



2003-05-11

## **Basis for discussion. Comparison between regulations**

### **Working group meeting on RID/ADR, paragraph 1.1.4.2.2, concerning the relationship between all modes of transport with regard to the transport document (Consignment Note)**

The information in the table below shows the details that have to be entered in the transport document. The table also considers cases when additional documents must accompany the transport. These documents often relate to approval, certification etc.. This is the case for all modes of transport. Other circumstances such as different consignor definitions in the regulations have also been highlighted.

State and Operator variations of the ICAO-TI and IATA-DGR have not been considered in the table. Some of them do require additional text to be added in the document such as emergency response tel. No.

Changes discussed during the current biennium have not been considered.

**Comparison between the UN recommendations, 12<sup>th</sup> Edition, ADR/RID 2003, IMDG Code amdt 31-02, ICAO-TI, 2003-2004 Edition, CFR 49 (parts 100 to 185, revised as of Oct. 1, 2001) and the IATA-DGR, 44<sup>th</sup> Edition.**

Information in the document	UN Rec.	ADR	RID	IMDG Code	ICAO-TI	CFR 49	IATA-DGR	Notes
<b>Generally for particulars related to the required sequence with no information interspersed</b>								
According to the UN Rec., ADR, IMDG Code and ICAO-TI a recommended dangerous goods form is set out. For the IATA-DGR, the form is specified and defined in the IATA-DGR regulations. The language used must be English for the IMDG Code, ICAO-TI And IATA-DGR. For the air mode, the wording in English may be supplemented by an accurate printed translation in any other language. For ADR, in an official language of the forwarding country, and also, if that language is not English, French, or German, in English, French or German. See also para. 5.4.1.4.1 of the ADR.								
Basic sequence	2 alternatives are defined (5.4.1.4.2)	Same as UN (5.4.1.1.1)	Same as UN (5.4.1.1.1)	Same as UN (5.4.1.4.2)	Same as UN + a third option which is intended to be deleted from 31 Dec. 2004 (5; 4.1.4.2.1/4.1.4.2.2)		Same as ICAO-TI but only one sequence (UNNo. first) from 1 Jan. 2005 as proposed by IATA (8.1.6.9.1)	
UNNo.	Yes, preceded by "UN" (5.4.1.4.1)	Yes, preceded by "UN" (5.4.1.1.1)	Yes, preceded by "UN" (5.4.1.1.1)	Yes, preceded by "UN" (5.4.1.4.1)	Yes, preceded by "UN" (5; 4.1.4.1/3; 2.1.1)		Yes, preceded by "UN" (8.1.6.9.1)	<b>1)</b>
PSN (basic)	According to substance list (5.4.1.4.1/3.1.2)	According to substance list (5.4.1.1.1/3.1.2)	According to substance list (5.4.1.1.1/3.1.2)	According to substance list (5.4.1.4.1/3.1.2)	According to substance list (5; 4.1.4.1/3; 1.2)		According to substance list (8.1.3/4.1)	<b>2)</b>
Technical names for generic and n.o.s entries	When SP 274 is assigned (3.1.2.8)	When SP 274 is assigned (3.1.2.8)	When SP 274 is assigned (3.1.2.8)	When SP 274 is assigned (5.4.1.4.3/3.1.2.8)	Indicated with a "*" in the substance list (5; 4.1.4.2.2/3; 1.2.7)		Indicated with a "*" in the substance list (8.1.3.1/4.1.2.1)	<b>3)</b>
Class	Yes (5.4.1.4.1)	Yes (5.4.1.1.1)	Yes (5.4.1.1.1)	Yes (5.4.1.4.1)	Yes (5; 4.1.4.1/3; 2.1.1)		Yes (8.1.6.9.1)	<b>4)</b>
Sub-risk	Yes (5.4.1.4.1)	Yes (5.4.1.1.1)	Yes (5.4.1.1.1)	Yes (5.4.1.4.1)	Yes (5; 4.1.4.1/3; 2.1.1)		Yes (8.1.6.9.1)	<b>5)</b>
Packing Group	Yes (5.4.1.4.1)	Yes (5.4.1.1.1)	Yes (5.4.1.1.1)	Yes (5.4.1.4.1)	Yes (5; 4.1.4.1/3; 2.1.1)		Yes (8.1.6.9.1)	
<b>Additional "general" information in the transport document</b>								
Consignor's name and address	Yes (5.4.1.3)	Yes (5.4.1.1.1)	Not required	Yes (5.4.1.3)	Yes (5; 4.1.3)		Yes (8.1.6.1)	<b>6)</b>
Consignee's name and address	Yes (5.4.1.3)	Yes (5.4.1.1.1)	Not required	Yes (5.4.1.3)	Yes (5; 4.1.3)		Yes (8.1.6.2)	<b>7)</b>

