



SAFETY CODES AND GUIDES - TRANSLATIONS

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Contents

Requirements on Security Personnel in the
Transport of Radioactive Materials

of June 4, 1996

Anforderungen an das Sicherungspersonal bei der
Beförderung von radioaktiven Stoffen

vom 4. Juni 1996

**Bundesamt für Strahlenschutz
Salzgitter**

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In case of discrepancies the German text shall prevail.

REQUIREMENTS ON SECURITY PERSONNEL IN THE TRANSPORT OF RADIOACTIVE MATERIALS

of June 4, 1996

1. Introduction and field of application

In addition to the structural and other technical as well as administrative security measures in the transport of radioactive materials the employment of security personnel, who must meet special requirements, is necessary to escort the consignments and in the transport control centre.

The following requirements apply in transports of nuclear fuels, which should be classified in security categories I, II and III in Appendix II to the Law concerning the Agreement dated 26 October 1979 relating to Physical Protection of Nuclear Material dated 24 April 1990 (BGBl.II, p. 326) and in transports of radioactive materials, which should be classified in the security category for waste and large sources according to the "Guideline for the protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1992.

2. Tasks

2.1 Escort personnel

The escort personnel includes the persons, who participate directly in the transport process¹⁾, but not the police officers possibly accompanying the transport.

The escort personnel must perform the security tasks during transport, recognize interference by third parties and report to the responsible bodies. The tasks should be laid down in service instructions.

The important tasks of the escort personnel in transport by road and rail are laid down in the Appendix, No. I.

For transport by water and by air the tasks of the personnel of the transport control centre should be laid down with due consideration of the specific requirements on the transport process and the important tasks specified in the Appendix, No. I.

2.2 Personnel of the transport control centre

The personnel of the transport control centre includes the persons, who are employed by the carrier in a central office during the transport, and the persons kept available as responsible and expert personnel in case of need.

The personnel have to monitor the transport process, document the reports of the escort personnel and take over the alerting of and communication with the responsible police. Their tasks should be laid down in service instructions.

The important task of the personnel of the transport control centre during transport by road and rail are laid down in the Appendix, No. II.

For transport by water and by air the tasks of the personnel of the transport control centre should be laid down with due consideration of the specific requirements on the transport process and the important tasks specified in the Appendix, No. II.

Additional tasks from other areas of work may be

¹⁾ The personnel required for execution of the transports and if necessary for handling operations (e.g. train drivers, shunting personnel, crane drivers) are not escorts according to this guideline.

assigned to the personnel of the transport control centre only insofar as they do not interfere with the tasks necessary during transport.

3. Organization

3.1 Escort personnel

3.1.1 An authorized transport officer should be appointed for each transport. This person is responsible for security during the transport process. If the transport is undertaken with more than one further accompanying person, a representative of the transport officer should be appointed.

3.1.2 The transport should be undertaken with escort personnel according to the "Guideline for protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1991 in such a way that it can take place without interruption of the journey apart from a change of lorry driver or train driver. Exceptions are planned stops determined by operation in the case of rail transport and interruptions when changing the form of transport or police escort and crossing frontiers.

3.2 Personnel of the transport control centre

The transport control centre should be manned according to the "Guideline for protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1991 in such a way that it can perform its tasks continuously throughout the transport process. These are determined in particular by the following conditions:

- operation of technical systems such as monitors, telecommunication equipment, signaling lines, coding equipment;
- communication with transport vehicles and police;
- documentation;
- security of the transport control centre.

4. Personal and technical requirements

4.1 Personal requirements

The escort personnel and the personnel of the transport control centre must be

- checked according to the "Guideline for checking the reliability of persons employed in nuclear facilities and in the transport and use of nuclear fuels" dated 4 June 1996 (GMBI 1996, p. 613) taking into account the assignment of check categories specified in the "Guideline for protection of radioactive materials against interference of other actions by third parties during transport" dated 28 May 1991; there must be no misgivings about the reliability;
- healthy and capable of meeting all demands (occupational health examinations e.g. G 25 "Trade association principles for occupational health precautionary examinations" (precautionary radiation protection examination according to § 67 Radiation Protection Ordinance)).

4.2 Technical requirements

4.2.1 The training and further training of the authorized transport officer and his representative must comprise in particular:

1. transport-orientated examination (e.g. further training examination "Security guard for transport of money and valuables and security transports") or "certified works security guard" examination, in each case at the Chamber of Industry and Commerce, or corresponding certificates of other suitable, officially recognized training centres;
2. practical knowledge of nuclear fuel transports acquired by participation in planning and execution of

