

<b>Transporting Radioactive Material – Security Guidance on the Carriage of Class 7 Radioactive Material</b>			
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# 1. Introduction

## 1.1. Purpose

- 1.1. This guide has been prepared primarily to help non-nuclear sector duty holders transporting radioactive material by road in Great Britain to determine:
- the security requirements to be complied with in the transport of all Class 7 radioactive material; and
  - the additional provisions to be implemented for transporting dangerous goods of Class 7, high consequence radioactive material.

## 1.2. Scope and Applicability

- 1.2. The carriage of dangerous goods, including radioactive materials, is regulated by the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (CDG). All persons engaged in the carriage of Class 7 radioactive material by road shall consider the security requirements set out in Chapter 1.10 of ADR<sup>1</sup> commensurate with their responsibilities. This document provides guidance on the interpretation of the implementation of the security provisions contained in the ADR.
- 1.3. For the purposes of Chapter 1.10 of ADR, security means measures or precautions to be taken to minimise theft or misuse of dangerous goods that may endanger persons, property or the environment.
- 1.4. More detailed guidance is available in technical inspection guide [NS-INSP-GD-072](#)

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<sup>1</sup> ADR refers to the Agreement Concerning the International Carriage of Dangerous Goods by Road. CDG refers to ADR requirements for road transport of dangerous goods in Great Britain.

## 2. General Provisions for the Transport of all Class 7 Radioactive Material

### 2.1. Company Roles and Responsibilities

- 2.1. Depending on the size of the organisation, there could be one or more persons managing security. However, it is ONR's expectation that one person in an organisation should have overall responsibility and accountability for ensuring the security requirements are met. A security function should be included in the job description of all persons engaged in the carriage of radioactive material and they should ensure that they understand their responsibilities.

### 2.2. Recruitment

- 2.2. Documentary evidence of the background and experience of anyone being recruited should be obtained. When conducting pre-employment checks, candidates should be asked for the following information:
- Full name.
  - Address.
  - Date of birth. Employers should insist on seeing the applicant's original birth certificate, not a photocopy.
  - National Insurance or other unique personal identifying number where appropriate.
  - Details of any past criminal convictions by requesting a disclosure certificate (where this is allowed by law).
  - Full details of references (where applicable).

### 2.3. Temporary Storage during Carriage of Class 7 Radioactive Material

- 2.3. Areas used for temporary storage of radioactive material shall be properly secured, well-lit and, where possible and appropriate, not accessible to the general public (Section 1.10.1.3 of ADR refers). All relevant areas should be subject to a security risk assessment to establish what measures are required to prevent unauthorised access and action taken accordingly to reduce identified risks. A Risk Assessment Template and information on conducting a Risk Assessment is contained in the Department for Transport (DfT) publication, 'Security Guidance on the Carriage of Dangerous Goods by Road and Rail', which is available on the DfT website at <https://www.gov.uk/government/publications/security-requirements-for->

[moving-dangerous-goods-by-road-and-rail](#). This document also contains security guidance and measures for the transport of all other classes of dangerous goods.

## 2.4. Parking and Short Stops

- 2.4. For the purposes of ADR, parking or necessary short stops during a journey are not considered temporary storage. Temporary storage does not encompass overnight parking or stops en-route, as 'parking' is not the same as storage. The requirements for parking and supervision are defined in ADR Section 8.4.
- 2.5. However, in accordance with ADR Section 8.5 S21, the provisions of Chapter 8.4 need not be applied where:
- (a) The loaded compartment is locked, or the packages carried are otherwise protected against illicit unloading; and
  - (b) The dose rate does not exceed 5 µSv/h at any accessible point on the outer surface of the vehicle.
- 2.6. In addition, if these goods are high consequence radioactive material, they must be supervised in accordance with the security plan required by ADR Section 1.10.3.2 at all times to prevent any malicious act and to alert the driver and the competent authorities in the event of loss or fire (see Section 1).
- 2.7. If the goods are high consequence radioactive material, then the security plan should address the issue of supervision overnight on a case-by-case basis. Supervision overnight should also take into account restricting so far as is reasonably practicable the extent to which its employees and other persons are exposed to ionising radiation (Ionising Radiations Regulations 2017 (IRR17) Regulation 9 and ADR Section 1.7.2.2).

## 2.5. Identification

- 2.8. Each member of a vehicle crew shall carry with them means of identification, which includes their photograph, during carriage of dangerous goods (Section 1.10.1.4 of ADR refers).
- 2.9. Photographic identification must be carried at all times during carriage. A driving licence or passport would be sufficient to meet this requirement.

