

**UNECE - Sub-Committee of Experts on the Transport of Dangerous Goods
Fifty-Fourth session**

26 November – 4 December 2018

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4 September 2018

Use of the Manual of Tests and Criteria in the context of GHS

Transmitted by the Chairman of the Working Group on Explosives of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) on behalf of the Working Group*

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This document contains the proposed list of amendments to Part II, Sections 20 to 28 of the sixth revised edition of the Manual of Tests and Criteria, including Amendment 1, to take account of its use in the context of the GHS, for consideration by both sub-committees.

<p>ST/SG/AC.10/C.3/2018/62 ST/SG/AC.10/C.4/2018/16</p> <p>4 September 2018</p> <p>Use of the Manual of Tests and Criteria in the context of GHS</p> <p>Transmitted by the Chairman of the Working Group on Explosives of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) on behalf of the Working Group*</p> <p>PDF</p>	<p>This document contains the proposed list of amendments to Part III, Sections 30 to 37 as well as sub-sections 38.1 and 38.2 of the sixth revised edition of the Manual of Tests and Criteria, including Amendment 1, to take account of its use in the context of the GHS, for consideration by both sub-committees.</p>	
<p>ST/SG/AC.10/C.3/2018/63</p> <p>27 August 2018</p> <p>Corrections to UN 2383 – Dipropylamine</p> <p>Transmitted by the expert from Germany*</p> <p>PDF</p>	<p>The Model Regulations list Dipropylamine under UN No. 2383, class 3 with a subsidiary hazard for corrosivity.</p>	
<p>ST/SG/AC.10/C.3/2018/64</p> <p>14 September 2018</p> <p>Consolidated list of adopted texts</p> <p>Note by the secretariat</p> <p>PDF</p>	<p>This document contains draft amendments to the Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.6 and Amend.1) which were adopted at the fifty-third session on the basis of informal documents that were not translated in all working languages and which, therefore, need to be carefully checked and confirmed.</p>	
<p>ST/SG/AC.10/C.3/2018/65</p> <p>14 September 2018</p> <p>Consolidated list of draft amendments</p>	<p>This document contains a consolidated list of draft amendments adopted by the SubCommittee of Experts at its fifty-first, fifty-second and fifty-third sessions</p>	

<p>Note by the secretariat</p> <p>PDF</p>		
<p>ST/SG/AC.10/C.3/2018/66</p> <p>27 August 2018</p> <p>Update of LC50 values in P200</p> <p>Transmitted by the International Organisation for Standardisation (ISO)*</p> <p>PDF</p>	<p>At the fifty-third session of the Sub-Committee of Experts on the Transport of Dangerous Goods ISO submitted ST/SG/AC.10/C.3/2018/24. This document proposed amending the LC50 values of eight toxic gases that showed different values in the twentieth revision of the Model Regulations to those in ISO 10298:2018 Gas cylinders - Gases and gas mixtures - Determination of toxicity for the selection of cylinder valve outlets.</p>	
<p>ST/SG/AC.10/C.3/2018/67</p> <p>12 September 2018</p> <p>Recommendations for Test Series 8</p> <p>Transmitted by the expert from Canada and the Institute of Makers of Explosives (IME)*</p> <p>PDF</p>	<p>As described in “Background” below, the Working Group on Explosives (EWG) of the TDG Sub-Committee has concluded that the Koenen Test (UN Test 8(c)) is unsuitable for evaluating certain emulsion candidates for classification as UN 3375; Division 5.1; AMMONIUM NITRATE EMULSION or SUSPENSION or GEL, intermediate for blasting explosives (ANE). The matter has been the subject of discussion within the EWG since the forty-seventh session and a possible solution, the minimum burning pressure (MBP) test has been identified. However, at the last session, despite general support for the MBP test, the EWG concluded “... that a consensus is unlikely and suggested that IME go ahead and prepare a formal proposal for the next [fifty-fourth] session so that the issue can be put to a vote.”¹. As the original developer and a current user of the MBP test for classification of ANE candidates, Canada offered to assist IME in the preparation of the formal proposal and proposed test procedure.</p>	
<p>ST/SG/AC.10/C.3/2018/68</p> <p>27 August 2018</p>	<p>The Dangerous Goods List has an entry for ammonium nitrate, UN 0222 (1.1D), which is not a commercially manufactured product. This was further confirmed during the fifty-second session</p>	

