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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)

Fifteenth session
Geneva, 24-28 August 2009
Item 5 of the provisional agenda

CATALOGUE OF QUESTIONS

Transport by dry cargo vessels, objectives 2, 3, 7 and 8

Transmitted by the Central Commission for the Navigation of the Rhine (CCNR)¹

1. At its fourteenth session, the ADN Safety Committee, recalling that, under 8.2.2.7.2.3 of the Regulations annexed to ADN, the ADN Administrative Committee was required to prepare a catalogue of questions for the ADN examinations, decided that the item should be put on the agenda for future sessions, in order to enable lists of questions to be translated and adopted progressively (ECE/TRANS/WP.15/AC.2/30, paras. 38 and 40).

¹ Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/ADN/WP.15/AC.2/2009/14.

2. This document contains the lists of questions proposed by CCNR in respect of dry cargo vessels and the following objectives:

- Examination objective 2: Construction and equipment
- Examination objective 3: Treatment of holds and adjacent spaces
- Examination objective 7: Documents
- Examination objective 8: Safety

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2001	7.1.3.31	B
<p>A vessel is transporting dangerous goods in packages. May portable stripping pumps running on liquid fuel be used outside the protected area?</p>		
<p>A No B Yes, if the liquid fuel has a flashpoint of 55° C or above C Yes, if the hold hatchways are closed D Yes, if the packages do not include goods of Class 1</p>		
DC 2002	9.1.0.11.1 (a)	B
<p>By what should the holds of dry cargo vessels transporting dangerous goods be bounded fore and aft?</p>		
<p>A Cofferdams B Watertight metal bulkheads C Pseudo cofferdams D Wooden bulkheads</p>		
DC 2003	9.1.0.34.1	A
<p>At what minimum distance from the hatchway openings should the exhaust outlets of engines be located?</p>		
<p>A 2.00 m B 2.50 m C 3.00 m D 1.00 m</p>		
DC 2004	9.1.0.11.1	C
<p>Each hold should be bounded fore and aft by bulkheads. How should these bulkheads be?</p>		
<p>A Gastight B Spray proof C Watertight D Dustproof</p>		

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2005	9.1.0.11.3	B
	<p>On dry cargo vessels transporting dangerous goods, may tarpaulins be used to cover the hatchways of the holds concerned?</p> <p>A No B Only if the tarpaulins do not readily ignite C Only if the dangerous goods are transported in packages D Only if an additional ventilator is installed in the hold to prevent condensation</p>	
DC 2006	9.1.0.12.1	A
	<p>Dry cargo vessels transporting dangerous goods must in many cases be capable of ventilating the holds mechanically. What capacity should the ventilators have?</p> <p>A Together they should provide five changes of air per hour based on the volume of the empty hold B Together they should provide at least 10 changes of air per hour based on the volume of the empty hold C There is no requirement in respect of ventilation capacity D This depends whether the ventilator fan extracts air from the hold or blows fresh air into the hold</p>	
DC 2007	9.1.0.32.1	C
	<p>May the double bottoms within the hold area be arranged as oil fuel tanks?</p> <p>A No, this is prohibited B No, unless specifically authorized by the competent authority C Yes, provided that their height is not less than 0.60 m and that the pipes and openings to such tanks do not penetrate the holds D Yes, provided that their height is not less than 0.50 m and that the pipes and openings to such tanks do not penetrate the holds</p>	

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2008	9.1.0.40.1 What should dry cargo barges without their own means of propulsion transporting dangerous goods have on board? A At least two fire pumps permanently installed B No fire pumps C At least one electrical fire or ballast pump in the protected area D At least one fire or ballast pump	D
DC 2009	9.1.0.40.2 When the engine room must be provided with a permanently fixed fire-extinguishing system, from which point should it be possible to activate it? A From the deck B From the wheelhouse C From the entrance to the engine room D From the accommodation	A
DC 2010	9.1.0.40.1 With what should the piping of the fire-extinguishing system be fitted to ensure that no gases can escape from the cargo zone through the fire-extinguishing system into the accommodation or service spaces? A A lid B A valve C A stop valve D A spring-loaded non-return valve	D
DC 2011	9.1.0.41.2 What appliances may be used for cooking? A Electrical appliances B Gas-fuelled appliances C Appliances fuelled with liquid fuels D Appliances fuelled with liquid or solid fuels	A

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2012	7.1.3.70.2	B
	<p>What minimum distance should be maintained between substances or articles of Class 1 and aerials for electronic apparatuses?</p> <p>A 3.00 m B 2.00 m C 4.00 m D 1.00 m</p>	
DC 2013	9.1.0.74.3	D
	<p>What should be provided close to each exit of the accommodation and the wheelhouse?</p> <p>A A sign bearing the text: “Please close this door immediately” B A sign bearing the text: “May be opened without the master’s permission. After opening, close immediately” C A sign bearing the text: “Do not open without the master’s permission” D An ashtray</p>	
DC 2014	9.1.0.91.2	A
	<p>On double-hull dry cargo vessels conforming to the additional construction rules set forth in ADN, what minimum distance should be respected between the sides of the vessel and the longitudinal bulkheads of the hold?</p> <p>A 0.80 m B 0.90 m C 1.00 m D 1.10 m</p>	

