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Denials and Delays of Radioactive Material Shipment

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ABSTRACT

Denials & delays of shipments of radioactive materials forms an important issue today. Radioactive materials need to be transported using all modes of transport for use in different applications such as public health, industry, research & production of nuclear power. The transport of radioactive materials is governed by national & international regulations, which are based on the International Atomic Energy Agency (IAEA) regulations for safe transport of radioactive materials (TS-R-1). These regulations ensure high standards of safety. Recently there were increasing numbers of instances of denials& delays of shipments of radioactive materials even when complying with the regulations. The denials & delays can result in difficulties to patients& others who rely on products sterilized by radiation. Therefore there is an urgent need for a universally accepted approach to solve this problem. In response, the IAEA has formed an International Steering Committee (ISC) on denials and delays of radioactive materials. Also, it designate the National Focal Points (NFP) representative to help the ISC members & the IAEA by informing about denial operations & how they can help. The Steering Committee developed & adopted an action plan which includes the action to be taken. This plan is based on: Awareness, Training, Communication, Lobbying for marketing, Economic & Harmonization among member states. It is important to work within the mandate of the ISC& in the line of action plan on denials and delays. It identified the following network members such as: National Focal Points, Regional Coordinators, National Committee, National Representative for different modes of transport& similar bodies, Carriers, Producers& Suppliers, Different civil societies, NGO's, Ministry of transport& others.

INTRODUCTION

The use of radioactive material is an important part of modern life and technology. Radioactive material is used extensively in medicine, industry, agriculture, research, consumer products and electric power generation. Every day a few million diagnostic procedures are carried out all around the world using radioactive material. Tens of millions

of packages containing radioactive material are transported each year throughout the world⁽¹⁾. The quantity of radioactive material in these packages varies from very small quantities in shipments of consumer product to very large quantities in shipments of irradiated nuclear fuel.

The International Atomic Energy Agency (IAEA) issued regulations which provide standards for insuring a high level of safety of people, transport workers, property and environment against radiation, contamination and criticality hazards as well as thermal effects associated with the transport of radioactive wastes and material⁽²⁾.

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Denials of Radioactive Material

Denial is the refusal to carry a radioactive material (RAM) though it conforms to all the applicable international regulations.

Denial is a result of lack of acceptance due to :

- Carrier policy not to carry RAM.
- Captain refused to load RAM.
- Port refusal to allow access where capability exists.
- Municipal Federal government refused to allow transit/ transshipment.

Major Causes of Denials

- Lack of training.
- Lack of harmonization between Regulations.
- Lack of communication.
- Lack of understanding of uses of RAM.

IF you experience a denial of RAM shipment you should:

- Notify the local NFP.
- Send all personal details (Tel, Fax, E-mail & name)
- Send the UN number, mode of shipment (air, road or sea)
- The NFP will keep all information confidential

Training

Training in the field of RAM transport is very important to the front line personnel (Cargo handlers, Custom members, Shipping Agent and Carriers) The training course is based on the IAEA training materials^(3,4). Such course is important in the issue of denials and delays of RAM shipments specially the short half-live isotopes.

Shipper obligations prior to charging “Denial”

- Evaluate, challenge and discuss shipping options.
- Obtain data on capability to carry, ship or transit through.
- Contact available resources to assist in convincing/educating those involved.
- Discussing with NFPs involved (Country of origin and country of destination).

Once obligations met,

- Complete Denial Report form.
- Submit to your NFP (All details).
- Answer questions of NFP.
- Follow up with NFP submission to IAEA/IMO/ICAO.
- Support investigations discussions in review of denial.
- Congratulate and thank NFP/IAEA/IMO/ICAO upon resolution of denial.

HISTORY AND STRUCTURE

In 2006, to increase transparency, seek effective solutions and permit participation of interested parties, the IAEA created a senior level International Steering Committee (ISC) on Denials of shipments of Radioactive Material. This ISC includes representatives from IAEA Member States, International Governmental and Nongovernmental organizations and industry. The Committee’s mandate is to coordinates international efforts at determining solution of issues related to the denial of shipments.

In order to facilitate the ease of communication between the Steering Committee and Member States, The Steering Committee identified the need for a National Focal Points (NFPs) to be nominated by the Member State.

