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)

Thirteenth session Geneva, 17-18 June 2008 Agenda item 4

PROPOSALS FOR AMENDMENTS

ADN Drafting Meeting, 09 - 13 June 2008

MEETING Notes

On 09 - 13 June 2008, an informal meeting was held in the Palais du Rhin of CCNR to review the consistency of the German version of the ADN with the English and French versions of the ADN. Representatives of Austria, Germany, Switzerland, CCNR and OTIF attended. The meeting reviewed parts 7 and 9 of the ADN and, in addition to modifications to the German version, proposed the modifications to the English and French versions which appear below.

Amendments to ADN (to be included in ECE/TRANS/WP.15/AC.2/26/Add.1)

Note: <u>abc...xyz</u> means: delete; <u>abc...xyz</u> means: add/insert.

ALL PARTS

All over ADN: where "vehicle" appears, add "wagon", as appropriate

All over ADN: delete ".00" in measurement values

PART 1

1.6.7.2.3.1 ...9.3.3.8.1 in conjunction with 7.2.2.8

PART 7

7.1.1.13 Delete "(see also 7.1.6.13)".

7.1.2.19.1 Insert "for the carriage of dangerous goods" after the first "certificate of approval".

- 7.1.3.15 Replace "Dangerous goods training" by "Expert on board the vessel" Insert "according to 8.2.1.2" after "expert".
- 7.1.3.22.1 Replace "covered" by "closed".
- **7.1.4.1.1** Class 2: Reverse the order of entries for labels No. 2.3 and 2.1.

Class 3: Replace "Other goods" by "Other goods: total".

Class 5.2: Replace "All other goods: total" by "Other goods: total".

Class 6.1: Replace "All goods of packing group I" by "All goods of packing group I: total" and "All goods of packing group II" by "All goods of packing group II: total"

Class 9: Replace "All goods of packing group II" by "All goods of packing group II: total"

- **7.1.4.1.5** Amend to read. "Where the total net mass of the explosive substances carried and of explosive substances contained in articles carried is not known, the gross mass of the cargo shall apply to the mass mentioned in the table in 7.1.4.1.1 above.
- 7.1.4.3.2 Replace "three" by "two" (twice).
- **7.1.4.3.4** Footnote "X": Insert "or articles" after "substances".

Footnote $\frac{1}{2}$: Amend to read "Packages containing articles assigned to compatibility groups B or substances or articles assigned to compatibility group D may be ...".

- 7.1.4.3.6 Move "(UN Nos. 2919 and 3331)" to after "special arrangement"
- 7.1.4.4.2 Second indent: Amend to read: "- closed vehicles and closed_wagons with complete metal walls;"
- **7.1.4.7.2** Delete "local".
- **7.1.4.9** Replace "transfer" by "transhipment" (three times) (((see 7.5.4 ADR; same amendments are necessary at many places)))
- **7.1.4.10.1** Second paragraph: Amend to read "Packages as well as uncleaned empty packagings, including large packagings and intermediate bulk containers (IBCs), bearing labels conforming to …".
- **7.1.4.12.2** Second sentence: Insert "of the container or release of content inside the container" after "damage".
- 7.1.4.12.3 Delete "road".
- 7.1.4.13 Replace "decks" by "areas".
- 7.1.4.14.5 First line: Insert "in the protected area" after "deck".