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2015	9.1.0.91.2 On a double-hull dry cargo vessel conforming to the additional construction rules set forth in ADN and constructed according to the longitudinal framing system, what is the maximum frame spacing permitted? A 0.60 m B 0.65 m C 0.70 m D 0.75 m	A
DC 2016	9.1.0.91.2 If, on a double-hull dry cargo vessel conforming to the additional construction rules set forth in ADN, the distance between the sides of the vessel and the longitudinal bulkheads of the hold is 0.60 m, what provisions are applicable to the transverse bulkheads? A The gangboards should be supported by transverse bulkheads or cross-ties spaced not more than 20 m apart B The gangboards should be supported by transverse bulkheads or cross-ties spaced not more than 32 m apart C There should never be any transverse bulkheads or cross-ties D There should always be at least one transverse bulkhead or one cross-tie, otherwise lateral solidity cannot be guaranteed	B
DC 2017	9.1.0.91.3 On a double-hull dry cargo vessel conforming to the additional construction rules set forth in ADN, what should the depth of the double bottom be? A It should correspond to the width of the double-hull space B It should not exceed 0.50 m C It should be at least 0.50 m D It should be at least 0.60 m	C

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2018	9.1.0.91.1	B
	<p>How should the protected area of a double-hull dry cargo vessel conforming to the additional construction rules set forth in ADN be arranged?</p> <p>A It should be built with double-hull spaces B It should be built with double-hull spaces and a double bottom C It should be equipped with double-hull spaces and a double bottom in the engine room D It should at least be built with double-hull spaces and a double bottom, and double-hull spaces in the engine room</p>	
DC 2019	9.1.0.91.3	B
	<p>In double-hull dry cargo vessels conforming to the additional construction rules set forth in ADN and equipped with suction wells with a capacity of 0.04 m³, what should the minimum space between the bottom of the vessel and the bottom of the suction well be?</p> <p>A 0.40 m B 0.50 m C 0.30 m D 0.60 m</p>	
DC 2020	9.1.0.93.2	C
	<p>For double-hull dry cargo vessels conforming to the additional construction rules set forth in ADN, how should the basic values for the stability calculation be determined?</p> <p>A By means of an inclining experiment conducted when the vessel is fully loaded B By means of an inclining experiment conducted before the vessel is equipped C By means of an inclining experiment or detailed mass and moment calculation D By means of a calculated inclining experiment</p>	

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2021	9.1.0.93.3 For double-hull dry cargo vessels conforming to the additional construction rules set forth in ADN, what is the purpose of the intact stability calculation? A To provide proof of sufficient stability for all stages of loading of the vessel B To provide proof of sufficient stability solely for the vessel loading stage C To provide proof of sufficient stability solely when the vessel is loaded with containers D To provide proof of sufficient stability solely when the vessel is loaded to less than 50% of the maximum draught	A
DC 2022	9.1.0.95.2 After damage, at the stage of equilibrium (final stage of flooding), what is the maximum permissible angle of heel of a double-hull dry cargo vessel conforming to the additional construction rules set forth in ADN? A 6 degrees B 8 degrees C 10 degrees D 12 degrees	D
DC 2023	9.1.0.95.3 At the stage of equilibrium (final stage of flooding), what is the maximum permissible angle of heel of a double-hull dry cargo vessel conforming to the additional construction rules set forth in ADN and loaded with containers which have not been secured? A 3 degrees B 5 degrees C 6 degrees D 12 degrees	B

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2024	9.2.0.34.1	B
	<p>Under ADN, on seagoing vessels complying with Chapter II-2, Regulation 54, of the SOLAS requirements, where should the exhaust pipe outlets be located?</p> <p>A They should be located not less than 1 m from the hold hatchways</p> <p>B They should be located not less than 2 m from the hold hatchways</p> <p>C They should always be located behind the wheelhouse</p> <p>D They should be located not less than 3 m from the hold hatchways</p>	
DC 2025	9.1.0.41.2	A
	<p>Under ADN, when are cooking appliances permitted in the wheelhouse of a dry cargo vessel?</p> <p>A When the wheelhouse has a metal floor</p> <p>B Such appliances are absolutely prohibited</p> <p>C When the separation distance between the wheelhouse and the holds is at least 4 m</p> <p>D When the separation distance between the wheelhouse and the holds is at least 3 m</p>	
DC 2026	9.1.0.17.2	C
	<p>What provisions apply to an accommodation door facing the holds?</p> <p>A It must be windowless</p> <p>B It must be sprung to ensure that it can close immediately after being opened</p> <p>C A gastight closing appliance must be provided</p> <p>D A watertight closing appliance must be provided</p>	

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2027	7.1.2.0.3, 7.1.4.1.1	A
<p>What provisions apply to the transport of goods of Class 7, with the exception of UN Nos. 2908 to 2911?</p>		
<p>A They may only be transported by dry cargo vessels conforming to the additional rules for construction of double-hull vessels set forth in ADN</p> <p>B They may only be transported by vessels with steel hatchways</p> <p>C Pursuant to ADN, they may be transported either by single-hull or double-hull vessels</p> <p>D They may only be transported by vessels with aluminium hatchways</p>		
DC 2028	9.1.0.12.1	B
<p>You are required to transport dangerous goods for which additional ventilators are prescribed. You install two portable ventilators. Where should the extraction ducts be positioned?</p>		
<p>A The extraction ducts should be positioned at least 1 m above the bottom of the hold</p> <p>B The extraction ducts should be positioned at the extreme ends of the hold and extend down to not more than 50 mm above the bottom</p> <p>C The extraction ducts should be positioned at the front of the hold and extend down to not more than 50 mm above the bottom</p> <p>D The extraction ducts should be positioned at the back of the hold and extend down to not more than 50 mm above the bottom</p>		

