

**Summary and Recommendations of the 8<sup>th</sup> European ALARA Network Workshop on  
"Occupational Radiation Protection through Inspection and Self-assessment"  
Uppsala, Sweden, September 2004**

### **Workshop Objectives and programme**

A total of 70 participants from 19 European countries attended the 8th EAN Workshop on "Occupational Radiation Protection through Inspection and Self-assessment". Respectively half and one third of the audience were from the regulatory bodies and utilities from medical and industry sectors. The objective of the Workshop was "to assess how regulatory authorisation and inspection, and internal controls (peer reviews, self assessment, etc.) contribute to achieving ALARA for occupational exposure".

Previous workshops have increasingly focused on participants working in groups to discuss issues and develop recommendations. This trend continued in this workshop, in which half the programme time was devoted to Group discussions and report backs.

In total, there were 14 oral presentations, and 10 poster presentations, organised under the following titles:

- Setting the Scene;
- Regulatory Bodies and Control Organisations;
- Licensees; and
- Workers.

The opening session included a presentation of the results of an EAN questionnaire on the size and structure of national regulatory authorities. It also identified a series of issues and questions for later consideration by the Working Groups. There were two such sessions where the participants were split into 6 Working Groups tasked with addressing specific issues. The four main topic areas were:

- Inspection;
- Self assessment;
- Workers' involvement; and
- Communication between stakeholders.

The reports from these groups were presented and discussed on the final day, from which the key findings and recommendations from the workshop were derived.

### **Issues Arising**

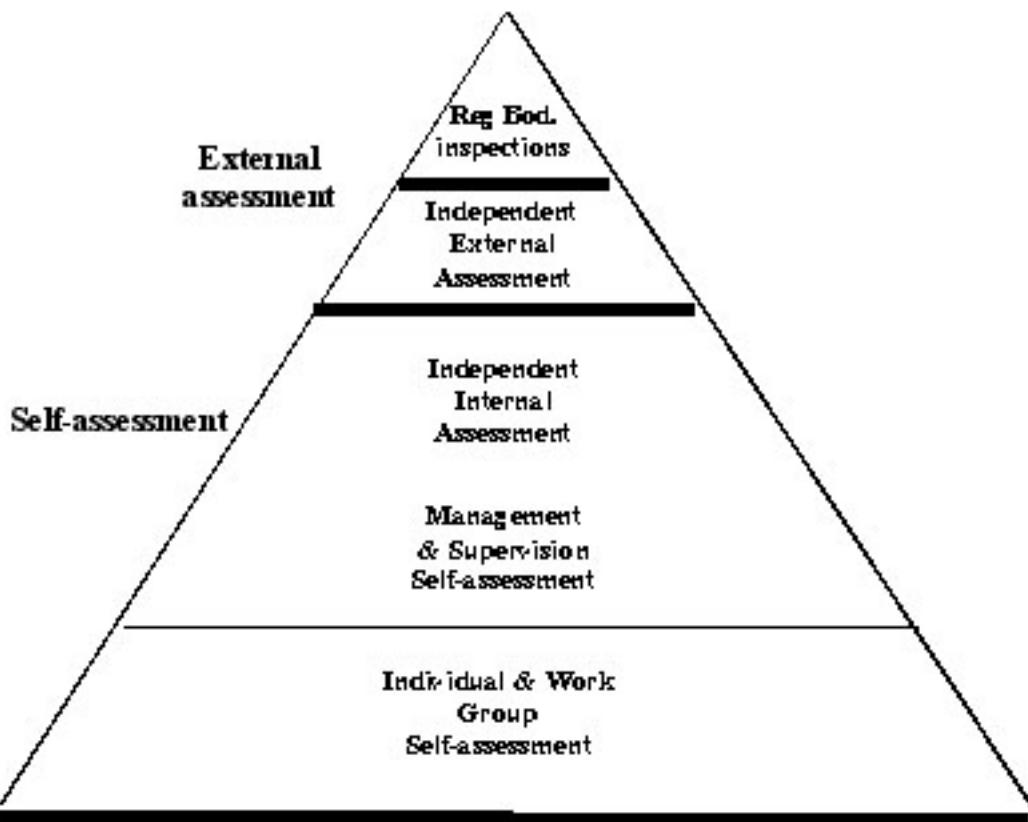
One of the main objectives of the EAN is to encourage optimisation through the sharing of information and experience. About half the participants were from national regulatory bodies, and the Workshop provided a valuable opportunity for exchanging information and ideas between these bodies. In addition, there was a general willingness from regulators and other stakeholders to openly discuss problem issues. In this respect alone, the workshop was considered to be of significant benefit. In addition to this, many issues were raised, from both