Information in the document	UN Rec.	ADR	RID	IMDG Code	ICAO-TI	CFR 49	IATA-DGR	Notes
<b>Additional "general" information in the transport document (cont.)</b>								
Date when document prepared	Yes (5.4.1.3)	Not required	Not required	Yes (5.4.1.3)	Yes (5; 4.1.3)		Not required	<b>8)</b>
Shipper's certification	Yes (5.4.1.6)	Not required	Not required	Yes (5.4.1.6)	Yes (5; 4.1.6)		Yes (8.1.4.1)	
Number and type of packages	Yes (5.4.1.5.1) see also appendix 1	Yes (5.4.1.1.1) see also appendix 1	Not required	Yes (5.4.1.5.1) see also appendix 1	Yes (5; 4.1.5.1) see also appendix 1		Yes (8.1.6.9.2) see also appendix 1	
Total quantity of dangerous goods	Yes (5.4.1.5.1)	Yes (5.4.1.1.1)	Not required	Yes (5.4.1.5.1)	Yes (5; 4.1.5.1)		Yes (8.1.6.9.2)	<b>9)</b>
Airport of Departure	Not required	Not relevant	Not relevant	Not relevant	Not required		Yes (8.1.5/8.1.6.6)	
Airport of Destination	Not required	Not relevant	Not relevant	Not relevant	Not required		Yes (8.1.5/8.1.6.7)	
Relation to Air Waybill Number	Not required	Not relevant	Not relevant	Not relevant	Not required		Yes (8.1.5/8.1.6.3)	
Page of pages	Yes (5.4.1.2.3)	Not required	Not required	Yes (5.4.1.2.3)	Yes (5; 4.1.2.3)		Yes (8.1.6.4)	
Flashpoint	Not required	Not required	Not required	Yes, Class 3 (5.4.1.4.3)	Not required		Not required	
Empty uncleaned packagings (and tanks)	Yes (5.4.1.4.3)	Yes (5.4.1.1.6)	Yes (5.4.1.1.6)	Yes (5.4.1.4.3)	Yes (5; 4.1.4.3)		Yes (8.1.3.10)	<b>10)</b>
"Waste"	Yes (5.4.1.4.3)	Yes (5.4.1.1.3)	Yes (5.4.1.1.3)	Yes (5.4.1.4.3)	Yes (5; 4.1.4.3)		Yes (8.1.3.10)	<b>11)</b>
Marine Pollutant	Not required	Not relevant	Not relevant	Yes (5.4.1.4.3)	Not relevant		Not relevant	
Elevated temperature subst.	Yes (5.4.1.4.3)	Yes (5.4.1.1.14)	Yes (5.4.1.1.14)	Yes (5.4.1.4.3)	Forbidden		Forbidden	<b>12)</b>
Salvage package	Yes (5.4.1.5.3)	Yes (5.4.1.1..5)	Yes (5.4.1.1..5)	Yes (5.4.1.5.3)	Yes (5; 4.1.5.3)		Yes (8.1.3.8)	
Limited quantities	Yes (5.4.1.5.2)	Not relevant	Not relevant	Yes (5.4.1.5.2)	Yes (5; 4.1.5.2)		Yes (8.1.6.9.4)	<b>13)</b>
Packing instruction No.	Not required	Not required	Not required	Not required	Yes (5; 4.1.5.8.1)		Yes (8.1.6.9.3)	
Substances stabilized by temp. control (not 4.1 / 5.2)	Yes (5.4.1.5.4)	Yes (5.4.1.1.15)	Not relevant, forbidden	Yes (5.4.1.5.4)	Forbidden		Forbidden	
Cargo or passenger aircraft	Not required	Not relevant	Not relevant	Not relevant	Not required		Yes (8.1.6.5)	
Continuous road/rail transport (ADR/RID) after sea or air transport	Not required	Yes (5.4.1.1.7/1.1.4.2)	Yes (5.4.1.1.7/1.1.4.2)	Not relevant	Not relevant		Not relevant	

Information in the document	UN Rec.	ADR	RID	IMDG Code	ICAO-TI	CFR 49	IATA-DGR	Notes
<b>Additional "general" information in the transport document (cont.)</b>								
Overpack is used	Not required	Not required	Not required	Not required	Yes (4.1.5.8.1)		Yes (8.1.6.9.3)	
Emergency response information	Yes (5.4.3) or <b>additional document</b>	<b>Additional document</b> (5.4.3)	Not required	Yes (5.4.3.2) but in practice EmS Guide on Ships	<b>Additional document</b> (7; 4.8) on board the aircraft		<b>Additional document</b> (9.5.1.2) on board the aircraft	
When IMO tanks are used (ADR/RID)	Not relevant	Yes (5.4.1.1.8)	Yes (5.4.1.1.8)	Not relevant	Not relevant		Not relevant	
Combi-traffic (ADR/RID)	Not considered	See RID	Yes (5.4.1.1.9)	Not considered	Not considered		Not considered	
Additions such as "liquid/solid", "mixture/solution", "molten", "stabilized" when missing in the PSN	Yes (3.1.2.3-6)	Yes (3.1.2.3-6)	Yes (3.1.2.3-6)	Yes (3.1.2.4-6)	Yes (3; 1.2.3-5)		Yes (78.1.3.6, 8.1.3.2, 8.1.3.3, 8.1.3.9)	
<b>Additional or special information required for Class 1, Class 2, Self-reactive Substances of Class 4.1, Organic Peroxides of Class 5.2, Class 6.2 and Class 7</b>								
<b>Class 1</b>								
Net explosive mass	Yes (5.4.1.5.1)	Yes (5.4.1.2.1)	Yes (5.4.1.2.1)	Yes (5.4.1.5.1)	Not required		Not required	<b>14</b>
Additional commercial name allowed	Yes (3.1.2.8.1)	Yes (5.4.1.2.1)	Yes (5.4.1.2.1)	Yes (3.1.2.3)	Yes (5; 4.1.4.2.2)		Yes (8.1.3)	
Approval for n.o.s.-entries or samples and use of P101	Yes, SP 16 and 178 and (4.1.4 / P101)	<b>Additional document</b> (5.4.1.2.1) and statement for P101	<b>Additional document</b> (5.4.1.2.1) and statement for P101	Yes, 5.4.1.5.9/4.1.5.18)	Yes, for P101 (5; 4.1.5.8.2)		Yes, for P101 (8.1.6.9.4))	
Protective container	Not considered	<b>Additional document</b> (5.4.1.2.1)	<b>Additional document</b> (5.4.1.2.1)	Not considered	Not considered		Not considered	
Fireworks of UN Nos. 0333, 0334, 0335, 0336 and 0337	Not required	Yes (5.4.1.2.1)	Yes (5.4.1.2.1)	Not required	Not required		Not required	