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
DC 2029	9.1.0.20	D
	<p>You are constructing a dry cargo vessel with double-hull spaces and a double bottom. You wish to arrange and use the double-hull spaces as ballast tanks. Is this permitted?</p> <p>A No, the double-hull spaces serve as a safety area and should therefore always be empty</p> <p>B No, because if the double-hull spaces were filled with water, the stability of the vessel would be jeopardized</p> <p>C Yes, since the double-hull spaces can be emptied in 30 minutes</p> <p>D Yes, the double-hull spaces may be arranged for being filled with water ballast</p>	
DC 2030	9.1.0.40.3	A
	<p>You are required to transport dangerous goods and, in accordance with 8.1.4, you are required to have two additional hand fire-extinguishers on board. Where should these two additional extinguishers be located?</p> <p>A In the protected area or nearby</p> <p>B Outside the protected area</p> <p>C Outside the wheelhouse, so that, in case of emergency, they can be located rapidly and used also by other persons</p> <p>D In an appropriate place designated by an expert</p>	
DC 2031	9.1.0.41.1	C
	<p>Should the outlets of funnels be equipped?</p> <p>A Yes, with devices to prevent the escape of sparks</p> <p>B Yes, with devices to prevent the entry of water</p> <p>C Yes, with devices to prevent the escape of sparks and the entry of water</p> <p>D No, ADN contains no stipulations in this regard</p>	

TRANSPORT BY DRY CARGO VESSELS
Examination objective 2: Construction and equipment

Number	Source	Correct answer
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DC 2032 9.1.0.52.1 D

What provisions of ADN apply to electrical equipment which is located in the protected area on the deck of a dry cargo vessel and cannot be isolated by means of a central switch?

- A It should be of the “certified safe” type
- B It should be fireproof in accordance with IEC 60079-1A
- C It should be watertight to prevent short circuits
- D It should be of the “limited explosion risk” type

TRANSPORT BY DRY CARGO VESSELS
Examination objective 3: Treatment of holds and adjacent spaces

Number	Source	Correct answer
DC 3001	3.2, Table A, 7.1.6.12	C
<p>A vessel is transporting UN No. 1435 ZINC ASHES in bulk. What should you do during the voyage?</p> <p>A Leave the windows and doors open B Seal the holds so as to ensure that no gas escapes C Ventilate the spaces adjacent to the holds containing the zinc ashes D Degas the holds every half hour</p>		
DC 3002	7.1.4.12.1	D
<p>A ro-ro-vessel is loaded with vehicles. How many times per hour must the air be changed?</p> <p>A 30 times B 20 times C 10 times D 5 times</p>		
DC 3003	3.2, Table A, 7.1.6.12	C
<p>A vessel is transporting UN No. 2211 POLYMERIC BEADS, EXPANDABLE, packaged. When must the holds be ventilated?</p> <p>A Always, when the goods are stowed in the holds B Throughout the voyage, for 15 minutes per hour C Where after measurement it has been established that the concentration of gases exceeds 10% of the lower explosive limit D Where after measurement it has been established that the concentration of gases is less than 10% of the lower explosive limit</p>		

TRANSPORT BY DRY CARGO VESSELS
Examination objective 3: Treatment of holds and adjacent spaces

Number	Source	Correct answer
DC 3004	3.2, Table A, 7.1.6.12 A vessel is transporting UN No. 1408 FERROSILICON in bulk or without packaging. After measurement it is established that the concentration of gases exceeds 10% of the lower explosive limit. How should the holds be ventilated? A With the ventilators operating at full power B With the ventilators on standby C For 15 minutes per hour D Once every 8 hours	A
DC 3005	3.2, Table A, 7.1.6.12 You are on board a dry cargo vessel with four holds. You have 300 tonnes of UN No. 1408 FERROSILICON in bulk in hold 2. Which holds or spaces should be ventilated for the voyage? A Hold 2 and all adjacent holds and spaces B Hold 2 C All the holds, i.e. holds 1, 2, 3 and 4 D This bulk cargo does not require ventilation	A
DC 3006	3.2, Table A, 7.1.6.12 A vessel is transporting UN No. 1398 ALUMINIUM SILICON POWDER, UNCOATED, in bulk. After measurement it is established that the concentration of gases given off by the cargo exceeds 10% of the lower explosive limit. What should be done with the holds? A The holds should be ventilated B The holds should be ventilated with a ventilator C The holds should not be ventilated D The holds should be ventilated with the ventilators operating at full power	D

TRANSPORT BY DRY CARGO VESSELS
Examination objective 3: Treatment of holds and adjacent spaces

Number	Source	Correct answer
DC 3007	3.2, Table A, 7.1.6.16	C
<p>You are on board a dry cargo vessel and are required to unload UN No. 2211 POLYMERIC BEADS, EXPANDABLE. The cargo is being carried in bulk.</p>		
<p>Which of the following measures should be taken prior to unloading?</p>		
<p>A The windows and doors of the accommodation should be hermetically sealed to prevent toxic substances from escaping</p> <p>B The master should measure the concentration of gases in the holds concerned</p> <p>C The consignee should measure the concentration of gases in the holds concerned</p> <p>D The consignee should measure the toxicity in the holds concerned</p>		
DC 3008	3.2, Table A, 7.1.6.16	D
<p>You are on board a dry cargo vessel and are required to unload UN No. 2211 POLYMERIC BEADS, EXPANDABLE. The cargo is being carried in bulk. Below what value must the concentration of gases be before unloading may be started?</p>		
<p>A At least 10% below the lower explosive limit</p> <p>B At least 20% below the lower explosive limit</p> <p>C At least 40% below the lower explosive limit</p> <p>D At least 50% below the lower explosive limit</p>		

TRANSPORT BY DRY CARGO VESSELS
Examination objective 3: Treatment of holds and adjacent spaces

