

3E Company Best Practices Web Seminar Series

**“HazMat, Homeland Security and
International Requirements: What
Companies Need to Know About
Shipping HazMat!”**

**3E Company is the trusted global provider of
chemical, regulatory and compliance
information services**

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- Click Q&A button to submit your questions. Questions will be answered at the end of the presentation
- The Web Seminar will be recorded. The audio and visual presentation link will be sent to you after the Web Seminar

- Jacki Burns – Supervisor, Classification Services, 3E Company
 - Responsible for training, program development and project management in the area of hazardous materials transportation compliance
 - DOT compliance specialist working with customers to develop hazmat shipping programs that encompass a total compliance solution
 - Oversees the classification and delivery of inventory items
 - University of California – BA Degree
 - Certified in hazmat shipping with U.S.D.O.T, IATA, IMDGC, TCTDG

- Andrea Clark – Technical Project Specialist, Regulatory Compliance Services, 3E Company
 - Technical lead over process and quality management, training development and custom projects for Regulatory services
 - Oversees customer hazardous materials reporting program development and implementation
 - Knowledge of environmental, health and safety regulations, including EPA, OSHA, state regulations, and fire codes
 - University of California – B.S. Chemistry & Biochemistry
 - 40-Hour HAZWOPER Certification

- Pernille Jakobik Wulff - Regulatory Consultant, Dangerous Goods Safety Adviser, Ariel Research Corp. Europe, 3E Company
 - Background in transport of dangerous goods in ADR, RID, IMDG and IATA, chemical regulations, environmental, health & safety, occupational safety and health, toxicology

Previous Experience:

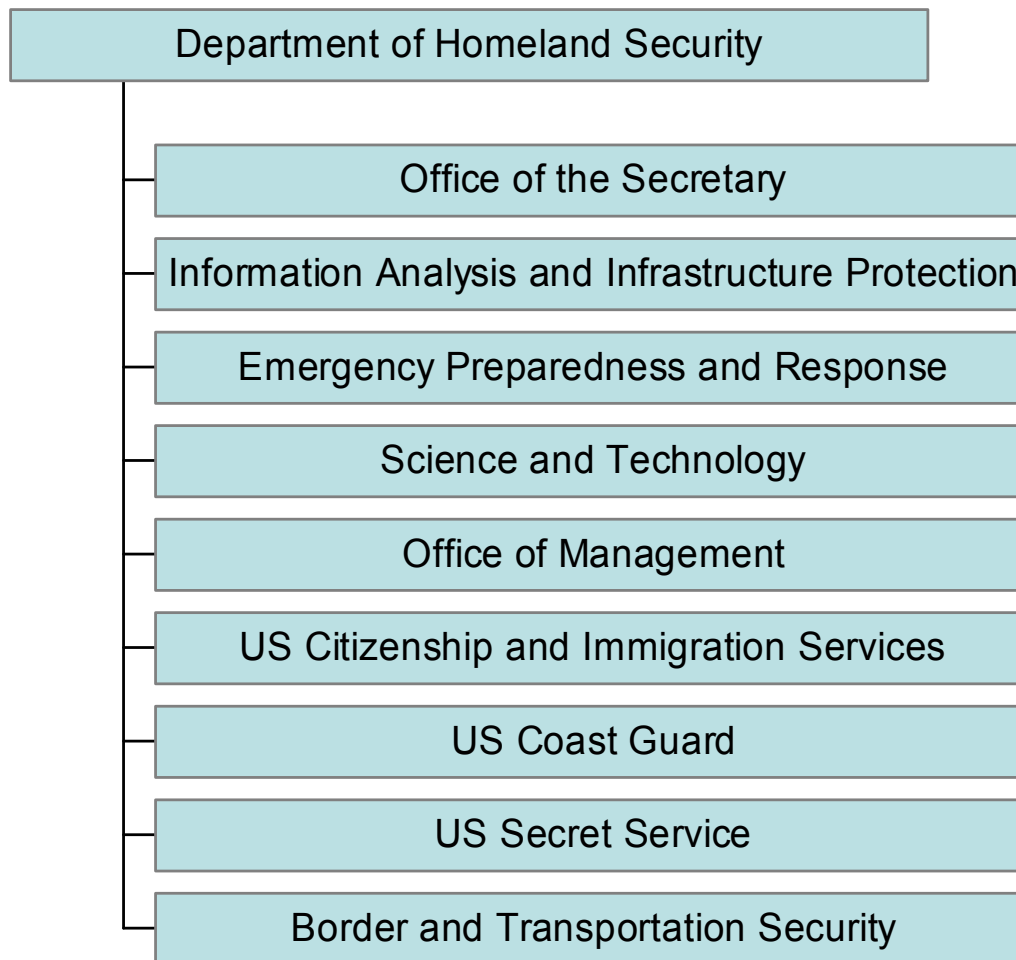
- Danish Toxicology Centre – Regulatory Consultant in Dept., Occupational Health and Toxicology
- Broste A/S – Regulatory Consultant and MSDS author

