

THE ROLE OF NATIONAL AUTHORITIES IN MINIMIZING DENIALS OF SHIPMENTS

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Abstract

Denials and delays of radioactive shipment have occurred and probably will always do. Reducing instances of denials to acceptable levels may be a tangible goal that consignors and consignees should envisage and pursue. The basis for solving denials and delays includes the participation of not only the national competent authorities but other authorities too. Shippers, consignors, carriers and consignees should include in their consultations the whole range of those authorities which apparently have no role to play but actually do. These "other authorities" who represent various State authorities may play an important role on this issue. Successful cases where port authorities, Civil Aviation authorities, airlines and other carriers have agreed to cooperate to minimize the problems are documented. These cases should be broadcast and adapted by other regions taking into account regional/national characteristics and ground realities. Brazil is a case in point as the national competent authority together with other authorities has arrived at a solution to the problem. Some successful cases documented in Brazil, provide the basis of a Model which would be useful for other regions to adopt and adapt. This paper describes and discusses some national experience and how IAEA Member States may use this experience to reduce the instances of denials and delays of radioactive shipment by developing similar models appropriate to their conditions.

Introduction

Much has been discussed and agreed on the need for specific actions to reduce instances of denials and delays of radioactive material. It is agreeable that instances of denials and delays of shipment have occurred for a long time and probably will always do. One may also say that reducing instances of denials to acceptable levels may be a real tangible goal that consignors and consignees should envisage and pursue. In these discussions a number key players are identified and the list includes consignors and shippers, carriers and consignees, freight forwarders and authorities.

When denials and delays were first addressed, i.e. at the International Conference of Transport Safety, organized by the International Atomic Energy Agency (IAEA) in 2003, it was unclear how much the national competent authority for the safe transport of radioactive material as well as other national authorities could do to minimize the problem. At that time the issue was thought by many to be merely of commercial interest.

A few years later many of the initial concepts on denials and delays changed and the wide range of information gathered by the IAEA and the International Steering Committee (ISC) constituted by IAEA projects a clearer picture thereby enabling identification of the role each stakeholder can be expected to play. The role is tied to the characteristics and functions the stakeholders have and are in charge of.

The National Competent Authority for Transport Safety

The designated Competent Authority (CA) works in liaison with other authorities such as customs authorities, port/airport authorities, district police, federal police, modal regulatory agencies, health and environmental authorities.

At international level the national CA interacts with organizations having similar functions and responsibilities and take part in expert missions. This brings them a broad view on transport problems and solutions. In addition communication channels among the CA's are established as they attend a number of meetings and conferences.

It is reasonable to expect the national competent authority having most of attributes necessary to take the leadership in implementing actions and measures to minimize denials/delays. However, experience shows that CAs aren't able or willing to play their part in addressing the issue. We may skip the reasons why CA's do not want to get involved in Delays and Denials (D & D) but it may be useful to split the CA into 3 groups:

- a) CA from countries where no instances of denials or delays have been documented and therefore the problem does not exist;
- b) CA from countries where such instances are documented but the CA understands this is an industry's problem and consequently no action is required; and
- c) CA from countries where the importance and relevance of the issue D & D is recognized and it is understood that a strategy must be developed and implemented and goals are to be established.

Thus the issue can be effectively addressed only if all the above three groups are brought together on a common platform. . The IAEA provides a common forum where all the CA's of its Member States are represented. The ISC by virtue of its composition is able to take along all the CA's. It would be possible to effectively address the issue only if a single approach is adopted by all the three groups of CA's. That is exactly what is recommended by the ISC for these groups.

The ISC Plan is divided into six action areas. For each area a suggestion of approach is presented and discussed. At the outset it must be agreed that the issue of D & D challenges the sustainability of transport of radioactive material and consequently the many peaceful applications of radiation in health care, industrial production, power production and several other uses such as smoke alarms and fluorescent lamps which contribute to the quality of human life.

Awareness – This is understood to be a method of recording sustainability problems in transport of radioactive material and is expected to make stakeholders aware of the events, their potential or real consequences, the underlying issues and their resolution.

For example: With few exceptions, personnel working at the competent authorities know very well about their national nuclear industry. In other words, they have accurate information on import/export of sources, main routes, number of shipments/month/year, quantities and activities been transported and, most important, the bottlenecks.

CA personnel are also in contact with main transport actors and stakeholders namely consignors, carriers, freight forwarders and consignees as these stakeholders depend of authorizations, certificates and permissions issued by the competent authority to carry out their duties.

A single action suggested here is that a paper prepared by the staff of CA addressing difficulties on the transport of radioactive material may be published in a national (specialized) journal thereby creating an excellent opportunity for other authorities to start identifying and discussing D & D issues in their modal transport.