Number	Source	Correct answer
DC 3009	3.2, Table A, 7.1.6.12, 7.1.6.16 You are on board a dry cargo vessel and you have loaded UN No. 2211 POLYMERIC BEADS, EXPANDABLE. The cargo is being carried in bulk. You are required to measure the concentration of gases. When should these measurements be taken? A Immediately after loading and one hour later B Every eight hours after loading C During loading, up to one hour after loading and then one hour prior to unloading D During transport, there is no need to make measurements	A
DC 3010	3.2, Table A, 7.1.6.12 You are on board a dry cargo vessel and you have loaded UN No. 2211 POLYMERIC BEADS, EXPANDABLE. The cargo is being carried in bulk. During the voyage, you are required to measure the concentration of gases in the holds where the polymeric beads, expandable, are located. What measures should you take if you discover a gas concentration 20% above the lower explosive limit? A Inform the competent authority B Ventilate the holds C Inform the consignee of the cargo or the loader D No additional measures, since the maximum value is 50% of the lower explosive limit	B

TRANSPORT BY DRY CARGO VESSELS**Examination objective 3: Treatment of holds and adjacent spaces**

Number	Source	Correct answer
DC 3011	3.2, Table A, 7.1.6.12 You are transporting UN No. 1408 FERROSILICON in bulk. Under normal conditions of operation, when should the concentration of gases in the hold be measured? A Never B Immediately after loading, one hour later and then every eight hours C Immediately after loading, one hour later and then every hour D Immediately after loading and one hour later	D
DC 3012	7.1.4.15.1 When is it not necessary to clean the hold? A When the previous cargo comprised goods of Class 4.1 B When the previous cargo comprised goods of Class 4.2 C When the previous cargo comprised goods of Class 4.3 D When the new cargo comprises the same goods as the previous cargo	D
DC 3013	3.2, Table A, 7.1.6.12 You are transporting UN No. 3101 ORGANIC PEROXIDE TYPE B, LIQUID, in a dry cargo vessel. Should the accommodation be ventilated, bearing in mind the nature of these goods? A No, this is not necessary B Yes, this is prescribed for these goods C No, unless the goods are loaded in bulk D Yes, if the goods have escaped	A

TRANSPORT BY DRY CARGO VESSELS
Examination objective 3: Treatment of holds and adjacent spaces

Number	Source	Correct answer
DC 3014	7.1.4.15.1 A hold is contaminated with goods of Class 9. What should be done? A The hold should be cleaned with a specialized cleaning product before new cargo may be loaded B The hold should be cleaned C The hold should be cleaned unless the new cargo comprises goods of Class 8 D The hold should always be decontaminated by a specialized company before new cargo may be loaded in it	B
DC 3015	3.2, Table A, 7.1.6.11 You are required to transport UN No. 2506 POTASSIUM HYDROGEN SULPHATE in bulk. What measures should be taken in respect of the holds? A Prior to loading, the holds should be ventilated for at least one hour B Prior to loading, the holds should be specially dried C The inner surfaces of the holds should be lined or coated so as to prevent corrosion D The inner surfaces of the holds should be lined or coated such that they are not liable to impregnation by the cargo	C
DC 3016	3.2, Table A, 7.1.6.11 You are required to transport UN No. 1334 NAPHTHALENE, CRUDE, in bulk. What measures should be taken in respect of the holds? A Prior to loading, the holds should be wiped so as to ensure that they are free of water B Prior to loading, the holds should be ventilated with an inert gas such that they are not flammable during loading C The inner surfaces of the holds should be lined or coated so as to prevent corrosion D The inner surfaces of the holds should be lined or coated such that they are not liable to impregnation by the cargo	D

TRANSPORT BY DRY CARGO VESSELS
Examination objective 3: Treatment of holds and adjacent spaces

Number	Source	Correct answer
DC 3017	7.1.3.51.4	B
<p>A dry cargo vessel is transporting explosive substances and articles.</p> <p>What must be done with all the electrical installations?</p> <p>A They should be removed from the protected area B They should be switched off in the holds C Electrical installations normally located in the holds should be removed D They should be switched off in the holds during loading and unloading</p>		
DC 3018	7.1.4.12.2	C
<p>On your dry cargo vessel, you are transporting some containers containing goods of Class 5.2. When should you ventilate the open holds?</p> <p>A For this cargo, the holds should always be ventilated B On container ships with open holds, the holds need never be ventilated C The holds should be ventilated where damage to a container is suspected D For this cargo, the holds only need to be ventilated during loading and unloading</p>		
DC 3019	7.1.4.12.2	D
<p>On your dry cargo vessel, you are transporting some containers containing goods of Class 3. You suspect that a container is defective.</p> <p>What measures should you take on board?</p> <p>A The outlets of the engine room and the accommodation doors and windows should be closed immediately B The container should be covered with a sheet C The container should be sprayed in order to cool it D The hold should be ventilated</p>		

TRANSPORT BY DRY CARGO VESSELS
Examination objective 7: Documents

Number	Source	Correct answer
DC 7001	1.1.3.6.1, 8.1.8.1 On your vessel you are transporting, among other cargo: 20 tonnes of UN No. 2448 SULPHUR, MOLTEN; 30 tonnes of UN No. 1498 SODIUM NITRATE; and 10 tonnes of UN No. 2031 NITRIC ACID. For this cargo of dangerous goods, do you need a certificate of approval under ADN, 8.1.8.1? A No B Yes, in all cases C Yes, if this is prescribed in one of the three transport documents D Yes, if this is prescribed in the instructions in writing	B
DC 7002	7.1.4.11.1 When dangerous goods are being transported, prior to departure, the master of a dry cargo vessel is required to draw up several documents. Which of the following is included in these documents, among others? A Instructions in writing for each dangerous goods B A certificate with which the master attests that the dangerous goods have been loaded and stowed in accordance with the requirements of ADN C A list indicating the place of loading, the name of the loading installation and the date and time of loading, in respect of each dangerous goods D A stowage plan indicating which dangerous goods (description as in the transport document) are stowed in the various holds or on deck	D
DC 7003	7.1.4.11.1 A vessel has dangerous goods of different classes on board. Who should draw up the stowage plan? A The master B The loader C The expert D The shipping company's authorized agent	A