Information in the document	UN Rec.	ADR	RID	IMDG Code	ICAO-TI	CFR 49	IATA-DGR	Notes
<b>Additional or special information required for Class 1, Class 2, Self-reactive Substances of Class 4.1, Organic Peroxides of Class 5.2, Class 6.2 and Class 7 (cont.)</b>								
<b>Class 1 (cont.)</b>								
Explosive substances for which a minimum water or phlegmatizer content is specified in the individual entry is prohibited when containing less water or phlegmatizer than the specified minimum	Not required	Not required	Not required	Yes (5.4.1.5.9)	Not required		Not required	
<b>Class 2</b>								
Aerosols above 1000 ml	Not required	Not required	Not required	Yes (5.4.1.5.8)	Not required		Not required	<b>16)</b>
Composition of mixtures as percentage of the volume (not receptacles)	Not required	Yes (5.4.1.2.2)	Yes (5.4.1.2.2)	Not required	Not required		Not required	
Transport of receptacles for testing	Not required	Yes (5.4.1.2.2)	Yes (5.4.1.2.2)	Not required	Not required		Not required	
Transport of cryogenic gases in tanks	Not required	Not required	Yes (5.4.1.2.2)	Not required	Not required		Not required	
<b>Class 4.1</b>								
control temp /emergency temp.	Yes (5.4.1.5.5)	Yes (5.4.1.2.3.1)	Not relevant, forbidden	Yes (5.4.1.5.5)	Not relevant, forbidden		Not relevant, forbidden	<b>15)</b>
label conforming to model No. 1 is not required	Yes (5.4.1.5.5.1)	Yes (5.4.1.2.3.2)	Yes (5.4.1.2.3.2)	Yes (5.4.1.5.5.1)	Not considered		Not considered	

Information in the document	UN Rec.	ADR	RID	IMDG Code	ICAO-TI	CFR 49	IATA-DGR	Notes
<b>Additional or special information required for Class 1, Class 2, Self-reactive Substances of Class 4.1, Organic Peroxides of Class 5.2, Class 6.2 and Class 7 (cont.)</b>								
<b>Class 4.1 (cont.)</b>								
Self-reactive substances- Protected from direct sun light etc..	Not required	Not required	Not required	Not required	Yes (4.1.5.8.3)		Yes (8.1.6.1.1)	
When approval is required	Yes (5.4.1.5.5.2) + additional document	Yes (5.4.1.2.3.3) + additional document	Yes (5.4.1.2.3.3) + additional document	Yes (5.4.1.5.5.2) + additional document	Yes (5; 4.1.5.5.1) + additional document		Yes (8.1.6.9.4) + additional document	
Transport of sample	Yes (5.4.1.5.5.3)	Yes (5.4.1.2.3.4)	Yes (5.4.1.2.3.4)	Yes (5.4.1.5.5.3)	Yes (5; 4.1.5.5.2)		Yes (8.1.6.1.1.2)	
Not a self-reactive substance (type G)	Not required	Yes (5.4.1.2.3.5) (optional)	Yes (5.4.1.2.3.5) (optional)	Not required	Not required		Not required	
<b>Class 5.2</b>								
control temp /emergency temp.	Yes (5.4.1.5.5)	Yes (5.4.1.2.3.1)	Not relevant, forbidden	Yes (5.4.1.5.5)	Not relevant, forbidden		Not relevant, forbidden	<b>15)</b>
Self-reactive substances- Protected from direct sun light etc..	Not required	Not required	Not required	Not required	Yes (4.1.5.8.3)		Yes (8.1.6.1.1)	
When approval is required	Yes (5.4.1.5.5.2) + additional document	Yes (5.4.1.2.3.3) + additional document	Yes (5.4.1.2.3.3) + additional document	Yes (5.4.1.5.5.2) + additional document	Yes (5; 4.1.5.5.1) + additional document		Yes (8.1.6.9.4) + additional document	
Transport of sample	Yes (5.4.1.5.5.3)	Yes (5.4.1.2.3.4)	Yes (5.4.1.2.3.4)	Yes (5.4.1.5.5.3)	Yes (5; 4.1.5.5.2)		Yes (8.1.6.1.1.2)	
Not an organic peroxide (type G)	Not required	Yes (5.4.1.2.3.5) (optional)	Yes (5.4.1.2.3.5) (optional)	Not required	Not required		Not required	
<b>Class 6.2</b>								
Full address of consignee and name and Phone No. of a responsible person	Yes (5.4.1.5.6)	Not required	Not required	Yes (5.4.1.5.6)	Yes (5; 4.1.5.6)		Yes (8.1.6.2)	
Advanced arrangements with the consignee	Not required	Not required	Not required	Not required	Not required		Yes (8.1.6.1.3/1.3.3.1)	

