



ASSOCIATION OF EUROPEAN COMPETENT AUTHORITIES (AECA) FOR THE SAFE TRANSPORT OF RADIOACTIVE MATERIAL

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ABSTRACT

In the coming years there will be a significant increase in the number of shipments of packages containing radioactive material. The main contributors to this increase will be:

- *the medical sector;*
- *the transport of low level non-nuclear wastes to disposal sites;*
- *the nuclear industry from decommissioning activities and the revival of the nuclear sector.*

Clearly many of the challenges faced by a Competent Authority (CA) to demonstrate that the levels of safety provided by the transport regulations are being achieved in practice are common in many countries and it would be the most efficient and effective solution to share CA resources.

It is to meet this challenge that the creation of an ‘Association of European Competent Authorities’ has been made in February 2008. At the moment the EU countries involved represent more than 75% of the overall EU territory and population.

Broadly speaking the mission of the Association is to develop co-operation between Competent Authorities (CA). All the subject matters that are the responsibility of national Competent Authorities can be addressed in principal in the framework of the Association.

We propose to present the mission and objectives of the Association, the results achieved so far and the future developments envisaged.

INTRODUCTION

Each year in the European Union approximately 3 million packages of radioactive material (RAM) are transported of which 5-10% is related to the nuclear fuel cycle. In comparison, some 350 million transport operations of dangerous goods take place predominantly by the oil/petroleum industry.

The transport of RAM is an important activity for:

- the medical sectors, with daily deliveries of radiopharmaceuticals for diagnosis and treatment procedures;
- Industrial / agriculture applications for non-destructive testing applications such as measurement of tarmac thickness on roads, moisture content in soils, thickness of paper during manufacture, grain levels in combine harvesters;
- Nuclear power programmes, Uranium ores, uranium hexafluoride, new and spent reactor fuels, radioactive and contaminated waste products;
- Decommissioning programmes for radioactive and contaminated waste products.

Transport can be national and often international with more than one mode of transport being used, for example road – air or sea – road.



Industry has long recognised that transport needs an integrated approach to improve the efficiency and reliability of the transport systems they use for example by forming Trade Associations and user groups together with the formalised training for DGSA, RPA, RPS, ADR driver training, etc.

BACKGROUND

For international transports of dangerous goods the transport system includes import/export and modal regulatory authorities of more than one country and this has contributed to the exemplary levels of safety achieved for the transport of RAM.

Compliance with transport regulations is the most important factor that affects levels of safety. The continued support by Member States to review and maintain the IAEA Transport Regulations [1], upon which the modal regulations are based, maintains a continuing improvement process for the regulations whilst contributing to a basis on which to encourage public confidence.

Transport does not need more legislation but a common/harmonised interpretation and implementation of existing legislation. To achieve this would require in a sharing of knowledge and best practice thereby ensuring the levels of safety during transport are maintained and providing a mechanism for continuous improvement for the future at the implementation level.

It is on this basis that Competent Authorities decided to work together on the practicalities of sharing knowledge and best practices whilst developing a forum to derive common understanding and interpretation of regulatory requirements.

UK-FRANCE BILATERAL AGREEMENT

A bilateral agreement between the competent authorities from France and UK was signed in March 2006. The scope of the agreement was for the mutual recognition of certification of GB and French package designs that require multilateral approval.

The agreement led to formal programme of meetings between both authorities to discuss the package designs and the assessment processes and an increase in communication between technical assessors.

This agreement was subsequently revised to provide extended co-operation in February 2008, namely:

- i. Establish Principles, Regulations and Guidance
- ii. Establish an assessment and authorisation system that provides the foundation for operation
- iii. Assure Safety during operation
- iv. Communicate clearly
- v. Maintain competence

For the competent authorities this has provided an increased understanding of each others work, the rationale behind the two assessment processes and in doing so we have been able to clarify differences. This has proven to enhance working relationships between the two authorities with increased confidence to discuss issues arising.



From the applicants' viewpoint and users of the package designs submitted for certification, this has led to a reduction in the time necessary to obtain UK and French certification thereby enabling more reliable scheduling and programming of their businesses with the associated decrease in costs.

The benefits of this agreement led to the logical conclusion that we should seek to adopt the principles with other European Union competent authorities which led to the creation of the AECA.

VISION OF ASSOCIATION

The coordinated approach of the Association will develop a common and harmonised approach for the interpretation of the regulations for the transport of radioactive material (RAM) in the European Union (EU). This in turn will provide a proactive means of maintaining and developing a consistent high level of safety for the transport of RAM in all EU Member States.

OBJECTIVES OF ASSOCIATION

- To develop networking between competent authorities
- Share knowledge, best practice and, potentially, resources
- Identify issues / needs and participate in joint working groups with defined outputs
- Develop common understanding and promote more effective interaction between competent authorities at a working level

DOMAINS OF COOPERATION / WORK PROGRAMME

All activities that are the responsibility of competent authorities relating to the transport of RAM are possible candidates for cooperation. At the first meeting held in Brussels the following topics were agreed as a generic scope of work for the Association:

- (i) Interpretation/ implementation of legislation
Exchange of information for example;
 - Review of Member State variations,
 - Issues and initiatives in Member States,
 - Package assessment issues.
- (ii) Develop best practices and guidance for example;
 - Package Design Safety Report,
 - Radiation Protection Programme (Reduction of doses),
 - Packages not requiring CA approval,
 - Compliance Inspection Programmes for CAs (work in progress).
- (iii) Development of joint actions (in future);
 - Joint audits, inspections,
 - Exchange of staff for training.
- (iv) Develop a Process for mutual recognition of practices;
 - Reaching same objective by different means.
- (v) Adopt common position on changes to TS-R-1 at IAEA (work ongoing).
- (vi) Workshops;
 - Joint workshops on specific topics.
- (vii) Development of CIRCA site for communication www.circa.europa.eu (under development).



BENEFITS

For *competent authorities* there is an improved networking and understanding at a working level, it identifies best practice, it improves consistency of approach and provides a clearer understanding of the levels of compliance by understanding the assessment processes in each Member State.

For *industry* there should be in time more consistency in the regulatory processes thereby reducing delays at industry/regulator interfaces. There is also scope to reduce the number of denial of shipments caused by differing understanding of regulatory requirements which result in national variations of regulatory requirements.

For the *wider communities* the closer working of competent authorities should contribute to a basis of confidence that transport of RAM is, and will continue to be, safe in that the transport regulators are discussing issues concerning the interpretation, implementation and regulation in a forum targeting compliance and practicalities not regulations per se

MEMBERSHIP

Membership of the Association is voluntary and non-legally binding which is important as it does not diminish the legal authority or duties of the Member State.

Membership is open to all CAs from EU and Candidate Countries and currently 22 Member States participate (nuclear and non-nuclear Member States) which represents approximately 90% of the EU population and territory.

IAEA RESOLUTION (SEPTEMBER 2009)

At the IAEA General Council meeting in 2009 the IAEA stated that it welcomed networks of competent authorities whose goal is to support the harmonised implementation of the Agency's transport safety standards, and it called upon Member States to use these networks to build capacity in the effective regulation of the safe transport of radioactive material.

CONCLUSIONS

The Association is proceeding very well in that there is a clearer understanding of the issues that each CA faces and common areas for joint working have been established. There is no doubt that this way of working together on the practicalities, interpretation of regulation, assessment processes and regulator overview is a way forward for regulators that will produce many advantages for the CAs involved, for industry and for the continued improvement in levels of safety attained by the Class 7 industry sectors.

REFERENCES

- [1] The IAEA Regulations for the Safe Transport of Radioactive Material 2009.