7.1.4.14.6 Insert "of dangerous goods" after "carriage".

7.1.4.14.7.1.1 First line: Insert "and wagons" after "vehicles".

- 7.1.4.14.7.1.3 Insert "driver of the" before "vehicle".
- 7.1.4.14.7.4.2 Insert ", a wagon" after "vehicle" and "or wagons" after "vehicles".
- **7.1.4.16** Replace "road tank vehicles tank wagons" by "tank vehicles, tank wagons" and delete "local".
- 7.1.4.53 Replace "limited explosion risk type" by "limited .
- **7.1.5.0.2** ... one blue cone or one blue light is required, a substance of Class 2 is involved or packing group I is indicated in column (4) of <u>Table A of</u> Chapter 3.2 and the total gross mass of these dangerous goods exceeds 130,000 kg.
- **7.1.5.0.3** ... in column (12) of Table A of Chapter 3.2 if these <u>units cargo transport unit</u> have contained dangerous goods for which this table prescribes marking.
- **7.1.5.0.5** ... shall notify the Executive Secretary of the United Nations Economic commission for Europe <u>(UNECE)</u>, who shall bring this derogation to the attention of the Administrative Committee.
- **7.1.5.1.1** The competent authorities may impose restrictions on the inclusion of tank vessels carrying dangerous goods in pushed conveys of large dimension.
- 7.1.5.4.1 ... prescribed by the European Code for Inland Waterways (CEVNI).
- **7.1.5.4.2** An expert in accordance with <u>7.1.3.15</u> <u>8.2.1.2</u> shall be permanently on board berthed vessels carrying dangerous goods for which marking is prescribed in column (12) of Table A of Chapter 3.2.
- **7.1.5.8.1** ... description of the dangerous goods carried as given in the transport document (UN number or identification number, proper shipping name, class and, where applicable, packing group and/or classification code information according to 5.4.1.1.1 (a) to (d)) together with the quantity in each case;
- **7.1.6.11** ST01: ... In those States where this is required, these substances may be carried in bulk only with the approval of the competent national authority.
- 7.1.6.12 VE03: Spaces such as holds, accommodation and engine rooms, adjacent to holds containing these goods substances shall be ventilated. After unloading holds having contained these substances shall undergo forced ventilation. After ventilation, the concentration of gases in the these holds shall be measured.

VE04: When aerosols are carried for the purposes of reprocessing or disposal under special provision 327 <u>of chapter 3.3</u>, provisions of VE01 and VE02 are applied.

7.1.6.14 HA01: These substances <u>or articles</u> shall be stowed ...

HA02: These substances or articles shall be stowed at a distance of not less than 2.00 m from the <u>vertical plains defined by the sides</u> of the vessel.

HA03: All packages loaded in the same hold shall be stowed and wedged as to prevent any jolting or friction during transport carriage.

7.1.6.16 Measures to be taken during loading, carriage, unloading and handling of cargo

IN03: If a hold contains these substances in bulk or unpackaged, the master shall make sure every day by checking the <u>hold</u> bilge wells or pump ducts that no water has entered the <u>hold</u> bilges.

Water which has entered the <u>hold</u> bilges shall be removed immediately.

- **7.2.1.21.2** ... as well as all other conditions of carriage <u>required for these substances</u> prescribed in the list of substances of Table C of Chapter 3.2 are met.
- **7.2.1.21.3, ...4, ...5** as in 7.2.1.21.2
- 7.2.2.0 NOTE 2: The design pressure and the test pressure of cargo tanks shall be indicated in the certificate of the <u>recognised</u> classification society prescribed in 9.3.1.8.1 or 9.3.2.8.1 or 9.3.3.8.1.
 NOTE 3: ... shall be indicated in the certificate of the <u>recognised</u> classification society.
- 7.2.2.0.1 Dangerous substances may be carried in tank vessels of Types N, C or G in accordance with the requirements of ChaptersSections 9.23.3, 9.3.2 or 9.43.1 respectively. The type of tank vessel to be used is specified in column (6) of Table C of Chapter 3.2 and in 7.2.1.21. NOTE: The substances accepted for carriage in the vessel are indicated in the certificate to be drawn up by the recognised classification society (se 1.16.1.2.5).
- **7.2.2.19.1** Where at least one vessel of a convoy or side-by-side formation is required to be in possession of a certificate of approval <u>for the carriage of dangerous goods</u>, all vessels of such convoy or side-by-side formation shall be provided with an appropriate certificate of approval.
- **7.2.2.19.3** ..., 9.3.3.51, 9.3.3.52.3, 9.3.3.52.4 to 9.3.3.52.6, 9.3.3.56.5, 9.3.3.71 and 9.3.3.74.
- **7.2.2.21** ... (directly at the access to the vessel and at an appropriate distance on the quay shore) ...
- **7.2.3.7.3** any entrances or openings of spaces connected to the outside are closed; this provision does not apply to the air supply openings of the engine room and overpressure ventilation systems;
- **7.2.3.7.4** Gas-freeing operations shall be interrupted <u>during a thunderstorm or</u> when, due to unfavourable wind conditions, dangerous concentrations ...
- **7.2.3.8** Delete (((contained in 8.3.5))) \rightarrow (Reserved)