Information in the document	UN Rec.	ADR	RID	IMDG Code	ICAO-TI	CFR 49	IATA-DGR	Notes
<b>Additional or special information required for Class 1, Class 2, Self-reactive Substances of Class 4.1, Organic Peroxides of Class 5.2, Class 6.2 and Class 7 (cont.)</b>								
<b>Class 6.2 (cont.)</b>								
Genetically modified substance	Not required	Yes (5.4.1.2.4)	Yes (5.4.1.2.4)	Not required	Not required		Not required	
Easily perishable substance	Not required	Yes (5.4.1.2.4)	Not required	Not required	Not required		Not required	
<b>Class 7</b>								
Name or symbol of each radionuclide or, for mixtures, a general description or a list	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.2)	
Description of the physical and chemical form or a notation with regards to special form or low dispersible material	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.2)	
Maximum activity of the radioactive content	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.2)	
Activity of each radionuclide in the same package	Not required	Not required	Not required	Not required	Not required		Yes (10.8.3.9.2)	
Category of the package	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.3)	
Transport index	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.3)	
The criticality safety index (incl. fissile material)	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.3)	
Identification mark if applicable	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.4)	
“All packed in one”	Not required	Not required	Not required	Not required	Not required		Yes (10.8.3.9.2)	

Information in the document	UN Rec.	ADR	RID	IMDG Code	ICAO-TI	CFR 49	IATA-DGR	Notes
<b>Additional or special information required for Class 1, Class 2, Self-reactive Substances of Class 4.1, Organic Peroxides of Class 5.2, Class 6.2 and Class 7 (cont.)</b>								
<b>Class 7 (cont.)</b>								
For consignments in overpacks or freight containers	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.2)	
Shipped under exclusive use	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)			
For LSA-II, LSA-III, SCO-I, SCO-II, Total activity	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.1)		Yes (10.8.3.9.2)	
Statement regarding actions by the carrier	Yes (5.4.1.5.7.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.2.5.1)	Yes (5.4.1.5.7.1)	Yes (5; 4.1.5.7.2)		Not required	

Miscellaneous	UN Rec.	ADR	RID	IMDG Code	ICAO-TI	CFR 49	IATA-DGR	Notes
<b>Various differences</b>								
Container/vehicle packing certificate	Yes (only for sea transport) (5.4.2.1)	Yes (only for container prior to sea transport (5.4.2)	Yes (only for container prior to sea transport (5.4.2)	Yes (5.4.2.1)	Not required		Not required	<b>17)</b>
Viscous <23C substances to be placed in PG III	Yes (2.3.2.2/2.3.2.3)	Yes (2.2.3.1.4)	Yes (2.2.3.1.4)	Yes (2.3.2.2/2.3.2.3))	Yes (2; 3.2.2/3.2.3)		Yes (3.3.3/3.3.3.1)	
Viscous substances not dangerous goods if less than 450 l	Yes (2.3.2.5)	Yes (2.2.3.1.5)	Yes (2.2.3.1.5)	<b>No</b> , see (2.3.2.5). Valid for max. 30 l and a statement in the declaration	<b>No</b>		<b>No</b>	
According to SP 640	Not required	Yes (5.4.1.1.16)		Not required	Not required		Not required	
Consignor definition	Any person, organization or government which prepares a consignment for transport (1.2.1)	See Note	See Note	Any person, organization or government which prepares a consignment for transport (1.2.1)	Not defined		Not defined	<b>18)</b>



