



DANGEROUS GOODS SAFETY ADVISERS

INFORMATION PACK

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CONDUCT OF EXAMINATIONS INFORMATION FOR CANDIDATES

Introduction

This document gives details about the arrangements for the examinations for Dangerous Goods Safety Advisers. It mentions other documents produced by the Scottish Qualifications Authority (SQA) which give further information – these are normally issued with this one. Copies are also available from SQA and on our website. Details of how to contact us are given at the end of this document.

The Department for Transport (DfT) is responsible for the implementation in the UK of the European *Community Directive 96/35/EC*. This Directive is about the appointment and training of safety advisers involved in the carriage of dangerous goods by road, rail and inland waterway. It requires certain organisations involved in the transport or related loading or unloading of dangerous goods by road, rail or inland waterway to appoint one or more Dangerous Goods Safety Advisers (DGSAs).

Before their appointment, DGSAs must gain a Vocational Training Certificate (VTC) by passing approved examinations. The DfT is responsible for the approval of the examinations and it has appointed SQA as its agent. SQA is responsible, in conjunction with the DfT and its advisory panel, for:

- developing and issuing the syllabus for the examinations
- developing, conducting and marking the examinations
- issuing Vocational Training Certificates.

Examinations will be offered at centres throughout the UK. SQA provide a list of examination centres and dates.

The examination questions are prepared and moderated by experts in the industry. For each subject, a Principal Examiner, Reviser and a team of question setters are appointed by SQA, in consultation with the DfT. Markers are also appointed by SQA.

Correspondence or enquiries regarding the examinations should be sent to the address on page 8.

How to gain a Vocational Training Certificate

To qualify as a DGSA, you must undertake and successfully complete an examination in three subjects as follows:

Core paper

and *one mode paper*

Road *or* Rail *or* Inland Waterways

and *one of the class papers*

All Classes

Class 1

Class 2

Class 3 (specifically UN 1202, 1203 and 1223)

Class 7

You may only be employed as a DGSA in the mode(s) and class(es) you have passed, and hold a Vocational Training Certificate for.

Training as a Dangerous Goods Safety Adviser

The DfT has decided that safety advisers will not have to undergo a course of training approved by the DfT. The form and type of training is a matter for the individual and the employer to decide, based on the individual's knowledge and experience.

Format of examinations

Details of this are given in the *Syllabus for Dangerous Goods Safety Advisers*.

Applying for the examinations

You need to apply to SQA to sit the examinations. Application forms are usually issued with this document.

You do not need to sit all three examinations on one day – you may hold single subject passes until you gain three. However, you must pass an appropriate combination of three papers within 12 months to qualify as a Dangerous Goods Safety Adviser. The twelve month period is calculated from result dates, not examination dates.

You can usually only sit **one** mode and **one** class paper on one day. However, if you do want to sit more than one mode or class paper on the same day, a written request should be submitted to the SQA.

You can also extend the areas you can operate in by sitting additional mode and/or class papers later.

The application form asks you to give a choice of examination centres – we will try to allocate your first choice, but this may not always be possible. Sometimes we may allocate you to an examination centre not shown on the original list, but in the same town or city you gave as a choice. The availability of examinations and centres is dependent on the number of candidates.

You should send the application form to SQA **no later** than **three** weeks before the examination date.

Candidates applying later than three weeks before the examination date will incur a £20 late enrolment fee.

We will confirm your examination details no later than one week before the examination date. This will show the address of the examination centre. You should pay particular attention to this, as it may not have been your first choice. We will also send you a form you can use to notify us of any changes to your details.

Organisations may wish to submit applications on behalf of groups of candidates –we will accept these provided they contain all the required information and the appropriate fee is also submitted.

Fees

The appropriate fee can either be submitted by cheque with a completed application form or you can pay by credit card over the telephone. The current fees are shown on the reverse of the application form.

Notes: SQA **will not** invoice candidates or accept payment by BACS for these examinations. Cheques should be made payable to SQA. Examination fees are VAT exempt.