Homeland Security: Impact on US Hazardous Material Transportation Regulations



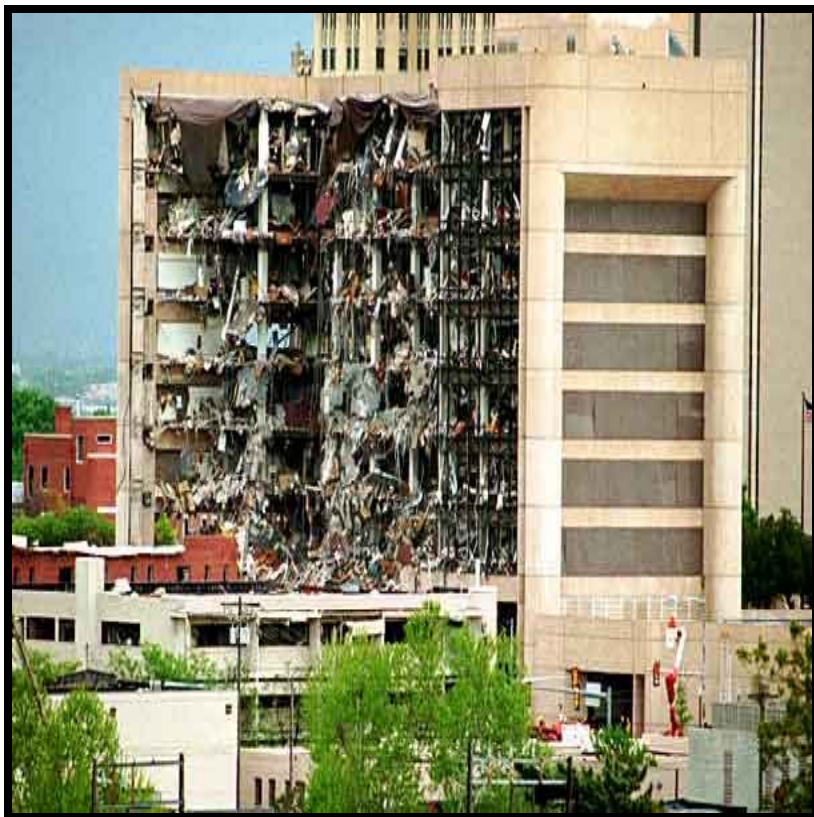
- **Structure of Department of Homeland Security**
- **Key events and resulting changes**
- **Regulatory Updates**
- **Proposed Changes**





- **1993 – NYC**
 - World Trade Center Bombing**
 - Rented Truck
 - Hazmat Cocktail
 - Ammonium Nitrate
 - Urea
 - Nitric Acid





•1996 – Oklahoma City

Oklahoma City Federal Building Bombing

–Rented Truck

–Hazmat Cocktail

- Ammonium Nitrate Fertilizer
- Racing Fuel

- **1999 – US/Canadian Border**

- Y2K Terror Suspect**

- Rented Vehicle
 - Hazmat Cocktail Ingredients
 - Nitroglycerin
 - Urea
 - Homemade Timing Devices