### **Explanation of the figures in the column “Notes”**

- 1) ICAO-TI and IATA-DGR uses ID 8000 “Consumer commodities” in addition to the UNN Nos.
- 2) The use of upper case or lower case is optional. In the ADR/RID this is specifically expressed.
- 3) Has not been checked if the “\*” and “★” exactly correspond to SP 274. However, see tables below.
- 4) The ADR relate to label model numbers due to the differences with regards to class 2. The ADR does not indicate division 2.1, 2.2 and 2.3 while other modes do. The result in the transport document is the same.
- 5) Enclosed in brackets – all modes of transport
- 6) It has been recognised in the IATA-DGR that the name and address of the consignor, which appears on the Declaration form may differ from that on the Air Waybill (8.1.6.1). Compare with CIM Waybill and the CMR Waybill.
- 7) It has been recognised in the IATA-DGR that the name and address of the consignee, which appears on the Declaration form may differ from that on the Air Waybill (8.1.6.2). Compare with CIM Waybill and the CMR Waybill.
- 8) IATA-DGR, not to be mixed up with the signing of the Shipper’s certification (where the date appears)
- 9) See Annex 1 for the very detailed requirements of the IATA-DGR regarding quantity of dangerous goods being carried by air.
- 10) Dangerous goods of classes other than class 7.
- 11) Other than radioactive wastes.
- 12) According to the UN rec., ADR and the IMDG Code the word “**HOT**” shall be added if the PSN does not cover the elevated state of the substance. Transport by air of elevated temperature substances is forbidden. The ICAO-TI and the IATA-DGR cover only molten substances.

13) Transport by air: The quantities of different dangerous goods contained in one outer packaging must be such that “Q” does not exceed the value of 1 where “Q” is calculated using the formula:

$$Q = \frac{n1}{M1} \oplus \frac{n2}{M2} \oplus \frac{n3}{N3} \oplus \dots\dots\dots$$

where: *n1, n2* etc. are the net quantities per package of the dangerous goods and *M1, M2*, etc. are the maximum net quantities per package permitted for these excepted quantity dangerous goods permitted for the appropriate packing group by 2.7.5.2. The following dangerous goods do not need to be taken into account in the calculation of the Q-value:

- (a) carbon dioxide, solid (dry ice), UN 1845; and
- (b) those with the same UN number, packing group and physical state (i.e. solid or liquid), providing they are the only dangerous goods in the package and the total net quantity does not exceed the maximum net quantity according to 2.7.5.2.

14) For air transport the “**net quantity of explosives**” per package must be added (IATA-DGR para. 7.1.5.1). According to the ADR, the transport document shall indicate, in addition to the requirements in 5.4.1.1.1 (g): - the total net mass, in kg, of explosive contents for each substance or article bearing a different UN number; - the total net mass, in kg, of explosive contents for all substances and articles covered by the transport document. For sea transport the total quantity of the net explosive mass shall be added.

15) Only to be transported by air under special permission.

16) IMDG Code: The information in the transport document for aerosols below 1000 ml shall be classified as Class 2 only (3.4.6.2).

17) The Container/Vehicle Packing Certificate is integrated into the recommended multi-modal form.

18) the enterprise which consigns dangerous goods either on its own behalf or for a third party. If the transport operation is carried out under a contract for carriage, consignor means the consignor according to the contract for carriage;

## QUANTITY OF DANGEROUS GOODS

### IATA-DGR, 44<sup>th</sup> Edition, Para. 8.1.6.9.2

#### 8.1.6.9.2 Second Sequence—Quantity and Type of Packing

**Step 6.** Number of packages (of same type and content), their type of packaging (either in full or by the use of the UN Packaging Specification Code, for example: “Fibreboard box”, “Box, fibreboard”, “4G”), and:

(a) except for empty uncleaned packagings, where a maximum quantity per package is shown in Columns H, J or L of Subsection 4.2 -- List of Dangerous Goods, the net quantity (including the unit of measurement as shown in Columns H, J or L abbreviated or in full, or multiples thereof) in each package in weight or volume, or the gross weight if applicable, of each item of dangerous goods bearing a different Proper Shipping Name, UN/ID number or packing group must be shown;

(b) where the maximum quantity per package is shown as “No Limit” or has a packing instruction reference in Columns H, J or L of the List of Dangerous Goods, the net quantity of the hazard contained in each package or the gross weight of each article or package must be shown;

(c) for chemical kits or first aid kits, the total net quantity (including the unit of measure) of dangerous goods must be shown. The net weight of liquids within the kits are to be calculated on a 1 to 1 basis of their volume, i.e. 1 L equal to 1 kg;

(d) for “Dangerous goods in machinery or apparatus” the individual total quantities of dangerous goods in solid, liquid or gaseous state, contained in the article must be shown;

(e) when two or more different items of dangerous goods are packed in the same outer packaging, the words “All Packed in One (description of package type)” must immediately follow the relevant entries. If the shipment contains more than one package, each containing the same assortment and quantities of compatible commodities, then the statement immediately following the relevant entries must read:

“All Packed in One (insert description of package type) x ....”. (insert the actual number of packages.)

(f) when two or more different items of dangerous goods are packed in the same outer packaging in accordance with 5.0.2.11 or 5.0.3.2, the “Q” value rounded up to the first decimal place;

(g) for dangerous goods transported in Salvage Packagings, an estimate of the remaining quantity must be entered and the words “SALVAGE PACKAGE” must be included. Note: For shipments of explosives to/from Europe, in addition to the net quantity of explosives, it is recommended that the “Net Explosive Quantity” in kilograms (kg) per

package be shown. The net explosive quantity refers only to the quantity of explosive substances.

**Step 7.** When an overpack is used, the wording “Overpack Used” must be inserted on the declaration form immediately after all the relevant entries relating to the packages within each overpack. In such cases, packages within overpacks must be listed first.