the presentations and the working groups, and from these a number of common themes emerged.

### The assessment layers

The full scope of the assessment is illustrated in Figure 1. It comprises five layers, of which two correspond to external assessment, and three to self-assessment.

*FIG. 1.Triangle of the assessment process*



The role of the different stakeholders in these different types of assessment, as well as their frequencies and pre-requisites have been discussed during the workshop. The main points that have been addressed are summarised below.

#### *Regulatory bodies and regulatory inspections*

- All the participating countries have one or more national bodies that are responsible for inspecting practices with a view to enforcing regulatory requirements. The resources devoted to inspection/enforcement vary, but are generally quite limited when compared against the number of practices. Consequently, priorities need to be set, and resources need to be appropriately targeted, to ensure effective regulatory control.
- Inspection and enforcement regimes vary between countries, but in all cases are regarded as an essential component of the control system. Such activities are not, however, sufficient by themselves, and Regulatory Body advice and guidance for users

can reach a larger audience, and thus lead to a better level of compliance overall. Having said this, the Workshop acknowledged that a balance was necessary to ensure that Regulatory Bodies do not encroach onto the responsibilities of (radiation) employers and Qualified Experts.

- The training of inspectors (from Regulatory Bodies or other external organisations) was raised several times. The view was that, as well as knowledge-based training in radiation protection, inspectors needed interpersonal skills to effectively undertake their work. In addition, training should include familiarisation with the approach to radiation protection within the different types of practice under their control. For example, it was suggested that inspectors in the medical sector should have received “on the job” training and experience in hospitals and other medical establishments.

#### *Licensees/Employers*

- It was agreed that self-assessment was central to maintaining regulatory compliance, and would usually aim to exceed regulatory requirements. Quality Management Systems are now an integral part of most businesses, and (radiation protection) self-assessment readily forms a component of such systems, as demonstrated in a number of presentations
- The amount of communication between regulatory bodies and employers varies considerably between countries. It was agreed that such communication should be encouraged, for example through consultation on draft regulatory changes, and through on-going liaison between the regulators and the regulated on issues/problems of common interest.

#### *Workers*

- The overriding impression was that more could be done to involve workers in both the drafting and enforcement of regulations. It seems that special initiatives, such as the creation of national bodies with formal liaison functions, or establishing stakeholder panels or workshops, are needed to make real progress in this respect
- It was agreed that Trade Unions, Professional bodies and other worker/safety representatives have a key role to play, and their involvement should be encouraged. They should be consulted on the drafting of regulations, and also be regarded as one of the main stakeholders in terms of regulatory inspections. As such, they should be notified of inspections, be consulted during inspections, and directly notified of the findings of the inspection.

Worker training is required to encourage their involvement. This should provide them with the required knowledge base to understand and critically review the precautions provided by employers for their own protection and to participate actively into the self assessment processes, as they are the only ones who should do it on a day to day basis. It should also be confidence-building, and help develop a “no fault” culture where workers are encouraged to question the status quo.

## **Recommendations**

Each working group produced conclusions and recommendations, and gave a report back on the final day of the workshop. The output of the Working Groups was collated by the EAN co-ordinators, to produce the formal recommendations of the Workshop, as listed below.

