

THE TRAINING, EXAMINATION AND CERTIFICATION OF SAFETY ADVISERS FOR THE TRANSPORT OF DANGEROUS GOODS BY ROAD, RAIL AND INLAND WATERWAYS

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The adoption of the European Union Council Directive 96/35/EC on the appointment and vocational qualification of safety advisers for the transport of dangerous goods by road, rail and inland waterways has posed significant challenges for administrators and industry. The concept of a mandatory qualification for the transport of dangerous goods was novel and cut across existing health and safety legislative requirements and industry schemes of "best practice". Within the Members of the European Union only the United Kingdom opposed the adoption of the Directive fearing that the requirement could lead to confusion with existing national health and safety requirements and to increased industry costs without any appreciable enhancement of current safety standards. The United Kingdom lost the debate but being good members of the European Union set out to implement the Directive using the flexibilities contained in the Directive and bearing in mind existing national safety procedures. The aim was implementation with "a light a touch as possible consistent with the UK's treaty obligations".

INTRODUCTION

The aim of the DETR is to facilitate transport, and therefore trade, in a safe manner. The importance of "dangerous goods" within the UK economy is significant and understood by DETR. A modern economy and society use chemicals and other dangerous goods on a daily basis. There is some ignorance within the British public of the part that such goods play in their everyday life, their health service, homes, transport and universities. Regrettably the public image of dangerous goods is very confused.

The work of the various Government authorities, the Department of the Environment, Transport and the Regions, the Health and Safety Executive, the Nuclear Safety Directorate, the Vehicle Inspectorate and the modal authorities, the Marine and Coastguard Agency and the Civil Aviation Authority, are designed to ensure that all dangerous goods are carried safely within the United Kingdom and to and from these islands. Virtually all UK legislation relating to the carriage of dangerous goods is based on international agreements made at various international bodies such as the United Nations, the International Atomic Energy Authority, International Maritime Organisation, the International Civil Aviation Organisation and the European Union. The ability of the UK Parliament to make specific UK legislation concerning single market issues is virtually non-existent. This is now a fact of life.

THE DIRECTIVE

The European Council Directive 96/35/EC (Official Journal No L145/11) on the appointment and vocational qualification of safety advisers for the transport of dangerous goods by road, rail and inland waterway was adopted by the EU Council of Ministers on 3 June 1996.

BACKGROUND

This was a Directive the UK did not want. UK authorities realised that there was very little in the way of added safety benefit and the costs of introduction would be great (estimated safety benefits £30 million over ten years) estimated costs (mainly to industry) £470 million to £750 million over ten years).

The original proposal for a Directive had its origins in a (West) German national requirement introduced in 1989. The European Commission took forward the idea and drafted a proposal for a Risk Prevention Officer Directive. Nothing happened between 1992 and 1995 when the German Presidency brought forward a further text. The UK authorities had looked at the German experience in some detail and despite our continued opposition we decided that constructive opposition was the best way forward. Therefore UK officials participated fully in the re-drafting of the safety adviser proposal.

The UK view was that the Directive's aim should be confined to providing advice to management. Others references to direct responsibility for the undertaking's actions and duties should be removed. In this we were successful. Even though the UK voted against the adoption it was believed that the agreed text could be accommodated within our national health and safety legislation.

One special feature which the Author would wish to briefly highlight here relates to existing safety qualifications held by individuals responsible for providing health and safety duties and advice. Other EU Member States, and especially Germany and France were determined to have introduced a specific transport related qualification with a specific training and approved examination requirement. The UK authorities did manage to argue against a specific approved training requirement but were unable to avoid the adoption of the requirement for an approved examination which, if successfully completed, would lead to the award of a specific transport related vocational training certificate.

There would be no "grandfather rights" for previous experience, or the holding of a related health and safety or transport safety certificate. Basically, you pass the approved examination set by the competent body in each Member State, and are awarded a vocational training certificate. It is realised that many experts holding such certificates as NEBOSH or in the nuclear industry, Radiological Protection Certificates are dismayed by this decision but It is regretted that there is nothing the UK can do.

