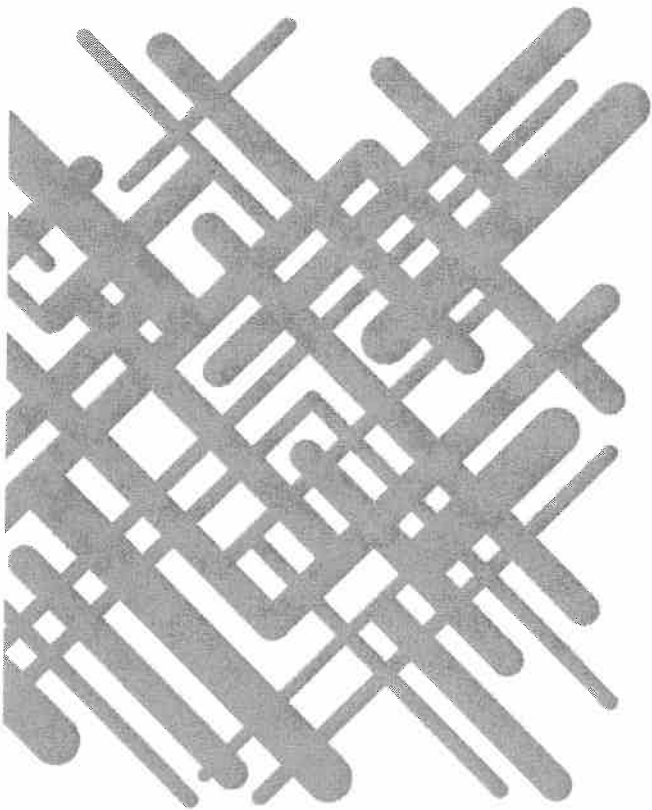


Guideline for Emergency Rescue Cards for Railway and Other Rail Vehicles



REVISION INFORMATION

Version	Date	Description of change	Created/Changed	Appointed
01	2011-04-18	New document	Bernt Andersson	Ove Andersson

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1 Introduction and terminology

1.1 Guideline requirements, scope and use

This guideline concerns emergency rescue cards which are intended to aid rescue services in emergency situations involving rail passenger vehicles. The word “vehicle” in the remainder of this document is to be interpreted as “rail passenger vehicle” included vehicles of this nature used in trams and metro systems. Emergency rescue cards contain the concise information necessary to enable rescue services to minimize risks and the consequences of accidents in rail passenger transportation.

The legal basis for the provision of information to emergency rescue services is included among the essential requirements of the *Directive (2008/57/EG) on the interoperability of the rail system*, in certain TSI's and applicable Swedish law. These are: *Locomotives and Passenger rolling stock* [ref. 2], *Safety in Railway Tunnels* [ref. 3], and *Lag om skydd mot olyckor* (2003:778) 1 kap. §§ 1-7 [ref. 4]. Additionally, this guide clarifies some requirements for the approval of vehicles in accordance with TSFS 2010:116 [ref. 5].

Information, source documentation and design of emergency rescue cards are to be taken care of by applicants when applying for a vehicle approval. This must be completed before a vehicle is put into service in passenger-carrying traffic. In accordance with a contractual agreement between the *Swedish Civil Contingencies Agency* (MSB) and the *Swedish Transport Agency*, MSB organizes the cards' distribution [ref. 6]. The cards are provided by Resources and Integrated Decision Support system (RIB) in restricted distribution to individual rescue services.

1.2 Definitions

Previously existing vehicles: Vehicles that were approved for use in Sweden at the time that the TSI gained legal force.

Vehicle of approved type: A vehicle having the same construction as a vehicle that was approved for use in Sweden at the time that the TSI gained legal force.

Vehicle with foreign approval: A vehicle that is already approved for use in another member state prior to its application for approval in Sweden. (To a certain degree, cross-acceptance applies).

Approval: An approved vehicle may be used in rail traffic in accordance with those restrictions expressly included in the approval. Routinely, one approval is required for each country in which the vehicle is used. The Swedish Transportation Agency approves vehicles for use in Sweden.

Emergency rescue cards: A form of concise information about a certain type of vehicle. The emergency rescue cards contain information about how emergency entry into a vehicle can be made; all the while that maximum safety is maintained for both passengers and rescue service personnel.

