

GUIDELINES FOR TRANSPORTATION SECURITY



Responsible Care

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Disclaimer:

This document is intended for information only and sets out guidelines concerning the main security risks involved in the transportation and associated storage, loading or unloading of chemicals. The information contained in these guidelines is provided in good faith and, while it is accurate as far as the authors are aware, no representations or warranties are made with regards to its completeness. It is not intended to be a comprehensive guide to all detailed aspects of the transportation of chemicals.



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1. INTRODUCTION

These guidelines are intended for the management of chemical companies, transport companies or other logistics service providers with responsibility for the secure transportation and associated storage, loading or unloading of chemicals (raw materials and finished products).

These guidelines do not attempt to provide a comprehensive overview of all security issues for chemical transports, but concentrate on the main issues that should be considered when evaluating and implementing measures for security management.

2. SCOPE

These guidelines address the main security risks that are related to the transportation and associated storage, loading or unloading of chemicals and the measures that should be taken to manage these risks.

This document contains guidelines for:

- in-transit security during transport of **dangerous** goods (Section 3) and;
- security on chemical sites involved in the transportation and associated storage, loading or unloading of **any** goods (Section 4).

3. SECURITY DURING TRANSPORT OF DANGEROUS GOODS



Companies that are engaged in the transportation of dangerous goods by all modes of transport should take into account the security provisions included in Chapter 1.4 of the UN Recommendations on the Transport of Dangerous Goods (see Appendix A). For transport of dangerous goods by road, rail and inland waterway the modal security provisions included in UN Chapter 7.2 should also be taken into account (see Appendix A). The new security provisions that will be included in the modal regulations for the transport of dangerous goods (ADR, RID, ADN, ICAO, IMO) must be implemented when they will enter into force.

Companies that are engaged in the transportation of High Consequence Dangerous Goods (as defined in Table 1.4.1 of the UN Recommendations) by all modes of transport should in addition develop a Security Plan that addresses at least the elements specified in Section 1.4.3.2.2 of the UN Recommendations. To assist companies in implementing the different elements that are required for the Security Plan for the transportation of High Consequence Dangerous Goods, the following guidance is provided:

3.1. RESPONSIBLE PERSONS

The company should appoint a person (employee or external expert), with appropriate qualifications and competence, as responsible person for security. This person should advise the management on the measures to be taken to reduce the security risks. The person should pass on all suggestions and information from employees regarding security to the management and is responsible for providing information to employees who are involved in activities related to High Consequence Dangerous Goods.

3.2. RECORDS

The company should keep records on the transport of the different types of High Consequence Dangerous Goods. The records should be kept for 5 years and on request made available to the authorities. These data should be integrated in the annual report prepared by the Safety Advisor under section 1.8.3 of ADR.

3.3. REVIEW OF OPERATIONS

When establishing the Security Plan all current operations regarding storage, handling and transportation of High Consequence Dangerous Goods should be reviewed by the management. At regular intervals a general review of the operations from a security point of view should be carried out in co-operation between management and the person responsible for security. The outcome of this review should be used to take the necessary measures to prevent or reduce the security risks.

3.4. TRAINING

Every employee with activities related to High Consequence Dangerous Goods should receive security awareness training. This training should be part of existing training programs. When they take up functions related to High Consequence Dangerous Goods, such employees should also receive clear information from the management about the security prevention measures.

3.5. REPORTING OF THREATS, BREACHES OR INCIDENTS

Every employee with activities related to High Consequence Dangerous Goods should report to the management and/or the person responsible for security any threat, breach or incident observed in relation to security. The management and/or the person responsible for security should decide if the authorities have to be informed.

3.6. SECURITY OF INFORMATION

Every employee with activities related to High Consequence Dangerous Goods should be instructed not to inform other persons about the type of goods transported and handled by the company and its clients, except if such information is needed according to other regulations (e.g. information in transport and customs documents) or demanded by the authorities.

Also information about the security measures that are in place and the contents of the Security Plan has to be kept confidential by employees. For the communication between the Logistic Service Provider (LSP) and the driver there must be systems in place that allow the driver and the LSP's office to assure that the received information comes from a known and reliable source. The method used should provide sufficient guarantee that the identity of the source of information is securely established.

3.7. ADDITIONAL MEASURES

In addition to the measures described above, each company should review whether the infrastructure and operations of the company or its customers give rise to more specific measures to reduce the security risks.

4. SECURITY ON CHEMICAL SITES

The following guidelines are intended for all chemical sites involved in the transportation and associated storage, loading or unloading of goods.



4.1. SITE SECURITY MANAGEMENT SYSTEM

To minimize security risks on chemical sites, chemical companies should have a written management system in place that addresses the security risks related to transport operations as part of the risk management system. It should include a process for the identification, evaluation and management of security risks to people, property, information and reputation. Line management should be responsible for the implementation of the security management system. Therefore a security policy should be established, security roles should be assigned and adequately resourced and the lines of communication should be made clear.