## 2.6. Security Training

- 2.10. The training and the refresher training specified in Chapter 1.3 of ADR, shall also include elements of security awareness (Section 1.10.2.1 of ADR refers).
- 2.11. Duty holders are required to provide security awareness training for everyone engaged in the carriage of Class 7 radioactive material. This training shall include the actions to be taken in the event of a security breach. In the event of a security breach, in addition to following company procedures and notifying the police if applicable, the duty holder shall report the occurrence to the competent authority, ONR, in accordance with the requirements detailed in Section 1.8.5 of ADR. Duty holders should be aware of the procedures for reporting occurrences to ONR, this can be found on the ONR website at <https://www.onr.org.uk/notify-onr.htm>
- 2.12. In addition to in house training, security training can also be obtained from private training suppliers or government departments including the Centre for the Protection of the National Infrastructure (CPNI) [www.cpni.gov.uk](http://www.cpni.gov.uk) and Counter Terrorism Security Advisors (CTSAs). [www.gov.uk/government/organisations/national-counter-terrorism-security-office](http://www.gov.uk/government/organisations/national-counter-terrorism-security-office)
- 2.13. Security training shall be periodically supplemented with refresher training. It is recommended that security awareness training is refreshed either at two to three yearly intervals or following a significant event. Records of all security training received shall be kept by the employer and made available to the employee or competent authority, upon request. Training records should be retained in a secure location for a minimum of four years from the date of the training.

## 3. Provisions for High Consequence Radioactive Material

- 3.1. In addition to the above guidance duty holders involved in the carriage of Class 7 high consequence radioactive material, also known as high consequence dangerous goods, are subject to additional security requirements.
- 3.2. High consequence dangerous goods as defined in the ADR, are those which have the potential for misuse in a terrorist event and which may, as a result, produce serious consequences such as mass casualties, mass destruction or, particularly for Class 7, mass socio-economic disruption (Section 1.10.3.1.1 of ADR refers).

### 3.1. Security Plans

- 3.3. Security Plans are required for carriers, consignors and other participants engaged in the carriage of high consequence radioactive material (Section 1.10.3.2.1 of ADR refers).
- 3.4. Duty holders are required to comply with a security plan that addresses at least the following elements:
- **specific allocation of responsibilities for security to competent and qualified persons with appropriate authority to carry out their responsibilities:** one person should have full responsibility for security procedures and have sufficient authority to design and implement these. The person responsible for security should control the security plan and the sharing of the information as required within the organisation.
  - **records of dangerous goods or types of dangerous goods concerned:** a summary of the types of Class 7 radioactive material regularly carried should be included. Records of Class 7 radioactive material transported, should be kept for a minimum of 3 months from the date of carriage.
  - **review of current operations and assessment of security risks, including any stops necessary to the transport operation and the intermediate temporary storage of dangerous goods:** the purpose and scope of the plan and an overview of the current operation should be included at the start of the document. This will set out the reasons for the plan, how and why it applies to the business and the carriage of Class 7 high consequence radioactive material. Security plans should consider whether drivers should be encouraged to keep their cab doors and windows closed and locked throughout the journey.



- **clear statement of measures that are to be taken to reduce security risks, commensurate with the responsibilities and duties of the participant, including:**
  - **training;**
  - **security policies (e.g., response to higher threat conditions, new employee/employment verification, etc.):** consideration should be given to changes to business or national threat levels. Up to date information and guidance regarding the National Threat Levels can be found at <https://www.mi5.gov.uk/home/news/news-by-category/threat-level-updates.html>
  - **operating practices:** document how Class 7 high consequence radioactive material is accepted and the process for determining specific security requirements necessary for a particular movement such as how movements are controlled and monitored to ensure security. Additionally, the plan should detail how any problems with the movement are dealt with, for example during unplanned stoppages.
  - **equipment and resources that are to be used to reduce security risks:** identify and record the equipment and resources deployed in the security arrangements for Class 7 high consequence radioactive material movements.
- **effective and up to date procedures for reporting and dealing with security threats, breaches of security or security incidents:** detail the system or procedures in place for reporting a security incident or a security concern.
- **procedures for the evaluation and testing of security plans and procedures for periodic review and update of the plans:** detail the requirement for testing of security plans and the frequency for periodic review and update of the plans.
- **measures to ensure the physical security of transport information contained in the security plan:** state how the information in the plan is protected from unauthorised access e.g., held electronically on a password-protected computer in a location with restricted access. If printed, the plan should be kept secure and treated as a sensitive document, only to be shared with emergency services or the competent authority on request. Everyone with access should be aware that this information should only be made available on a need-to-know basis.

- **measures to ensure that the distribution of information relating to the transport operation contained in the security plan is limited to those who need to have it:** detail the measures in place to restrict the distribution of information about the Class 7 high consequence radioactive material transport operations to those who need to have it.

## **3.2. Devices, Equipment or Arrangements to Prevent Theft**

- 3.5. Devices, equipment or arrangements to prevent the theft of the vehicle carrying high consequence radioactive material and its cargo, shall be applied and measures taken to ensure that these are operational and effective at all times. The application of these protective measures shall not jeopardize emergency response (Section 1.10.3.3 of ADR refers).
- 3.6. The application of measures to prevent theft will need to be determined by the transport operator and the consignors. Examples of devices and equipment include locks, seals and tracking devices. Duty holders should seek specialist advice from commercial organisations, CTSA's or CPNI when appropriate. There should be a system in place for reporting failures of devices, equipment or arrangements. It is advisable that drivers have a means of communication at all times when carrying Class 7 high consequence radioactive material.