TRANSPORT BY DRY CARGO VESSELS**Examination objective 7: Documents**

Number	Source	Correct answer
DC 7004	1.1.3.6.1, 3.2, Table A, 8.1.8.1	A
<p>You have 10 cylinders of UN No. 1978 PROPANE gas on board. The gross mass of each cylinder is 35 kg. Is a certificate of approval required to transport them?</p>		
<p>A Yes, in this case the vessel should have a certificate of approval, since the gross mass of the cargo is greater than 3,000 kg</p> <p>B Yes, goods of Class 2 may only be transported on vessels possessing a certificate of approval</p> <p>C Yes, a certificate of approval is always required for the transport of dangerous goods</p> <p>D No, since the exempted gross mass per class is 3,000 kg in this case</p>		
DC 7005	7.1.2.19.1, 8.1.8.1	C
<p>A dry cargo vessel in possession of a certificate of approval has a cargo of wheat on board. The master receives the order to take an empty pushed barge lacking a certificate of approval in side-by-side formation. Is he permitted to do this?</p>		
<p>A Yes, since certificates of approval are only prescribed if one of the vessels is required to display a blue cone</p> <p>B No, loaded cargo vessels are not permitted to take empty barges in side-by-side formation</p> <p>C Yes, provided that, consistent with their certificates, the two vessels are permitted to navigate side by side</p> <p>D No, if a vessel navigating in convoy is in possession of a certificate of approval, all vessels of the convoy must possess such a certificate</p>		

TRANSPORT BY DRY CARGO VESSELS
Examination objective 7: Documents

Number	Source	Correct answer
DC 7006	7.1.2.19.1, 8.1.8.1 You are on board a dry cargo vessel transporting wheat. May you take in side-by-side formation an empty tank barge not degassed that has previously been transporting dangerous goods? A Yes, but only if the two vessels display the correct cone marking B Yes, but only if the dry cargo vessel is also in possession of a certificate of approval C Yes, since the dry cargo vessel does not require a certificate of approval in this case D No, this is prohibited	B
DC 7007	7.1.2.19.1 A dry cargo vessel in side-by-side formation with a pushed barge is transporting dangerous goods in convoy. The barge is transporting gravel. Which vessel(s) require(s) a certificate of approval? A Only the dry cargo vessel B Both vessels C Only the pushed barge D Neither vessel	B
DC 7008	5.4.3.2 A container ship with a Dutch crew is transporting dangerous goods from the Netherlands to Bulgaria. In which language(s) should the instructions in writing to be provided by the carrier be drafted? A In Dutch B In English, German and French C In Dutch and German D In Dutch or German	A

TRANSPORT BY DRY CARGO VESSELS**Examination objective 7: Documents**

Number	Source	Correct answer
DC 7009	7.1.4.8.1 Permission in writing is required in order to load explosive substances for which marking with three blue cones or three blue lights is prescribed in Table A. As a general rule from, whom is this obtained? A The local fire brigade B The competent authority C The shipping police D The classification society	B
DC 7010	7.1.4.8.1 You are transporting explosive substances for which marking with three blue cones or three blue lights is prescribed in Table A. Permission in writing is required for unloading. As a general rule, from whom is this obtained? A The competent authority B The shipping police C The classification society D The local fire brigade	A
DC 7011	7.1.4.8.1 Permission in writing is required for the trans-shipment of explosive substances for which marking with three blue cones or three blue lights is prescribed in Table A. As a general rule, from whom is this obtained? A The shipping police B The classification society C The local fire brigade D The competent authority	D

TRANSPORT BY DRY CARGO VESSELS
Examination objective 7: Documents

Number	Source	Correct answer
DC 7012	7.1.4.11.1	A
	<p>How should dangerous goods be described on a stowage plan when, in accordance with ADN, such a plan is required to be drawn up?</p> <p>A As in the transport document B Anyhow, as long as red outlining is used C By their commercial name D With an indication of the relevant class only</p>	
DC 7013	8.1.2.1, 8.1.2.2	A
	<p>You are on board a dry cargo vessel loaded with dangerous goods in a quantity greater than the exempted quantity. Which of the following documents is required to be on board?</p> <p>A The certificate of approval and the instructions in writing B The certificate of approval and the checklist C The instructions in writing and the checklist D The certificate of approval and the certificate attesting gas-free condition</p>	
DC 7014	5.4.3	A
	<p>During the voyage, a very small quantity of cargo escapes from a package. Where would you find the measures to be taken?</p> <p>A In the instructions in writing B In the stowage plan C In the security plan D In the transport document</p>	
DC 7015	7.1.4.11.1, 7.1.4.11.2	A
	<p>What must the master of a container ship enter on the stowage plan?</p> <p>A The number of the container B The proper name of the substance and the official number of the vessel C The number of the container and, if known, the number of the substance and the length and width of the container D The proper name of the substance, its quantity and class</p>	