- **7.2.3.15** During the carriage of goods for which a type C vessel is prescribed in column (6) of Table C of Chapter 3.2 and cargo tank type 1 in column (7), an expert holding the certificate referred to in 8.2.1.5 for carriage in type G vessels is sufficient.
- **7.2.3.22** Entrances to hold spaces, cargo pump-rooms below deck, and cofferdams; openings of cargo tanks and residual cargo tanks; closing devices
- 7.2.3.25.2 pipes located outside the cargo area while the cofferdams have to be filled with water <u>in an emergency</u>.
 ... The cofferdams shall be emptied only by means of <u>educators ejectors</u> or an independent system within the cargo area.
- **7.2.3.25.3** ... Double-hull and double bottom spaces and hold spaces shall be stripped only by means of <u>educators ejectors</u> or an independent system within the cargo area.
- **7.2.3.42.3** ... meets in all respects the provisions of 9.3.2.52.3 (b) or 9.3.3.52.3 (b).
- **7.2.4.11.1** ... The goods shall be described as in the transport document (UN number or identification number, proper shipping name, class and, where applicable, packing group and/or classification code information according to 5.4.1.1.2 (a) to (d)).
- **7.2.4.11.2** same amendment as in 7.2.4.11.1
- 7.2.4.12

. . .

Loading: Place of loading and loading berth, date and time, UN number or identification number of the substance, proper shipping name of the substance, including the class and packing group if it exists any;

- 7.2.4.15.3 same amendment as in F-version
- **7.2.4.16.1** The loading rate and the maximum operational pressure of the cargo pumps shall be determined in agreement with the personnel at <u>of</u> the shore installation.
- 7.2.4.16.3 The shut-off devices of the cargo loading and unloading piping as well as ...
- **7.2.4.16.6** In case of recovery of the gas-air mixture from shore into the vessel, the pressure at the connection point shall not be more than the <u>operating opening</u> pressure of the high velocity vent valve.
- **7.2.4.16.8** ... to in 8.1.5-<u>; Iif</u> this equipment is prescribed ...
- **7.2.4.16.10** ... for the carriage of which a closed-type tank vessel is required in columns (6) and (7) of Table C of Chapter 3.2.
- 7.2.4.17.1 air intakes of the overpressure ventilation system referred to in 9.3.1.52.3 (b), 9.3.2.52.3 (b) or 9.3.3.52.3 (b);
 air intakes of air conditioning in installations if these openings are fitted with a gas detection system referred to in 9.3.1.52.3 (b), 9.3.2.52.3 (b) or 9.3.3.52.3 (b).
- 7.2.4.18.1 For the gaseous phase of <u>cargo</u> tanks ...
- 7.2.4.18.3 Inerting of <u>cargo</u> tanks

When anti-explosion protection is required in column (17) of Table C of Chapter 3.2 and <u>inerting is required in (20) of Table C of Chapter 3.2</u>, ...

7.2.4.19 ... is prescribed in columns (6)<u>, and (7) and (17)</u> of Table C of Chapter 3.2 and shall be inerted in accordance with 7.2.4.18. ...

(((**Note:** 7.2.4.18 and 7.2.4.19 in conjunction with part 9 seem to be unclear; it is suggested to carry out a complete review of the provisions)))

