CN-145 International Conference on Environmental Radioactivity: From Measurements and Assessments to Regulation

OPENING STATEMENT

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Distinguished delegates, ladies, and gentlemen:

On behalf of the Director General of the International Atomic Energy Agency, of my colleague, DDG Taniguchi of the Department of Nuclear Safety and Security, and on my own behalf, I welcome you to this International Conference on Environmental Radioactivity: From Measurements and Assessments to Regulation.

The understanding of and regulation of radioactivity in the environment is by its very nature a multi-facetted activity. It involves specialists from a wide range of disciplines including those taking samples and making measurements; those interpreting data; those making operational decisions based on such data; and those drafting regulatory legislation, standards, guides and procedures.

For the protection of the public and the sustainable management of the environment, it is, of course, very important that all of these people talk to each other, so that they learn what each others' needs are, as well as the limits of what is possible. As an example, developments in low-background, high-efficiency gamma spectrometry systems in recent years have made detection of ever-lower activities in environmental samples possible. This has implications for the levels of regulatory controls.

The roles of the IAEA in the promotion of nuclear science, and in setting international safety Standards and to provide for their application, are part of its Statute. To successfully carry out these duties, we need to act as the catalyst for bringing together people across a broad spectrum, and so we decided to organise this conference jointly between two Agency Departments. These are the Department of Nuclear Sciences and Applications I am heading, coming from the scientific and technological end of the spectrum, and the Department of Nuclear Safety and Security, which is coming from the regulatory and operational end.

Several organizations are cooperating with us in this event, these are the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), the South Pacific Environmental Radioactivity Association (SPERA), and two of our IAEA Collaborating Centres, the National Food Investigation Institute of Hungary (NFII) and the Belgian Nuclear Research Centre (SCK-CEN).

If we look to this diagram, we can see some of the key ideas behind this conference:



It shows the many and complex factors involved in the understanding and regulation of environmental radioactivity, and importantly, indicates their inter-dependence and linkages. Each step in the chain is worthy of consideration.

It was decided to start the conference at the "Regulation" point in the chain. In this way, the regulators, who are major users of the information gained in environmental investigations, can tell us what they need in order to do their job. Then the others in the chain can discuss the best way to supply this information in an accurate, reliable and timely fashion. This feedback mechanism is of crucial importance in the proper development and application of regulations and standards.

The next steps indicate the importance of the unbiased sample in environmental work, and we have given sampling a special emphasis in the conference programme.

Another point I would like to mention is the assurance of quality in sampling and measurements. Here the IAEA plays a key role with the provision to Member State laboratories of matrix reference materials and the organisation of proficiency tests and other interlaboratory exercises. It is proposed to strengthen this role in the 2008/09 programming cycle with a new project entitled "Reference Materials for Environment and Trade". The project will bring together and introduce better harmonisation of reference materials practices across our programmes, producing greater efficiencies. We look to the outcomes of this conference to help us in planning and implementing this activity.

Finally, we need to ensure that the best use is made of the collected data. The sixth session of the conference is dedicated to modelling and assessment, including discussion of radioecological and dosimetric models and the necessary input parameters. The IAEA has been active in organising intercomparison exercises in environmental radiation safety since the inception of the VAMP project in 1988, later with the BIOMASS project and eventually with the EMRAS project. The results of the EMRAS project will be extensively reported during the conference and will certainly serve as a basis for the audience to discuss the future need of the international community in this area.

Tested and validated models, using quality input data from properly collected samples, provide the summary information needed by regulators. – and so we come full circle.

I am pleased to see that the conference has drawn wide interest, with approximately 250 participants from 75 Member States. We are pleased to welcome representatives from CTBTO and from the European Commission. I am sure that your interactions will lead to many positive outcomes for our programmes, and I am looking forward to receiving your feedback.

Once again, I welcome you to the beautiful city of Vienna and to the IAEA, and wish you a successful and enjoyable conference.