The thrust of the Directive is towards transport and we have had to steer the training and the examinations for the DGSA towards the specific areas of packaging, labelling, classification, documentation and the associated transport requirements.

THE PROPOSAL FOR A "FOLLOW ON" OR SUPPLEMENTARY DIRECTIVE

Mention must be made of the proposal for a further Directive on the harmonising of training and examination requirements. The UK's minor success in limiting the approval to the examination was hard won. The debate did not stop there as the Commission, at the request of some other Member States, decided to bring forward proposals for harmonizing the training and the examination. Initial Commission proposals were for 'X' number of training units for the Core subjects; 'Y' training units for the transport mode and 'Z' training units for classes of dangerous goods plus detailed examination timetable of at least 50 questions of various stated types with minus marks for incorrect answers!

This proposal was subject to various detailed discussions which resulted in a significant political agreement under the UK Presidency at the June 1998 Council for a proposal to set "minimum standards relating to the examination for safety advisers". This is a

much less onerous requirement. This proposal has now reached “Common Position” and subject to the agreement of the European Parliament we hope it will be adopted shortly.

The “common position” text also allows some modularity with regard to classes of dangerous goods viz All Classes, Class 2 (Gases); Class 1; Class 7; “Mineral Oils” (UN 1202, 1203, 1223) and finally “General Chemical Classes [Class 3, 4, 5, 6, 8 & 9]. This modularity was requested by industry and therefore the UK authorities supported its adoption and intends, initially at least, to allow its use within our regime and regulations.

THE REGULATIONS

The national requirements for the appointment, duties, training, examination and certification of dangerous goods safety advisers (DGSA) are set out in the Transport of Dangerous Goods (Safety Advisers) Regulations 1999 (SI 257). Similar but separate regulations will apply in Northern Ireland.

The Regulations were drafted by the Health and Safety Executive after extensive informal and formal consultation. There were various legal concerns from Government lawyers about whether the Regulations would be under implementation of the Directive and concerns about incorporating requirements from an unadopted Directive. Both DETR and HSE officials were caught in the middle of the arguments of industry “its all too prescriptive” and lawyers “its not prescriptive enough”. At the same time the DETR had to get an examination regime up and running so that industry had the maximum time to put in place the arrangements so that potential DGSA candidates could be examined and awarded certificates by 1 January 2000. Living in “interesting times” does not always have obvious attractions to officials, especially the Author!!

THE REQUIREMENTS

What industry wants to know is “How does all this work; Who has to appoint a safety adviser; What are the duties; Where do I get my certificate; Where do I take the examination etc?” Let us examine the requirements first.

WHO HAS TO APPOINT?

Undertakings involved in the transport of dangerous goods by Road, Rail and Inland Waterway.

CONSIGNORS (MOST)

Consignors of dangerous goods who are involved in the physical loading of dangerous goods above the so called limited quantity thresholds of the national and international requirements will have to appoint a DGSA.

TRANSPORT OPERATORS (MOST)

All transport operators who carry/transport dangerous goods above the limited quantity thresholds will have to appoint a DGSA.

FREIGHT FORWARDERS (SOME)

Freight forwarders who are involved in the physical loading or unloading or transport of dangerous goods will have to appoint a DGSA.

CONSIGNEES (EXEMPT)

If the consignee is the final recipient of the dangerous goods a DGSA need not be appointed.

INTERFACE WITH AIR AND SEA TRANSPORT

While Air and Sea transport are excluded from the specific requirements to appoint a DGSA covering those modes of transport, all consignors of dangerous goods by road and rail who operate at sea and air ports may be required to appoint safety advisers to cover the onward consigning activities by road or rail as will the operators of transport to and from such ports.

DUTY TO APPOINT SAFETY ADVISERS BY 1 JANUARY 2000

The regulations place a prohibition on employers from transporting dangerous goods by road, rail or inland waterway unless a safety adviser is appointed.

EXEMPTIONS

Inland Waterway - Our national inland waterways are exempt as they are not connected to Inland Waterway of another Member State.

LIMITED QUANTITIES

For consignments below the designated limited quantity thresholds, safety advisers need not be appointed.