- at least three transports;
3. knowledge of secrecy, concluding with a declaration of secrecy for a limited period with regard to official matters;
 4. knowledge of self-defence and emergency aid law according to Civil Code and Penal Code;
 5. knowledge of transport-related aspects of radiation protection, as required for persons according to § 4, para. 2, No. 2 Atomic Energy Act or § 10 para. 1, No. 3, Radiation Protection Ordinance; e.g. by participation in a course on "Radiation protection during transport of radioactive materials";
 6. knowledge of the relevant provisions for carrying out these transports in the following legal and sublegal regulations:
 - Atomic Energy Act, Radiation Protection Ordinance and the regulations (e.g. licence contents, subsidiary provision) based on them for the safety and security of transports;
 - Law concerning the Transport of Hazardous Goods (GGG); Regulations concerning Transport of Hazardous Goods by Road (GGVS) or Regulations concerning Transport of Hazardous Goods by Rail (GGVE);
 - exceptional provisions concerning Hazardous Goods;
 - the corresponding international regulations in the case of cross-border;
 7. adequate command of the German language²⁾;
 8. knowledge and skills in unarmed self-defence;
 9. knowledge and skills in the use of weapons, e.g. according to VBG 68;
 10. knowledge of alarm and emergency plans, in particular
 - evaluation and transmission of hazardous situations taking into account possible criminal actions as well as possible tactics to the required extent;
 - knowledge of behaviour when deployed in the case of attacks;
 - principles of cooperation with the police, tactical behaviour, securing of the scene of the crime, use of technical possibilities.

Before appointment of a person as authorized transport officer or as his representative Nos. 1 to 10 as training content should be proved; proof of Nos. 5 and 6 can be furnished by submission of the certificate concerning "Special training of vehicle drivers" according to GGVS/ADR; No. 1 is dispensed with in the case of transport of radioactive materials of security category III as well as in the transport of large sources according to the "Guideline for protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1991.

Annual further training is required for Nos. 3, 4, 6 and 10, quarterly further training for Nos. 8 and 9 and half-yearly instruction for No. 5.

Nos. 4, 8 and 9 are dispensed with, insofar as the "Guideline for protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1991 does not envisage an obligation by the escort personnel to take delaying action or provision of arms.

4.2.2 Training and further training of the other escort personnel must comprise in particular

1. transport-orientated examination (e.g. further training examination "Security guard for transport of money and valuables and security transports") or "Certified works security guard" examination, in each case at the Chamber of Industry and Commerce, or corresponding certificates of other suitable, officially recognized training centres;

2. knowledge of secrecy, concluding with a declaration of secrecy for a limited period with regard to official matters;
3. knowledge of self-defence and emergency aid law according to the Civil Code and Penal Code;
4. knowledge of possible radiation hazards and protective measures to be applied by instruction;
5. knowledge of the relevant provisions of the GGVS (for drivers and co-drivers of the form of transport) or the GGVE (for transport by rail) or international provisions;
6. knowledge and skills in unarmed self-defence;
7. knowledge and skills in the use of weapons, e.g. according to VBG 68;
8. knowledge of emergency plans, in particular
 - knowledge of behaviour when deployed in the case of attacks;
 - principles of cooperation with the police, tactical behaviour, securing the scene of the crime, use of technical possibilities;
9. participation in suitable driving courses (for drivers of road transports).

Before employment of the other escort personnel Nos. 1 to 9 as training contents should be proved; proof of Nos. 4 and 5 can be furnished by submission of the certificate concerning "Special training of vehicle drivers" according to GGVS/ADR; No. 1 is dispensed with in the case of transport of radioactive materials of security category III as well as in the transport of large sources according to the "Guideline for protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1991.

Annual further training is required for Nos. 2, 3, 5 and 8, quarterly further training for Nos. 6 and 7 and half-yearly instruction for No. 4.

Annual further training for drivers and co-drivers of the form of transport is required for No. 9.

Nos. 3, 6 and 7 are dispensed with, insofar as the "Guideline for protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1991 does not envisage an obligation by the escort personnel to take delaying action or provision of arms.

4.2.3 Training and further training of the personnel in the transport control centre must comprise in particular:

1. basic knowledge of the duties of works security guards;
 2. knowledge of secrecy, concluding with a declaration of secrecy for a limited period with regard to official matters;
 3. practical knowledge of transport;
 4. knowledge of cooperation with the police;
 5. knowledge of the evaluation and transmission of hazardous situations;
 6. knowledge of alarm and emergency plans.
- Annual further training is required for Nos. 2, 4, 5 and 6.

4.2.4 The personnel kept available by the carrier for the responsible and expert functions envisaged under No. 2.2 must have at least the same training and further training as the authorized transport officer according to 4.2.1, Nos. 1, 2, 8 and 9 from 4.2.1 being dispensable.

4.2.5 Compliance with the requirements under 4.2.1 to 4.2.3 must be proved. This can be done by submission of certificates from organizers of courses, which show the content, period and type of the check on the training and further training course. The applicant may also be the organizer of a course.

5. Equipment

Depending on the security category and requirement stage the escort personnel should be equipped with

²⁾ In addition the authorized transport officer must be able to communicate with the other escort personnel and the driver and codriver.

firearms (pistols or revolvers) and irritant aerosols according to the "Guideline for protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1991. Firearms should be carried loaded ready for use and secured³⁾. In more hazardous situations the carriers of the weapons use their discretion to decide their condition.

