission participation was sensitive and the Commission would see its role as an observer. The subgroup had been brought under way but no major breakthrough had been achieved so far.

3.18 Wrap of the MS Meeting and Closing Remarks by the Safeguards Director

The Safeguards Director asked MS representatives about their wishes for the future format of the MS Meeting and one delegate suggested that the topics for a round-table discussion could be communicated early to the delegates *e.g.* together with the agenda, to allow for some preparation.

The Safeguards Director closed the meeting and invited delegates to the next MS Meeting in spring 2015.