

A NEW REGULATORY OBLIGATION FROM ADR: THE SAFETY ADVISER (DGSA)

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ABSTRACT

In order to improve safety in the transport of dangerous goods, the European ADR regulations (Agreement of the Transport of Dangerous Goods by Road) requires training for drivers and other personnel as a function of their responsibilities. In 1996, a European directive was issued concerning the designation as well as the professional qualifications of safety advisers for road, rail and inner navigation of dangerous goods. In France, this gave rise to the decree of December 17, 1998 (which was subsequently modified on December 22, 1999). This decree requires any enterprise engaged in operations involving transport, loading or unloading of dangerous goods to designate a Safety Adviser ; the decree took effect on January 1, 2001. This adviser must have an appropriate professional qualification, obtained after sitting for a national examination given by an organisation to be designated by the Ministry of Transport, and jointly by the Ministers of Industry and the Environment, in the case of transport of radioactive goods.

In order to help candidates to prepare for this examination, and for their future role as a Safety Adviser, it is highly recommended that they enrol in a specialised training program. The *Institut National des Sciences et Techniques Nucléaires*, (INSTN) under the authority of the *Commissariat à l'Énergie Atomique* (French Atomic Energy Commission) offers training programs covering safety issues in road transport of radioactive goods. The course, which lasts 5 days, offers a dual approach: The first part of the course is general in nature; and deals with safety issues relative to dangerous goods; the second part deals with radioactive materials. One of the difficulties in developing the course was to provide trainees with a working methodology to enable them to quickly become familiar with the ADR structure, taking into account the fact that basic knowledge in terms of regulations and radiation protection vary widely from one trainee to another.

The purpose of the course is to present:

- Regulatory aspects (role and purpose) of the decree requiring Safety Advisers, to be an integral part of the new European regulations, which will be applicable as of July 1, 2001,
- The course of study enabling candidates to prepare for national examinations,
- An overview of the current situation in France and Europe.

INTRODUCTION

As the amount of national and international transport of dangerous goods has increased considerably during the years, the increased risk of accidents was significant. Some of these accidents have for origin a misunderstanding or an insufficient knowledge of the risks connected with the nature of the transported goods. It is for that reason that the Council of the European Union decided to take measures to insure greater prevention of the risks, and promote the improvement of the safety and health of the employees. To reach these objectives, it was decided to set up advisers in the safety for the transport of dangerous goods. To promote this decision, the European Directive 96 / 35 / EC relative to the appointment and to the adviser's professional qualification in safety, was created in 1996.

At first, the consequences were to transcribe this last directive in a national text of law by every member state and then, to set up the organization of the exams as well as the training of the advisers in safety. Adviser's implementation in safety is an integral part of the new European Agreement for the

Transport of Dangerous Goods by Road (ADR), the new European regulation applicable on July 1, 2001.

STATUTORY ASPECT

The safety adviser for the transportation of dangerous goods (DGSA) should have a knowledge of the legal, statutory and administrative measures, validated by an exam. Member states deliver a certificate of community model giving evidence of the professional qualification of the advisers. This qualification should contribute to minimize the risk of accidents and prevent irreversible damage to the environment as well as to insure the safety of anyone who may come in contact with dangerous goods.

Liability undertakings

The European directive indicates that all member states should take the necessary measures to see that every concerned undertaking appoints one or several advisers to the safety issue no later than December 31, 1999. Undertakings subjected by this obligation are those who use ground transport ; that is by road, by rail or by inner navigation as well as loadings or unloadings of dangerous goods. The directive does not apply to transport made by the armed forces themselves or under the auspices of the armed forces as well as for the occasional activities of transport pertaining to limited quantities of dangerous goods.

The role of the DGSA

Under the responsibility of the head of the undertaking, the main task of the adviser shall be to see that the directive is enforced in accordance with the rules applicable and in the safest possible way.

He has the following duties in particular :

- monitoring compliance with the requirements governing the transport of dangerous goods
- advising his undertaking on the transport of dangerous goods
- preparing an annual report to the management of his undertaking which shall be conserved for five years and made available to the national authorities at their request.

The adviser's duties also include monitoring the implementation of procedures relating to :

- the compliance with the requirements governing the identification of dangerous goods
- the checking of the equipment used in connection with the transport, loading or unloading
- ensuring the presence of the documents and safety equipment which must accompany different means of transport and their compliance with the regulation
- the proper training of the undertaking's employees and the maintenance of records of such training
- proper emergency procedures in the event of any accident or incident that may affect safety during the transport, loading or unloadings
- appropriate measures to avoid the recurrence of accidents, incidents or serious infringements

Appointment of the DGSA

The list of tasks for which he or she is responsible is lengthy, and some are more complex than others. Each concerned undertaking appoints one or several DGSA. In that case, the undertaking clarifies the field of competence of each, namely, geographic, thematic (road, rail) or by class.

