

Safety Advisor in Europe

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In 1978 there was a large dangerous goods accident in Spain with over 200 deaths (gas tank truck explosion). The driver of this vehicle was not trained. Shortly after this incident, training was prescribed at first for tank truck drivers and then later for parcel goods transport drivers (including as such for radioactive materials) as well. Soon thereafter, it was clear that it was not enough only to train the drivers, but also the persons responsible for preparing and overseeing the movements of shipments were also in need of training.

Hazmat accidents started it all

Nine years after the accident in Spain, in 1987 in a small town in Germany, a serious tank truck accident occurred. This disaster killed six people, severely injuring some 40 other people and destroyed 12 buildings. Politicians in particular were involved in heated discussions over the possible causes of a such a mishap, asking for further measures to be taken:

- highway improvements (more local beltways)
- advancements in vehicle technology
- improvements of emergency response action, and
- **better training of all transport participants.**

As to the last item, mention should be made of an even more severe accident in Spain that killed more than 200, which had given rise to special tank truck driver training.

This mandatory training was improved and extended to apply to packaged-goods drivers. A further intention was to train not only drivers but their support network as well.

About 2 years after this tank truck accident the “Statutory Ordinance on the Appointment of Dangerous Goods Officers and the Training of Designated Persons in Enterprises and Factories” was ready for promulgation. The essentials of this work are set out below:

Two years after the Herborn disaster (1989)

S.I. on the Appointment of Dangerous Goods Officers and the Training of Designated Persons in Businesses and Industrial Enterprises.
(S.I. for D.G.O.s)

Fig. 1 Two years after the Herborn disaster a Statutory Instrument was put into force.

Statutory Instrument (S.I.) for Dangerous Goods Officers (DGOs) (contents)	
§ 1	appointments
§ 2	requirements
§ 3	duties and obligations
§ 4	obligations of the entrepreneur
§ 5	designated persons
§ 6	infringements
§ 7	clauses with regards to Berlin's former special legal status
§ 8	entry into force
Further official announcements on the S.I. for DGOs	
*	statements of reasons
*	explanatory statements from the "Federal Ministry of Transport"
*	German Industrial and Trade Association's model statute

Fig. 2 Statutory Instrument (S.I.) for Dangerous Goods Officers

Every establishment carrying, shipped, or packed dangerous goods was to appoint a DGO if they met any of the following conditions:

- movement of cargo upwards of 50 metric tons (net) per year,
- movement of radioactive material as pertaining to schedules 5 - 13, and
- movement of highly dangerous goods more often than 4 times a year.

German Industrial and Trade Association's model statute	
*	Suitable premises
*	Professional training for staff
*	Suitable teaching aids
Approval	
*	Uniform syllabus
General part (all modes)	Specific part (individual modes)
*	Duration of training: 29 hours for each mode of transport
*	Reduced quantity (duration) for a combination of several modes

Fig. 3 German Industrial and Trade Association's model statute

The DGO must be qualified (through initial training) and attend prescribed training courses at least once every 3 years. Responsibility for all procedures relating to this training has been delegated to local Chambers of Commerce and Industry as part of the industry's self-administration.

All Chambers of Commerce and Industry jointly developed a training system:

- training course organizers to provide suitable premises and professional teaching staff

- approval is granted once all requirements have been met
- the subjects to be covered are laid down in a syllabus, and
- duration of training is 29 hours for any one mode of transport: if several modes are combined, each mode is given fewer hours.

Structure of DGO Training	
DGO Training Syllabus	
General Part of Syllabus (GP)	
1	S.I. for DGOs
2	The international context
3	Carriage of Dangerous Goods Act
4	Criminal law and law concerning liabilities
5	Other specific provisions
Specific Part of Syllabus (SP)	
1	Introduction
2	Persons in charge
3	Framework of the statutory instruments
4	Classification
5	Packaging of dangerous goods
6	Marking and labeling
7	Documentation
8	Operation
9	Further individual aspects

Fig. 4 Structure of DGO Training

Duties and responsibilities

After successful completion of initial training, an appointment as a DGO for an establishment may follow. The tasks include monitoring all aspects related to dangerous goods carriage. This person is required to keep records of his activities and report deficiencies to management. This person is however is not personally responsible for the following remedial action. He or she must file an annual activity report with management. This report shall contain:

- nature and quantity of dangerous goods handled
- mode of transport chosen
- packaging and vehicles used
- staff employed
- particulars on loading and unloading equipment, and
- particulars on training courses and accidents administered.

Management must submit the annual activity report to the local competent authority upon request.

Any person who:

- packs,
- hands over for shipment,
- carries or
- ships

prerequisite

special knowledge, training, appointment

Dangerous Goods Officer D.G.O.

responsibilities

reports to management

compliance assurance

presents report to supervising
public authority when requested

keeps records of supervisory activities

draws up an annual report

conducts or provides for training
of colleagues

Note: Responsibility for complying with regulations rests with the persons actually charged with specific tasks. This is however not always the Dangerous Goods Officer (D.G.O.).