<p>UN 0222 Ammonium Nitrate</p> <p>Transmitted by the Institute of Makers of Explosives (IME)*</p> <p>PDF</p>	<p>of the Sub-Committee during which some members stated that this number is used for labelling contaminated ammonium nitrate or for ammonium nitrate fertilizers that fail test series 2.</p>	
<p>ST/SG/AC.10/C.3/2018/69</p> <p>27 August 2018</p> <p>Alignment of the English and French versions of 5.4.1.5.1</p> <p>Transmitted by the expert from Belgium*</p> <p>PDF</p>	<p>During the fifty-third session Belgium brought forward informal document INF.25 (fifty-third session) where it was pointed out that there is a difference in wording between the English and the French text in the first sentence of paragraph 5.4.1.5.1 of the Model Regulations. This difference resulted in a diverse interpretation of 5.4.1.5.1 when reading either the English or the French version of the text.</p>	
<p>ST/SG/AC.10/C.3/2018/70</p> <p>27 August 2018</p> <p>Revision of paragraph 2.8.3.2 of the Model Regulations based on the revised OECD Test Guideline 431 allowing sub-categorisation for skin corrosion</p> <p>Transmitted by the European Union</p> <p>PDF</p>	<p>The present document carries over ST/SG/AC.10/C.3/2018/30 and takes on board the suggestions of improvement contained in informal documents INF.34, TDG/INF.71 – GHS/INF.28, as suggested in the report of the previous session of the Sub-Committee (ST/SG/AC.10/C.3/106, paragraph 167).</p>	
<p>ST/SG/AC.10/C.3/2018/71</p> <p>28 August 2018</p> <p>Proposal to include special provision 653 of the ADR in the Model Regulations</p> <p>Submitted by the European Industrial Gases Association (EIGA)*</p>	<p>At the fifty-third session of the Sub-Committee EIGA proposed to include the exception that is provided in Special Provision 653 of the European Agreement concerning the International Carriage of Dangerous Goods by Road Regulation since 2007. The decision was partly based on the opinion of the Bundesanstalt für Materialforschung und Prüfung (BAM) (Federal Institute for Materials Research and Testing) that there was an infinitely small</p>	

PDF	probability of leakage during transport and even if a leak were to occur the hazard would not present a significant risk. For more details see the justification under paragraph 6.	
<p>ST/SG/AC.10/C.3/2018/72</p> <p>27 August 2018</p> <p>Articles containing dangerous goods in excepted quantities</p> <p>Transmitted by the experts from Germany</p> <p>PDF</p>	Between 2013 and 2016, the Sub-Committee discussed the classification of dangerous goods in articles. In the twentieth edition of the UN Model Regulations, twelve new UN numbers were included for articles that have to be classified in accordance with the provisions in 2.0.5 of the Model Regulations. The scope of application of UN 3363 was limited to articles which only include dangerous goods within the limited quantity amounts as permitted in Column 7a of the Dangerous Goods List.	
<p>ST/SG/AC.10/C.3/2018/73</p> <p>27 August 2018</p> <p>Editorial corrections to the Model Regulations</p> <p>Transmitted by the expert from Germany*</p> <p>PDF</p>	Special provision 172 (d) should be amended to further align the wording with column (3) of the dangerous goods list. The term “subsidiary class” is not used in the context of the Model Regulations.	
<p>ST/SG/AC.10/C.3/2018/74</p> <p>27 August 2018</p> <p>Multiple marking of packagings, including IBCs and large packagings, indicating conformity with more than one successfully tested design type</p> <p>Transmitted by the expert from Germany</p> <p>PDF</p>	At the fifty-third session, the Sub-Committee adopted text on multiple marking of packagings, including IBCs and large packagings, indicating conformity with more than one successfully tested design type, see ST/SG/AC.10/C.3/106 paras 116 and 117 and annex I.	
<p>ST/SG/AC.10/C.3/2018/75</p>	At the fifty-second and at the fifty-third session of the Sub-Committee, the expert from Germany	