The adviser may also be the head of the undertaking or a person not directly employed by that undertaking. Each undertaking shall inform the competent authority or the body designated by each contracting party of the identity of its adviser. Each undertaking concerned shall inform the competent authority or the body designated for that purpose by each contracting party of the identity of its adviser.

Qualification certificate

The DGSA should hold a vocational training certificate, valid for one or several concerned modes and function of the chosen classes. To obtain this certificate, it is necessary to undergo training and pass with success an exam approved by the Member State's competent authority. Its validity is 5 years.

THE SITUATION IN FRANCE

The French modified decree of December 17, 1998 which carries transposition of the European directive obliges undertakings to appoint to the prefect of the department of the head office of the undertaking, one or several advisers on January 1, 2001. To become DGSA, the candidate should address the only national body appointed by order by Minister of Transport in charge of and collectively Secretaries of Commerce in charge of Environment, the « Comité Interprofessionnel pour le développement de la Formation dans les transports de Marchandises Dangereuses » (CIFMD). The members of this association arise from representative professional organisations of sectors directly concerned by the production, the distribution, the storage and the transport of dangerous goods. The bodies of training concerned by the same domain are present as associate members and have only a consultative way.

Only the exam is compulsory, but it is strongly recommended that the candidates follow a training. For the radioactive goods (class 7 of the dangerous goods), this one is assured by the *Institut National des Sciences et Techniques Nucléaires* (INSTN) which depends on the *Commissariat à l'Énergie Atomique*.

Organization of the exam

To become DGSA, there were 2 possibilities :

- 1) By means of the professional experience (article 7.2 of the French order)
These modalities of exam were feasible only in 1999. The candidate practicing for at least three years, missions close to the DGSA within his undertaking subjected to this new obligation, presented a written explaining file how he exercised his mission as well as the organized procedures. The candidate was orally interrogated by a jury appointed by the Member State's competente authority, on his motivations and knowledge of the rule while limiting itself to the activities of the company
- 2) By exam (article 7.1 of the French order)
Only existing possibility today. The exam consists of a series of written tests adapted to the specializations and the mode (s) chosen by the candidate. At first, this one should answer in a time limit of 2. 30 hours to 50 questions of type MCQ distributed in the following way : 25 questions of general order concerning one or several ways of transport (common-core syllabus of the rule ADR, RID or ADNR) and 25 specific questions in it or the chosen classes and finally in one or several case studies in a time limit of 1. 30 hour. The total duration is fixed at 4 hours and the candidate is authorized to use the not commented current regulations.

The MCQ being noted on 60 points with an eliminating note lower than 40 and the case study on 40 with an eliminating note lower than 14, the candidate is successful if he adds up a number of points superior or equal to 60 on 100.

Training of the safety adviser for the transport of radioactive materials

INSTN, the only body approved for the training of the drivers for the transport of radioactive materials by road, organizes trainings to prepare the candidate for the exam and help him to succeed in his or her future missions. The teaching, of a duration of 5 days is divided into two parts as follows :

- 1) The basic training (3 days) : In this first part, the trainee discovers the structure of the regulation ADR and the generalities applicable to all classes of dangerous goods. This discovery of the ADR allows the trainee to get acquainted and to acquire an ease in the research for precise statutory points. It is necessary to remember that the candidate has only 3 minutes on average to answer a question, what authorizes no waste of time !
- 2) The specialization relative to the radioactive materials (2 days) : The first morning is reserved for the notions of radioactivity, radiation protection and detection because it is important to consider and to approach the risks presented by the nature of the transported material. To have a level of culture in radiation protection is important with regard to the missions of the DGSA. The part of the ADR relative to the class 7 is presented in detail to the trainee during a day. The last afternoon is dedicated to the realization of an exam and its correction.

In view of the evaluations of the various sessions which have already taken place, it emerges that this teaching is very intensive. Besides the trainees having basic knowledge in radiation protection and in regulation vary, INSTN is going to modify this training. In October 2001, only the speciality will be approached. The candidate should follow the basic training in a specialized body before arriving at INSTN. Therefore the trainee will be more available and receptive, the first part being already assimilated

The notions of radioactivity, radiation protection and detection will be optional, always with a concern to simplify, which allows neophyte trainees in this domain to progress, in a rhythm which is adapted to them. The next four days will be concentrated on the transport rule of radioactive materials by alternating theory, exercises and a simulated exam.