- **7.2.4.21.3** For carriage of substances having a relative <u>mass</u> density higher than that stated in the certificate of approval, the degree of filling shall be calculated in accordance with the following formula: Permitted degree of filling (%) = $a/b \cdot 100$ $a = relative <u>mass</u> density stated in the certificate of approval <math>b = relative \underline{mass}$ density of the substance.
- **7.2.4.22.1** Opening of cargo tanks apertures shall be permitted only after the tanks have been relived relieved of pressure.
- **7.2.4.22.3** ... for which marking with <u>one or two</u> blue cones or <u>one or two</u> blue lights is prescribed ...
- **7.2.4.22.5** The duration of opening shall be limited to the time necessary for control, cleaning, <u>replacing the flame arrester</u>, gauging or sampling.
- 7.2.4.25.2 The cargo loading and unloading piping shall not be extended ...
- **7.2.4.25.3** The shut-off devices of the cargo loading and unloading piping shall not be open except as necessary during loading, unloading or gas-freeing operations.
- **7.2.4.28.1** ... it shall be kept ready for operation during loading, unloading and transport operationscarriage. If a water-spray system is required to cool the tank-deck, it shall be kept ready for operation during the voyagecarriage.
- **7.2.4.28.3** ... shall activate an alarm when the internal pressure reaches 40 kPa (0.4 bar). The water-spray system shall immediately be activated and remain in operation until the internal pressure drops to 30 kPa (0.3 bar).
- **7.2.4.51.2** Electrical equipment which has been switched off by the device referred to in 9.3.1.52.3 (b), 9.3.2.52.3 (b) or 9.3.3.52.3 (b) shall only be switched on after the gas-free condition has been established in these spaces.
- **7.2.4.51.3** Equipment for electric corrosion protection against external currents <u>Fremdstrom-Korrosionsschutzanlagen</u> shall be disconnected ...
- **7.2.4.74** ... the provisions of 9.3.1.52.3 (b), 9.3.2.52.3 (b) or 9.3.3.52.3 (b).
- **7.2.5.0.2** like 7.2.5.0.2 F-version as amended
- 7.2.5.0.3 like 7.2.5.0.3 F-version; "contracting party" instead of "competent authority"
- 7.2.5.4.1 The distances from other vessels to be kept by <u>berthed</u> vessels ...

- **7.2.5.4.3** Outside the berthing areas specifically designated by the local competent authority ...
- **7.2.5.4.4** The local competent authority may prescribe ...
- **7.2.5.8.1** ... description of the dangerous goods carried as given in the transport document (UN number or identification number, proper shipping name, class and, where applicable, packing group and/or classification code information according to 5.4.1.1.2 (a) to (d)) together with the quantity in each case;

PART 9

- 9.1.0.40.2.10 (a) "Warning: general danger"
- **9.1.0.40.2.13** <u>Fixed</u> Fire-extinguishing system for physical protection In order to ensure physical protection in the engine rooms, boiler rooms and pump rooms, <u>permanently fixed</u> fire-extinguishing systems are accepted solely on the basis of recommendations by the Administrative Committee.
- **9.1.0.56.3** For movable cables permitted in accordance with 9.1.0.56.2 above, only rubbersheathed cables of type H07 RN-F in accordance with 245 IEC 66 standard IEC-<u>60 245-4:1994</u> or cables ...
- **9.1.0.91.2** (a) add after ,,apart;": as in F-version
- **9.2.0.31.2** Air intakes of the engines (((insert text as in F-version))) shall be located not less than 2.00 m from the protected area.
- 9.2.0.88.2 The vessel's <u>highest</u> class shall be continued.
- **9.2.0.94.4** and the stability documents have been checked by the competent authority.<u>and the container have been secured according to the Cargo Securing Manual</u>.
- **9.3.1** The provisions <u>rules for construction</u> of 9.3.1.0 to 9.3.1.99 apply to type G tank vessels.
- 9.3.1.8.1 ... The vessel's <u>highest</u> class shall be continued.
- 9.3.1.11.1 L = overall length of the hull<u>in m;</u> B = extreme breadth of the hull<u>in m;</u> H = shortest vertical distance between the top of the keel and the lowest point of the deck at the side of the vessel (moulded depth) within the cargo area in m; where ht = trunk height (distance between trunk deck and main deck measured on trunk side at L/2) in m; bt = trunk breadth in m; lt = trunk length in m;
 (b) Pressure cargo tanks whose ratio of length to diameter exceeds 7 are prohibited.
 - (c) The pressure $\frac{1}{2}$ tanks shall be designed for a cargo temperature of + 40 °C.