### **Recommendation 1: Inspector training**

**Regulatory Authorities** should develop and implement training programmes for regulatory inspectors. The aim is to ensure that inspectors have the necessary competence and experience to effectively undertake their duties. Training programmes should include:

- An initial training programme, including a scientific core of knowledge, and a code of conduct for undertaking inspections;
- Familiarisation with how work is undertaken in the different work sectors they will inspect; and
- A system for Continuous Professional Development.

**Regulatory Authorities** are encouraged to make use of standardised training material for inspections, such as provided by the IAEA.

**International Organisations** should be encouraged to provide guidance to Regulatory Authorities on training programmes and their provision.

**The European Commission** should be encouraged to develop competence criteria for inspectors for mutual recognition within the European Union.

### **Recommendation 2: Self-assessment**

**Regulatory Authorities** should ensure that self-assessment is an explicit requirement of the regulatory system, particularly through authorisations. Regulatory inspections should pay attention to how employers implement this requirement in practice.

**Regulatory Authorities** and **International Organisations** should develop guidance on the self-assessment principles, methods and tools appropriate for different practices. It is recognised that **IAEA** has already produced a number of documents that refer to the self-assessment procedures, and a review of these should be undertaken before any new guidance documents are produced.

**Employers** and **training providers** should ensure that self-assessment tools and methods are included in education and training programs for Qualified Experts, managers and supervisors, and workers.

### **Recommendation 3: Internal regulation (large utilities)**

The concept of an internal regulatory, or quality assurance, department is considered to be a helpful bridge between external regulatory inspections and self-assessment. This concept should be encouraged across the EU, especially for larger organizations, and with a special emphasize on new member states and applicant countries. The aim of this “internal regulator” is:

- To play an active role in ensuring that a satisfactory radiation protection system is in place
- To critically review the system with a degree of impartiality; and
- To assist and complement the existing external regulatory inspection regime.

### **Recommendation 4: Involvement of Trade Unions and other social partners**

**Regulatory Authorities** should ensure that Trade Union and other worker/safety representatives are consulted on the drafting of requirements for inspection and self-assessment. They should also be informed of planned regulatory inspections, involved in the inspection process, and directly informed of the results.

In turn, Employers should ensure that such representatives are consulted on self-assessment procedures and are involved in the implementation and review of such procedures in practice.

### **Recommendation 5 : Communication between Regulators and other stakeholders**

- In order to make efficient use of resources, **Regulatory Authorities** should develop systems for two-way communication with
- (groups of) workers in different sectors
- Qualified Experts;
- Employers’ representatives such as professional bodies/associations, from different work sectors; and
- Institutions providing radiological protection training

Topics should include consultation on new regulations, expectations of the different stakeholders, examples of good practice, and the emergence of new applications and protection methods. Formalised systems of communication could be an effective means for increasing the role of inspectorates and should, where practicable, be open and transparent.

### **Recommendation 6 : Worker involvement**

**Employers** should encourage and facilitate worker involvement in both external and internal assessments by:

- Ensuring a management commitment to worker involvement
- Providing appropriate training to empower workers and encourage questions; and by
- Clearly communicating results of inspections and self-assessments to workers.

### **Recommendation 7 : Communication between Regulatory Authorities**

**National Authorities** should promote communication between different **National Regulatory Authorities**. This should include the exchange of information on the licensing and inspection methods employed in different countries. Joint inspections, i.e. involving two or more Regulatory Bodies from different countries, should also be encouraged as a means of sharing information and experience. The creation of a network of contacts through which such information can be exchanged, is also recommended.

### **Recommendation 8 : Self-assessment and accident prevention**

The investigation of accidents often reveals a number of contributing factors that place workers under additional stress, and hence make accidents more likely. Employers are encouraged to consider such factors when developing self-assessment procedures, so as to help minimise the probability of accidents occurring in future.