

**Economic Commission for Europe****Inland Transport Committee****Working Party on the Transport of Dangerous Goods****Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)****Twenty-eighth session**

Geneva, 25-29 January 2016

Item 5 (b) of the provisional agenda

**Proposals for amendments to the Regulations annexed to ADN:  
Other proposals****Chapter 8.2.2 — Special requirements for the training of experts****Transmitted by the Government of Germany<sup>1</sup>***Summary*

**Executive summary:** Examinations and final tests during the training of ADN experts must currently be “written”.

At the nineteenth session of the Safety Committee, it was proposed that the possibility of electronic tests should be raised at the Joint Meeting, since the matter is also relevant to safety advisers and to training for ADR drivers.

At the session held in September 2015 and at the request of Germany, the Joint Meeting opened up the possibility of using electronic data processing techniques in examinations during the training of safety advisers.

The possibility of electronic examinations should be offered in the training of ADN experts.

During the examination for the ADN specialized knowledge certificate, only the texts of regulations on dangerous goods, CEVNI, the police regulations based on these regulations and technical literature are currently authorized as forms of help. However, answering many of the questions from the catalogue of questions requires calculations that tend to be done with a pocket calculator,

<sup>1</sup> Distributed in German by the Central Commission for the Navigation of the Rhine in document CCNR-ZKR/ADN/WP.15/AC.2/2016/17.



	which should thus be authorized as a form of help during the examination.
<b>Action to be taken:</b>	Amendments to 8.2.2.7 so that the new rules for the examination of safety advisers also apply to examinations and final tests during the training of ADN experts.  In 8.2.2.7.1.5, 8.2.2.7.2.5 and 8.2.2.7.3.2, “basic pocket calculators” should be added to the list of authorized forms of help.
<b>Related documents:</b>	ECE/TRANS/WP.15/AC.2/40, para. 18 ECE/TRANS/WP.15/AC.2/2014/49, para. 22 ECE/TRANS/WP.15/AC.1/140 ECE/TRANS/WP.15/AC.2/2015/1 ECE/TRANS/WP.15/AC.2/54

## Introduction

1. 8.2.2.7, on “Examinations and final tests”, stipulates that they should be written. The same requirement applies to examinations for safety advisers under 1.8.3.12.1.
2. At the nineteenth session of the Safety Committee, in response to a question by the representative of the Netherlands, it was proposed that the possibility of using electronic tests as an alternative to written examinations should be introduced and raised at the RID/ADR/ADN Joint Meeting, since arrangements for tests and examinations are also relevant to training courses for drivers of vehicles and safety advisers (document ECE/TRANS/WP.15/AC.2/40, para. 18).
3. The German delegation took on the task.
4. The project was presented in detail to the informal working group on the training of experts at its twelfth session in March 2014 (document ECE/TRANS/WP.15/AC.2/2014/49, para. 22).
5. At its session in September 2015 and at the request of the German delegation, the Joint Meeting opened up the possibility of using electronic data processing techniques in examinations during the training of safety advisers and agreed on corresponding amendments to 1.8.3.12 of ADR/RID/ADN (document ECE/TRANS/WP.15/AC.1/140 — report of the Joint Meeting/INF. document of the secretariat).
6. These amendments should be applied by analogy to examinations and final tests for the ADN specialized knowledge certificate.
7. The catalogues of questions for the examination for the ADN specialized knowledge certificate contain questions for which the use of pocket calculators may prove necessary. The informal working group on training had therefore proposed to allow candidates to use pocket calculators in the examination, on condition, however, that the pocket calculators be supplied by the competent authority or by the examining body designated by the competent authority. The use of programmable pocket calculators shall be ruled out.
8. Germany wishes to take up the informal working group’s proposal and, in that connection, to propose amendments to 8.2.2.7.1.5, 8.2.2.7.2.5 and 8.2.2.7.3.2.

## Proposed amendments and justification

(text to delete in ~~strikeout~~, new text underlined)

9. Amend 8.2.2.6.3 (e) as follows:

“(e) detailed plan for final tests, including, if necessary, the infrastructure and organisation of electronic examinations in accordance with 8.2.2.7.1.7, if these are to be carried out.”

Justification: in line with the amendment to 1.8.3.10.

10. Amend the second indent in the third sentence of 8.2.2.7.0 as follows:

“– specifications of the form of the examinations the examining body is proposing, including, if necessary, the infrastructure and organisation of electronic examinations in accordance with 8.2.2.7.1.7, if these are to be carried out.”

Justification: in line with the amendment to 1.8.3.10.

11. Delete the third sentence of 8.2.2.7.1.5.

Justification: the rule governing which regulatory texts are authorized for use should be maintained, but moved to the new 8.2.2.7.1.6.

12. Insert the following new paragraphs after 8.2.2.7.1.5:

“8.2.2.7.1.6 The competent authority or an examining body designated by the competent authority shall supervise every examination. The possibility of any manipulation or deception shall be completely ruled out. Authentication of candidates shall be ensured.

