Report back from
Working Group 1

Implementation of the Code of Conduct and HASS – ensuring ALARA

- *How far have the IAEA Code of Conduct and HASS been implemented?*
- *What feedback is there? For example, what improvements to security and safety have been achieved? (and how have these been demonstrated?)*
- *In which sectors have there been problems with implementation?*
- *What further improvements might be made?*
- *Are existing controls on the import/export of sources (legal or illicit) effective? What should be done at borders/monitoring stations to ensure that doses to persons are optimised?*

How far have the IAEA CoC and HASS been implemented?

The implementation of the HASS Directive (mandatory for EU MS) has more or less been completed, EC has not received any complaints about the implementation. In 2010, each MS has to report on their experience with the implementation.

There are some issues pending: harmonisation with the IAEA guidance on source categorisation is still in discussion. It is planned to include IAEA Category 3 sources when the HASS Directive is included in the new European BSS.

There is a difference between legal and practical implementation of the HASS Directive. EC has to make sure that countries have taken measures to implement the Hass directive not only in legal terms, but also down to the practical level. The end user often doesn't see the benefit, only the additional paper work.

The IAEA CoC is a non-legally binding set of principles and objectives. The IAEA encourages all States to express their political commitment to implement the CoC and its supplementary guidance.

In Canada, the provisions of the CoC and its guidance documents, are fully implemented.

What feedback is there?

The impact of implementing HASS/CoC on the national regulatory framework varies from country to country according to the pre-existing framework and the national circumstances.

In Switzerland, regulatory requirements are based on their own national limits derived from European Directives and ICRP publications, and are, in principle, in line with the IAEA CoC and the HASS Directive. However, harmonisation with EU values on exemption is foreseen for the future.

In Norway, a national register exists on all sealed sources above the exemption levels. The provisions are in line with IAEA CoC (same values) and also with the HASS Directive.

In Italy, there is a national register under development and regulatory infrastructure is being revised.

The possible impact on the exposures of workers and the public was discussed in terms of qualitative and quantitative aspects. In general, regulatory control has been strengthened and awareness of potential risks has been increased. Therefore, exposures might have been reduced. However, a quantitative impact is difficult to measure in practice.

In theory, increased safety measures and security checks of radiation sources could increase the exposure of the staff involved (source identification control, frequency of physical inventory, etc.). However, in practice this has not been reported.

The number of incidents is not a good indicator for the success of CoC/HASS, since incidents do not depend only on the practical implementation of CoC/HASS.

What improvements to security and safety have been achieved?

- Due to the IAEA CoC, the cooperation between all authorities involved in the process of implementation has been improved worldwide.

- The HASS directive has led to an increasing number of detection equipment, so sources are under better control and exposures can be avoided.

- When implementing safety and security measures related to CoC/HASS the exposure of workers could theoretically be increased (example: scanning procedures, training events). Therefore, the application of the ALARA principle is a key element. Presentations during the workshop demonstrated that for instance practical training to locate sources does include ALARA considerations for the trainees.

In which sectors have there been problems with implementation?

Sector specific issues:

In Germany, meetings between BfS (in charge of the national register), users of the register and source manufacturers were organised to discuss problems, such as the issue of identification numbers. The national NDT society helped NDT maintenance companies (in charge, for example for the exchange of radiation sources) to facilitate the implementation process by providing electronic tools.

Meetings were also held in the Czech Republic on various issues, such as import/export of HASS sources.

In Canada, the implementation of the CoC has been carried out in close consultation with the industry and other stakeholders.

In Norway, the regulator has been invited to NDT sector meetings to exchange information and experience and to communicate regulatory requirements, dose statistics, experience of inspections and incidents. NDT companies do not send notifications to the authorities when changing sources, suppliers have to send an inventory of sources to the authority every year.

What further improvements might be made?

- EU cross-border movement of radiation sources, for example for NDT field work over a short period of time:
  no or no harmonised exchange of information between the national authorities exists. This could be an issue for further discussion. Better cooperation and information between authorities of neighboring EU countries is necessary.
  This approach has already been taken between Canada and USA.
  In Spain, the NDT companies have to notify the authorities when moving sources, in other countries this might not be the case.

- Confusion between Regulation Euratom1493/93 and IAEA import/export guidance within the EU:
  The Regulation Euratom 1493/93 needs to be revised in order to comply with the IAEA import/export guidance with due consideration of the EU open market.

Recommendations

When the EU MS report their experience gained with the implementation of the HASS Directive to the EC in 2010, the EAN should support this process by ensuring that practical aspects of the implementation are included.

Better cooperation and information between authorities of EU countries on the movement of sources is necessary. This should be supported by ERPAN and the EC.

The Regulation Euratom 1493/93 needs to be revised in order to comply with the IAEA import/export guidance with due consideration of the EU open market. This should be initiated by the EC.

When implementing safety and security measures the ALARA principle has to be applied to ensure that protection of workers and the public is optimised. This issue has to be addressed by all parties involved.

The EAN could promote this idea in training courses and other ALARA events.