SECONDARY ACTIVITIES

Such activities may be exempt if the dangerous goods are not the prime aim of the carriage

eg. dangerous goods carried as part of equipment on a vehicle or dangerous goods which pose an insignificant danger to the public or the environment.

However, careful reading of the guidance is required to ensure that all parts of this exemption are met. The guidance is available in the [free](#) HSE booklet - "Are you involved in the Carriage of Dangerous Goods by Road or Rail". The guidance is available from HSE Books, Sudbury, Suffolk. Tel: 01787 881165.

APPOINTMENT AND FUNCTIONS OF SAFETY ADVISER

The safety adviser must hold an appropriate Vocational Training Certificate appropriate to the mode of transport and type of dangerous goods. The certificate is valid for five years when it must be renewed. The UK has yet to decide the system to be implemented when renewing the certificates.

The DGSA must be appointed and named but the officer appointed may be an existing employee, a new appointee or a third party appointee eg. a consultant. He must make the VTC available when required by an authorised official.

At least one DGSA must be appointed but he must be provided with sufficient resources, time and facilities to carry out the duties in an effective manner. This requirement follows closely the position contained in the Management of Health and Safety Regulations.

DUTIES

The DGSA will:

monitor the activities of the company involved in the carriage of dangerous goods;

provide advice to the management of the company on the carriage of dangerous goods, eg. packaging, marking types of vehicles, dangerous, procedure etc;

write an annual report for management; and

be involved in accident or incident reports (including RIDDOR requirements) to ensure such reports are written. The DGSA must sign off and be aware of all accident and incident reports relating to transport operations.

The DGSA's annual report and any accident reports must be held by the company for 5 years and made available to the appropriate authority when requested.

SUMMARY VIZ A VIZ EXISTING SAFETY ARRANGEMENTS

The Department and the HSE accept that many good quality companies probably already have in place persons and procedures to undertake the duties set out above. Industry has had in place "Responsible Care" and "Chemsafe" initiatives for many years. The DGSA requirement could be described as a formalizing of such industry initiatives. The Department also appreciates that there will have to be careful consideration given to ensure that the DGSA requirement does not cause confusion with existing safety officers in place within industry.

THE EXAMINATION REGIME

The regulations do not require a formal training regime to be established. The UK authorities believe that industry and individuals will undertake the appropriate training to be familiar with the various requirements which will allow them to successfully undertake the approved examination. The DGSA must hold the appropriate VTC covering the mode of transport and the classes of dangerous goods carried.

The VTC will be valid for 5 years and its validity will then have to be extended, probably by a refresher examination. The detail format of the refresher and revalidation procedures and examination have still to be considered by DETR.

SETTING UP THE EXAMINATION REGIME

At an early date the Department realised that it needed assistance and advice from various expert bodies to put in place the required approved examination regime. While the competent authority is the Secretary of State, the DGSA regime is managed by the DETR, the Dangerous Goods Branch. Mr Slatter is the project officer for the DGSA and Driver Training Regimes.

EDUCATIONAL BODY - AGENT TO THE DETR

A tender exercise was undertaken by the DETR and directed at various educational bodies who could advise DETR, devise a detailed examination syllabus, organise the writing of examination questions, organise and mark examinations throughout the UK and issue the necessary vocational training certificate.

The Scottish Qualifications Authority (SQA) were chosen after detailed consideration of various formal submissions from a number of educational bodies. The SQA have a good track record of vocational training arrangements and professional examinations (for Police Authorities and the Marine and Coastguard Agency for officer qualifications).

AID FROM INDUSTRY

DETR facilitated, under the control of the SQA, various working groups which devised a formal examination syllabus, devised a formal examination scheme, wrote detailed examination questions and devised the necessary “pass” criteria.

Participation of industry was vital in this task. While the SQA had extensive educational experience, individuals from industry with various detailed knowledge provided valuable assistance in formulating the overall regime.