TRANSPORT BY DRY CARGO VESSELS**Examination objective 7: Documents**

Number	Source	Correct answer
DC 7016	2.2.1.1.5, 2.2.1.1.6, 7.1.4.3.4	B
<p>You are transporting a substance of Class 1 described in the transport document as follows:</p>		
<p>UN No. 0392 HEXANITROSTILBENE 1.1 D</p>		
<p>What does the letter D signify in this context?</p>		
<p>A It indicates the maximum quantity of this explosive substance that may be transported by vessel</p> <p>B On the basis of this letter, it can be ascertained whether carriage in the same hold together with certain other explosive substances is permitted or prohibited</p> <p>C The explosive substance is too dense</p> <p>D On the basis of this letter, it can be ascertained whether carriage in the same hold together with substances of Class 3 is permitted or prohibited</p>		
DC 7017	1.1.3.6.2	C
<p>Which documents should always be on board, even if the vessel is transporting dangerous goods in quantities below the exempted quantities stipulated in 1.1.3.6.1?</p>		
<p>A The certificate of approval and the instructions in writing</p> <p>B The transport document and the instructions in writing</p> <p>C The transport document and the stowage plan</p> <p>D The stowage plan and the certificate of approval</p>		
DC 7018	5.4.3.2	C
<p>A vessel is required to transport dangerous goods from Antwerp to Rotterdam. The master and expert only understand French. In what language(s) should the instructions in writing be drafted?</p>		
<p>A Only in Dutch</p> <p>B At least in Dutch</p> <p>C In French</p> <p>D In Dutch, German, English and French</p>		

TRANSPORT BY DRY CARGO VESSELS
Examination objective 7: Documents

Number	Source	Correct answer
DC 7019	1.1.3.6.1, 5.4.3.1, 5.4.3.2	D
	<p>You are required to load 1,500 kg of dangerous goods of Class 3, Packing Group III, in a dry cargo vessel.</p> <p>Must the carrier provide you with instructions in writing?</p> <p>A Yes, they must be provided prior to loading B Yes, they may be provided after loading but before departure from the loading installation C This is not necessary, since a dry cargo vessel is not permitted to transport a flammable liquid as described here D No, for this quantity, instructions in writing do not need to be provided</p>	
DC 7020	8.1.2.1	A
	<p>What is the purpose of the record book on board a dry cargo vessel?</p> <p>A All results of measurements of toxicity and of the concentrations of flammable gases and oxygen are recorded in the book B All results of measurements of the concentrations of flammable gases and oxygen are recorded in the book C The goods which the dry cargo vessel is permitted to transport are listed in the book D The book contains the results of the stability test for double-hull vessels</p>	
DC 7021	8.1.2.4	B
	<p>Which documents should be handed to the master before loading?</p> <p>A The transport documents B The transport documents and the instructions in writing C None, since in the case of dry cargo vessels, the documents may also be handed to the master after loading but prior to departure D The instructions in writing</p>	

TRANSPORT BY DRY CARGO VESSELS
Examination objective 7: Documents

Number	Source	Correct answer
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DC 7022	8.1.8.2	C
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What does a dry cargo vessel's certificate of approval attest?

- A That the vessel complies with the technical requirements of ADN and that dangerous goods may thus be transported in the cargo tanks
- B That the vessel complies with the technical requirements of the general technical requirements
- C That the vessel complies with the technical requirements of ADN and may thus transport dangerous goods
- D That the vessel is equipped in accordance with the requirements of ADN

TRANSPORT BY DRY CARGO VESSELS
Examination objective 8: Safety

Number	Source	Correct answer
DC 8001	Basic general knowledge A gas of Class 2 escapes from a container. In all circumstances, who should be informed <u>first</u> ? A The shipping police B The traffic centre C The classification society D The media	B
DC 8002	8.3.5 The paint on the coaming of a dry cargo vessel loaded with dangerous goods requires scraping. Is this permitted? A No, since sparks could be caused during work on the coaming B Yes, work may be carried out on the gangboard on the outside of the hold even if it is liable to cause sparks C No, work liable to cause sparks is prohibited everywhere on board a dry cargo vessel loaded with dangerous goods D Yes, scraping of paint cannot cause sparks	A
DC 8003	5.4.3 During the transport of packages all originating from the same consignor, a disagreeable odour is detected. You do not know the source. Do measures need to be taken, and if so, which ones? A No particular measures need to be taken. I would continue under way while monitoring the situation B I would take the actions indicated in the instructions in writing C As a safety precaution, I would alert the fire brigade D I would activate the “Do not approach” signal and continue to monitor the situation	B

TRANSPORT BY DRY CARGO VESSELS**Examination objective 8: Safety**

Number	Source	Correct answer
DC 8004	7.1.4.8.2 Your vessel is being loaded with explosive substances. A storm is brewing. What should you do? A Continue to load if the shore facility is equipped with a lightning conductor B Immediately distance the vessel from the trans-shipment facility C Suspend loading during the storm D Continue to load until the competent port authority for the trans-shipment facility prohibits continuation of loading	C
DC 8005	1.1.3.6.1, 8.3.4 You are transporting 800 tonnes of tree trunks and 10 tonnes of UN No. 1812 POTASSIUM FLUORIDE. Is smoking allowed on the deck of your vessel? A Yes, provided the cargo is secured in the vessel and the hatchways are closed B Yes, but only with the master's consent C No D Yes, the substance belongs to Class 8 and this class is not subject to the requirements of ADN in respect of the prohibition on smoking	C
DC 8006	1.1.3.6.1, 8.3.4 You are transporting packages of substances of Class 3, Packing Group III, with a gross mass of 9,000 kg. Is smoking prohibited on board and, if so, in which paragraph is this stated? A No, since this cargo is not subject to the requirements of ADN B Yes, as stated in 7.1.3.74 C No, during the transport of substances of Packing Group III, smoking is not prohibited D Yes, as stated in 8.3.4	D