This security management system should include:

- Procedural security measures: these are measures to be taken in relation to personnel, budgets and procedures.
- Constructional (physical) security measures: these are measures giving physical resistance against efforts to gain unauthorized access to sites, buildings, rooms and information.
- Electronic security measures: these are electronic, electro-technical and optical security measures that provide information, detection, warning and/or observation and thus register or enable an appropriate and timely response.

Appendix B contains a checklist of possible specific measures that should be considered for the control of site access of vehicles and for the control of vehicles on site.

4.2. SELECTION, CONTROL AND SUB-CONTRACTING OF LOGISTIC SERVICE PROVIDERS (LSP)

4.2.1. SELECTION AND CONTROL OF LOGISTIC SERVICE PROVIDERS BY CHEMICAL COMPANIES

The following guidelines should be taken into account:

- Every LSP should be assessed using the SQAS questions related to security, supplemented if necessary with company-specific security requirements.
- Chemical companies should maintain a list of approved LSP based on an evaluation of the assessment results.
- Only LSP appearing on the approved LSP list should be used by the chemical companies.
- A security clause should be included in the contractual agreements with the LSP.
- Transit control procedures, site control procedures and sub-contracting requirements should be communicated by the chemical companies to the LSP and implemented by the LSP.

4.2.2. SUB-CONTRACTING

The following guidelines should be taken into account:

- Sub-contractors should work under the responsibility, management and operational system of the prime LSP and should follow their procedures. The prime LSP should remain responsible towards the chemical company.
- The prime LSP should assess and train their sub-contractors and should ensure they are fully incorporated in their management and operational system.
- The prime LSP should produce and maintain a list of their approved sub-contractors and give a copy to the chemical company for approval.
- Chemical companies should refuse sub-contractors on that list if they failed in the chemical companies' own assessment procedure (see section 4.2.1).
- The sub-contractor should not be allowed to do any sub-contracting (sub-sub-contracting).

4.3. TRANSPORT OPERATIONS NOT CONTRACTED BY THE CHEMICAL COMPANY

In case the chemical company is not the contracting party for the transport operation (e.g. in case of raw materials purchased on a delivered basis or in case of customer pick-ups), the chemical company should, as a contractual requirement, specify to its suppliers or customers the measures they should take to ensure that the loading/unloading at the chemical companies' site is carried out under secure conditions. In this case the chemical company should pay special attention to access control of the vehicles/drivers entering the chemical site and to the control of vehicle/driver movements and operations on site.

APPENDIX A

Extract from “UN Recommendations on the Transport of Dangerous Goods, Model Regulations, Thirteenth revised version, United Nations”



CHAPTER 1.4 SECURITY PROVISIONS

Introductory notes

NOTE 1: This Chapter provides requirements intended to address the security of dangerous goods in transport in all modes. Mode specific security provisions can be found in Chapter 7.2. National and modal authorities may apply additional security provisions which should be considered when offering or transporting dangerous goods.

NOTE 2: For the purposes of this Chapter security means measures or precautions to be taken to minimise theft or mis-use of dangerous goods that may endanger persons or property.

1.4.1 GENERAL PROVISIONS

- 1.4.1.1 All persons engaged in the transport of dangerous goods shall consider security requirements for the transport of dangerous goods commensurate with their responsibilities.
- 1.4.1.2 Consignors shall only offer dangerous goods to carriers that have been appropriately identified.
- 1.4.1.3 Transit sites, such as airside warehouses, marshalling yards and other temporary storage areas shall be properly secured, well lit and, where possible, not be accessible to the general public.

1.4.2 SECURITY TRAINING

- 1.4.2.1 The training specified for individuals in 1.3.2 (a), (b) or (c) shall also include elements of security awareness.
- 1.4.2.2 Security awareness training shall address the nature of security risks, recognising security risks, methods to address and reduce such risks and actions to be taken in the event of a security breach. It shall include awareness of security plans (if appropriate) commensurate with the responsibilities of individuals and their part in implementing security plans.
- 1.4.2.3 Such training shall be provided or verified upon employment in a position involving dangerous goods transport and shall be periodically supplemented with retraining.
- 1.4.2.4 Records of all security training undertaken shall be kept by the employer and made available to the employee if requested.

1.4.3 PROVISIONS FOR HIGH CONSEQUENCE DANGEROUS GOODS

1.4.3.1 In implementing national security provisions competent authorities shall consider establishing a programme for identifying consignors or carriers engaged in the transport of high consequence dangerous goods for the purpose of communicating security related information. An indicative list of high consequence dangerous goods is provided in Table 1.4.1.

1.4.3.2 Security plans

1.4.3.2.1 Carriers, consignors and others (including infrastructure managers) engaged in the transport of high consequence dangerous goods (see Table 1.4.1) shall adopt, implement and comply with a security plan that addresses at least the elements specified in 1.4.3.2.2.