EXAMINATION SYLLABUS

The various committees were put in place in March 1998 and the Approved Syllabus was issued in July 1998. Copies of the syllabus can be obtained from the SQA. The syllabus is an imposing and robust document. It has to be to accommodate the following:

a CORE PAPER covering matters common to road, rail and inland waterway movements - national and international
Up to 10 questions - varying complexity - 50 marks
duration - 1hr 15 mins

a CLASS PAPER covering subjects related to the UN classification Class Modules available -

- ALL CLASSES of Dangerous Goods
- CLASS 1 (Explosive Substances)
- CLASS 2 (Gases)
- ‘Mineral Oils’ (Class 3 - specifically UN numbers 1202, 1203 and 1223)
- CLASS 7 (Radioactive Material)
- General Chemical Classes (Classes 3, 4, 5, 6, 8 & 9)

Up to 8 questions - varying complexity - 50 marks
Duration - 1hr 45 mins

a MODE PAPER related specifically to road, rail or inland waterway operations
Choose one of 3 case study questions - plus 4 other questions - 50 marks
Duration - 1hr 45 mins

All candidates must sit and pass at least the three papers in order to be awarded a DGSA Vocational Training Certificate (VTC).

The proposed system of selecting from a choice of Class papers is designed to allow individuals working in certain specialist industry sectors to gain a DGSA VTC qualification specific to their area of employment. Candidates may undertake examination at different times but a VTC will only be awarded when at least three papers elements are obtained in a twelve month period.

Examination Cost - £170 to sit three Papers or £60 per individual paper.

EXAMINATION FORMAT

The Examinations are “open book” and answers will require reference to the relevant regulations, agreements and supporting documents. The SQA provide a list of “permitted examination material”. The use of any other documents is prohibited.

The Mode paper incorporates a “Case Study” question - one question from four or five options and a number of compulsory questions. There is a passmark of 65% of each paper. The candidates’ results will be issued no later than 8 weeks following the examinations.

Examination Centres are available throughout the UK at specific Universities, Colleges of Further and Higher Education and other suitable venues.

Examination Dates Examinations are being held bi-monthly on the last Thursday of the month. The first examinations were held in October and November 1998. Future examination dates and venues may be obtained by contacting SQA.

General Observations - SQA’s approach is to give the candidate the benefit of the doubt, so far as possible. SQA want to see candidates pass the examinations.

RESULTS TO DATE

As at the end of January over 3,900 candidates had sat the examination. Over 50% of the candidates have been awarded a vocational training certificate. Some conclusions from the results to date have become apparent and the DETR and the industry and other interested parties. A breakdown of the available results is attached as an Annex to this paper.

SQA have made available a paper to interested bodies and candidates. Some very general observations were apparent:

- candidates needed to brush up on their examination techniques; it is possibly a long time since many potential candidates undertook formal examinations;
- candidates must read the questions carefully; answer first those questions on which you feel confident;
- candidates must answer the question quoting the right regulations; for instance do not answer an ADR international question by reference to GB national regulations; and
- candidates must answer only those questions asked of them.

While these points may seem self evident and obvious it may surprise readers to find that candidates are answering too many questions and spending too much time on questions which carry very few marks. Updated advice to candidates and training providers is available from the SQA.

THE FUTURE

The Department and the SQA will continue to monitor the results of the examinations. The Syllabus and Examination format will also be reviewed to take account of changes in regulations. The Syllabus and Examination Review Working Groups will meet regularly under the SQA’s control. The DETR will also consider carefully any comments made by the

Training Advisory Panel set up in 1998 under the DETR's standing Working Party on the Transport of Dangerous Goods.

There will be full consultation with industry on any possible regulatory changes which might be required when the EU's supplementary Directive is adopted and there will be consultation with regard to the arrangements to be put in place for the certificate revalidation arrangements every five years and any changes to the Approved Syllabus.

ENFORCEMENT IN THE UK

Enforcement within the UK will follow the normal enforcement arrangements relating to enforcement of provisions made under the Health and Safety at Work etc. Act 1974. HSE's approach to enforcement is to encourage companies to comply with health and safety requirements. They are not generally heavy handed in their enforcement procedures but in the event of accidents and incidents they are very thorough and professional and they expect the same from industry. Fines and bad publicity for offenders who appear in the Crown Court can be very expensive.