- **9.3.1.11.2** (a) In the footnote 1 in 9.3.1.11.2 add at the end: "Alternative constructions in accordance with 9.3.4 are permitted."
- 9.3.1.11.7 ... and breathing apparatus ...
- **9.3.1.11.8** "personnel" → "person"
- **9.3.1.12.6** ... Ventilation inlets of service spaces in the cargo area below deck may be located within such area.
- **9.3.1.17.6** 5th indent: ... The necessary operation of the control devices in the pump-room, starting of pumps or compressors and <u>necessary</u> control of the liquid flow rate shall be effected from the deck;
- 9.3.1.18 ... The set pressure of the vacuum-relief valve shall be 3.5 kPa (0.035 bar).
- **9.3.1.21.1** (e) an instrument for measuring the pressure <u>of the gas phase in the cargo tank;</u>
- **9.3.1.21.7** referred to in 9.3.1.21.5 above, enables measures to be taken to interrupt the loading and unloading operation. ...
- 9.3.1.21.9 ... The switches shall be placed at the two points on the vessel (fore and aft).
- **9.3.1.21.10** ... In the event of the transport of substances that must be carried in a refrigerated state the opening pressure of the safety system shall be not less than 25 kPa (0.25 bar) greater than the maximum pressure calculated according to 9.3.1.27.
- **9.3.1.22.2** Cargo tank openings shall be fitted with gastight closures capable of withstanding the test pressure in accordance with which comply with the provisions according to 9.3.1.23.1.
- 9.3.1.24.1 ...
 (b) a system ensuring safety in the event of the heating or increase in pressure of the cargo. The insulation or the design pressure of the cargo tank, or the combination of these two elements, shall be such as to leave an adequate margin for the operating 360 period and the temperatures expected; in each case the system shall be deemed acceptable by a recognized classification society <u>and shall</u> ensure safety for a minimum time of three times the operation period;
- **9.3.1.25.7** The pipes for loading and-unloading shall be fitted with pressure gauges at the inlet and outlet of the pump.
- 9.3.1.27.3 When several two or more refrigerated cargoes with a potentially dangerous
- **9.3.1.27.5** ... This pump or pumps shall have at least two suction pipes, if possible leading from two water intakes, ...
- **9.3.1.27.6** The refrigeration system may take one of the following forms:

(a) Direct system: the cargo vapours are compressed, condensed and returned to the cargo tanks. This system shall not be used for certain cargoes specified in column (20) of Table C of Chapter 3.2. ...

9.3.1.27.10 A certificate from a recognised classification society stating that <u>9.3.1.24.1 to</u> <u>9.3.1.24.3</u>, 9.3.1.27.1 and 9.3.1.27.4 above have been complied with shall be submitted together with the application for issue or renewal of the certificate of approval.

9.3.1.28 Water-spray system

When water-spraying is required in column (9) of Table C of Chapter 3.2 a waterspray system shall be installed in the cargo area on deck for the purpose of reducing (((reducing? German = niederschlagen))) gases given off by the cargo by spraying water over the whole surface.

- **9.3.1.31.4** ... shall not exceed the allowable temperature according to the temperature class of the substances carried. This ...
- **9.3.1.32.1** ...within the cargo area may be arranged as a liquid oil fuel tanks, provided their depth is not less than 0.60 m.

Liquid oil fuel pipes and openings of such tanks are not permitted in the hold space.

- **9.3.1.32.2** Open ends of air pipes of all liquid oil fuel tanks shall extend to not less than 0.5 m above the open deck. ...
- **9.3.1.34.2** Exhaust pipes <u>of engines</u> shall be provided with a device preventing the escape of sparks, e.g. spark arresters.
- **9.3.1.40...** (((Same amendments as for 9.1.0.40...)))
- **9.3.1.56.5** For movable cables intended for signal lights and gangway lighting, only sheathed cables of type H 07 RN-F in accordance with <u>standard</u> IEC <u>publication</u> 60 245-4: <u>1994</u> (1994) or cables of at least equivalent design having conductors with a cross-section of not less than 1.5 mm2 shall be used.
- **9.3.2.0.1** (c) Inside vapour pipes and gas discharge pipes shall be protected against corrosion.
- **9.3.2.8.1** like 9.3.1.8.1
- **9.3.2.11.1** like 9.3.1.11.1 \rightarrow Add <u>m</u> (for meters)
- **9.3.2.11.3** (a) ... bulkhead meeting at least the definition for Class "A-60" provided with a Class A-60 fire protection insulation according to SOLAS 74, Chapter II-2, Regulation 3...
- 9.3.2.11.4 ... loading <u>or unloading</u> pipes ...