Refunds

Examination fees paid to SQA may be refunded or transferred to a later examination date only when you are prevented, by accident or illness, from attempting the examination(s) you applied for. If you choose to transfer the fees to a later date, you must attempt the examination(s) within six months of your original examination date.

Applications for refunds or transfer of fees must be submitted with a medical certificate.

Please note that fees are **not** refundable in any other circumstances.

Candidate enrolment number

When you first apply to sit a DGSA examination, you will be allocated a candidate enrolment number. We will use this in any correspondence we send you. You should also use it if you are writing to us.

If you make another application to sit a DGSA examination, it is important that you use this number so that we can match your details with any earlier results. If you do not use this number, it may result in a delay in issuing a certificate.

Sitting the examinations

You must be at the examination room at least 30 minutes before the start of an examination. Your seat number will be shown on a list outside the room, together with a seating plan. You should find your seat number before entering the examination room. You will be required to show an invigilator proof of your identity which includes a photograph – for example, a passport.

You will be allowed to enter the examination room 15 minutes before the start of an examination. You must not take any books or sources of information, other than the permitted examination material, into the examination room. You will be disqualified if you are in possession of unauthorised material.

The times of examinations will be:

0930 – 1045 Core

Break

1115 – 1300 Class paper

Lunch break

1400 – 1545 Mode paper

There will normally be one Chief Invigilator in every examination centre and one invigilator for every 20 candidates.

If you arrive late, you may not be permitted to enter the examination room – this will only be allowed in exceptional circumstances and with the agreement of SQA. You cannot leave the examination room during the first 30 minutes of an examination, or during the last 15 minutes, unless you are ill. If you leave because of illness, an invigilator must accompany you. You will be allowed to return to the examination room, provided you were supervised during your absence and your examination material remained in the examination room.

You will be given an examination booklet containing the questions and space for your answers. This booklet remains the property of SQA at all times.

An invigilator will read the following instructions before the examination:

Personal belongings such as briefcases or handbags must be left at the front of the room.

The use of calculators is not permitted.

Mobile phones and pagers must be switched off.

You must write in ink only.

You must enter your name and seat number on the examination booklet, and sign it.

No separate time is set aside for the study of the questions and you may begin writing immediately. However, you are advised to read through the examination paper before attempting to answer the questions. You are reminded that you may answer questions in any order. It is recommended that you attempt questions that you feel are more straightforward first, so giving yourself the maximum time in which to tackle questions of which you feel less confident

During the examination you must not communicate with another candidate; you must not copy from his or her booklet; you must not use any book or source of information on the subject of the examination at the time other than the permitted texts; you must not in any way infringe the conditions necessary for the honest and orderly conduct of the examination. You must only write in the examination booklet. You must not remove any sheets from the examination booklet. Breaches of these rules will be reported to SQA. SQA will then take such action as appears appropriate.

SQA instructs its examiners to report to it any case of suspected copying. If the evidence of copying appears indisputable, SQA will cancel the papers in ALL subjects of the candidate concerned.

Candidates must not copy examination questions and write them on the permitted examination materials or any other paper, if this happens SQA will then take such action as appears appropriate, including possible disqualification

Candidates will be advised of the final 30, 15 and 5 minutes of the examination.

No candidate may leave the examination room during the first 30 minutes or in the last 15 minutes.

*Candidates are only required to record references to the 2007 “Carriage of Dangerous Goods And Use of Transportable Pressure Equipment Regulations” where one has been **specifically** asked for in a reference box within the examination paper.*

Candidates are reminded that illegible handwriting may result in a loss of marks

Invigilators can expel candidates from the examination room should serious disorder occur. The Chief Invigilator will report any incidents of irregular behaviour to SQA.

As we have said, SQA instructs its markers and invigilators to report any irregular behaviour. SQA may then cancel the papers of any candidate involved and may bar the candidate(s) from sitting the examinations again.

To ensure that examination conditions are uniform throughout all centres, no additional information or modification to an examination will be given to candidates without the authorisation of SQA.

An invigilator will open the sealed envelope(s) containing the examination booklets in the examination room in the presence of candidates not more than 10 minutes before the examination start time.

