

# CHARTERED INSTITUTE OF LOGISTICS AND TRANSPORT IN IRELAND

## PRINCIPAL MARKER'S REPORT FORM

### DANGEROUS GOODS SAFETY ADVISER EXAMINATION

#### PART TWO – COMMENTS MAY BE CIRCULATED

<b>No Attempting Examination:</b>	31
<b>No Passing Examination:</b>	25
<b>% Pass Rate:</b>	70.59%
<b>Average Mark:</b>	49.23 across the two case studies candidates were required to take.

#### A. General Comments

Candidates had a compulsory case study based on the international transport of two substances in packages. One was a Limited Quantity. This was well answered in general, the average mark being 29.52 and 87% of candidates achieving a pass. Comments on this case study follow below.

Candidates had a choice of two other case studies to take. The first (Case Study 2) concerned the transport of an infectious substance and infectious clinical waste. The average mark achieved on this case study was 24.59. While the average mark was somewhat lower, 90% of candidates who took this case study achieved 35 marks or more, considered a pass. The majority of candidates chose this case study as their second (71%).

The third case study was based on one of the new UN numbers introduced into the ADR this year, UN 3541. The remaining 29% of candidates chose this one. The pass rate was low, only 22% of candidates who took this gained the 35 marks considered to be a pass. Below are reasons why this could have been the case:

Over the two case studies candidates are expected to get 45 marks to pass, to some extent one case study can subsidise the other.

Candidates are recommended to familiarise themselves with the Transport Categories in the ADR and the exemptions therein at e.g. 1.1.3.6.3 and other parts of the ADR. A working knowledge of this system of exemption was necessary for both of the two optional case studies. The lack of such knowledge was a major contributor to those candidates who did not do well on them.

#### Comments on Individual Questions

## Compulsory Case Study 1

A good understanding of the concept of Limited Quantities was necessary to do well on this case study, particularly in understanding that there are two quantity limits, the maximum quantity allowed for the inner packagings and the maximum permitted gross mass for boxes (30kg) or trays (20kg).

When asked to work out whether a consignment consisting of 0.25 litre cans inside the boxes which weighed 5.5 kg, 32% of candidates did not mention the 30 kg limit for the boxes and that at 5.5 kg the boxes qualified on this count as Limited Quantities.

A number of candidates multiplied the 0.25 litres capacity of the inners in the box by the number (12) of the inners in the box and checked whether that number fell below, in this case, the maximum of 5 litres for the inners. This was not correct. As each can was below the 5litre limit for Packing Group III substances that was enough to say compliance with the limit for inner packagings had been achieved. The 30 kg limit then kicks in to limit the number of such cans which could be put in a box.

One of the parts of this case study concerned the documentation requirements for the consignment. Candidates were asked to state in which languages the transport document should be written. There was some confusion here as the main consignment originated in Denmark and was dropped off in Hamburg, Germany for pickup by a vehicle going to Ireland. Some candidates thought Germany was the forwarding country and said the document should be in German as the language of the forwarding country and as one of the three official languages of the ADR. Though dropped off for collection in Germany, the forwarding country is Denmark.

The document then had to be in one of the three official languages of the ADR, English, French or German. Some candidates opted for English as this is the predominant language of the country of destination. However, Ireland has to accept the document in e.g. Danish and German or Danish and French. It should be understood that the reasons for the three main languages specified in the ADR are to do with the three official languages in which the ADR treaty exists in the treaties archives of the UN in New York.

Some candidates did not clearly state why there was no need for a road mode transport document for the small consignment. This was, of course, because that was a Limited Quantity and the ADR does not demand a transport document for such consignments.

One part of this case study depended on whether a driver could pass through a restricted tunnel coded “D”. Some candidates were unsure what to do when a substance had a tunnel code “(D/E)”. The more restrictive code is for bulk or tank transport and the less restrictive when carried in other than tanks.

There was an important question based on the options given in Chapter 8.4 where drivers may leave a vehicle laden with dangerous goods unattended. Candidates were asked to “Justify your answer with reference to the size of the load.”. What this meant was that candidates had to work out that special provision for carriage S19 applied to the main substance in the case study and that this imposes a threshold of 5000 kg in a load for when Chapter 8.4 requirements

begin. 29% of candidates did not make the connection between the question and S19.

16% of candidates thought that Hazard Identification Numbers and UN numbers were needed on the orange plates on the vehicle. This is not the case for vehicles carrying packaged dangerous goods.

The last part of this case study in relation to what to do if a spillage of the toxic substance is discovered on the floor of the vehicle after unloading. Any candidate who gave an answer based on 7.5.8.1 of Chapter 7.5 of the ADR (26% of candidates) were marked wrong as Special Provision for Unloading CV13 applied to the substance which leads you to the correct answer based on 7.5.11 of Chapter 7.5.

## Case Study 2

This was a case study based on the transport of substances infectious to humans, Category A of UN 2814 and unspecified infectious clinical waste of UN 3291 within Ireland.