- **2001 – NYC/DC**
World Trade Center/Pentagon Attacks
 - Hijacked Transportation
 - Hazardous Accelerant
 - Jet Fuel

- **2001 – Paris/Miami**
 - R. Reid attempts to set off bomb onboard aircraft**
 - Traditional means of Transportation Used
 - Hidden Plastic Explosives
 - Security Screening now adjusted for hidden explosives





**(HM-232) Hazardous Materials:
Security Requirements for
Offerors and Transporters of
Hazardous Materials;**

- Proposed Rule Published
5/2/2002
- Final Rule Published 3/25/2003

Security Training

Security Plans

- ALL hazmat employees subject to training
- All training must include:
 - Awareness to security threats
 - Methods to improve transportation security
 - Recognition and response
- If required, Security Plan specifics must be covered





- Required for Registered Hazmat Shippers and/or Carriers
- Offerors and/or Carriers of CDC Regulated Toxins/Agents

Security Plans must address:

- Assessment of Risk
- Personnel Security
- Unauthorized Access
- En Route Security

Security Plans Must Also:

- Be in writing
- Retained as long as in effect
- Made available to appropriate employees for implementation
- Revised and Updated as necessary for the circumstances
- If revised, all copies must be current to most recent revision



([HM-232B](#)); Revision to Periodic Tire Check Requirement for Motor Carriers Transporting Hazardous Materials

- Proposed Rule Published 7/16/2002
- Final Rule Published 10/4/2002
- Effective Date: 11/ 4/2002
 - Relieves drivers of requirement to inspect tires every 2 hours or 100 miles.
 - Tires must be checked before transit and each time vehicle is parked



FMCSA-2001-11117; Limitations on the Issuance of Commercial Driver's Licenses with a Hazardous Materials Endorsement

- Interim Final Rule Published 5/5/2003

HM-232C; Hazardous Materials: Enhancing Hazardous Materials Transportation Security

- Interim Final Rule Published 5/5/2003
- Final Rule Published 02/10/2004



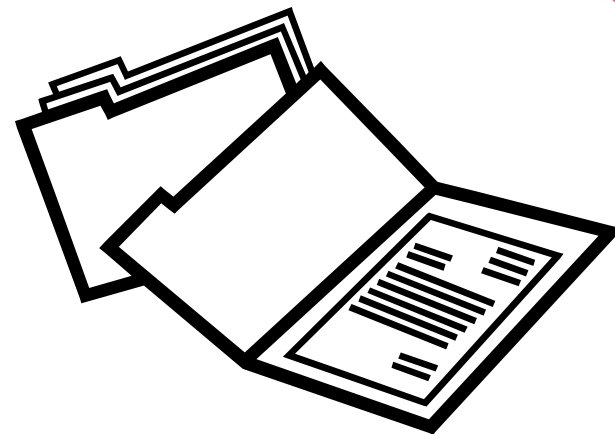
- TSA-2003-14610; Security Threat Assessment for Individuals Applying for a Hazardous Materials Endorsement for a Commercial Drivers License;**
- Interim Final Rule Published 5/5/2003