After the examination

All material will be collected and the Chief Invigilator will make a report to SQA. The examination books will be sent to the marker(s). SQA administers the marking process, in consultation with the DfT. Before any results are issued, they will be scrutinised and approved by the Examination Review Board.

Issue of results

We will issue results no later than eight weeks after the examination date. You will be sent a letter showing your results in each subject. Results are identified on a pass or fail basis only. Marks are not issued to candidates. If you have passed three examinations – core one mode and one of the class papers – you will be issued with a VTC, which you must sign and date when you receive it. It will show the mode and class in which you have qualified. Your VTC will be valid for five years from the date the results are run, after which you will have to extend its validity if you wish to continue to operate as a DGSA. You can do this in the same way as gaining your original VTC up to 12 months before it expires.

If you have failed any examination(s), you can apply to SQA to sit again at any later examination date. However, you are advised to wait until you have your results before reapplying. You can hold any subject passes, but you must pass an appropriate combination of three papers within 12 months to qualify as a DGSA. If you do not, any passes become invalid and you will have to attempt the subject(s) again.

In no circumstances will SQA issue candidates' results over the telephone.

Lost certificates

A replacement certificate or results letter may be provided by SQA on payment of the appropriate fee. This is currently £30. Requests for replacements should be made in writing to the Manager, Testing Services Section, SQA.

Additional subjects

You may decide to extend the scope of your certificate by sitting additional mode and/or class papers. If you are successful, you will receive another certificate reflecting this. The new certificate will be valid for the same time as the original – so, if your original certificate was valid until November 2009, the new certificate will also be valid until then.

Revalidation of a Vocational Training Certificate

Extension of validity certificates will be issued if you have **not** changed your original mode or class. i.e. your original validity date plus 5 years. If you change your mode or class, the certificate issued will be new i.e. 5 years validity from the date resulted.

Candidates who are applying to **extend the validity** of an existing certificate should note that if an extension is required to all subjects currently held, each subject would require to be re-taken for example, if you achieved Core, Road and All Classes in September 1999, each subject pass would be valid until November 2004. If you then achieved Rail in July 2001 the validity of this pass would also be to November 2004 (not July 2006). If you chose to revalidate Core, Road and All Classes in the fourth year, the Rail pass will not be carried forward. However, if a candidate achieved Core, Road and All Classes in September 1999, each subject pass would be valid until November 2004. If you then achieved Rail in the fourth year you would receive a certificate All Classes by Road and Rail valid until November 2004. If you then chose to revalidate Core, Road and All Classes also in the fourth year then the Rail pass would be carried forward due to the fact that it was achieved during the revalidation eligibility period. You would receive a certificate All Classes by Road and Rail with an extended validity date of November 2009.

If a candidate achieved Core, Road and General Chemical Classes in September 1999, each subject pass would be valid until November 2004. During the revalidation eligibility period you choose to take Core, Road and All Classes (rather than General Chemical Classes) and achieve them then you would receive a new certificate valid for 5 years from the date resulted. If however, you achieve All Classes only then you will receive a certificate Core, Road and All Classes with a validity date of November 2004.

If you later achieve Core and Road within the revalidation eligibility period then you will receive a certificate Core, Road and All Classes with an extended validity date of November 2009. However, if the original ROAC certificate has expired and All Classes is still within its 12 month period you will receive a certificate Core, Road and All Classes with a validity date of five years from the date resulted. (not an extension)

Eligibility period for revalidation

Candidates should note that the validity date on the certificate is calculated at five years from the date resulted. You are eligible to revalidate 12 months before the expiry date but you must allow a maximum of eight weeks between the examination date and the result date. For example, candidates with a VTC with a validity date of 13 November 2005 are eligible to revalidate on 25 November 2004 (nearest exam date 12 months prior to revalidate by date). The last exam to revalidate by to avoid lapsing period of current VTC would be 29 September 2005.