Member state: Members of the European Union supplemented by Norway and Switzerland

MSB: *Swedish Civil Contingencies Agency*

Applicant: The party applying for a vehicle approval

TSI: Technical Specification for Interoperability according to Directives 96/48/EG, 2001/16/EG and 2008/57/EG. The TSIs will be included among the Swedish Transportation Agency's regulations in step with their initial acceptance or later modification. For more information see <http://www.transportstyrelsen.se/sv/Jarnvag/>

2 Vehicles

2.1 New vehicles covered entirely or partly by TSI

For new vehicles of a new type which are to be certified by a “notified body”, information must be presented in accordance with *TSI Safety in Railway Tunnels*, chap. 4.2.5.12, “Emergency Rescue Organizations – Information and Access”. Here it is stated that “Emergency rescue organizations shall be provided with a description of the rolling stock so that they can deal effectively with situations. In particular, they shall be provided with information about how they can make entry into railway vehicles”. This information should be in the form of emergency rescue cards. Descriptions of the design and contents of these cards are included in chapter 3.

New emergency rescue cards must be supplied for previously approved vehicles if such vehicles are modified in a “significant” way. If previously approved vehicles are modified in a “less significant” way, it is sufficient to update previously existing cards. The Swedish Transport Agency will determine the meaning of “significant” in discussions together with the applicant.

2.2 New vehicles not covered by TSI

The Swedish Transport Agency requires that cards must be provided for new vehicles which are not yet covered by TSI. Descriptions of the design and contents of these cards are included in chapter 3.

2.3 Previously existing vehicles

For previously existing vehicles, approved for use before the adoption of TSI, the provision of emergency rescue cards to facilitate rescue efforts is voluntary. The descriptions of the design and contents of emergency rescue cards included in chapter 3 are suitable even in this case.

2.4 Redesign or modernization of existing vehicles

When a vehicle is modified, either redesigned or modernized, a judgment must be made regarding the instituted changes. If the changes influence the contents of the emergency rescue cards, appropriate modifications of the cards must also be made.

If the Swedish Transport Agency determines that a TSI must be applied to such modifications, the applicant must provide an EC Declaration of Verification. A notified body is then to certify that the vehicle fills the requirements of the relevant TSI.

2.5 Vehicles having foreign approval

The Swedish Transport Agency applies the principle of cross-acceptance to vehicles approved by safety authorities in other European countries. Such vehicles may not have emergency rescue cards. If such vehicles are to go through the simplified approval process applied to vehicles already having foreign approval for continuous use in Sweden, emergency rescue cards must be supplied. If a vehicle is intended to be used in Sweden for only a short, limited, time period emergency rescue cards are not required. The Swedish Transport Agency defines a "short, limited, time period" in each particular case.

2.6 Vehicles with foreign emergency rescue cards

Vehicles which already have a foreign approvals and emergency rescue cards may have to have the cards translated into Swedish and make modifications to their contents so that they conform to the Swedish approval.

3 Development of emergency rescue cards

3.1 Information content of emergency rescue cards

Applicants must produce emergency rescue cards which can help mitigate the consequences of accidents involving rail passenger vehicles. The cards concisely describe the risks that can arise during rescue operations. They also describe suitable rescue procedures. The cards ensure that the rescue services can operate as efficiently and effectively as possible, minimized the risk that rescue operations themselves induce additional injuries and damages.

It is the applicant for a vehicle approval that is responsible for the correctness of the source documentation and presentation of this information on the cards. This is to be done at the time that an application is applied for and prior to the vehicles being used in passenger traffic.

The following information shall be included on the cards.

- The vehicle's name and identifying features.
The rescue service must be able to quickly and correctly identify a vehicle upon arrival at the scene of an incident so that the selected emergency rescue card can provide the proper information.
- The location in the vehicles of volumes of oil or other combustible liquids. This information can help the rescue service avoid injuries to their own personnel.
- Show how one can open the vehicle's doors, using either built-in emergency entry functions or brute-force methods of entry, both from outside the vehicle or from within. This information shall include any special doors leading to the driver's compartment.
- Entry through the windows.
Show which windows allow forced entry and how this should be done.
- Entry through the car-body.
Describe how entry into the vehicle can be made through the car-body and which tools are needed.
- How the vehicle can be immobilized with brake blocks.
How you can prevent the vehicle from rolling away.
- Disengagement of high-voltage electrical system.
Including how the main circuit breaker is disengaged, how the pantograph is disengaged from the main high-voltage electrical supply line and how one can work safely in the machine room.

- Disengagement of battery-powered electrical circuits.
This information allows the emergency rescue service to work effectively while minimizing the risk for personal injury.