<p>27 August 2018</p> <p>Classification of self-inflating recovery devices</p> <p>Transmitted by the expert from Germany*</p> <p>PDF</p>	<p>presented proposals for the possible classification of self-inflating recovery devices, see documents ST/SG/AC.10/C.3/2017/29 and ST/SG/AC.10/C.3/2018/13.</p>	
<p>7 September 2018</p> <p>ST/SG/AC.10/C.3/2018/76</p> <p>Amendment of packing instructions P400 and P404</p> <p>Transmitted by the European Chemical Industry Council (CEFIC)*</p> <p>PDF</p>	<p>At the fifty-third session of the Sub-Committee, CEFIC raised the topic of safety related issues concerning the handling of inner receptacles of combination packagings filled with pyrophoric solids according to the requirements of packing instruction P404.</p>	
<p>7 September 2018</p> <p>ST/SG/AC.10/C.3/2018/77</p> <p>Chemicals under pressure: extinguishing agents (UN 3500)</p> <p>Transmitted by the European Chemical Industry Council (CEFIC)*</p> <p>PDF</p>	<p>Chemicals under pressure without any subsidiary risks (UN No. 3500) are widely used in the area of gas based suppression systems (see Annex), and other terms connected to fire control. UN No.1044 FIRE EXTINGUISHERS were initially considered to be assigned to this product. Nevertheless, this UN number cannot be used for this type of extinguishing agents because they are carried separately and meet the Note of special provision SP225:</p> <p>“Pressure receptacles which contain gases for the use in the above-mentioned fire extinguishers or for use in stationary fire-fighting installations shall meet the requirements of Chapter 6.2 and all requirements applicable to the relevant dangerous goods when these pressure receptacles are carried separately.”.</p> <p>Therefore, they do not meet the definition of a fire extinguisher.</p>	

<p>ST/SG/AC.10/C.3/2018/78</p> <p>12 September 2018</p> <p>Transport of energetic samples for further testing</p> <p>Transmitted by the European Chemical Industry Council (CEFIC)*</p> <p>PDF</p>	<p>Research and development in industry, public institutes, and universities frequently need to transport substances for the purpose of testing, i.e. the determination of physical, chemical, biological, toxicological or ecotoxicological properties and behavior, fitness for use or application</p>	
<p>ST/SG/AC.10/C.3/2018/79</p> <p>3 September 2018</p> <p>Exemptions for polymerizing substances</p> <p>Transmitted by the European Chemical Industry Council (CEFIC)*</p> <p>PDF</p>	<p>In the nineteenth edition of the Model Regulations, the Sub-Committee of Experts on the Transport of Dangerous Goods introduced new criteria and UN numbers for polymerizing substances in Division 4.1.</p>	
<p>ST/SG/AC.10/C.3/2018/80 ST/SG/AC.10/C.4/2018/25</p> <p>5 September 2018</p> <p>Proposal to classify chemicals under pressure within Chapter 2.3 of the GHS and in SP362 of the Model Regulations</p> <p>Submitted by the European Chemical Industry Council (CEFIC) and the European Industrial Gases Association (EIGA)*</p> <p>PDF</p>	<p>In the joint session of the TDG and the GHS sub-committees in July, the proposal in ST/SG/AC.10/C.3/2018/5-ST/SG/AC.10/C.4/2018/3 (CEFIC, EIGA) was accepted in its principles provided that:</p> <p>(a) Consolidated text with the relevant editorial amendments proposed by Germany in informal document INF.51 (TDG, fifty-third session)-INF.17 (GHS, thirty-fifth session) is submitted at the December sessions;</p> <p>(b) Proposals to amend special provision SP362 to avoid conflicting classifications are submitted. Experts from the TDG Sub-Committee would join experts from the GHS Sub-Committee in an intersessional working group to that effect.</p>	