Appeals procedures

Prior to the issue of results, several mechanisms are used to ensure that all examination booklets have been fairly considered and that results are correct. These mechanisms include:

- agreement of solutions by subject experts
- booklet checking by SQA
- sampling of booklets by Principal Markers
- scrutiny of borderline booklets by Principal Markers and the Examination Review Board
- consideration of any adverse circumstances by the Examination Review Board.

Examination results are scrutinised by the Principal Examiner(s) and by the Examination Review Board before they are issued. SQA will not normally enter into correspondence about individual results.

You may, however, wish to appeal against our decision about your result. There are two categories of appeal:

- 1 A review of your examination booklet. This is a check that all procedures have been correctly followed, particularly that:
 - all material has been fully considered
 - the addition of marks awarded is correct
 - the result achieved is correctly recorded in the results letter.

This does not normally include a re-mark of the examination booklet, unless it is found that the above procedures have not been followed. A fee of £15, refundable if your appeal is successful, is charged for this service. Your request must be made in writing. The fee must be submitted with the request.

Requests for a review must be made within **one month** of the receipt of results.

Please note that all examination material is confidential to SQA and DfT. Examination booklets are not returned to candidates.

- 2 You may appeal on the grounds that you were disadvantaged because appropriate procedures were not followed at the examination centre on the day of the examination. Some of these are shown in this document, in the section about *Sitting the examination*. A separate document, *Instructions to examination centres*, gives more information. Your appeal must be made in writing, giving details of your grounds for appeal and any supporting evidence.

Please note that the Chief Invigilator is required to report any unusual circumstances on the day of the examination, and any such report is considered by the Examination Review Board prior to the issue of results.

Appeals in this category must be submitted within **one month** of sitting the examination, so that they can be considered before results are issued.

Appeals made later will not be considered.

SQA will fully investigate any appeal submitted within the permitted timescale, in consultation with any other appropriate body. You will be notified of the result within one month of us receiving your appeal.

Send appeals to:

The Manager
Testing Services Section
The Optima Building
58 Robertson Street
GLASGOW
G2 8DQ

3 Data Protection

Under the Data Protection Act (1998) candidates can request SQA to provide them with information we hold on them. This information identifies the actual mark a candidate achieved which may be helpful to candidates who have been unsuccessful in achieving a Vocational Training Certificate.

A form can be found in Appendix five of this document should you wish to apply.

Further information

Syllabus for Dangerous Goods Safety Adviser Examinations

Application forms for the examinations

Examination Centres

Permitted Examination Material

Sources of Information

Instructions for Examination Centres

These are all available from:

Testing Services Section
SQA
The Optima Building
58 Robertson Street
GLASGOW
G2 8DQ

And on our website at <http://www.sqa.org.uk/dgsa>

Telephone: 0845 213 5275
Fax: 0845 213 5000
e-mail: Sheron.ross@sqa.org.uk.

As the published information may change from time to time, you must make sure you have up to date copies.

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SOURCES OF INFORMATION

Candidates may find the following list of sources of information helpful in the interpretation of the permitted examination material for the DGSA examinations. It is a candidate's responsibility to check that they have the most recent list.

Candidates should note that the use of CD ROMs is not permitted in the examination, however, the use of downloaded material from internet sources, for example, the HMSO website, is acceptable. Candidates should seek to obtain the **current** editions of publications from the sources shown.

UNITED NATIONS

Recommendations on the Transport of Dangerous Goods (The Orange Book)

Manual of tests and criteria

INTERNATIONAL LAND

European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)

European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

UK RAIL

Railway Group Standards:

GM/RT 2101 Requirements for the design, construction, test and use of tanks of rail wagons.

GO/RM 3053 Working Manual for Rail Staff, handling and carriage of Dangerous Goods (Pink Pages).

GO/RM 3420 Dangerous Goods – Acceptance and Carriage Manual.

Avail from: Serco Raildatea, Derwent House, RTC Business Park, London Road, Derby, DE24 8UP.