POSSIBLE SAFETY BENEFITS

Earlier in the paper the author set out the estimated costs of implementation which are very significant. What can be set out as the benefits? The Department would not claim to argue that there are obvious safety benefits to industry by appointing a DGSA. The Health and Safety Executive believe that there will be some general improvement in conformity to the existing associated road and rail regulations. The DGSA's annual report may reveal potential weakness and lack of knowledge within companies which management may be able to correct before there is any breach of regulations. A focal point for knowledge will become available to advise on training requirements and provide in-house training for personnel.

It is appreciated that these potential benefits are not highly significant but they may lead in some cases to overall and possibly significant improvements with a possible reduction in the type of incident which provokes criticism from the public and media. Appointing a DGSA may lead to companies being able to secure reductions in their liability insurance premiums. The Department has heard of some initiatives in this area and the insurance industry has responded with interest.

If these threads are drawn together there will be gains but it is admitted not to any significant obvious extent. The DETR accepts that many in industry have similar adviser arrangements in place already under "best practice" schemes which taken together with the health and safety officers already in place make much of the DGSA requirement a potential duplication. Industry will have to make sure that such potential duplication does not arise and existing standards are maintained in any situation of potential confusion.

The legislation has codified the transport safety arrangements which will mean that both the existing good companies and the not so enlightened will have to play on the same level playing field in future. Some sectors of industry may be grateful for this spin off from the requirement.

TRAINING

DETR decided that approved formal training was not to be part of the regime to obtain a VTC. It is up to each employer and employee to decide the level of training required based on the potential candidate's knowledge, requirements and confidence.

There are a number of training companies offering training to meet this requirement. Please consider your training needs carefully. Ask your colleagues, industry associations etc. for advice and ask the potential provider exactly what the training consists of, obtain a full prospectus and training programme and assess it against your needs.

SOME CONCERNS EXPRESSED BY SAFETY EXPERTS

There have been some concerns expressed by safety experts regarding the arrangements we have put in place. The main concerns have centred on the following:

- (i) why no “grandfather rights” for existing qualifications held by those in the “safety” community;
- (ii) the DETR and SQA did not consult widely enough with regard to the construction and content of the examination syllabus; and
- (iii) the examination questions are of poor quality.

With regard to (i) it is regretted that the terms and wording of the Directive 96/35 made it impossible for the UK authorities to grant any form of “grandfather rights” for specialist qualifications in the transport or safety industry. The DGSA VTC requires re-validation every five years and the aim is to ensure that the dangerous goods transport qualifications and detailed knowledge of the individual adviser is kept up-to-date. Whether this concept applies to some or all of the existing industry safety qualifications suggested as an alternative is not known to me. In any event for the reasons set out above the qualifications cannot be recognised.

In answering (ii) it must be stressed that DETR consulted on the syllabus and examinations to the widest possible extent. Many meetings were held over a 6 month period. Additionally HSE consulted on the proposed regulations implementing the requirements of the Directive. It is difficult to believe that there was anybody important within the safety community who did not know of the proposal. Many articles in magazines, publications and erudite journals were seen.

However, the examination syllabus is not set in stone. If other industry experts wish to participate, even at this stage, this may be possible to arrange. The SQA’s senior adviser is Mr R Thomas, ex Hayes Chemicals, who is a Chemical Engineer and lectures widely to the Chemical & Transport Industry. The SQA is anxious to get the arrangements right for industry and the candidate.

The answer at (ii) above equally applies to (iii). We want more questions. SQA will pay for questions accepted into the bank so there is encouragement to you – help us and we will help you!

Holding the VTC proves that the holder has undergone some training, has passed on “open book” examination and therefore has a working knowledge of the principles and regulatory regime applying to the safe carriage of dangerous goods. It remains the responsibility of the employer to choose a VTC holder who can show him that as well as the holding of the certificate he has the necessary background, experience and competence to do the job for the employer. We are not taking away from industry the right to choose the man or woman you want, who has the required attitude and safety profile, CV etc for your company. The holding of the VTC is not an end in itself.

FINALLY

This is a requirement which Government did not want. The UK authorities have tried to implement the requirement with a light a touch as possible consistent with our EU treaty obligations. We must now try and ensure that we all make the best of the situation we face.