TRANSPORT BY DRY CARGO VESSELS
Examination objective 8: Safety

Number	Source	Correct answer
DC 8007	7.1.3.8 You are on board a dry cargo vessel loaded with dangerous goods. You wish to carry out soldering work on deck outside the protected area. Are you permitted to do this? A Yes, but only if, for the duration of the work, a distance of 3 metres from the protected area is maintained B No, the permission of the local competent authority or a certificate attesting gas-free condition is required in all cases C Yes, but only if two additional extinguishers are provided D No, the work must be carried out by duly authorized experts	A
DC 8008	7.1.3.44 On board dry cargo vessels, may you perform cleaning operations with liquids having a flashpoint below 55° C? A Yes, but only outside the protected area B Yes, but only in the engine room C No D Yes, but only if there is an extinguisher nearby	C
DC 8009	1.1.3.6.1, 3.2, Table A, 8.1.5.1 You are transporting 2,000 kg of UN No. 1986 ALCOHOLS, FLAMMABLE, TOXIC, N.O.S., Packing Group III. Are you required to have on board a toximeter with the instructions for its use? A Yes, during the transport of toxic substances, there should always be a toximeter on board B No, since marking with blue cones or blue lights is also not prescribed C Yes, since this is prescribed in Table A, column (9) D No, since the gross mass is less than 3,000 kg	D

TRANSPORT BY DRY CARGO VESSELS**Examination objective 8: Safety**

Number	Source	Correct answer
DC 8010	3.2, Table A, 8.1.5.1 You are transporting UN No. 2067 AMMONIUM NITRATE FERTILIZERS. Are you required to have a suitable escape device on board? A No B No, provided that the cargo has a dustproof cover C Yes, for the entire crew D Yes, for each person on board	A
DC 8011	3.2, Table A, 8.1.5.1 A dry cargo vessel is transporting 60 tonnes of UN No. 2224 BENZONITRILE and is displaying two blue cones or two blue lights in accordance with Table A. Should there be a toximeter on board with the instructions for its use? A No B Yes, but only if required by the loader C Yes D ADN does not specify	C
DC 8012	3.2, Table A, 8.1.5.1 You are transporting 10 tonnes of explosive substances of Class 1, UN No. 0012. Should you have a flammable gas detector and a toximeter on board? A No B Yes C Only a flammable gas detector D Only a toximeter	A

TRANSPORT BY DRY CARGO VESSELS
Examination objective 8: Safety

Number	Source	Correct answer
DC 8013	3.2, Table A, 8.1.5.1 You are transporting UN No. 3170 ALUMINIUM SMELTING BY-PRODUCTS in bulk. In accordance with ADN, which of the following equipment is not prescribed for this cargo? A Protective boots and protective gloves B A suitable escape device C A flammable gas detector with the instructions for its use D A toximeter with the instructions for its use	D
DC 8014	3.2, Table A, 7.1.3.1.4 A dry cargo vessel is transporting UN No. 1398 ALUMINIUM SILICON POWDER, UNCOATED, in bulk. The gas concentration must be measured. In accordance with ADN, what protective equipment must the person making the measurement wear, as a minimum? A A full mask with a suitable filter B Protective gloves and a protective suit C A protective suit and a breathing apparatus D A breathing apparatus with a suitable filter	D
DC 8015	3.2, Table A, 7.1.3.1.6 You are transporting dangerous goods of Class 8, Classification Code CF1, on board a dry cargo vessel. A small quantity of the substance escapes from the packaging. You wish to enter the hold to inspect the packaging. What are the measurements you must make, as a minimum, before you may enter the hold? A It is necessary to measure the concentration of flammable gases and the oxygen content B Measurements of the concentration of flammable gases and the oxygen content do not need to be made since, for this class, measuring devices are not prescribed C Only the oxygen content needs to be measured to check that it is sufficient D Only toxic substances need to be measured	A

TRANSPORT BY DRY CARGO VESSELS**Examination objective 8: Safety**

Number	Source	Correct answer
DC 8016	<p data-bbox="272 412 612 443">Basic general knowledge</p> <p data-bbox="272 483 1106 622">On board your dry cargo vessel, you are also transporting some container tanks. For an unknown reason, one of the containers containing a substance of Class 3 starts to leak. Which of the following measures should the master take?</p> <p data-bbox="272 663 1114 913"> A Activate the “Do not approach” signal and alert the competent authority B Alert the competent authority and wave a red flag C Alert the competent authority and inform the consignor or the consignee D Activate the “Do not approach” signal and inform the consignee </p>	C
DC 8017	<p data-bbox="272 949 552 981">3.2, Table A, 8.1.5.1</p> <p data-bbox="272 1021 1118 1124">On board your dry cargo vessel, you are transporting 120 tonnes of UN No. 1363 COPRA. For this quantity of cargo, should you have escape devices on board?</p> <p data-bbox="272 1164 1078 1415"> A No, this is not necessary B Yes, for Class 4.2 it is always necessary to have escape devices on board C Yes, because I have more than 100 tonnes of cargo on board D No, the escape devices are only obligatory above 300 tonnes </p>	A
DC 8018	<p data-bbox="272 1451 403 1482">7.1.3.1.6</p> <p data-bbox="272 1523 1126 1626">If a gas container loaded with a substance of Class 2 is no longer gastight and you wish to enter the hold, should you wear a breathing apparatus? If so, which one?</p> <p data-bbox="272 1666 1114 1944"> A An ambient-air-dependent breathing apparatus, as prescribed in ADN B A self-contained breathing apparatus (non-ambient-air-dependent) C A P3 filter mask D There is absolutely no need to wear a breathing apparatus, since the gases are lighter than air and thus no harmful substance will remain in the hold </p>	B

