

Paper No. 4003 Joint Authority Inspections in Dangerous Goods
Law Enforcement in Sweden

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Abstract

The authorities' mandates for inspecting transport activities concerning dangerous goods are divided between several authorities in Sweden. This is due to the fact that the Act (2006:263) and Ordinance (2006:311) on Transport of Dangerous Goods state that the Swedish Civil Contingencies Agency (MSB) and Swedish Transport Agency (TS) are transport authorities and that the Transport Agency, Police, Swedish Coast Guard (KBV), Swedish Radiation Safety Authority (SSM) and Swedish Civil Contingencies Agency are inspection authorities.

The transport authorities, MSB and TS, issue the modal regulations; MSB is responsible for translating and putting ADR-S (road regulations) and RID-S (railway regulations) into force. The Swedish Transport Agency is responsible for putting the international IMDG-code and ICAO-TI into force. We do not use ADN in Sweden; the IMDG-code is applicable on inland waterways.

The inspection authorities are:

- The Swedish Transport Agency: Its railway department performs inspections of rail transports of dangerous goods. The shipping department performs inspections of sea transports, with some help from the Coast Guard. The aviation department performs inspections of air transports of dangerous goods.
- The Swedish Police' mandate is for road transport inspections.
- The Swedish Coast Guard has this role in harbours. The Coast Guard also assists the Transport Agency at sea upon request.
- SSM is responsible for inspecting all modes of transport involving radioactive materials and advice the other authorities on radioactive materials.
- MSB is responsible for inspections involving Safety Advisers for all modes of transport, as well as the security provisions (transport security according to the modal regulations) and regulations on portable pressurized tanks.

Swedish authorities co-operate in inspections to help meet inspection needs. This approach is very successful, especially at terminals, airports and harbours, where modes of transport change. In harbours, the Coast Guard co-operates with SSM in the area of radioactive material, also with the Police, which conducts road checks, and with the Transport Agency. This co-operation also involves Swedish Customs on borders, and occasionally MSB as well on the part of the Safety Advisers. The co-operation can also include the Swedish Work Environment Authority, which performs particular checks on securing of cargo. At airports and road/rail terminals, the checks are performed through a similar co-operative approach.

Introduction

There are several authorities involved in regulating and enforcing the regulations of transport of dangerous goods in Sweden. The Swedish legislation gives some authorities the power to issue rules and regulations and some the task of enforcing the regulations. Because of the number of different authorities enforcing the laws and regulations for different classes of dangerous goods or different modes of transport it is vital to co-operate between authorities for transport of dangerous goods to achieve a good result.

The Swedish Radiation Safety Authority

The Swedish Radiation Safety Authority's (SSM) mandate areas are mainly:

- Nuclear safety and radiation protection:
They are means of protecting human health and the environment against radiation, including
 - Ionising radiation,
 - Ultraviolet radiation,
 - Lasers,
 - Radio waves (mobile phones, antennas, etc.),
 - Electromagnetic fields and more.
- Security and nuclear non-proliferation are means of protecting activities, facilities and equipment against
 - unauthorised access,
 - unauthorised handling,
 - theft,
 - sabotage
 - and other impact that can result in detriment from radiation.

Information security ensures protection of critical data and information, as well as IT functions which, if compromised by unauthorised parties, risk contributing to harmful effects of radiation.

Regulations

The Act on Nuclear Activities regulates nuclear safety and security of fissile material and nuclear generated waste in general, including transport of this material.

The Radiation Protection Act regulates radiation protection concerning other (than fissile) radioactive material and focuses on protecting human health and the environment against radiation.

The Transport of Dangerous Goods Act regulates transport of all dangerous goods materials, including radioactive material.

Each Act has its own Ordinance, regulating the activities in more detail, and the Swedish Radiation Safety Authority also issues more detailed regulations and general advice on most subjects.

The Swedish Authorities' mandates for issuing regulations and for inspecting transport activities concerning dangerous goods are divided between several authorities in Sweden.

These Bodies are:

- The Swedish Transport Agency (TS); concerning sea and air transport regulations.

- The responsibilities include the IMDG-code and ICAO-TI; they are incorporated into the Swedish regulations as they are, they not translated into Swedish.
- The Swedish Civil Contingencies Agency (MSB); issues regulations for Road and Rail Transport Regulations.
 - The ADR and RID are translated into Swedish, with some national additions, resulting in ADR-S and RID-S.

The ADN, for inland waterways, is not used in Sweden.

Inspections

The Inspection authorities for transport of dangerous goods are, according to the ordinance of transport of dangerous goods:

- The Transport Agency; for sea, air and rail transport,
- The Police; for land transport, except rail transport (meaning road and off-road transport),
- The Coast Guard; sea transport and within harbours,
- The Swedish Radiation Safety Authority; radioactive material in all transport modes,
- MSB; for safety advisers and transport security in all transport modes
- Security is also regulated in the Act on Nuclear Activities and as terms in transport authorisations, and separately regulated for air and sea transport by the air or sea division of the Transport Agency.

Apart from our normal inspections of nuclear facilities, hospitals, radiographers, industry and other license holders, we often co-operate with other authorities when inspecting dangerous goods transports

- in harbours,
- at airports,
- at road/rail terminals and other terminals
- co-operation with the police at road checks.