<p>ST/SG/AC.10/C.3/2018/81 ST/SG/AC.10/C.4/2018/19</p> <p>4 September 2018</p> <p>Inconsequent use of the expression “manufactured with a view to producing a practical explosive or pyrotechnic effect”</p> <p>Transmitted by the expert from Sweden*</p> <p>PDF</p>	<p>A product is a candidate for Class 1 if it falls into one of the definitions of Class 1 in 2.1.1.1 (a), (b) or (c) of the Model Regulations. A product that has been provisionally accepted into Class 1 may be excluded from Class 1 by virtue of test results.</p>	
<p>ST/SG/AC.10/C.3/2018/82</p> <p>3 September 2018</p> <p>Missing description in test procedure of Test 6 (b) in the Manual of Tests and Criteria</p> <p>Transmitted by the expert from Sweden*</p> <p>PDF</p>	<p>Section 16.5.1 of the Manual of Tests and Criteria describes the test procedure as well as the criteria to assess results for Test 6 (b). Section 16.5.1.4 (c) contains the description for selection of suitable initiation system for packaged substances which are not intended for use as explosives. According to the description, the initiation system should be selected based on the test result in Test 6 (a).</p>	
<p>ST/SG/AC.10/C.3/2018/83</p> <p>4 September 2018</p> <p>Applicability of packing instruction LP906</p> <p>Transmitted by the European Association for Advanced Rechargeable Batteries (RECHARGE), International Organisation of Motor Vehicle Manufacturers (OICA), the Rechargeable Battery Association (PRBA), and the Council on Safe Transportation of Hazardous Articles (COSTHA)*</p> <p>PDF</p>	<p>Packing instructions P911 and LP906 have been developed in order to provide a packaging solution for damaged and defective batteries of UN Nos. 3090, 3091, 3480 and 3481 liable to rapidly disassemble, dangerously react, produce a flame or a dangerous evolution of heat or a dangerous emission of toxic, corrosive or flammable gases or vapours under normal conditions of transport.</p>	

<p>ST/SG/AC.10/C.3/2018/84</p> <p>4 September 2018</p> <p>Amendment to 38.3.3 (g) of the Manual of Tests and Criteria</p> <p>Transmitted by the European Association for Advanced Rechargeable Batteries (RECHARGE) and the Rechargeable Battery Association (PRBA)*</p> <p>PDF</p>	<p>The development of Li-ion batteries in e-mobility and energy storage is generating a number of new transport situations, which were not anticipated in the regulation and in the testing conditions of the Manual of Tests and Criteria revision 6, amendment 1. Particularly, the assembly and the maintenance of large assembled batteries used for e-mobility or energy storage is requiring the transport of parts of these large batteries. The parts of these large batteries are made themselves from an assembly of batteries that are connected together. Although these parts of batteries can be large, they may not be equipped with battery overcharge protection, as these are provided for in the hosting equipment or battery, but still need to be transported.</p>	
<p>ST/SG/AC.10/C.3/2018/85 ST/SG/AC.10/C.4/2018/20</p> <p>5 September 2018</p> <p>Proposed criteria for an amended classification system for Explosives in the GHS</p> <p>Transmitted by the expert from Sweden and the Chairman of the Working Group on Explosives*</p> <p>PDF</p>	<p>The review of Chapter 2.1 of the GHS, which is the chapter that governs the classification and labelling for explosives, has been on-going since 2015. The reason for the review is that the current classification system, which was taken over from the transport sector, is ill-suited for classifying explosives that are not in their transport packaging or configuration, as the classification frequently depends on that particular packaging/configuration. This drawback of the current system and its negative effects has been further elaborated in several previous documents on the subject, most recently in document ST/SG/AC.10/C.3/2018/33–ST/SG/AC.10/C.4/2018/7 from the expert from Sweden.</p>	
<p>ST/SG/AC.10/C.3/2018/86</p> <p>5 September 2018</p> <p>Removal of packing group I for UN 1390 Alkali metal amides</p>	<p>At the fifty-second session in December 2017, the Sub-Committee agreed to add a packing group (PG) I entry to the Dangerous Goods List for UN 1390 “Alkali metal amides” based on data obtained through conducting the N.5 test method on sodium amide. Historically the Dangerous Goods List only included a PG II entry for this</p>	