TUNNELS

Le Shuttle

Hazardous Goods - Practical Guide for Users of Le Shuttle Freight Services

Available from: Le Shuttle Freight Division

Restrictions on the carriage of dangerous goods on through freight services through the Channel Tunnel
– Annex 3 to LIF, Stationery Office text of RID

British Toll Tunnels

Dangerous Traffic List of Restrictions

Available from: Le Crossing Company Ltd
Mersey Tunnel Ltd
Tyne Tunnel Authority

Suppliers of Dangerous Goods Regulations and Publications

General Suppliers

Labeline Ltd

Midas House
Chiveno Business Park
Near Barnstaple
EX31 4AY
Tel: 0870 850 5051
<http://www.labeline.com>

The Stationery Office

TSO
PO Box 29
Norwich
NR3 1GN
Tel: 08706 005522 Fax: 08706 005533
<http://www.tso.co.uk>

Cameon Ltd

9 Irk Vale Drive
Chadderon
Oldham
OL1 2TW
Tel: 0845 166 2524
Fax: 0871 251 3062
Email: danger@cameon.com
<http://www.cameon.com>

Suppliers of Specialist Information

Le Crossing Company Ltd

Crossing Offices
South Orbital Way
Dartford
Kent
DA1 5PR
Tel: 01322 221603 Fax: 01322 294224
<http://www.dartfordrivercrossing.co.uk>

Le Shuttle Freight Division

Eurotunnel
Freight Division
PO Box 2000
Folkestone
Kent
CT18 8XY
Tel: 01303 272244 Fax: 01303 282026
www.eurotunnel.com

Merseyside Passenger Transport

Georges Dock Building
Georges Dock Way
Pier Head
Liverpool
L3 1DD
Tel: 0151 236 8602 Fax: 0151 255 0610

Rail Safety and Standards Board

Evergreen House
160 Euston Road
London
NW1 2DX
Tel: 0207 904 7518 Fax: 020 7557 9072
<http://www.rssb.co.uk>

Tyne Tunnel

Walleseend
Tyne and Wear
NE28 0PD
Tel: 0191 262 4451 Fax: 0191 263 1031
<http://www.tynetunnel.info>

DANGEROUS GOODS SAFETY ADVISERS

INSTRUCTIONS FOR EXAMINATION CENTRES

Centres must nominate a contact for SQA. All material relating to the examinations will be sent to the nominated contact. The contact should be available on examination days in case we need to get a message to the examination room(s).

The times of examinations will be:

0930 – 1045 Core

Break

1115 – 1300 Class paper

Lunch break

1400 – 1545 Mode paper

We will notify centres of the number of candidates and the Chief Invigilator's details no later than **one week** before the examination date. We will send candidate lists for each examination showing the candidate names and seat numbers. These must be displayed outside the examination room with a plan showing seat numbers. A copy of the plan must be given to the Chief Invigilator.

SQA will send all examination papers/answer books to the Chief Invigilator, who will have overall responsibility for the conduct of the examinations and the return of materials to SQA.

SQA will appoint and pay all invigilators.

Layout and environment of examination rooms

Entry to the examination room during an examination is only to be permitted to:

Enrolled candidates shown on the list of candidates

Invigilators employed by SQA

The centre contact at the request of SQA

SQA personnel

Centre staff in case of emergency.

No noise or other disturbance to the candidates must be permitted in the vicinity of examination rooms.

A double desk or large table must be provided for each candidate to allow for the use of permitted materials.

Examination rooms must be laid out to minimise any possibility of collusion between candidates.

Any material on display in the room likely to be of assistance to candidates must be removed.

Examination rooms must be set up **NO LATER THAN 0900** on the morning of the examinations

Please note that candidates may have grounds for appeal if the instructions about layout and environment are not followed.

Examination rooms must be open to inspection by representatives of SQA.

Invoices for the use of examination rooms and any enquiries should be sent to:

Testing Services Section
SQA
The Optima Building
58 Robertson Street
GLASGOW
G2 8DQ

(Telephone: 0845 213 5275)

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Notes for Candidates in Class 1

EXPLOSIVES TERMS

DETONATION: An extremely fast explosive decomposition, in which an exothermic reaction wave follows and also maintains a shock front in an explosive.

DEFLAGRATION: A rapid burning assisted by convection.