There are different jurisdictions:

The Police have the authority to stop vehicles on the road, but the Swedish Radiation Safety Authority's inspectors do not. Also, the Coast Guard has this authority within Harbour areas. The Police also have special Vehicle Inspectors, who perform checks to determine the roadworthiness of vehicles. The Police and Coast Guard also perform breathalyser tests on drivers.

The advantages in co-operation with other Authorities can be:

- Expertise; there is a networking benefit.
- The regulations on Radioactive Material are complex. SSM provides assistance within this network when transports of radioactive material are encountered.
- The Swedish Work Environment Authority has expertise in occupational safety (for inspectors and drivers) as well as securing of cargo, which is related and regulated. The most common deficiency is insufficient securing of cargo in all classes.
- Working in teams is an occupational safety issue for our inspectors, there is safety in numbers. Co-operation with other authorities ensures that inspectors do not work alone and that the enforcement of the regulations is effective.

- Access to secure areas, such as harbour areas, airport terminals and rail terminals is simplified and smoother when personnel with specific knowledge of the areas participates.
- Some authorities also have facilities on location, such as the Customs at border locations. Facilities include equipped buildings for indoor inspections of vehicles, mobile or stationary scanners for scanning containers and vehicles, restrooms and kitchens for the personnel, etc.
- The Coast Guard, Police and Work Environment Authority's inspectors have tools and routines for safely opening containers and other cargo units, such as ladders for access, master key and safety bands for opening containers, instrument for tension control, etc. Several Authorities bring mobile offices, with data connections, forms and other equipment, both vans and boats.
- SSM uses a portable gamma ray scintillometer for detecting and localizing radioactive material (usually the total count scintillometer model GR-110), as well as calibrated instruments for determining dose rate and transport index (TI).
- SSM also has extensive resources on standby, if any problems occur or if there is a need for other measuring equipment.
- Quick transport of resources can easily be provided by one of the "blue-light" authorities (Police, Coast Guard and Customs).

Road checks in the Stockholm area are always conducted by, or in co-operation with the police, they have the authority and the means to stop and pursue vehicles. Other authorities may also participate in road checks. Inspections are made of marked and unmarked vehicles, for all dangerous goods classes.

Road Checks are of course carried out nationally. SSM is always on Standby to assist if needed.

SSM always has an officer on duty around the clock (TiB) who can be contacted through the emergency services (112).

Co-operation also takes place with other authorities having related tasks, such as the Swedish Work Environment Authority (work related issues, securing of cargo), Customs (border control), County Administrative Boards (decisions on parking lots for dangerous goods transports), (Local Communities, on routes for dangerous goods) Local emergency services (if there is an incident).

There are quite a few road/rail terminals in Sweden, where road cargo, such as containers, tank containers, trailers and flatbeds are put on trains and vice versa. Co-operated inspections in the Stockholm area are mainly conducted at Rosersberg and Årsta Combi terminals, north and south of Stockholm.

There are road/rail terminals all across the country, from Malmö to Luleå; most are open to all operators on equal terms. One Train equals about 40 Trucks, meaning long-distance hauls can be more cost effective and environmentally friendly.

At airports the inspections are mainly conducted in co-operation with the other authorities outside the secure area of the Airport, as a road-side inspection of inward and outward bound vehicles. Some inspections are also conducted inside the secure area in co-operation with the air division of the Transport Agency.

The cargo consists mainly of small packages; excepted packages and type A packages. Some transports of Fluorine 18 and other nuclides are made domestically (mainly between hospitals), as well as imports directly to other Airports.

Harbour inspections in the Stockholm area are mainly conducted in the harbours of Kapellskär, Nynäshamn, Stockholm and Norrköping; on Ferries to and from Finland, Estonia, Latvia, Russia and Poland. Gotland ferries are sometimes inspected too.

Gothenburg is the main port to Sweden. About half of all transported dangerous goods arrive via Gothenburg. There are also two refineries in the Gothenburg area producing dangerous goods in class 2 and 3. Ferries from the UK arrive to Gothenburg.

This is also one of the ports of call for the Swedish flagged ships of the Atlantic Container Line (ACL), which is permitted to carry strong radioactive sources, uranium hexafluoride (UF-6), nuclear fuel elements, etc., across the Atlantic Ocean.

Conclusions

The Swedish model with dangerous goods inspections carried out jointly between several operative authorities in this field, has great advantages. It promotes broader cooperation between the parties involved, is cost effective and has a clearly preventive effect on lax transport safety performance on the part of licensees, shipping companies and carriers.

Safety and security for inspectors is important. This is a matter of occupational safety for the inspectors and working in larger teams facilitates this. The tight network ensures easy access to a broad area of expertise as well as equivalent assessments when considering actions against non-compliance. Another benefit is that inspectors get a good insight into the tasks, problems and solutions of other authorities. Co-operation with relevant authorities can also simplify access to secure areas, such as secure areas within an airport or a harbour. Many authorities also bring tools and special vehicles to an inspection site, enabling mutual use of these as well as the possibility of quick transport when needed.

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References

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The Act (1984:3) on Nuclear Activities
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Swedish Civil Contingencies Agency provisions (MSBFS 2015:1) on the road and off-road transport of dangerous goods (ADR-S)
Swedish Civil Contingencies Agency provisions (MSBFS 2015:2) on the transport of dangerous goods by rail (RID-S)
Transport Agency regulations and general advice (TSFS 2015:66) on transport at sea of packaged dangerous goods (IMDG-code)
Civil Aviation Authority regulations (LFS 2007:23) of the carriage of dangerous goods (ICAO-TI)