<p>Transmitted by the expert from the United States of America*</p> <p>PDF</p>	<p>specific dangerous good. This decision was taken based on information found in document ST/SG/AC.10/C.3/2017/38 and is reflected under the Chapter 3.2 amendments in Annex II of ST/SG/AC.10/C.3/104/Add.1.</p>	
<p>ST/SG/AC.10/C.3/2018/87</p> <p>3 September 2018</p> <p>Application of the default fireworks classification table for classification of certain articles, pyrotechnic UN0431</p> <p>Transmitted by the expert from the United States of America</p> <p>PDF</p>	<p>At the fifty-third session a proposal to allow UN 0431 “Articles pyrotechnic” to utilize the default fireworks classification table was discussed in document ST/SG/AC.10/C.3/2018/48. While there was some support for the proposal based on safety equivalency, some experts expressed concerns over the use of the proposed phrase “intended for professional use only” as it was unclear to some what this phrase meant and the phrase is not utilized elsewhere in the Model Regulations.</p>	
<p>ST/SG/AC.10/C.3/2018/88 ST/SG/AC.10/C.4/2018/26</p> <p>7 September 2018</p> <p>Use of the Manual of Tests and Criteria in the context of GHS</p> <p>Transmitted by the Chairman of the Working Group on Explosives of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) on behalf of the Working Group</p> <p>PDF</p>	<p>This document contains the proposed list of amendments to Part II, Section 28 of the sixth revised edition of the Manual of Tests and Criteria, including Amendment 1, to take account of the determination of the self-accelerated polymerization temperature (SAPT), for consideration by both sub-committees.</p>	
<p>ST/SG/AC.10/C.3/2018/89</p> <p>4 September 2018</p> <p>Bundles of cylinders</p>	<p>This document proposes to delete the last sentence in 4.1.6.1.6 in Chapter 4.1 of the Model Regulations because it conflicts with the requirements in ISO 10961:2010 entitled Gas cylinders - Cylinder bundles - Design, manufacture, testing and inspection.</p>	

<p>Transmitted by the expert from Canada*</p> <p>PDF</p>		
<p>ST/SG/AC.10/C.3/2018/90</p> <p>11 September 2018</p> <p>Consolidated list of adopted texts</p> <p>Note by the secretariat</p> <p>PDF</p>	<p>This document contains draft corrections to the twentieth revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.20) which were adopted by the Sub-Committee on its fifty-first, fifty-second and fifty-third sessions.</p>	
<p>ST/SG/AC.10/C.3/2018/91</p> <p>4 September 2018</p> <p>Proposal for a new Chapter 6.10: Provisions for the design, construction, inspection and testing of portable tanks with shells made combined materials intended for transportation of class 2 substances (non-refrigerated liquefied gases)</p> <p>Transmitted by the expert from the Russian Federation</p> <p>PDF</p>	<p>During the fifty-second session of Sub-Committee the Russian Federation submitted a document (ST/SG/AC.10/C.3/2017/40) with a proposal for a new Chapter 6.9 “Provisions for the design, construction, inspection and testing of portable tanks with shells made of Fibre Reinforced Plastics (FPR) materials intended for the transport of substances of classes 3, 5.1, 6.1, 6.2, 8 and 9”.</p>	
<p>ST/SG/AC.10/C.3/2018/92</p> <p>4 September 2018</p> <p>Design pressure calculations</p> <p>Transmitted by the expert from the Russian Federation</p> <p>PDF</p>	<p>Paragraph 6.7.3.1 of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations says:</p> <p>“Design pressure means the pressure to be used in calculations required by a recognized pressure vessel code. The design pressure shall be not less than the highest of the following pressures:</p> <p>(a) The maximum effective gauge pressure allowed in the shell during filling or discharge, or</p>	

	<p>(b) The sum of:</p> <p>(i) the maximum effective gauge pressure to which the shell is designed as defined in (b) of the MAWP definition,</p> <p>(ii) a head pressure determined on the basis of the static forces specified in 6.7.3.2.9 but not less than 0.35 bar.”.</p>	
<p>ST/SG/AC.10/C.3/2018/93 ST/SG/AC.10/C.4/2018/21</p> <p>4 September 2018</p> <p>Suggested terms of reference and description of work for combinations of physical hazards</p> <p>Transmitted by the expert from Germany</p> <p>PDF</p>	<p>Reference is made to informal documents INF.8 (GHS thirty-fourth session), INF.13 (GHS thirty-fifth session) and INF.20 (TDG fifty-third session), respectively in which the expert from Germany presented the question which combinations of physical hazards are possible and relevant when classifying a chemical according to the GHS.</p>	
<p>ST/SG/AC.10/C.3/2018/94 ST/SG/AC.10/C.4/2018/22</p> <p>5 September 2018</p> <p>Proposed amendment to the classification criteria for flammable liquids in Chapter 2.6 of the GHS</p> <p>Submitted by the International Paint and Printing Ink Council (IPPIC)*</p> <p>PDF</p>	<p>The goal of the GHS, as described in Chapter 1.1, is to achieve worldwide harmonization in the classification and labelling of chemicals. The International Paint and Printing Ink Council (IPPIC), which has many member companies operating globally or multi-nationally, supports this goal of harmonization and appreciates the work that has gone into creating and developing the GHS since its inception.</p>	
<p>ST/SG/AC.10/C.3/2018/95</p> <p>3 September 2018</p>	<p>Paints and printing inks are extremely high volume commodities in the global marketplace. With the move towards water-based formulations</p>	