additionally in the third sub-paragraph: amendments as in the F-version

- **9.3.2.11.7** ... their depth shall be not less than 0.15 m, provided they join are completely welded to the frames.
- 9.3.2.11.9 ... and breathing apparatus ...
- **9.3.2.11.10** "personnel" → "person"
- **9.3.2.12.6** ... Ventilation inlets of service spaces in the cargo area below deck may be located within such area.
- **9.3.2.14.2** check; see F-version
- **9.3.2.15.2** $= 27^{\circ} \rightarrow \leq 27^{\circ}$
- **9.3.2.17.6** 5th indent: ... The necessary operation of the control devices in the pump-room, starting of pumps or compressors and <u>necessary</u> control of the liquid flow rate shall be effected from the deck;
- 9.3.2.18 ... The set pressure of the vacuum-relief valve shall be 3.5 kPa (0.035 bar).
- **9.3.2.20.1** Cofferdams or cofferdam compartments remaining once a service space has been arranged in accordance with 9.3.2.11.6 shall be accessible through an access hatch. If, however, the cofferdam is connected to a double-hull space, it is sufficient for it to be accessible from that space. For openings giving access to double-hull spaces on deck the last sentence of 9.3.2.10.3 remains applicable. In this case an arrangement shall be made for possible monitoring in order to ascertain from the deck whether the cofferdam is empty. (((check also ADNR2007DE)))
- **9.3.2.21.7** add (0.05 bar) and (0.4 bar) ...
- **9.3.2.22.2** Cargo tank openings shall be fitted with gastight closures capable of withstanding the test pressure in accordance with 9.3.2.23.<u>12</u>.
- **9.3.2.22.5** (iii) like F-version
- 9.3.2.22.5 (c) pressure/vacuum valve
- **9.3.2.25.7** (((Insert as first sentence))) <u>The pipes for loading and unloading shall be fitted</u> with pressure gauges at the outlet the pumps.
- **9.3.2.25.9** 3. Density of the vapour mixture of the cargo based on 50% volume vapour of and 50% volume air;
- **9.3.2.26.4** ... conditions set out in column (109<u>10</u>) of Table C of Chapter 3.2; ...
- **9.3.2.28** ... at 50 kPa (0.5 bar).
- 9.3.2.31.4 ... according to the temperature class <u>of the substances carried</u>. This ...

9.3.2.32.1 When the vessel is fitted with hold spaces and double bottoms, double bottoms within the cargo area may be arranged as a liquid oil fuel tanks, provided their depth is not less than 0.60 m.

Liquid oil fuel pipes and openings of such tanks are not permitted in the hold space.

- **9.3.2.32.2** Open ends of air pipes of all liquid oil fuel tanks shall extend to not less than 0.5 m above the open deck. ...
- **9.3.2.40...** (((Same amendments as for 9.3.1.40...)))
- 9.3.2.42.4 ... shall fully comply with the requirements of 9.3.2.52.3 (b). ...
 ... located at a minimum distance of 2.00 m from the cargo area and 6.00 m from the openings ...
 The requirements of 9.3.2.52.3 (b) are not applicable ...
- **9.3.2.56.5** For movable cables intended for signal lights and gangway lighting, only sheathed cables of type H 07 RN-F in accordance with <u>standard</u> IEC <u>publication</u> 60 245-4: <u>1994</u> (1994) or cables of at least equivalent design having conductors with a cross-section of not less than 1.5 mm2 shall be used.
- **9.3.3** .. like F-version
- **9.3.3.51.1** (Fremdstrom-Korrosionsschutzanlagen)
- **9.3.3.53.3** Independent cargo tanks, metal intermediate bulk containers and tank containers shall be earthed.