- multiple overpacks with identical contents shall be identified as follows: “Overpack Used x (number of identical overpacks)”.

**Note:** See Figure 8.1.M, (Example 9).

- multiple overpacks with different contents shall be identified by listing them separately.

**Note:** See Figure 8.1.N, (Example 10) for operator requirements when offering multi-overpacks containing different quantities of dangerous goods.

### **ADR version 2003**

#### **Paragraph 5.4.1.1.1**

(f) the total quantity of each item of dangerous goods bearing a different UN number, proper shipping name or, when applicable, packing group (as a volume or as a gross mass, or as a net mass as appropriate);

**NOTE:** In the case of intended application of 1.1.3.6, the total quantity of dangerous goods for each transport category shall be indicated in the transport document in accordance with 1.1.3.6.3.

### **UN Recommendations 12th Edition, para. 5.4.1.5.1**

#### **ICAO-TI 2003-2004 Edition, para. 5; 4.1.5.1**

#### **IMDG Code, Amdt 31-02, para. 5.4.1.5.1**

#### **Total quantity of dangerous goods**

Except for empty uncleaned packagings, the total quantity of dangerous goods covered by the description (by volume or mass as appropriate) of each item of dangerous goods bearing a different Proper Shipping Name, UN Number or packing group shall be included. For Class 1 dangerous goods, the quantity shall be the net explosive mass. For dangerous goods transported in salvage packagings, an estimate of the quantity of dangerous goods shall be given. The number and kind (e.g. drum, box, etc) of packagings shall also be indicated. Abbreviations may be used to specify the unit of measurement for the total quantity.

## Hamburg RID/ADR Working Group – 10-1 June 2003

The purpose with this document is to highlight differences between the regulations having an impact on harmonized documentation. Please note that these entries are only a few examples and that there are many entries in the various regulations that differ in a similar way. Consideration has not been taken to current work during the present biennium except for UN Nos. 1268, 2319 and 3295 of the ADR/RID where SP 274 will be deleted

### SOME DIFFERENCES WITH REGARD TO PROPER SHIPPING NAMES, including text in lower case and P Groups.

UN No.	UN 12 Edition	ADR 2003	IMDG CODE 31-02	ICAO-TI 2003-2004	IATA-DGR 44
0209	TNT, WETTED; dry or wetted with less than 30% water, by mass	TNT, WETTED; dry or wetted with less than 30% water, by mass	TNT, WETTED; dry or wetted with less than 30% water, by mass	TNT, WETTED; dry or wetted with less than 30% water, by mass <b>(Forbidden)</b>	TNT <b>(Forbidden)</b>
3366	TNT, WETTED; with not less than 10% water, by mass <b>(PG I)</b>	TNT; wetted with not less than 10% water, by mass <b>(PG I)</b>	TNT, WETTED; with not less than 10% water, by mass <b>(PG I)</b>	TNT; not less than 10% water, by mass <b>(PG II)</b>	TNT, WETTED; with more than 10% but less than 30% water, by weight <b>(PG I)</b>
1354	TRINITROBENZENE, WETTED; with not less than 30% water, by mass <b>(PG I)</b>	TRINITROBENZENE, WETTED; with not less than 30% water, by mass <b>(PG I)</b>	TRINITROBENZENE, WETTED; with not less than 30% water, by mass <b>(PG I)</b>	TRINITROBENZENE, WETTED; with not less than 30% water, by mass <b>(PG I)</b>	TRINITROBENZENE, WETTED; with 30% or more water, by weight <b>(PG I)</b>
3367	TRINITROBENZENE, WETTED; with not less than 10% water, by mass <b>(PG I)</b>	TRINITROBENZENE, WETTED; with not less than 10% water, by mass <b>(PG I)</b>	TRINITROBENZENE, WETTED; with not less than 10% water, by mass <b>(PG I)</b>	TRINITROBENZENE, WETTED; with not less than 10% water, by mass <b>(PG II)</b>	TRINITROBENZENE, WETTED; with more than 10% but less than 30% water, by weight <b>(PG I)</b>
3368	TRINITROBENZOIC ACID, WETTED; with not less than 10% water, by mass <b>(PG I)</b>	TRINITROBENZOIC ACID, WETTED; with not less than 10% water, by mass <b>(PG I)</b>	TRINITROBENZOIC ACID, WETTED; with not less than 10% water, by mass <b>(PG I)</b>	TRINITROBENZOIC ACID, WETTED; with not less than 10% water, by mass <b>(PG II)</b>	TRINITROBENZOIC ACID, WETTED; with more than 10% but less than 30% water, by weight <b>(PG I)</b>