1.4.3.2.2 The security plan shall comprise at least the following elements:

- (a) specific allocation of responsibilities for security to competent and qualified persons with appropriate authority to carry out their responsibilities;
- (b) records of dangerous goods or types of dangerous goods transported;
- (c) review of current operations and assessment of vulnerabilities, including inter-modal transfer, temporary transit storage, handling and distribution as appropriate;
- (d) clear statements of measures, including training, policies (including response to higher threat conditions, new employee/employment verification etc.), operating practices (e.g. choice/use of routes where known, access to dangerous goods in temporary storage, proximity to vulnerable infrastructure etc.), equipment and resources that are to be used to reduce security risks;
- (e) effective and up to date procedures for reporting and dealing with security threats, breaches of security or security incidents;
- (f) procedures for the evaluation and testing of security plans and procedures for periodic review and update of the plans;
- (g) measures to ensure the security of transport information contained in the plan; and
- (h) measures to ensure that the security of the distribution of the transport information is limited as far as possible. (Such measures shall not preclude provision of transport documentation required by Chapter 5.4 of these Regulations).

NOTE: Carriers, consignors and consignees should co-operate with each other and with appropriate authorities to exchange threat information, apply appropriate security measures and respond to security incidents.

Table 1.4.1: Indicative list of high consequence dangerous goods

High consequence dangerous goods are those which have the potential for miss-use in a terrorist incident and which may, as a result, produce serious consequences such as mass casualties or mass destruction. The following is an indicative list of high consequence dangerous goods:



Class 1, Division 1.1 explosives
Class 1, Division 1.2 explosives
Class 1, Division 1.3 compatibility group C explosives
Class 1, Division 1.5 explosives
Division 2.1 flammable gases in bulk
Division 2.3 toxic gases (excluding aerosols)
Class 3 flammable liquids of packing groups I and II in bulk
Class 3 and Division 4.1 desensitised explosives
Division 4.2 goods of packing group I in bulk
Division 4.3 goods of packing group I in bulk
Division 5.1 oxidizing liquids of packing group I in bulk
Division 5.1 perchlorates, ammonium nitrate and ammonium nitrate fertilisers in bulk
Division 6.1 toxic substances of packing group I
Division 6.2 infectious substances of Category A
Class 7 radioactive material in quantities greater than 3000 A1 (special form) or 3000 A2, as applicable, in Type B or Type C packages
Class 8 corrosive substances of packing group I in bulk

NOTE 1: For the purposes of this Table, "in bulk" means transported in quantities greater than 3000 kg or 3000 l in portable tanks or bulk containers.

NOTE 2: For purposes of non-proliferation of nuclear material, the Convention on Physical Protection of Nuclear Material applies to international transport supported by IAEA INFCIRC/225(Rev.4).

CHAPTER 7.2 MODAL PROVISIONS

7.2.4 SECURITY PROVISIONS FOR TRANSPORT BY ROAD, RAIL AND INLAND WATERWAY

NOTE: These provisions are in addition to those applicable to all modes of transport as provided in Chapter 1.4.

- 7.2.4.1 Each crew member of road vehicles, trains and inland waterway craft transporting dangerous goods shall carry with them means of identification, which includes their photograph, during transport.
- 7.2.4.2 When appropriate and already fitted, the use of transport telemetry or other tracking methods or devices shall be used to monitor the movement of high consequence dangerous goods (see Table 1.4.1 in Chapter 1.4.).
- 7.2.4.3 The carrier shall ensure the application to vehicles and inland waterway craft transporting high consequence dangerous goods (see Table 1.4.1 in Chapter 1.4) of devices, equipment or arrangements to prevent the theft of the vehicle or inland waterway craft or its cargo and shall ensure that these are operational and effective at all times.
- 7.2.4.4 Safety inspections on transport units shall cover appropriate security measures.



APPENDIX B

Checklist of possible measures for the control of vehicle access and vehicles on site

Security checks for incoming vehicles at the site entrance before entering the site:

- Use of unique order numbers for loading / unloading;
- Identification of the driver via a valid passport or ID card with photograph ;
- Check of the drivers employment statement (if applicable);
- Identification of the vehicle via the vehicle documents;
- Check of the loading or unloading documents and the destination of the cargo;
- Registration of the driver, the vehicle, the cargo and the destination on the site;
- Check on non-authorized passengers.


Security measures on site:

- Restricted and controlled access of drivers and vehicles inside plants or storage areas;
- Reporting of suspicious incidents;
- Internal communication systems for contacting the internal security service;
- Adequate lighting of loading and unloading points;
- Standard loading and unloading procedures (no self loading/unloading by drivers unless special precautionary measures have been taken e.g. camera observation);
- Procedures for tracking the timely movement of incoming and outgoing goods;
- Procedures for detecting deviations from documented volumes to be loaded/unloaded (shortages and surpluses);
- Separate parking area for private cars and trucks;
- Regular inspection of the interior/exterior of all buildings and around all storage tanks and other critical areas;
- System for positive identification of all personnel and visitors on site;
- Obligatory dedicated routes for vehicles on site.




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