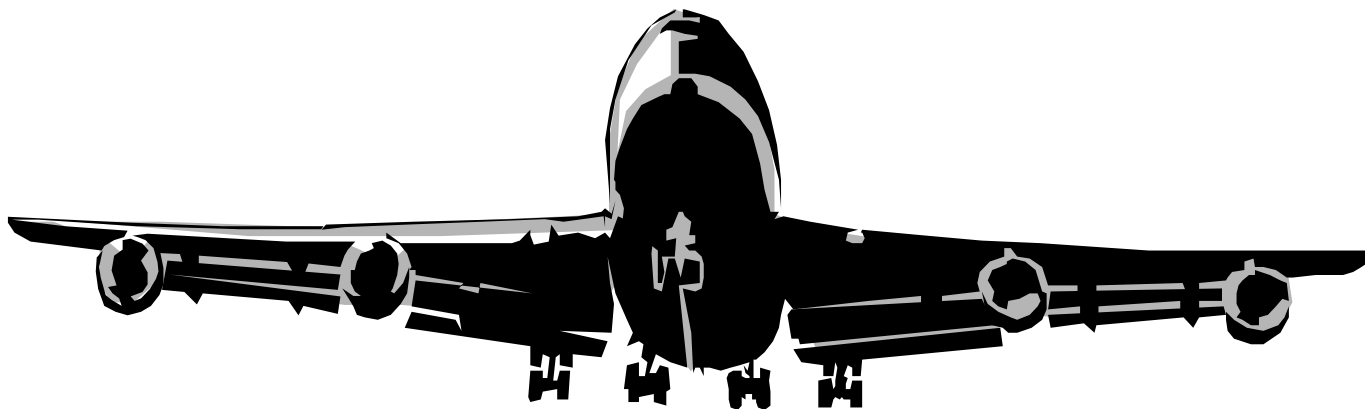


- Applies to applicants for CDL with Hazmat Endorsement
- TSA mandated background checks
- Employer background checks still required
- Does not apply to drivers not seeking Hazmat endorsement

FMCSA-97-2180 Federal Motor Carrier Safety Regulations: Hazardous Materials Safety Permits

- Final Rule Published 6/30/2004
- Carriers must have safety permit to transport highly hazardous materials
- Federally issued permits do not supercede additional state requirements
- Permits are effective for 2 years





- [3/25/2003](#) - ER Number required for Notification of Pilot-in-Command documentation
- [12/15/2004](#) - Primary (non-rechargeable) lithium batteries banned from passenger aircraft
- [3/1/2005](#) - Lighters banned from carry-on luggage



- No intent to change placarding requirements
- No registration number on Shipping Papers
- No reporting required for hazmat found in passenger luggage

Proposed Rulemakings –
not yet codified Final Rules



- [8/16/2004](#) - Requirements for Lighters and Lighter Refills
- [9/24/2004](#) Hazardous Materials; Applicability of the Hazardous Materials Regulations to "Persons Who Offer" Hazardous Materials for Transportation in Commerce
- [11/10/2004](#) - Hazardous Materials; Revision of Requirements for Carriage by Aircraft
- [5/19/2005](#) -Hazardous Materials: Infectious Substances; Harmonization With the United Nations Recommendations

Homeland Security: Impact on US Hazardous Materials Reporting Requirements



- **Regulatory background**
- **Agency changes**
- **Security reporting requirements**
- **Impact on Right-to-Know**



Homeland Security Act

- Effective November 25, 2002
- Established Department of Homeland Security
- Designated member agencies
- Permitted delegation of responsibilities to other agencies (EPA, SERC, DOE, etc.)

Homeland Security Presidential Directive (HSPD-5) *Management of Domestic Incidents*

- Issued February 8, 2003
- Established requirement to develop National Incident Management System (NIMS), standardizing the use of the incident command system for managing emergency response incidents, officially released March 1, 2004
- Required development of National Response Plan (NRP), which became effective January 6, 2005
- Consistent way for federal, state, local and tribal governments to work together with the private sector on preparation and response to major incidents

Homeland Security Presidential Directive (HSPD-8)

National Preparedness

- Issued December 17, 2003
- Companion to HSPD-5
- Established national domestic all-hazards preparedness goal; includes terrorist attacks, major disasters, and other emergencies (emphasis on terrorism)
- Established policies and mechanisms for better allocation of federal preparedness assistance to state and local governments
- Defined “first responders” and national training and exercise system

Organizational Changes

- Some state emergency response commissions (SERC) have been reorganized under the state's Department of Homeland Security
- Improved cooperation between federal, state and local governments
- Some rural local emergency planning committees (LEPC) have merged in order to combine resources

Funding Changes

- Increased federal funding to state and local emergency management agencies
- Nearly \$13 billion in grant monies have been disbursed
- Buffer Zone Protection Program grants announced March 2, 2005 for securing critical infrastructure and key resource sites such as chemical facilities, dams and nuclear plants
- Targeted funding through states to local jurisdictions to purchase equipment to extend the protected zone for these facilities
- Increased focus and enforcement of security provisions in emergency response plans