THE AUTHOR

Mr Slatter works in the Logistics and Maritime Transport Directorate of the DETR, specifically the Dangerous Goods Branch. The Division also contains the Radioactive Materials Transport Branch and the Division leads the UK's involvement at the international conferences within the United Nations, its Economic Committee for Europe and the European Union covering the carriage of dangerous goods by road, rail and inland waterways.

Attachment: Breakdown of UK Examination Results

UK TRAINING REQUIREMENTS ROAD TRANSPORT

GENERAL TRAINING REQUIREMENT

All persons engaged in the transport of dangerous goods shall receive training commensurate with their responsibilities.

UN CHAPTER 1.3
ADR Marginal 10 316

General requirement; not specific; records to be maintained and made available to employee by employer.

DRIVER TRAINING REQUIREMENT

Certain drivers of vehicles carrying dangerous goods in packages and in tanks and tank containers must hold a Vocational Training Certificate; valid for 5 years.

EU DIRECTIVE
ADR Marginals 10 315, 11 315, 71 315 and Appendix B

Detailed Training requirements, approved and specified training courses setting out numbers of training units. Approval from Competent Authority.

DANGEROUS GOODS SAFETY ADVISER

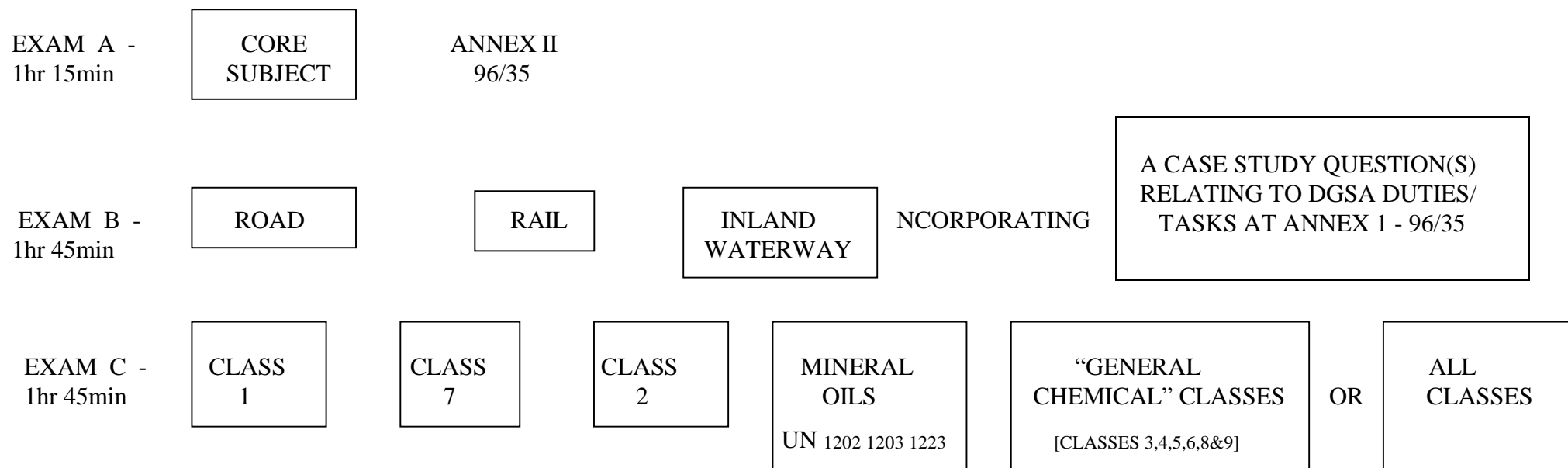
Each undertaking consigning or transporting dangerous goods must appoint DGSA; DGSA to hold a Vocational Training Certificate; valid for 5 years.

EU Directive 96/35/EC

Training and/or Examination must be approved by Competent Authority.

THE UK EXAMINATION REGIME

THREE PART EXAMINATION



The Examination shall consist of “At least 20 Open Questions”

NOTE:

To obtain certificate a candidate undertakes an examination covering at least A, at least one of the options at B, at least one of the options at C including a Case Study question.