In one part of the question, candidates were asked to explain the meaning of three elements of a packaging for dangerous goods of class 6.2. The code given to candidates was UN/4C1/Class 6.2/. To answer this question properly, candidates had to first check the provisions of Chapter 6.3 of the ADR where the term “Class 6.2” is specified i.e. 6.3.4.2 (c). Any candidate who did not give this link lost a mark, being 55%.

Perhaps the core of this case study concerned the allowances for small loads based on Transport Categories and the exemptions at 1.1.3.6.3 which, for example, allows a vehicle to carry a certain quantity of dangerous goods without the need to display orange coloured plates. There was a two-part question worth 8 marks in this case study based on these provisions. 36% of candidates who took this case study did not approach the question this way. These candidates should have noted that Transport Category 2 applies to UN 3291. Candidates should have also noted that dangerous goods of UN 2814 have the Transport Category “0” meaning no exemptions from orange plates. 46% of candidates did not answer this correctly. This kind of questions not specific to the topics of this case study but cut across all classes of dangerous goods.

One of the parts of this case study concerned an offence under the domestic regulations, again a question not specific to Class 6.2. It concerned the fixed penalty payable by a *consignor or carrier* if a driver was found not to have his or her ADR training certificate with them. The penalty for them is up to €500. There is a similar fixed penalty offence for drivers but a different amount payable, up to €100. The question required the answer €500. 32% of candidates gave the penalty which could be imposed on drivers.

Vehicles carrying infectious clinical waste are allowed to have a reduced number of fire extinguishers, just 1 x 2 kg fire extinguishers. This is given in special operating provision S3.

The ADR provides that if there has been a spillage of dangerous goods of UN 2814 on a vehicle, any contaminated wooden parts of the vehicle should be burnt. This is stated in Special Provision for Handling, Loading and Unloading CV26. The final part of this case study required candidates to locate CV26 and to give an answer based on it. 50% of the candidates who took this case study gave an answer based on CV13 which though relevant overall was not the answer to the

last part.

### Case Study 3

29% of candidates chose case study 3.

It was based on one of the new UN numbers introduced into the ADR this year, UN 3541. The first task was to recognise the dangerous goods in the question for what they were – UN 3541. Some candidates chose UN 1309 which was the UN number for the chemical in the articles covered by UN 3541. This caused a serious mistake that impacted on the answers given in the rest of the case study.

UN 3541 has SP 274 allocated to it so that it is compulsory to add a technical name or names in brackets after the main part of the Proper Shipping Name. As previously stated in past reports, the Proper Shipping Names where SP 274 is allocated are incomplete without this detail being added and so candidates should immediately jump to the conclusion that they must include the technical name in brackets automatically when answering questions where SP 274 applies. Candidates must also give all the appropriate references for SP 274 as explained above.

Results varied in relation to the extent that candidates recognised that ADR Transport Category 4 is allocated to UN 3541 with all that that entails by way of the load exemptions at 1.1.3.6 – an unlimited quantity may be carried under these provisions and similar exemptions based on TC 4 elsewhere in ADR. 56% of candidates did not do this with respect to their answers for part (a) (i) of this case study.

UN 3541 has the Packing Instruction P006. One part of this case study could be answered from this Packing Instruction.

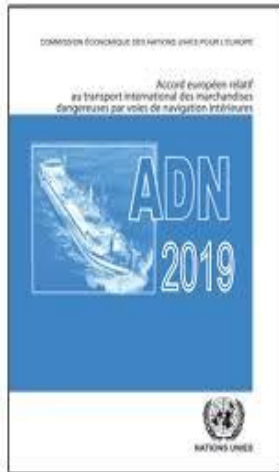
Candidates were asked to show the dangerous goods information which would have to be shown on the ADR road-mode transport document for goods of UN 3541 in the manner “UN 3541 ARTICLES CONTAINING FLAMMABLE SOLID, N.O.S. (aluminium powder, coated), 4.1, (E)”, noting that no Packing Group is assigned to UN 3541 as is the normal practice of the United Nations Subcommittee of Experts on the Transport of Dangerous Goods with articles containing dangerous goods. Some candidates gave a list of the requirements from 5.4.1.1.1 rather than showing the actual details which should appear on the document.

Series of questions in the case study on the exemptions granted to TC4 consignments. These are:

- Instructions in Writing are not needed,
- Tunnel restrictions do not apply.
- Only 1 x 2 kg fire extinguisher is needed.
- These dangerous goods are exempted from the provisions for High Consequence Dangerous Goods by not appearing in the table in Chapter 1.10 but they are also exempted through the TC4 route.
- Carriers etc. are exempted from the need to appoint Dangerous Goods Safety Advisers in 1.8.3.2 (a).

Finally, candidates were asked about the rules applicable to other modes of transport. 56% of

candidates said the IMDG Code was applicable to the transport of dangerous goods by road when it is, in fact, the ADN:



**C. Comments on Candidates' Performance (include identification of any gaps in knowledge\areas of weakness)**

Any comments appear above.

**D. Comments on the Marking Process**

None.

SIGNATURE: .....DATE: 23.07.19

Roadreport/dgsa