Enforcement Changes

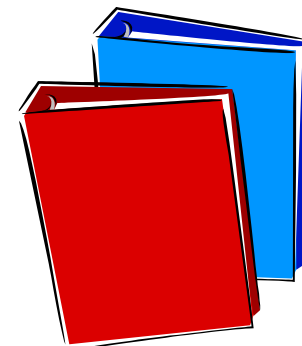
- Increased focus and enforcement of security provisions in emergency response plans
- Inspectors reviewing whether site security measures have been addressed and included in emergency planning
- Agencies taking a more “risk-based” approach
 - Inspection periods tiered with more frequent inspections of sites with larger amounts of chemicals and/or a history of non-compliance
 - Helps allocate resources and personnel where they are most needed

Existing security provisions:

- Oil Pollution Act – Spill Prevention, Control and Countermeasures Plans, Facility Response Plans
- Clean Air Act Section 112(r) - Risk Management Program
- EPCRA - Tier Two, Section 303 Emergency Response Plans for EHS facilities
- California Hazardous Materials Business Plans

Typical Disclosure:

- Emergency Responder Information
- EPCRA, “Community-Right-to-Know”
- Who is required to report?
- What is reportable?
- What is required within a Contingency Plan?
- What should Site Maps identify?



What must be considered when writing contingency plans?

- How are hazardous materials managed?
- How is the facility prepared to respond to an accident or release?
- What accident history exists?
- What are the potential release scenarios?
- Are the employees trained? How?
- Are there adequate controls and safety equipment on site?
- Could this give potential terrorists information about weak points in site security?

Contingency Plan Changes

Example from the Business Emergency Plan required by Riverside County:

9. SITE SECURITY

As applicable on an individual facility basis, you should assess the security and vulnerability of your business from intentional acts both from within your business (sabotage) and from the outside (vandalism and terrorist acts). This assessment should consider testing your security system and procedures on a regular basis.

Details of this assessment should not be included in this plan as it is a public document.

Risks

- According to EPA, 123 U.S. chemical facilities could potentially expose more than 1 million people in the event of a chemical release
- No federal law currently exists requiring chemical facilities to perform a vulnerability assessment of susceptibility to terrorist attack
- Members of the American Chemistry Council and Synthetic Organic Chemical Manufacturer's Association required to perform vulnerability assessments for security and make improvements

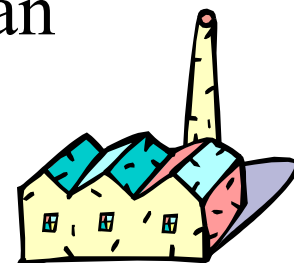
Finding the balance...



- Need for security vs. public right-to-know about hazards in community
- No official U.S. policy exists on communication; not “black and white”
- Open participation with local agencies and community groups necessary to coordinate efforts on security measures

Industry Concerns

- Terrorists could obtain detailed site information through public access that could be used in an attack
- Competitors could obtain proprietary information about chemicals or processes
- Opposed to imposition of arbitrary regulatory standards
- Prefer that agencies pre-approve reasonable requests before supplying copies of plans



Public Concerns

- Want confidence that industry has taken adequate measures to mitigate and plan for releases
- Companies could use “security” as an excuse to withhold or limit access to hazmat information
- No recourse procedures exist if a request for information from a regulatory agency is denied
- What is being done to ensure public safety



Securing sensitive data:



- Reduction in accessibility of specific site information via the internet – login and authorization necessary
- Public information available for in-person review with supervision; hardcopies restricted
- Written request often required in advance along with copy of identification
- Not all site information is available for review, documents must be filtered in advance



ADR

RID

IATA-DGR

IMDG-code

ADN

- 40 countries has adopted the ADR-convention.
- Directive 94/55/EC commits the member states to harmonize the national regulations to be in agreement with the ADR-convention.
- The transitional period ends on 30 June 2005