The number of the safety advisers in France is given in the table below :

Article 7.1	Number of present candidates	Number of accepted candidates	Admission %	Number of candidates registered for the class 7 by road	Number of accepted candidates	Admission % for the class 7 by road
Exam of November 22, 1999	1027	581	56,57	26	20	76,92
Exam of February 10, 2000	875	362	41,37	19	15	78,95
Exam of October 4, 2000	1349	828	61,38	31	22	70,97
Exam of March 21, 2001	848	458	54	18	8	44
TOTAL	4099	2229	53,33	94	65	67,71

Article 7.2	Number of candidates having taken the exam	Number of accepted candidates	Admission %	Number of candidates registered for the class 7 by road	Number of accepted candidates	Admission % for the class 7 by road
TOTAL	3738	2703	72,4	48	29	60,4

Article 7.2 + Article 7.1	Number of candidates having taken the exam	Number of accepted candidates	Admission %	Number of candidates registered for the class 7 by road	Number of accepted candidates	Admission % for the class 7 by road
TOTAL	7837	4932	62,86	142	94	64,77

In fact, 267 DGSAs passed with success the exam pertaining to class 7, some acquired it by means of a multi classes exam or by a different mode of road transport. On the other hand, the number of advisers exercising their mission and declared rest unknown.

THE SITUATION IN EUROPE

On March 1, 2001, 15 countries (14 from the European community and Ireland) transposed the directive relative to the DGSA among the 34 which ratified or adhered to the ADR (35 if Ukraine adhered to the ADR). The countries which have not done it yet should take the necessary administrative measures so that the clauses relative to the DGSA are applicable at the latest on January 1, 2003.

List of countries that have adhered to the directive as of March 1, 2001:

- Belgium - Denmark - Germany - Greece - Spain - France - Ireland - Italy - Luxemburg – The Netherlands - Austria - Portugal - Finland - Sweden - United Kingdom

The table below re-groups the information collected on August 1, 2001 :

COUNTRIES	TRAINING	EXAM	Number of safety advisers
Germany	Approved by the Chamber of Commerce	Chamber of Commerce	
Luxemburg	Compulsory Chamber of Commerce Approved by the Competent Authority	Chamber of Commerce	60 (all classes)
Austria	Compulsory About forty approved bodies	Performed by the training institution in cooperation with an examination expert appointed by the competent authority	
United Kingdom	Not compulsory Examination syllabus accessible on the Web	Scottish Qualification Authority	3400 (all classes)
Spain		Ministerio de Fomento Direccion general de transportes por carretera	12 (class 7) 289 (all classes)
Sweden	Not compulsory Swedish Rescue Services Agency Only all classes. 4 or 5 bodies	Swedish Rescue Services Agency Department of DG	850 (all classes but depending on the mode)
Denmark	Not compulsory	Road Safety and Transport Agency	430 (all classes)
Finland	Not compulsory	Vehicle Administration AKE	250 (all classes)

In view of the gathered information, it seems that the implementation of the exam's organization exams as well as the training by every member state was not made with a concern for harmonization. The notorious differences are as follows :

- The training is :
 - compulsory or not
 - all classes or function of a specialization
 - assured by an approved body or not

- The exam is :
 - assured by the training institution or by an approved body appointed by the Competent Authority
 - valid for all classes of dangerous goods and in function of the chosen mode of transport,
 - valid in function of the chosen class and mode

The issuance of the vocational training certificate still not being insured by only one approved body, it is difficult to estimate the amount of safety advisers as of this date. Some countries (Sweden for example) impose the implementation of safety advisers for means of transportation other than ground (by air, by sea).

CONCLUSION

In spite of the difficulties encountered, on a European level, in gathering information useful for the preparation of this presentation (8 answers received out of 15 countries contacted as of August 20, 2001), it appears that the implementation of the European Directive is done in good conditions, due to the voluntarist action of some leader countries. However, the absence of harmonization, regarding the training and the level of the exam, between the various States merits our attention.

The validity period of the certificate of qualification being five years, the safety adviser is required to extend the certificate in order to continue to exercise his or her mission. Consequently, if there has been no harmonization regarding the initial modalities of acquisition of the certificate, it would be advisable to commence a reflection on how to attain such a harmonization. It will be a question of envisaging a dialogue between the various States to guarantee recycling with a homogeneous level of knowledge of the adviser and to standardize the methods and the means to reach it. Indeed let us be reminded that the certificate of qualification enables the adviser to exercise his or her mission in all the member States.

In France, the appointment of the safety adviser in a transport company is compulsory only since January 1, 2001, therefore it is not yet possible to estimate the impact of this new requirement on the improvement of the safety of the transport of dangerous goods. A feedback on this question should be initiated on a European level.