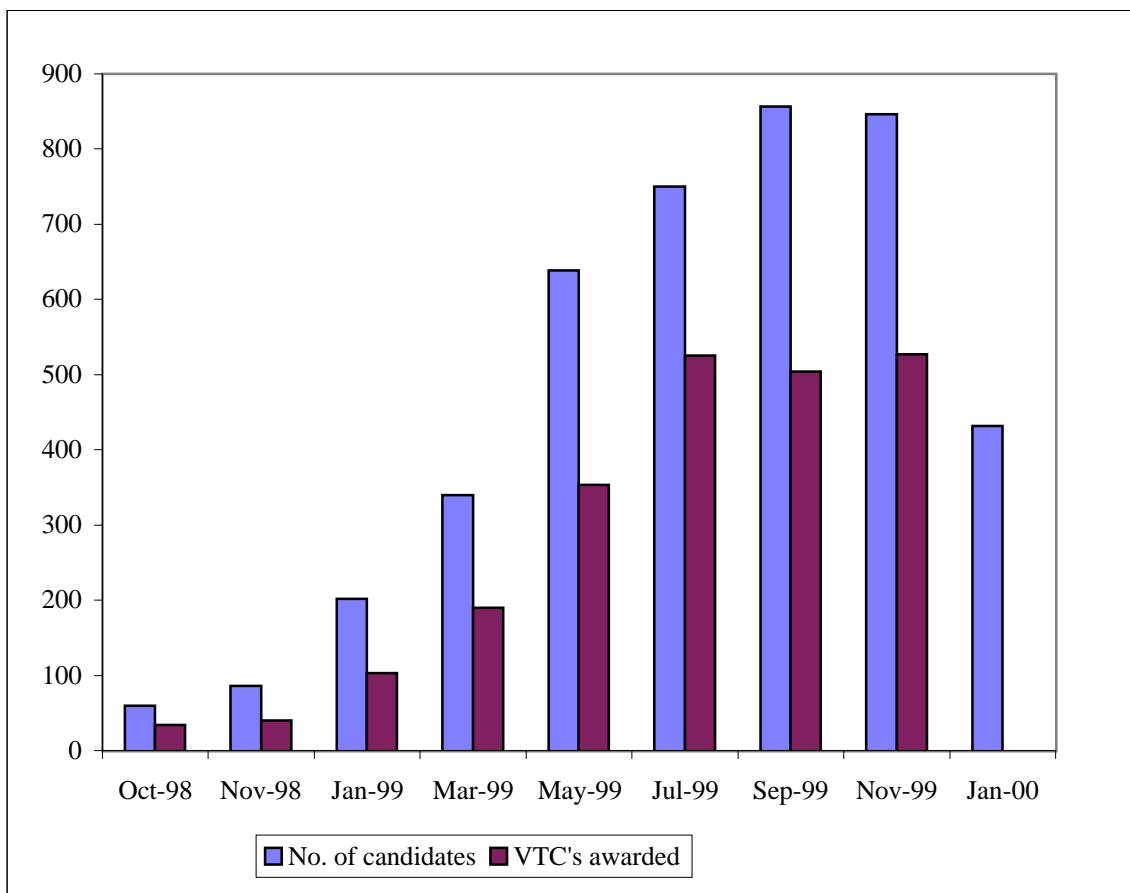
DGSA STATISTICS**October 1998 – November 1999**

SUBJECT	SAT	PASSED	% Pass
Core	3,508	2,849	81
Road	3,530	2,591	73
Rail	90	86	95
IW	8	8	100
All Classes	2,779	1,599	57
General Classes	989	586	59
Class 1	15	14	93
Class 2	139	100	71
Class 3	81	42	51
Class 7	8	7	87

Total Number of VTCs Gained 2,213

	<u>No. of candidates</u>	<u>VTC's awarded</u>		
Oct-98	60	34		
Nov-98	86	40		
Jan-99	202	103		
Mar-99	340	190		
May-99	639	353		
Jul-99	750	525		
Sep-99	857	504		
Nov-99	846	527	*	[2213]
Jan-00	432			

* provisional



Updated after DETR/SQA project meeting and markers meeting

20-Jan-00