3.2 Presentational requirements for emergency rescue cards

The following section gives a detailed description of what should be included on emergency rescue cards and how the information should be presented. Emergency rescue cards must be provided in the Swedish Transportation Agency's PowerPoint layout. Blueprints, photographs, and informational text should be included in an attached file (link below). Photographs should have a 90-degree perspective relative to the photographed object. Colors should be accurately depicted. In close-ups of signs, etc, the text must be legible. To use the attached file, right-click on its icon below, chose "presentationsobjekt" and "redigera". Then make changes in the file according to the itemized list below.



2009-02-26

Insatskortens layout.

Layout of emergency rescue card

1) Visual description of vehicle

- a) Photos or other pictures that make it possible to identify the vehicle, together with descriptions of what rail-vehicle combinations can occur in which the vehicle can appear (multiple-units, number of vehicles, etc.)

2) Significant volumes of oil or other flammable liquids in the vehicle

- a) Engineering drawing or picture of vehicle viewed from above
- b) Engineering drawing or picture of vehicle viewed from side
- c) The locations of significant volumes of oil or other flammable liquids should be clearly indicated in the above-mentioned drawing and pictures.

3) Access to vehicle through doors

- a) Engineering drawing or picture of vehicle viewed from above
- b) Engineering drawing or picture of vehicle viewed from side
- c) Clear indications of the locations of doors
- d) Close-up pictures of doors and access devices

- e) Close-up picture of emergency access devices along with clear indication of their locations.
- f) Description of making forcible entry through a door, including where and how the force is to be applied.
- g) Close-up picture of emergency opening devices inside the vehicle along with clear indication of their locations.

4) Entry through windows

- a) Engineering drawings or pictures with clear indication of which windows can be shattered
- b) Picture of any signs that indicate which windows can be forcibly entered and descriptions of where and how the force is to be applied. Pictures of any signs or markings on the vehicle that show which windows can be shattered and where the force should be applied.
- c) Close-up picture of window
- d) Description of which tools and equipment should be used

5) Entry through car-body

- a) Picture of vehicle showing clearly where it is possible to make entry through the car-body, from above, from below or through the side
- b) Exactly where and with which equipment entry can be made, pictures of the equipment and close-up pictures of the locations where openings can be made by cutting, sawing or other means

6) How the vehicle is immobilized

- a) Picture of drivers control panel showing any buttons, levers or switches that can be used to prevent movement of the vehicle. Such devices should be specially indicated in the picture
- b) Close-up picture of any manual brake-system depressurization devices and associated equipment and where they are located on the vehicle

7) Disengagement of high-voltage electrical system

- a) The location of the main circuit breaker

- b) Exactly which controls, levers or regulators are to be used. Close-up pictures of them together with any associated signs and equipment.
- c) Wide-angle pictures of all control panels showing the relative location of the controls, levers or regulators

8) Stopping diesel engines and low-voltage electrical systems

- a) Where in the vehicle shut-off units are located
- b) Which button on the driver control panel
- c) Wide-angle pictures of all control panels showing the relative location of relevant controls

9) Disengagement of batteries

- a) Where the batteries are located in the vehicle
- b) Close-up picture of battery unit. How it is opened. Which tools are needed.
- c) Close-up picture of open battery unit showing which batteries are to be removed and how. Which tools are needed.

4 References

- [1] Europaparlamentets och rådets direktiv 2008/57/EG av den 17 juni 2008 om driftskompatibilitet hos järnvägssystemet inom gemenskapen. *
- [2] TSI Loc and passenger rolling stock, "*Draft Commission Decision concerning a technical specification for interoperability relating to the rolling stock sub-system – "Locomotives a Passenger rolling stock" of the trans-European conventional rail system*";08/57-ST05 EN05.*
- [3] TSI Safety in railway tunnels, "*Commission Decision 20 December 2007 concerning the technical specification of interoperability (TSI) relating to "Safety in railway tunnels" in the trans-European conventional and high speed rail system*", 2008/163/EG.*
- [4] Lag om skydd mot olyckor; 2003:778
<http://www.notisum.se/rnp/sls/sfs/20030778.PDF>
- [5] Transportstyrelsens föreskrifter om godkännande av delsystem för järnväg, TSFS 2010:116.*
- [6] Transportstyrelsens "Avtal gällande leverans och hantering av insatskort för järnvägsfordon avsedda för personbefordran", TSJ 2009-220.

* Could be find on <http://www.transportstyrelsen.se/>