Education & Training – The objective here is to improve the understanding of service providers and other major stakeholders so that they find it easier to comply with class 7 regulations.

IAEA has prepared a set of the so called targeted training modules. These modules were created to be used in short events (ex. 1 day meeting or seminar) in which a specific audience is provided with all relevant information appropriate to their duties and responsibilities. A staff from CA may group stakeholders on the basis of their role such as regulators, port/airport authorities, emergency services, trade unions, local councils, training providers, and others.

Communications – In this action area the CA may approach other authorities and, in a half-day meeting, present a background on the D & D issue and summarize the work done by the IAEA, the Steering Committee and Regional Coordinators. At this meeting the CA may also:

- a) Introduce the International Action Plan,
- b) Make available the list of National Focal Points,

- c) Suggest other authorities to hold general awareness seminars; and
- d) Advise them on how contact/interact/work the ISC.

It would be pertinent to point out here that this line of approach was adopted by Brazil. The national competent authority of Brazil brought together all the stakeholders in the field of transport of radioactive material including other State Agencies who would have an interface. Each participant in the discussion was encouraged to present their requirements. No compromise on the standards of safety and other governmental regulations was considered. In simple terms each player was helped to understand and appreciate the roles of each of the other members and an approach was derived which would ensure unhindered safe transport of radioactive material in complete conformity with all national and international regulations!

Lobbying – This action area is intended for marketing, outreach and promotion of industries requiring transport of radioactive material and for promoting a positive image of use of radioactive material. The following remarks reflect the perceptions about lobbying.

- ✓ This is a truly controversial area indeed. This area of action has been an object of criticism in by the representatives of the competent authorities.
- ✓ This approach can pose a potential conflict with the regulatory functions
- ✓ Competent authorities have no experience nor the skills required for promoting the use of nuclear energy it is in fact against the “culture” of competent authorities to canvass for what they regulate.

Economics – The purpose of this approach is to identify and reduce economic burdens causing sustainability problems. The economic gains from the applications of radiation are likely to be neutralized to a great extent by the delay or denial of shipment of radioactive material. This is of serious concern. In addition, it is argued with good reason that alternative routes of transport of radioactive material resulting from its denial or delay would involve not only considerable expenditure but also add to the carbon cost.

Harmonization - This aspect deserves a lot more attention than is presently being accorded to it. All the international instruments governing the transport of radioactive material are harmonized. Yet, the national regulations are at variance with one another. Such variance is occasioned by the peculiarities of the legal systems of individual states and hence is unavoidable to a large extent. This action area seeks to identify where differences of interpretation of international regulations or additional requirements (e.g. state variances, local requirements, and environmental requirements) which may result in denial or delays. That done, the issue becomes amenable to solutions because, if the consignor and the carrier are aware of the variations in the regulations of different states, non-compliance can be reduced considerably.

The National Focal Point profile

The ISC and the IAEA attach great importance to NFP. ISC understands the NFP to be pivotal to ensuring that the causes and, in some cases, instances of denials and delays of shipment of radioactive material are addressed and successfully resolved.

Because of the wide range of information and data as well as national and international experience on transport safety, members of the national competent authorities are identified as the appropriate persons to play the role as national focal point.

The NFP is typically a senior/high ranking official with appropriate managerial and technical competence, appointed as the NFP and given the appropriate authority, resources and infrastructure by the Member State to fulfill the roles and responsibilities identified for the NFP.

The specific roles of a NFP include:

- To advise appropriate agencies (both governmental/non-governmental) on all aspects of denials and delays of shipment of RAM;

- To be the interface between the government, regional coordinators and the IAEA in all matters related to planning, facilitating and monitoring of shipments of radioactive material and evaluating the reasons for denials;
- To serve as a resource centre for knowledge about the IAEA's denials of shipment;
- To ensure that lessons learned and the proposed corrective actions, adaptations and innovations for future solutions are documented and reported to the regional coordinators and the Denials Secretariat at IAEA;
- To interact with network members, NFP counterparts, Regional Coordinators (RC) and the IAEA with a view to resolving issues relating to the denial/delay of shipments of radioactive material.

The IAEA understands that the effectiveness of the NFP is highly dependent upon a set of competencies that reflect core knowledge and judgment, management aptitudes and behaviors, and leadership skills to drive proactively the cooperation process with a result-oriented approach and inspire innovation and organizational learning. The following attributes are expected from any one designated to act as NFP:

- Strategic planning - (Communication, cooperation, facilitation, analysis and evaluation);
- Approach determination - (identification of approach, proposed solutions);
- Operational actions - (Implementation, measurement & report).