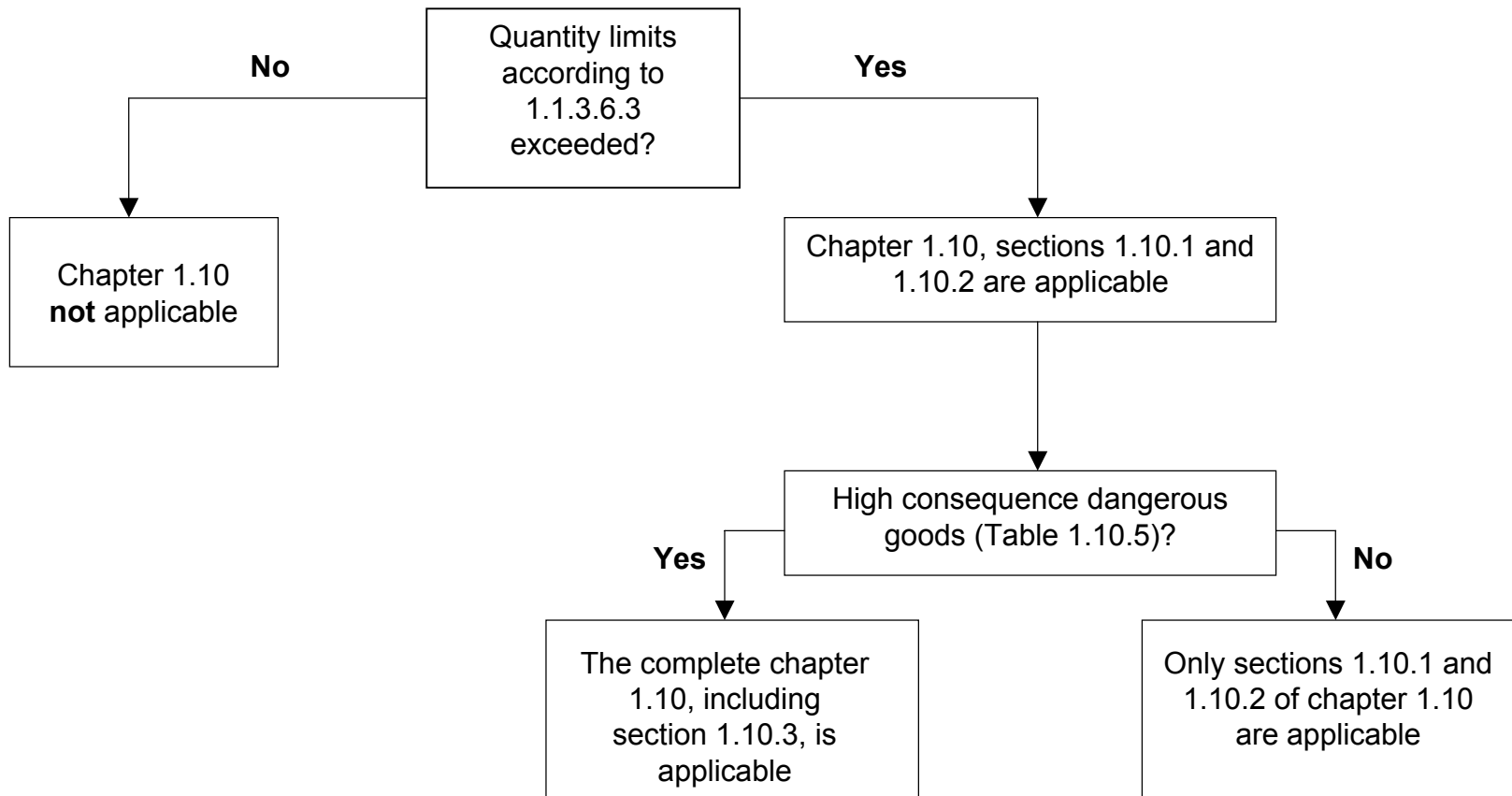
- The council Directive 96/35/EC of 3 June 1996 on the appointment and vocational qualification of safety advisers for the transport of dangerous goods by road, rail and inland waterway
- The Dangerous Goods safety adviser arrangement was introduced in EU in 2000 and in all the ADR- and RID countries in 2003.
- In this directive the role and appointment of the dangerous goods safety adviser are set and in annex 1 the duties of the adviser is listed

