



RIKSREVISIONEN  
*The Swedish National Audit Office*

RiR 2008: 29 Summary

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Security for dangerous goods

## Summary

According to the Swedish Emergency Management Agency, acts of terrorism involving chemical, biological or radioactive substances constitute one of the most serious threats to Sweden. The transport of dangerous goods or explosive substances may represent an opportunity for terrorists to cause a great deal of damage in a relatively simple way.

*Riksrevisionen* (the Swedish National Audit Office, the Swedish NAO) has therefore examined whether the Government and the government agencies responsible have created adequate conditions to ensure that the transport of dangerous goods will be adequately protected against relevant threats.

The audit focused on ‘antagonistic threats’ to hubs for air, sea, road and rail transport. Such transport hubs include installations for the intermediate storage of goods, and they are often located close to major cities. This is why they are deemed to be the places where terrorist acts may lead to the most serious consequences.

More specifically, the audit focused on transport hubs close to major population centres such as Gothenburg, Örebro–Hallsberg and Stockholm–Arlanda. It does not cover the actual transport of dangerous goods by air, sea, rail or road. Nor does it examine the issue of emergency management in the event of a disaster resulting from criminal acts involving dangerous goods.

The government agencies responsible create conditions enabling operators to take security measures. The audit therefore deals mainly with the *preventive measures* taken by the agencies concerned in the form of regulations and supervision to prevent dangerous goods from being used for criminal purposes. Taking adequate security measures is the duty of operators, for example the Rail Administration at shunting yards and freight terminals or shipping agents at airports. This report presents the Swedish NAO’s assessment of whether the government agencies’ measures have been sufficient to create an adequate level of security for the transport of dangerous goods. It also assesses whether the Government has created sufficient conditions for such security by specifying a clear division of responsibility and appropriate mechanisms for liaison among agencies. Finally, it assesses whether legislation and other rules create adequate conditions for the measures to be taken by agencies and operators.

## Conclusions

There are several shortcomings in the security of dangerous goods. The Swedish NAO begins by noting that international and Swedish legislation to

deal with antagonistic threats to dangerous goods have existed for only a few years, while rules to prevent accidents involving dangerous goods have existed for a long time. Further, work is ongoing to restructure the agencies which have been responsible for the protection of dangerous goods against antagonistic threats.

The audit shows that there are large differences in security arrangements as well as in the nature of the shortcomings, depending on whether dangerous goods are handled at airports, seaports or goods terminals for road and rail transport.

The Swedish NAO's overall finding is that the Government and the agencies responsible have not fully ensured that the transport of dangerous goods is adequately protected against relevant antagonistic threats.

### *Inadequate knowledge of threats*

The agencies have an unclear idea of the threats against which dangerous goods should be protected. Their liaison with the Police is partly underdeveloped and there is no clear division of responsibility for intelligence. As a result, the agencies lack adequate information and knowledge about the threats that may affect dangerous goods, and thus also about how the potential threats should influence the design of security measures.

### *Serious shortcomings in the security for dangerous goods*

In the risk and vulnerability analyses performed by the agencies concerned, antagonistic threats involving dangerous goods are addressed to a varying extent. Even though the Emergency Management Agency has identified this as one of the most serious threats, the agencies bearing regulatory and supervisory responsibility for aviation and road-transport security do not consider these threats as major risks and do not analyse the vulnerability of the transport sector.

There are several shortcomings, documented by the agencies themselves, in the security for dangerous goods. The protection and security requirements for airports and seaports do not focus on dangerous goods; as a consequence, nor do the security measures. In addition, several documented shortcomings have been identified as regards compliance with security requirements for rail transport.

Supervision of security measures against antagonistic threats to dangerous goods takes place only to a very limited extent, unlike supervision of efforts to prevent accidents. As a result, the supervisory authorities fail to evaluate the strengths and weaknesses of the security of dangerous goods and are thus unable to assess whether this security is adequate.

One prerequisite for satisfactory preparedness to handle threats of different types is that the agencies and operators concerned should take part in adequate exercises to a sufficient extent. This criterion has been found to be met in most of the Swedish NAO's previous audits of various functions of society. When it comes to the security for dangerous goods, however, training and exercises are carried out to a very limited extent. Exercise activities therefore provide an inadequate basis for improvements.