HIGH EXPLOSIVE: An explosive which is capable of detonation under normal conditions of use.

LOW EXPLOSIVE: An explosive which burns very rapidly, rather than detonates.

INITIATION: Explosives can be ignited or initiated by a prescribed stimulus. The stimulus can be thermal or mechanical. Accidental ignition of explosives **can** be caused by exposure to heat, flame, spark and impact and friction.

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Notes for Candidates in Class 7

These notes/definitions are intended to be a guideline for Class 7 candidates.

It is believed that candidates should have knowledge of these areas to have a firm understanding of the regulations.

Activity

A measure of radioactive material by the number of nuclear disintegrations per second. (number of atomic nuclei that decay in one second). Unit becquerel. 1 bq = 1 transformation per second.

Radiation Dose

Absorbed Dose :- Measure of energy that is deposited in a material – for a fixed amount of mass (normally 1 Kg) from any interaction with radiation.

Dose equivalent :- Because some radiations are more damaging than others they are given a Q factor to take into account the different biological effects that comes from irradiation with different types of radiation. The Dose equivalent is the Absorbed Dose modified by a quality factor.

Radiation Types

Alpha particles :- (helium nuclei) These behave like a single particle and are easily absorbed by matter eg A thin sheet of paper is enough to stop most Alpha particles.

Beta particles :- High speed single electrons. These have a range of about 4 metres in air and can be stopped by light materials like perspex or aluminium. Light materials are a better choice because heavier materials such as lead or steel can cause Bremsstrahlung radiation (X-rays) when they absorb beta particles.

Gamma – Electromagnetic Radiation :- Short wave (high energy) electromagnetic radiations are more penetrating than beta radiation. Heavy shielding such as concrete, lead or steel may be used to reduce the intensity but in theory it cannot be stopped completely.

X-Radiation :- A form of electromagnetic radiation but with generally lower energy than gamma rays.

Units

Activity = becquerel (Bq)

Absorbed dose = gray (Gy)

Dose equivalent = sievert (Sv)

Half Life

The time taken for the activity of a radionuclide to lose half of its value by decay. The following estimated examples give an idea of the time and types of radiation half-lives and can be very important when transporting medical items.

<u>Radionuclide</u>	<u>Radiation</u>	<u>Half-life</u>
nitrogen 16	gamma	7 seconds
technicium – 99	beta	6 hours
sodium – 24	gamma	15 hours
phosphorus – 32	beta	14 days
uranium 238	alpha	4,500,000,000 years

Biological Effects

There are many biological effects which can develop from ionising radiation.

When energy (radiation) passes through a material some of this energy may be absorbed, with biological material the majority of energy transferred is heat energy. The important effect is that chemical changes can occur. There may be effects on molecules and cells within the body.

There are 3 main levels of damage which may occur to cells. Massive, Intermediate and Minor damage.

Radiation can be taken into the body in 3 ways.

Absorption	: Through the skin
Inhalation	: Through the lungs
Ingest	: Through the mouth.

The damage will depend on the type of radiation, exposure and method of intake.

The 4 basic principles to protect against damage are:

- 1 Time : The shorter the time spent near the source the smaller the dose.
- 2 Distance : The further away you are the smaller the dose.
- 3 Shielding : The correct type of shielding and thickness for source.
- 4 Source Activity : Smallest activity actually necessary for work / transport is used.

These notes may NOT be taken into the examination

**Scottish Qualifications Authority
Request for access to personal information**

1 Complete the following sections

Examination Type	Dangerous Goods Safety Adviser Examinations
-------------------------	--

Full Name	
Address	
Street	
Town/City	
Postcode	
Date of Birth	
Candidate Number	

I request access to my records under the terms of the Data Protection Act (1998)

Signed _____

Date _____

2 Enclose a cheque for £10, payable to SQA

3 Return to

Data Protection Officer
Scottish Qualifications Authority
The Optima Building
58 Robertson Street
GLASGOW
G2 8DQ

Please note the following restrictions:

- **Examination scripts are exempt and will not be released under the terms of this act.**