- Everybody who transports or ships dangerous goods by road, rail or inland waterway, or who fills out transport documents, classifies, marks, packs, loads or unloads dangerous goods.
- There are some exceptions such as for transport of limited quantities etc
- The ADR-Convention covers the requirements for DGSA's. This means that countries having adopted the ADR-Convention but which are not member states of the EU were required to implement the DGSA-regulations by January 1st 2003 at the latest.

- In annex I of the council Directive 96/35/EC of 3 June 1996 one of the DGSA's tasks is to prepare an annual report to the management of his undertaking or a local public authority, as appropriate, on the undertaking's activities in the transport of dangerous goods. Such annual reports shall be preserved for five years and made available to the national authorities at their request.

- Following the events of September 11 2001, international legislators considered it necessary to work out measures regarding security.
- On January 1st, 2005, a new chapter in ADR/RID/ADNR was entered into force and will take effect after the end of the usual 6-month transition period on July 1st, 2005.

- 1.10.1 General provisions
- 1.10.2 Security training
- 1.10.3 Provisions for high consequence dangerous goods and security plans
- 1.10.4 Exceptions
- 1.10.5 List of high consequence dangerous goods



- All persons engaged in the carriage of dangerous goods shall consider the security requirements commensurate with their responsibilities.
- The carriers must be appropriately identified.
- Areas within temporary storage terminals, temporary storage sites, vehicle depots, berthing areas and marshalling yards used for the temporary storage during carriage of dangerous goods shall be properly secured, well lit and, where possible and appropriate, not accessible to the general public.

- The general awareness training and the refresher training shall also include elements of security awareness.
- Do not need to be linked to regulatory changes only.
- Security awareness training shall address: nature and recognising of risks, methods to address and reduce such risks etc.
- Awareness of security plans (if appropriate)

- Goods which have the potential for misuse in a terrorist incident and which may, as a result, produce serious consequences such as mass casualties or mass destruction.

- Carriers, consignors and other participants specified in 1.4.2 and 1.4.3 engaged in the carriage of high consequence dangerous goods shall adopt, implement and comply with a security plan that addresses at least the elements specified in the following slides.

- Content of a security plan:
 - Specific allocation of responsibilities
 - Records of DG or types of DG concerned
 - Review of current operations and assessment
 - Clear statement of measures that are to be taken to reduce security risks:
 - Training
 - Security polities
 - Operating practice
 - Equipment and resources

- Effective and up to date procedures for reporting
- Procedures for the evaluation and testing of security plans
- Measures to ensure the physical security of information
- Measures to ensure distribution of information

Carriers, consignors and consignees should co-operate with each other and with competent authorities to:

Exchange treat information, apply appropriate security measures and respond to security incidents.

- Devices, equipment or arrangements to prevent the theft of the vehicle carrying high consequence dangerous goods or 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.

***NOTE:** When appropriate and already fitted, the use of transport telemetry or other tracking methods or devices should be used to monitor the movement of high consequence dangerous goods.*

- If the quantities carried in packages, in bulk or in tank on a transport unit do not exceed those referred to in 1.1.3.6.3 then 1.10 does not apply

- High consequence dangerous goods are those listed in table 1.10.5 and carried in quantities greater than those indicated therein

Tabel 1.10.5 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 in bulk of packing groups I and II
Class 3 and Division 4.1 desensitized 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 in bulk of packing group I
Division 5.1 perchlorates, ammonium nitrate and ammonium nitrate fertilizers, 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

- 1.10.1 General provisions and 1.10.2 Security training is required for everybody.
- 1.10.3 is required by everybody dealing with high consequence dangerous goods (table in 1.10.5) unless the quantities carried do not exceed those referred to in 1.1.3.6.3

Q&A