

Distinguished Representatives.

I would like to express the appreciation of the International Atomic Energy Agency for your participation in this International Symposium dealing with the transport of radioactive materials.

I trust you had a pleasant journey here, and you did not suffer, as a result of delay or denial of transport.

Transport of radioactive material is a subject that — despite its long history of excellent technical performance, strong interactions with regulatory bodies at the international and national level, and wide application of well developed safety standards — continues to focus the attention of Society, and hence, that of regulators and the industry worldwide.

Around the world, tens of millions of shipments of radioactive material are made each year. These shipments serve a broad range of applications that benefit humankind — in fields such as medicine, industry, agriculture and electricity generation.

### *History and Background*

The transport of radioactive material has been subject to regulation for many decades, and the International Atomic Energy Agency, working with its Member States and all relevant international governmental organizations, has played a key role in fostering the establishment of those regulations and providing for their application.

Soon after the formation of the United Nations more than 60 years ago, the international community initiated efforts to harmonize international practices for the safe transport of hazardous goods, including radioactive material. The United Nations Economic and Social Council (ECOSOC) appointed a Committee of Experts to lead this effort, and for over four decades the Committee has co-ordinated with the IAEA on

safety standards covering the national and international carriage of radioactive material by all modes of transport. First published in 1961, the IAEA's *Regulations for the Safe Transport of Radioactive Material* are periodically revised to incorporate technical advances, operational experience and the latest radiation protection principles. We are nearing the 50<sup>th</sup> anniversary of this event.

### *Current International Framework*

These *Transport Regulations* address all categories of radioactive material [ranging from low to very high activity, including both fresh and spent nuclear fuel and high level radioactive waste]. Although recommendatory in nature, they constitute the basis for national regulations in many Member States, and generally become mandatory through the legally binding instruments of the relevant modal bodies, such as the International Maritime Organization or the International Civil Aviation Organization. In some cases, these instruments take the form of international conventions, such as the Convention on International Civil Aviation or the International Convention for the Safety of Life at Sea; in other cases, they take the form of regional agreements, such as the European Agreement Concerning the International Carriage of Dangerous Goods by Road. Overall, there are more than 20 worldwide instruments and 20 regional instruments in force that apply, directly or indirectly, to the safe transport of radioactive materials.

This current worldwide system of regulatory control, while not without flaws, has achieved an excellent safety record. Over several decades of transporting radioactive material, there has never been an in-transit accident with serious human health, economic or environmental consequences attributable to the radioactive nature of the transport goods. In recognition of this fact, the United Nations Scientific Committee on the Effects

of Atomic Radiation has noted these transport activities as having no radiological impact.

I really do think this excellent record demonstrates the positive influence of the Agency's *Transport Regulations*. However, safety cannot be ensured through the best standards if these are not widely, consistently and uniformly interpreted and applied. The Agency's experience shows that this is not always the case today.

### *Concerns and Areas for Improvement*

To illustrate the relevance and importance of these transport issues, let me give one concrete example. There is a strong and widespread need for access to nuclear and radiation medicine for cancer treatment in developing countries. The IAEA has been working to provide radiotherapy equipment and specialized training to assist countries in meeting this need. However, when doctors are available and have the right equipment, proper diagnosis and treatment cannot occur if shipments of essential radionuclides are denied by carriers, ports and handling facilities. The Agency itself is in some cases having difficulties in fulfilling its technical co-operation commitments to developing Member States as a result of these denials of service.

Clearly, much remains to be done to ensure that the transport of radioactive material can be undertaken for the benefit of humankind, while continuing to ensure safety and security to people and the environment, and while improving transparency through appropriate communication with all concerned. Both regulators and transporters — as well as all other stakeholders engaged in the safe transport of radioactive materials — must continue to be vigilant about transport safety and security, and must continually reassess their

practices in light of changes in technology and advancement in assessment techniques. This should include the consistent interpretation and application of international standards, which will in turn enhance the safety and reliability of these activities. But it is equally important that we seek to understand and address concerns related to safety, security and other aspects of radioactive material transportation.

### *Challenges for the next decades*

Now turning to the future, out of 65 countries that have declared their wish to develop a nuclear energy programme, in the next decades, for those which will have effectively started this long path, there will be a need for new transport routes for fresh fuel, followed by irradiated fuel transport...We are talking here of both road and sea transport, under the control of nascent safety authorities, with infrastructures which are still largely to be developed. This will be a difficult challenge for both industry, the regulators and the IAEA, to keep the safety record of class 7 transport at its present level.

I can see also that new routes will raise the focus on the security of transport. Today it is addressed mainly separately from safety. But the present, reasonable, trend to identify synergies and interfaces between nuclear safety and security, inside the IAEA, but also in the wider world, will most certainly impact also the approach the field of transport.

### *Conclusion*

As you may know, my appointment at the IAEA as Deputy Director General for nuclear safety and security is only 4 weeks old. One consequence is that I may be still around at the next PATRAM in three years time!

But if I am still a tenderfoot in Vienna, and if I still struggle to find my way, travelling between the various buildings in the

Vienna International Center, this appointment gave me the pleasure to renew links with old friends, and the transport community that I was part of some seven years ago.

Now, to conclude, I would like to say that at the IAEA I am, we are, convinced that an important way forward is to work together. Through cooperation we can find ways to support each other, and the synergies can lead to significant savings, as well as improved safety in transport. Transport has always been an area where the community has recognized the benefits of working with each other. It is a testament to your commitment, that so many of you are attending and participating in this meeting.

Just a few years ago the hosts of this symposium, the UK Department for Transport, met with representatives from the French regulatory body and from the European Commission to draft an agreement on working together. I understand that this has now flourished into an active association of competent authorities with around 20 members. Similar groups are emerging in different regions of the world.

We face many challenges, and it is our hope that some of the less technical issues raised in this forum can be taken forward to the conference we will be hosting in Vienna next year dealing with sustainable safety and security in the transport of radioactive material. I am convinced that effective cooperation between the IAEA, other international agencies, Member States and the industry will form the machinery we use to respond to these challenges. It is my hope that through this technical symposium and our conference next year we will be able to find a process which will facilitate the safe and secure door to door transport of radioactive material for the next half century.

Over the next few days you will have several papers presented to you by or on behalf of the IAEA. These represent a summary of the work we have been carrying out together over the past few years. They will present to you our joint achievements as a community, and hopefully will offer you a glimpse of what we can achieve by “**working together**” as, in the PATRAM 2010 symposium, we “**look into the future**”.