The structure of the committees and networks was reviewed and more cohesive approach was recommended, with a skeleton made up of the National, Regional and International government nominated representatives.

Roles and Responsibilities of National Focal Points (NFPs)⁽⁵⁾

The roles and responsibilities of an NFP’s are:

- To serve as the principal focal points for advising appropriate agencies (governmental/non-governmental) on all aspects of denials and delays of shipment of RAM.
- To serve as the interface between government, the regional coordinators (RC) and the denials secretariat (DS) in all related matters and evaluating the reasons for denials.
- To serve as a resource center for knowledge about IAEA's denials of shipment and ensure that lessons learned are documented and reported to regional coordinator and denials secretariat.
- To interact with network members, NFP counterparts, regional coordinators and denials secretariat, to resolve issues relating to the denials/delays of shipment of RAM.
- Review the successes and failures of interventions and provide feedback to the RC and DS.
- Will maintain a record of activities regarding the delays and denials of RAM.
- To initiate and maintain a national network for coordinating work related to delays and denials of shipment of RAM.
- To identify national needs including training in the area of delays and denials of shipment of RAM with cooperation of the stakeholders.

Examples of stakeholders to be involved in National Networks.

Duty Holders Such as :

Package designer, Packaging manufactures, Packer, Consignor, Carrier, Driver/ Pilot/ Captin and Clearing Agents.

Regulators Such as :

Environment, Transport-Road, Transport-Rail, Transport-Air, Transport-Sea, Radiation Protection, Nuclear Safety, Law Enforcement and Security.

Emergency Services Such as :

Police, Fire, Ambulance and Coastguard .

Transport Workers Such as :

Vehicle loaders and Unloaders, Distribution staff, Freight Forwarders, Cargo handlers and Consignee.

Other Authorities Such as :

Airport authorities, Port authorities, Rail authorities and Tunnel authorities.

Other Government Departments Such as :

Customs, Border officials and Embassy officials .

Other Groups Such as :

Trade unions, Radiation Protection Advisor Trade associations, Training Providers and General Public.

Roles and Responsibilities of Regional Coordinator⁽⁵⁾

The roles and responsibilities of Regional coordinator are :

- To serve as coordinator and to conduit for knowledge about the IAEA's denials of shipment to NFPs.
- To serve as the interface between the NFPs of the region, the ISC and the denials secretariat in all related matters.
- To inform the ISC/IAEA on the severity and importance of specific cases of denials and delays of shipment of RAM in the region .
- To support NFPs to seek adequate solutions to the problems with the help of agencies like IMO, ICAO, IATA, etc...
- To represent the region at the meetings of the ISC and assist the ISC in formulating relevant policies and strategies.
- To build a knowledge base for regional facilitation and identify potential areas for national/regional/international collaboration and participation of others.
- To support a regional web page through the IAEA platform.
- To maintain current knowledge on the status of denials of shipments in the region.
- To coordinate with representatives of the international organization, associations and NFPs in the region for training needs.
- Through other regional coordinator:
 - Keep upto date on progress, problems and actions concerning denials of shipment, and
 - Facilitate solutions by taking actions as necessary.
- To coordinates implementation of actions determined by ISC according to regional priorities.
- To develop, evaluate and review the implementation of the regional action plans.
- To review the success or failure of delivered solutions and to provide feedback to the denials secretariat.
- To assist other regional coordinators as necessary .
- To monitor and encourage timely completion of activities as per the regional action plans.
- To organize the preparation and submission of half-yearly/annual updates to the DS.

Roles and Responsibilities of the International Steering Committee⁽⁵⁾

The roles and responsibilities of the International Steering Committee are:

- To Provide IAEA with presentations completed and progress updates.
- To identify opportunities for furthering the efforts of the steering Committee.
- To identify stakeholders, who are key to sustainability of radioactive material transport .
- To develop an outreach programme involving conference participation, journal articles to positively influence the stakeholders, incorporate in action plan.
- To monitor action plan and record changes resulting from it at Steering Committee annual meeting.
- To provide the Director General of the IAEA with annual report to communicate back to Member States .
- To elaborate an effective strategy of communication .

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