*Responsibility is divided among several agencies; the boundaries are partly unclear and liaison is underdeveloped*

It is unclear in several respects how the agencies are to apply the current division of responsibility. This is true as between operators and the Police. It is also unclear how the Rescue Services Agency and the Maritime Administration share responsibility for seaports. Further, there are similarly unclear boundaries between the Rescue Services Agency and the Rail Agency as regards supervision of security for dangerous goods transported by rail. The allocation of responsibility for supervision laid down in legislation is part of the reason why supervision of rail-transport security is of such very limited extent. Further, there is limited coordination among agencies, and liaison mechanisms are partly underdeveloped, when it comes to the security of dangerous goods at seaports and on land. This is because, in these cases, the Government has made few demands of liaison in relation to the security of dangerous goods either in legislation or in its general instructions and appropriation directions for the agencies.

The Swedish NAO considers it important that the integrated view of supervisory activities that the new Transport Agency (covering all modes of transport) is intended to bring about should also encompass security in relation to the transport of dangerous goods. The Swedish NAO finds that one reason for the inadequacy of liaison is that the Government has imposed few requirements in legislation and in its general instructions and appropriation directions that agencies should liaise with each other to ensure security in relation to the transport of dangerous goods by land.

*General security legislation provides weak support for security in relation to the transport of dangerous goods*

International rules on the security of dangerous goods have been introduced in Swedish legislation and given effect through implementing regulations. These regulations are differently designed depending on the mode of transport and have therefore created conditions for security measures that have a varying degree of explicitness.

However, the security for dangerous goods is not governed by the national rules on aviation, maritime and port security, which deal with the overall security of air and sea transport and seaports.

General provisions covering all sectors to ensure the protection of national security and prevent terrorist crimes can be found, for example, in the Protective Security Act and the Protection of Essential Facilities Act. This legislation takes as its starting point the requirements of military and civil defence. It has been adapted only to a limited extent to the emergence of new threats and an increased level of vulnerability of society.

The Protective Security Act supports measures to protect national security and counteract terrorism, for example the screening of staff using official records. Of the various transport agencies, however, only the Civil Aviation Board is explicitly authorised under the Protective Security Ordinance to check records in order to counteract terrorism. The Government has not yet had a review carried out of the Protective Security Act to strengthen support for higher security for other modes of transport as well.

Dangerous goods are vulnerable at the hubs of the transport systems: airports, seaports, shunting yards and goods terminals. The Protection of Essential Facilities Act makes it possible to protect certain installations, buildings and areas. Since that Act is not used to protect civilian operations against criminal acts that may undermine the functioning of society, however, it does not apply to the security of dangerous goods at transport hubs.

The Swedish NAO finds that, taken together, the general (non-sector-specific) security legislation provides insufficient support for efforts to protect the security of dangerous goods, considering the serious potential consequences of antagonistic acts.

## **Recommendations**

The Swedish NAO finds that a number of shortcomings in the security of dangerous goods need to be addressed and improvements made to achieve and maintain a reasonable level of security for infrastructure vital to society. The Swedish NAO recommends that the Government should:

- analyse possible ways of addressing the shortcomings, above all as regards land transport, and the related need for investment and prioritisation; in this context, security requirements for dangerous goods with a high risk potential should also be specified;
- ensure that responsibility for supervising the security of dangerous goods for all modes of transport is placed on the new Transport Agency;
- amend the Transport of Dangerous Goods Ordinance to ensure that the duties of the National Police Board as regards the security of land transport are more in line with its duties as regards aviation, maritime and port security;
- investigate the possibility of creating a clearer division of responsibility for issuing regulations relating to dangerous goods in seaport areas;
- investigate how international recommendations on the security of air transport of dangerous goods are to be taken into account at the national level;
- review the Protective Security Act and continue its review of the Protection of Essential Facilities Act in such a way that opportunities to enhance the security of the transport of dangerous goods are taken into consideration based on an analysis of the critical vulnerabilities of the transport systems;
- investigate, in the context of the review of the Protective Security Act, the need and conditions for records-based screening of staff handling dangerous goods, especially dangerous goods with a high risk potential.

The Swedish NAO recommends that the National Police Board should:

- adopt regulations on port security inspectors under the Port Security Act to improve conditions for the security of dangerous goods at seaports.

The Swedish NAO recommends that the Transport Agency should:

- develop supervisory and regulatory activities in the field of dangerous goods in which an integrated view is taken encompassing both accident prevention and protection against criminal acts;
- address dangerous goods in risk and vulnerability analyses for all modes of transport using similar assessment criteria.

The Swedish NAO recommends that the Civil Contingencies Agency should:

- deal specifically with antagonistic threats to dangerous goods in its annual analyses of the emergency preparedness of society.