UN No.	UN 12 Edition	ADR 2003	IMDG CODE 31-02	ICAO-TI 2003-2004	IATA-DGR 44
3369	<b>SODIUM DINITRO-0-CRESOLATE WETTED;</b> with not less than 10% water, by mass <b>(PG I)</b>	<b>SODIUM DINITRO-0-CRESOLATE WETTED;</b> with not less than 10% water, by mass <b>(PG I)</b>	<b>SODIUM DINITRO-0-CRESOLATE WETTED;</b> with not less than 10% water, by mass <b>(PG I)</b>	<b>SODIUM DINITRO-0-CRESOLATE WETTED;</b> with not less than 10% water, by mass <b>(PG II)</b>	<b>SODIUM DINITRO-0-CRESOLATE,</b> <b>WETTED;</b> with more than 10% but less than 15% water, by mass <b>(PG I)</b>
3370	<b>UREA NITRATE,</b> <b>WETTED;</b> with not less than 10% water, by mass <b>(PG I)</b>	<b>UREA NITRATE,</b> <b>WETTED;</b> with not less than 10% water, by mass <b>(PG I)</b>	<b>UREA NITRATE,</b> <b>WETTED;</b> with not less than 10% water, by mass <b>(PG I)</b>	<b>UREA NITRATE,</b> <b>WETTED;</b> with not less than 10% water, by mass <b>(PG II)</b>	<b>UREA NITRATE,</b> <b>WETTED;</b> with more than 10% but less than 20% water, by weight <b>(PG I)</b>
1788	<b>HYDROBROMIC ACID (PG II/III)</b>	<b>HYDROBROMIC ACID (PG II/III)</b>	<b>HYDROBROMIC ACID (PG II/III)</b>	<b>HYDROBROMIC ACID;</b> not more than 49% strength <b>(PG II/III)</b>	<b>HYDROBROMIC ACID;</b> 49% or less strength <b>(PG II/III)</b>
1790	<b>HYDROFLUORIC ACID;</b> solution, with more than 60% hydrofluoric acid <b>(PG I)</b>	-	<b>HYDROFLUORIC ACID;</b> solution, with more than 60% hydrofluoric acid <b>(PG I)</b>	<b>HYDROFLUORIC ACID;</b> more than 60% strength <b>(PG I)</b>	<b>HYDROFLUORIC ACID;</b> more than 60% strength <b>(PG I)</b>
1790	-	<b>HYDROFLUORIC ACID;</b> with more than 60% but not more than 85% hydrofluoric acid; more than 60% <b>(PG I)</b>	-	-	-
1790	-	<b>HYDROFLUORIC ACID;</b> with more than 85% hydrofluoric acid <b>(PG I)</b>	-	-	-
1265	<b>PENTANES,</b> liquid <b>(PG II)</b>	<b>PENTANES;</b> liquid <b>(PG II)</b>	<b>PENTANES, LIQUID (PG II)</b>	<b>PENTANES;</b> liquid <b>(PG II)</b>	<b>PENTANES;</b> liquid <b>(PG II)</b>
1278	<b>1-CHLOROPROPANE (PG II)</b>	<b>1-CHLOROPROPANE (PG II)</b>	<b>1-CHLOROPROPANE (PG II)</b>	<b>1-CHLOROPROPANE (PG II)</b>	<b>PROPYL CHLORIDE (PG II)</b>

UN No.	UN 12 Edition	ADR 2003	IMDG CODE 31-02	ICAO-TI 2003-2004	IATA-DGR 44
2014	HYDROGEN PEROXIDE, AQUEOUS SOLUTION; with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary) (PG II)	HYDROGEN PEROXIDE, AQUEOUS SOLUTION; with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary) (PG II)	HYDROGEN PEROXIDE, AQUEOUS SOLUTION; with not less than 20% but not more than 60% hydrogen peroxide (stabilized as necessary) (PG II)	HYDROGEN PEROXIDE, AQUEOUS SOLUTION; with not less than 20% but not more than 40% hydrogen peroxide (stabilized as necessary) (PG II)	HYDROGEN PEROXIDE, AQUEOUS SOLUTION; with not less than 20% but not more than 40% hydrogen peroxide (stabilized as necessary) (PG II)
2431	ANISIDINES (PG III)	ANISIDINES (PG III)	<i>ortho</i> -ANISIDINE (PG III)	ANISIDINES LIQUID/SOLID(PG III)	ANISIDINES LIQUID/SOLID(PG III)
2669	CHLOROCRESOLS (PG II)	CHLOROCRESOLS; liquid/solid (PG II)	CHLOROCRESOLS SOLUTION/SOLID(PG II)	CHLOROCRESOLS LIQUID/SOLID (PG II)	CHLOROCRESOLS LIQUID/SOLID (PG II)

**TABLE SHOWING DIFFERENCES WITH REGARD TO PSN and TECHNICAL NAMES**

The ADR/RID column show the UN Nos. requiring technical names not required by UN Recommendations, 12<sup>th</sup> Edition.