The use of documents shall not be authorized during the written examination, with the exception of the texts of regulations on dangerous goods, CEVNI and the police regulations based on these regulations. Non-programmable pocket calculators are authorized for use and shall be supplied by the competent authority or by the examining body designated by the competent authority.

All examination documents shall be documented and kept as a print-out or electronically as a file.

8.2.2.7.1.7 Written examinations may also be conducted, in whole or in part, as electronic examinations, where the answers are recorded and evaluated using electronic data processing (EDP) processes, provided the following conditions are met:

(a) The hardware and software shall be checked and accepted by the competent authority or by the examining body designated by the competent authority.

(b) Electronic media may be used only if provided by the competent authority or by the examining body designated by the competent authority.

(c) Proper technical functioning shall be ensured. Arrangements shall be made as to whether and how the examination can be continued in the case of a failure of the devices and applications. No aids (e.g. electronic search function) shall be available on the input devices; the electronic data processing equipment provided shall not allow the candidates to communicate with any other device during the examination.

(d) There shall be no means of a candidate introducing further data to the electronic media provided; the candidate may only answer the questions posed.

(e) The final inputs of each candidate shall be logged. The determination of the results shall be transparent.”

Justification: transposition of the new 1.8.3.12.5 into the provisions on the examination for ADN experts.

8.2.2.7.1.6 authorizes the use of basic pocket calculators.

The informal working group's proposal is convincing as far as the catalogue of questions is concerned. The pocket calculators must, however, be supplied by the competent authority or by the examining body designated by the competent authority, to ensure that all candidates sit the examination under the same conditions and that no possibility of abuse is opened up by making answers available. The use of programmable pocket calculators must be ruled out, since knowledge of calculations and formulae is an important element in the training of experts.

New subparagraphs (b) and (d) of 8.2.2.7.1.7 are taken from 1.8.3.12.3, on the examination of safety advisers.

13. Amend 8.2.2.7.2.5 as follows:

“8.2.2.7.2.5 The examination shall be written.

The candidate is to be asked 30 multiple-choice questions and one substantive question. The examination shall last a total of 150 minutes, of which 60 minutes for the multiple-choice questions and 90 minutes for the substantive question.

The examination shall be marked out of a total of 60, of which 30 marks will go to the multiple-choice questions (one mark per question) and 30 to the substantive question (the distribution of marks is left to the appreciation of the competent authority). A total of 44 marks must be achieved to pass. However, not less than 20 marks must be obtained in each subject part. If the candidate obtains 44 but does not achieve 20 in one subject part, the subject part in question may ~~be set in a resit~~ be resat once.

~~The texts of regulations and technical literature are permitted during the examination.~~

The provisions of 8.2.2.7.1.6 and 8.2.2.7.1.7 shall apply by analogy.”

Justification:

(a) The examination is not divided into separate subjects whose content differs (e.g. law, chemistry, shipbuilding, etc.). Rather, it comprises two parts that are organized differently: one contains multiple-choice questions and the other, a substantive question. This should be reflected in the text of the regulation.

(b) An indication of the authorized forms of help is already contained in 8.2.2.7.1.6, to which reference is subsequently made. Technical literature such as manuals and teaching aids is not authorized in any examination and reference to it should thus also be deleted in ADN.

(c) The reference to 8.2.2.7.1.6 and 8.2.2.7.1.7 avoids repetition and helps shorten the provisions.

14. Delete the fourth sentence of 8.2.2.7.3.2.

Justification: the rule governing which regulatory texts are authorized for use should be maintained, but moved to the new 8.2.2.7.1.6.

15. Amend 8.2.2.7.3.3 as follows:

“8.2.2.7.3.3 The provisions of 8.2.2.7.1.2, ~~and~~ 8.2.2.7.1.3, 8.2.2.1.7.6 and 8.2.2.1.7.7 shall apply to the administration of the tests (outside the provisions of the directive on the use of the catalogue of questions for examining authorities and bodies).”

Justification:

The provisions in force on electronic examinations are added to the list.

16. The amendments contribute to the modern development of examination procedures. The need to allow the use of electronic data processing techniques has

been expressed by several Contracting Parties. The proposed amendments provide a reliable legal framework for that possibility.

## **Safety**

17. Transport safety is not affected. The high level of the examinations for the ADN specialized knowledge certificate is maintained.

## **Implementation**

18. The introduction of electronic data processing techniques in examinations is left to the discretion of the Contracting Parties. Examining authorities and bodies will be required to make medium-sized investments in order to allow the use of electronic data processing techniques in examinations and final tests, and to implement additional organizational measures. There will be no additional cost for companies.

19. Training bodies and the competent authorities or the examining bodies designated by the competent authorities will have to purchase the most basic pocket calculators. The estimated financial expense is low. There will be a small additional cost for the examining authority or body to ensure that the pocket calculators that it supplies are the only ones used.

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