The Brazilian Model of minimizing Denials and Delays - a Case Study

Brazil has more than 3500 licensed facilities handling radioactive material. About 100,000 shipments per year, mostly radiopharmaceuticals are carried by air/land. These numbers reflect the quantum of transport activities in the country. The transport of radioactive material used in the nuclear fuel cycle (ores, yellowcake, UF₆, fresh fuel) which are intended for peaceful purposes are significant in quantities and involve considerable revenue to the transporters. Transport of sources for therapy, remarkably Co-60 – are relevant due to the social impact, namely, health care.

Over the last 10 years sustainability problems in transport of radioactive material have been documented and addressed on case-by-case basis. Records show that instances of denials and delays have occurred in all transport modes, but mostly in transport by air. Reasons for refusals refer mostly to lack of information and/or mainly associated to risk perception. Up to 2003 the instances of denials were brought to the attention of the Competent Authority and recorded but were not used as basis for a systematic solution. Specific cases requiring actions from the national competent authority for transport safety were addressed as being due to communication inefficiency. Difficulties in transport continued to be reported. When D&D do not constitute a regulatory issue, the CA would not be of much help.

Due to actions developed by the IAEA, the engagement of the Brazilian industry in providing relevant reports on D&D and proactively working with the international community, the CA reviewed its position and decided to join the international efforts in minimizing the problem. The nomination of a National Focal Point allowed a series of actions to be started. A national committee was established and a domestic action was outlined.

The thrust of the approach adopted by Brazil was to take all stakeholders on board. A broad-based committee was formed by the national competent authority. The committee included modal transport agencies, port/airport authorities, service providers, shipping lines, airport administration, isotope producers, nuclear fuel suppliers, carriers and other relevant stakeholders joined the committee. Apparently each member of this committee has his own interest in the transport of radioactive material and could not be expected to “surrender” their claims. At the same time the economic and social impact of the delay and denial of shipment had to be appreciated by all the members.

It was necessary for each member of the committee to be informed about the need for transporting radioactive material and the positives of such transport. With that knowledge it was easy to see the negatives of delay and denial. The next logical step was to examine the reasons for such denials. It was appreciated by the committee that with improved coordination among the members of the committee it would be possible to address the issue more effectively. For example, instances of delay or denial due to procedural requirements were sorted out by informing the concerned stake holders, e.g., the carrier, about such requirements which led to compliance thereby eliminating delays and denials due to non-compliance with procedural requirements. There were instances where the concerned agencies were brought together to facilitate transport of radioactive material without any agency compromising or surrendering its position.

The success of the Brazilian Model stems from the fact that an objective and coordinated effort among all stake holders with proper communication based on correct information could drastically reduce instances of delay and denial to insignificant levels. That is, bring all stake holders together to form a single forum. Understand the position of each member of the forum. Seek a solution objectively with a good knowledge of the need for the transport of radioactive material. The simplicity of this approach recommends itself to easy adoption in different regions with the necessary adjustments to take into consideration the local situations. The efficacy of this approach is evident from the fact the number of delays and denials has reduced considerably in Brazil. The cooperation among the members of the committee has to be continued. It is an ongoing process which may have to be tweaked periodically to incorporate the changing situations.

It is evident from the above that a concerted effort aimed at addressing the issue objectively without compromising the standards of safety or any regulatory requirements could well lead to a way out of the problem.

Conclusions

From the above discussion which considers certain aspects of delay and denial of shipment the following conclusions may be drawn:

- Denials and delays of shipment of radioactive material are no longer a single business issue or problem. It needs to be addressed in a holistic view/approach and by a wide range of authorities.
- A national competent authority for transport safety may or not recognize the existence of difficulties in accepting class 7 cargos for transport. However, a national competent authority should be concerned if a shipment which is deemed to be in compliance with its regulations for the safe transport of radioactive material is denied on grounds of safety.
- It is up to a national competent authority to decide as to whether or not to take part in actions aiming to eliminate or minimize denials problems. However, it may wish to help/advise other authorities in addressing D & D problems by using the attributes and expertise it has accumulated.
- Other authorities may benefit from the variety of resources available to the CA.
- By discussing D&D issues in their modal forum, other competent authorities may perform a relevant role on D&D issues as potential problems are identified and reported to ISC, IAEA, NFP, RC.
- A competent authority taking part in actions aiming to minimize sustainability problems but wishing not to prolong its participation may define strategy and deadline to move out from the activity, but in this case it should prepare a replacement to it.
- The issue of delay and denial of shipment of radioactive material can be effectively addressed by a combination of objective professionalism and cooperation as demonstrated by the Brazilian experience.

References

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[2] International Atomic Energy Agency, Roles and Responsibilities of National Focal Point on Denials of Shipment, IAEA CS-169/WP03, Vienna, December 2008.