ADR/RID version 2003		IATA_DGR 44 <sup>th</sup> Version		IMDG Code Amdt 31-02		Comments
<b>CLASS 1</b>	<b>UN Nos.</b>	<b>CLASS 1</b>	<b>UN Nos.</b>	<b>CLASS 1</b>	<b>UN Nos.</b>	
Division 1.3	0132	Division 1.3	0132*	Division 1.3	0132*	
<b>CLASS 2</b>	<b>UN Nos.</b>	<b>CLASS 2</b>	<b>UN Nos.</b>	<b>CLASS 2</b>	<b>UN Nos.</b>	
	1075		1075*		1075*	
	3167		3167*		3167*	
	3168		3168*		3168*	
	3169		3169*		3169*	
<b>CLASS 3</b>	<b>UN Nos.</b>	<b>CLASS 3</b>	<b>UN Nos.</b>	<b>CLASS 3</b>	<b>UN Nos.</b>	
	1268		1268*		1268*	
	2319		2319*		2319*	
	2985		2985*		2985*	
	3248		3248*		3248*	
	3256		3256*		3256*	
	3295		3295*		3295*	
<b>CLASS 4</b>	<b>UN Nos.</b>	<b>CLASS 4</b>	<b>UN Nos.</b>	<b>CLASS 4</b>	<b>UN Nos.</b>	
Division 4.1	1353	Division 4.1	1353*	Division 4.1	1353*	
Division 4.1	1373	Division 4.1	1373*	Division 4.1	1373*	

\* No technical name required - in line with UN Recommendations 12<sup>th</sup> Edition



ADR/RID version 2003	IATA_DGR 44 <sup>th</sup> Version			IMDG Code Amdt 31-02	Comments
CLASS 4	UN Nos.	CLASS 4	UN Nos.	CLASS 4	UN Nos.
Division 4.3	1389	Division 4.3	1389*	Division 4.3	1389*
	1390		1390*		1390*
	1391		1391*		1391*
	1392		1392*		1392*
	1393		1393*		1393*
	1421		1421*		1421*
	2988		2988*		2988*
CLASS 5		CLASS 5		CLASS 5	
Division 5.1	1450	Division 5.1	1450*	Division 5.1	1450*
	1461		1461*		1461*
	1462		1462*		1462*
	1477		1477*		1477*
	1481		1481*		1481*
	1482		1482*		1482*
	1483		1483*		1483*
	2627		2627*		2627*
	3210		3210*		3210*
	3211		3211*		3211*
	3212		3212*		3212*
	3213		3213*		3213*

\* No technical name required - in line with UN Recommendations 12<sup>th</sup> Edition

ADR/RID version 2003		IATA_DGR 44 <sup>th</sup> Version		IMDG Code Amdt 31-02		Comments	
CLASS 5	UN Nos.	CLASS 5	UN Nos.	CLASS 5	UN Nos.	CLASS 5	UN Nos.
Division 5.1	3214	Division 5.1	3214*	Division 5.1	3214*		
	3215		3215*		3215*		
	3216		3216*		3216*		
	3218		3218*		3218*		
	3219		3219*		3219*		
<b>CLASS 6</b>		<b>CLASS 6</b>		<b>CLASS 6</b>			
Division 6.1	1549	Division 6.1	1549*	Division 6.1	1549*		
	1556		1556*		1556*		
	1557		1557*		1557*		
	1564		1564*		1564*		
	1566		1566*		1566*		
	1583		1583*		1583*		
	1655		1655*		1655*		
	1707		1707*		1707*		
	1851		1851*		1851*		
	1935		1935*		1935*		
	2024		2024*		2024*		
	2025		2025*		2025*		
	2026		2026*		2026*		
	2291		2291*		2291*		
	2570		2570*		2570*		
	2630		2630*		2630*		
	2742		2742*		2742*		

\* No technical name required - in line with UN Recommendations 12<sup>th</sup> Edition

ADR/RID version 2003		IATA_DGR 44 <sup>th</sup> Version		IMDG Code Amdt 31-02		Comments	
CLASS 6	UN Nos.	CLASS 6	UN Nos.	CLASS 6	UN Nos.		
Division 6.1	----	Division 6.1	<b>2788</b>		----		No technical name required - in line with UN Recommendations 12 <sup>th</sup> Edition
	2856		2856*		2856*		
	3048		3048*		3048*		
	3141		3141*		3141*		
	3144		3144*		3144*		
	----		<b>3146</b>		----		"2788, 3146 / IATA-DGR" No technical name required - Required in UN Recommendations 12 <sup>th</sup> Edition.
	3249		3249*		3249*		
	3283		3283*		3283*		
	3284		3284*		3284*		
	3285		3285*		3285*		
	3361		3361*		3361*		
	3362		3362*		3362*		
<b>CLASS 8</b>	1740	<b>CLASS 8</b>	1740*	<b>CLASS 8</b>	1740*		No technical name required - in line with UN Recommendations 12 <sup>th</sup> Edition
	2430		2430*		2430*		
	<b>2571</b>		----		----		
	2583		2583*		2583*		
	2584		2584*		2584*		"2693 / IATA-DGR" No technical name - Required in UN Recommendations 12 <sup>th</sup> Edition.
	2585		2585*		2585*		
	2586		2586*		2586*		
	----		<b>2693</b>		----		
	2837		2837*		2837*		"2571 / ADR" No technical name required - Required in UN Recommendations 12 <sup>th</sup> Edition.
	2986		2986*		2986*		
	2987		2987*		2987*		
	3145		3145*		3145*		
<b>CLASS 9</b>	3257	<b>CLASS 9</b>	3257*	<b>CLASS 9</b>	3257*		No technical name required - in line with UN Recommendations 12 <sup>th</sup> Edition
	3258		3258*		3258*		