Fig. 5 Dangerous Goods Officer D.G.O.

Training of Designated Persons

Persons in charge of transport operations must be trained. This is required of all firms that pack, ship, or carry dangerous goods, regardless of the quantity of these goods. No procedure for this training is prescribed, it may be conducted by external trainers or by the in-house DGO.

Designated persons are those personally responsible for transport or transport-related activities. Additionally, someone whose area of responsibility includes packing or supervision of packing of dangerous goods or radioactive materials.

Regulations proved effective

Intense training activity followed promulgation of the DGO Statutory Ordinance. A transitional provision that exempted practitioners from training was exercised only sparingly. Very soon a more conscious attitude towards dangerous goods handling could be observed.

EU activities

The European Union of 15 countries intends action in those areas of dangerous goods transport either not covered by international agreements or insufficiently regulated. They may issue statutory ordinances that are directly binding or directives that need to be transposed into national law by every European member state.

In 1989 the EU issued a directive on driver training which required, for instance all RAM drivers with cargo pertaining to schedules 5 - 13 to complete special training.

Germany requested the European Commission to make mandatory, the appointment of DGOs at the EU level in all establishments involved in the packing, shipping, or carrying of dangerous goods. Several years of negotiations in Brussels followed, and today a wording has been agreed upon whose adoption occurred in 1996.

D.G.O./Safety Advisor	
EU activities	
* 1989	Directives driver training
* 1993	German application
* 1993 – 1995	intensive consultations
* 1996	Council of Ministers (of the EU) resolution - title: Safety Advisor - guarantees safety of carriage for dangerous goods - training and examination - accident report - reciprocal recognition of training certificates
* 2000	transitional provisions to expire
* 2001	Safety Advisor in ADR, RID (ADNR)

Fig. 6 EU Activities/Safety Advisor

Starting with the year 2000, every firm conducting shipment, carriage, or unloading of hazardous materials will have to appoint a Safety Advisor. Exemptions are provided for the following cases:

- armed forces (which in Germany are presently fully subject to the DGO Statutory Ordinance)
- small quantities (referring to the ADR Agreement for specification) and
- occasional carriage.

According to these guidelines a safety advisor must be appointed, as was the case with the former “Dangerous Goods Ordinance” in Germany, with the primary task of, in a on site monitoring capacity reducing risks which may occur with the transportation of dangerous goods. Exemption from the „Dangerous Goods Ordinance“ has been amended considerably.

The member states were required to secure a sufficient quantity of “Safety Advisors as of the 1st of January 2000 to meet the, then upcoming needs of the affected establishments.

New since 1998 is in the “Dangerous Goods Safety Advisor Ordinance”, the safety advisor is responsible for the removal of the, through monitoring identified deficiencies (without authorization to issue directives).

The implementation of these guidelines is carried out in Germany with an ordinance change and revision of the Dangerous Goods Safety Advisor Ordinance dated from March 26, 1998 (BGBl. I S. 648).

In the meantime there is also a guideline from the EU Advisory Council responsible for the harmonization of testing rules for dangerous goods safety advisors via road, rail, or inland waterway (2000/18/EG). In these EC guidelines are stipulated the specific details of the now required tests in all 15 EU countries.

Public announcement of the examination questions for the “Dangerous Goods Safety Advisor” examination, a further revision is in process at present, here special attention shall be given to alignment with those regulations changed by the structure reform.

A training certificate is issued upon successful completion of the initial training valid for a period of 5 years. A refresher course with an examination or just an examination is then required for renewal. One has the additional option in Germany to participate in a refresher course without an examination after each 3 years (instead of the 5 year stipulation).

In the fall of 2001 a revision of the “Dangerous Goods Safety Advisor Ordinance is planned, an alignment with the exemption regulations of the new ADR (section: 1.1.3.6.3).

Dangerous Goods Safety Advisor in the current ADR/RID

Behind the abbreviation ADR is concealed a European agreement on the international carriage of dangerous goods by road. ADR is in force at present in 36 countries of Europe. For rail transport RID is in force in all the European states except for Russia.

Both international agreements have been restructured and have been brought into power in their new forms as of the 1st of July 2001.

New in the new ADR/RID is the incorporation of the requirement of appointment of a dangerous goods safety advisor in the new regulations. With this action for example is the “Dangerous Goods Safety Officer” now obligatory in 36 ADR countries and additionally in more than 40 RID member countries.

There were no changes with respect to EU guidelines, so that these guidelines can be dropped.

Summary

Extensive regulation governs dangerous goods transport. These regulations are often difficult to understand. Lack of application, however, will endanger life and the environment. To ensure proper application, firms are in need of specific advice.

This can be achieved with the help of the so-called “Dangerous Goods Advisor” which was at first required in Germany and later in the 15 EU countries and now today in almost all European countries.