TRANSPORT BY DRY CARGO VESSELS
Examination objective 8: Safety

Number	Source	Correct answer
DC 8019	3.2, Table A, 7.1.3.1.6, 8.1.5.1 In order to carry out inspections, you wish to enter a hold containing packages of goods of Class 6.1, Classification Code FT2, Packing Group II, with a total mass of 4,000 kg. What equipment do you need to make the measurements required so that you may enter the hold without danger? A A flammable gas detector and an oxygen meter B A toximeter and an oxygen meter C A flammable gas detector, a toximeter and an oxygen meter D A toximeter and a flammable gas detector	C
DC 8020	3.2, Table A, 7.1.3.1.6, 8.1.5.1 In a hold, there are packages containing goods of Class 8, Classification Code CF1, Packing Group II. You suspect that a package is not gastight and you wish to enter the hold to carry out inspections. What equipment do you need to make the measurements required so that you may enter the hold without danger? A A flammable gas detector and an oxygen meter B A toximeter, an oxygen meter and a thermometer C A flammable gas detector, a toximeter and a thermometer D It is not necessary to make measurements, since ADN does not prescribe measuring devices for this substance	A

TRANSPORT BY DRY CARGO VESSELS**Examination objective 8: Safety**

Number	Source	Correct answer
DC 8021	<p data-bbox="272 412 555 443">1.1.3.6, 3.2, Table A</p> <p data-bbox="272 479 1091 584">A dry cargo vessel is transporting 80 kg of goods of Class 4.1, Classification Code FT2, Packing Group II, danger labels 4.1+6.1</p> <p data-bbox="272 620 1091 689">For transporting this substance, are escape devices required on board and, if so, for what reason?</p> <p data-bbox="272 725 1070 907"> A Yes, they are always obligatory during the transport of ADN substances B No C Yes, unless the consignor issues a dispensation D Yes, if they are stipulated in the instructions in writing </p>	B
DC 8022	<p data-bbox="272 943 555 974">3.2, Table A, 8.1.5.1</p> <p data-bbox="272 1010 1129 1155">A dry cargo vessel is transporting goods of Class 6.1 for which, in accordance with Table A, a flammable gas detector is required on board. This being the case, which breathing apparatus is prescribed?</p> <p data-bbox="272 1191 1031 1373"> A A pressurized air mask B A self-contained breathing apparatus C A breathing apparatus (ambient-air-dependent filter apparatus) D A flexible tube apparatus with a filter </p>	C
DC 8023	<p data-bbox="272 1402 555 1433">3.2, Table A, 8.1.5.1</p> <p data-bbox="272 1469 1107 1574">You are transporting UN No. 1408 FERROSILICON, a substance of Class 4.3. In accordance with ADN, are protective goggles required for the crew on board?</p> <p data-bbox="272 1610 1067 1794"> A No, this is not necessary for this class B Yes, this is always necessary for this class C Yes, but only if the substance is packaged D No, this is only required if the substance is transported without packaging or in bulk </p>	B

TRANSPORT BY DRY CARGO VESSELS
Examination objective 8: Safety

Number	Source	Correct answer
DC 8024	3.2, Table A, 8.1.5.1	A
In accordance with ADN, for the transport of substances of Class 1, is personal protective equipment required on board? If so, which?		
<p>A Yes, a pair of protective goggles, a pair of protective gloves, a protective suit and a suitable pair of protective shoes</p> <p>B No, for the transport of substances of Class 1 no personal protective equipment is prescribed</p> <p>C Yes, but only a pair of protective goggles and a pair of protective gloves</p> <p>D Yes, but only a breathing apparatus</p>		
DC 8025	3.2, Table A, 8.1.5.1	B
In accordance with ADN, are breathing apparatuses required on board during the transport of UN No. 3106 ORGANIC PEROXIDE TYPE D, SOLID, of Class 5.2?		
<p>A No, this is never necessary for substances of Class 5.2</p> <p>B Yes, if a flammable gas detector is prescribed, breathing apparatuses are also required on board</p> <p>C No, this is not necessary for solid substances</p> <p>D No, this is only necessary if two blue cones or two blue lights are prescribed for a substance of Class 5.2</p>		
DC 8026	3.2, Table A, 8.1.5.1	B
In accordance with ADN, what special equipment must be provided on board a dry cargo vessel transporting goods of Class 7?		
<p>A Special protective clothing against radiation</p> <p>B Special protective clothing against radiation is not required on board</p> <p>C Special breathing apparatuses</p> <p>D Special anti-radiation masks</p>		

TRANSPORT BY DRY CARGO VESSELS**Examination objective 8: Safety**

Number	Source	Correct answer
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DC 8027 1.1.3.6.1, 8.1.4 A

What does ADN stipulate for a dry cargo vessel transporting dangerous goods in quantities exceeding the exempted quantities?

- A In addition to the fire-extinguishing appliances prescribed in the general technical requirements, the vessel should be equipped with at least **two** additional hand fire-extinguishers
- B It is sufficient for the vessel to be equipped with the fire-extinguishing appliances prescribed in the general technical requirements
- C In addition to the fire-extinguishing appliances prescribed in the general technical requirements, the vessel should be provided with at least **four** additional hand fire-extinguishers
- D In addition to the fire-extinguishing appliances prescribed in the general technical requirements, the vessel should be provided with at least **three** additional hand fire-extinguishers