Firearms may also be stored in the transport control centre for own security and as a precaution against interference or other actions by third parties.

The firearms should be regularly tested and serviced. When not in use they should be unloaded and kept under lock and key in specially secured rooms or containers, e.g. in the transport control centre.

6. Proof

Compliance with the requirements in this guideline should be proved to the licensing authority, unless other regulations are laid down in the licensing decision; the supervisory checks are conducted by the responsible authorities.

7. Special regulations

7.1 The proof should be furnished within two years for persons already employed as transport control centre or escort personnel before this guideline came into force.

7.2 The licensing authority decides on deviation from the requirement of the examination according to 4.2.1, No. 1 and 4.2.2, No. 1 in individual cases (e.g. relevant practical experience for many years).

³⁾ A special permit of the responsible accident insurer according to § 3, para 1 of the "General Provisions" of the Accident Prevention Regulations (VBG 1) may be required for this purpose.

Appendix

I. Duties of escort personnel during transport by road and rail

- a) Duties before transport begins:
 - inspection, for prohibited objects, of the vehicles or the wagon and wagons coupled directly to it and of the power unit;
 - examination of completeness of escort papers;
 - examination, against a checklist, that structural and other technical safety equipment is in working order;
 - submission of necessary notifications at the start of transport;
 - in case of there being a police escort: agreement of transport details with the leader of the police escort party.
- b) Duties during transport:
 - monitoring radio traffic reports and evaluating the information with regard to the planned route (not applicable for transport by rail);
 - necessary reports to the transport control centre stating position and transport progress and giving a status report;
 - maintaining technical safety equipment and examining and evaluating information provided by this equipment;
 - observing the surroundings for irregularities and informing the transport control centre immediately if these are judged to be interference or other actions by third parties;
 - agreement with the transport control centre should a deviation have to be made from the set route⁴⁾;
 - communication within the transport unit (and with police if accompanying);
 - for transport by rail, notifying the competent border protection committee for each section of line of the arrival and departure of the transport unit;
 - in case of scheduled interruptions to the journey:
 - provision of a communication link with the transport control centre and also with the police if accompanying;
 - ensuring the security of the escorting transport unit and self protection.
- c) Duties in case of unscheduled interruptions to the journey (amongst others, accident, vehicle breakdown or operational difficulty, failure of security equipment):
 - notification of the transport control centre, stating position and giving status report;
 - maintaining the communication link with the transport control centre and with the police if accompanying;
 - ensuring the security of the escorting transport unit and self protection;
 - observation of surroundings;
 - assessment of the situation and agreement with the transport control centre as to whether the journey should be continued or a stop-over point reached or if help is required.
- d) Duties in case of interference or other actions by third parties:
 - alert the competent police and the transport control centre stating position and giving a status report;
 - continuous communication of situation to operations centre of competent police;
 - implementation of further immediate measures in accordance with the emergency plan;
 - delaying action in accordance with the "Guideline for protection of radioactive materials against interference or other actions by third parties during transport" dated 28 May 1991.

II. Duties of personnel at the transport control

⁴⁾ For transport by rail the deviation of the set transport route may be brought about by the transport control centre only.

centre during transport by road and rail

- a) Duties before transport begins:
- examination that structural and other technical security equipment at the transport control centre, where not in constant use, is in working order;
 - necessary communication with the shipper and receiver and with the competent authorities (e.g. police) and the carrier.
- b) Duties during transport:
- maintaining technical security equipment;
 - accepting, examining and processing documentation and evaluating information;
 - agreeing with the competent authorities (supervisory authority/police) any deviations from the transport schedule and correspondingly informing the authorized transport officer;
 - notifying the operations centre of the competent police for each part of the route of the arrival and departure of the transport unit (not applicable if police accompanying);
 - necessary communication with the recipient;
 - provision of communication link to the transport unit for scheduled interruptions of the journey (not applicable to scheduled stops when transporting by rail).
- c) Duties in case of unscheduled interruptions of the journey:
- acceptance of the assessment of the situation by the authorized transport officer;
 - passing above on to the competent authorities (supervisory authority/police) and agreeing with them on whether the journey to be continued or a stop-over point reached or if help is required.
 - informing the authorized transport officer of the outcome of this agreement;
 - maintaining communication with the transport unit and the competent police;
 - organizing the carrier's help measures.
- d) Duties in case of interference or other actions by third parties:
- passing on the alarm and any situation report to the operations centre of the competent police;
 - implementing further immediate measures in accordance with the alarm plan;
 - call in additional personnel.

(Where necessary, responsible people are to be called being immediately available at the transport control centre and have the authority to direct transport control centre personnel and personnel escorting the transport; furthermore, during the transport itself competent personnel to be immediately available to the transport control centre is hold in readiness).