<p>Technical names for environmentally hazardous goods of Class 9 (UN 3077 and UN 3082)</p> <p>Transmitted by the International Paint and Printing Ink Council (IPPIC)*</p> <p>PDF</p>	<p>(estimated to represent some 50% of liquid products overall) and other non-solvent-borne products such as powder coatings, a high percentage of these goods is now regulated in Class 9 due to environmental hazards and thus transported under entries UN 3077 or UN 3082 of the Dangerous Goods List (“ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID/LIQUID, N.O.S.”).</p>	
<p>ST/SG/AC.10/C.3/2018/96</p> <p>7 September 2018</p> <p>Minimum wall thickness for metal IBCs</p> <p>Transmitted by the Stainless Steel Container Association (SSCA)*</p> <p>PDF</p>	<p>SSCA already introduced the issue of the minimum wall thickness for metal-IBCs to the Sub-Committee in document ST/SG/AC.10/C.3/2013/57 at the forty-fourth session and ST/SG/AC.10/C.3/2018/34 at the fifty-third session.</p>	
<p>ST/SG/AC.10/C.3/2018/97</p> <p>3 September 2018</p> <p>Transport of polymerizing substances as waste</p> <p>Transmitted by the expert from Germany</p> <p>PDF</p>	<p>An essential prerequisite for the transport of polymerizing substances is a sufficient stabilization by means of chemical stabilization or temperature control or a combination of both. This presupposes that the self-accelerating polymerisation temperature (SAPT) is determined in relation to the packages, as a SAPT below 50°C (packagings) or 45°C (tanks) requires the application of temperature control provisions. Based on the SAPT, the control and emergency temperatures have to be determined for this purpose and have to be indicated in the transport document, see 5.4.1.5.5. When chemical stabilization is employed, it must be ensured that the level of chemical stabilization is sufficient to prevent the substance from dangerous polymerization also at a bulk mean temperature of 50°C or 45°C, respectively. In this case, different factors are to be taken into account, for example the duration of transport or the effectiveness and properties of the stabilizer. This</p>	

	information is in particular available at the manufacturer of such substances, which means at the beginning of the transport chain, and the person that hands over the packagings or tanks for transport is responsible for complying with the obligations of special provision 386.	
<p>ST/SG/AC.10/C.3/2018/98</p> <p>3 September 2018</p> <p>Harmonisation of the requirement “structurally serviceable”</p> <p>Transmitted by the expert from Germany and the European Chemical Industry Council (CEFIC)*</p> <p>PDF</p>	At the fifty-third session of the Sub-Committee, the experts from Germany and CEFIC presented informal document INF.13, proposing harmonisation of the requirement “structurally serviceable” for all containers.	
<p>ST/SG/AC.10/C.3/2018/99</p> <p>3 September 2018</p> <p>Informal working group on Fibre-reinforced plastics (FRP) portable tanks</p> <p>Transmitted by the Australian Explosives Industry and Safety Group (AEISG)*</p> <p>PDF</p>	At its fifty-second session (December 2017) in response to a proposal in document ST/SG/AC.10/C.3/2017/40, the Sub-Committee established an intersessional informal working group to: “Develop requirements for the construction, approval, inspection, and use of fibre reinforced plastics portable tanks...” (ST/SG/AC.10/C.3/104, para 80-81).	
<p>ST/SG/AC.10/C.3/2018/100</p> <p>3 September 2018</p> <p>Chapter 6.7 and portable tank special provisions</p> <p>Transmitted by the expert from Belgium</p> <p>PDF</p>	During the fifty-second and fifty-third sessions of the Sub-Committee, Belgium respectively brought forward informal document INF.25 (fifty-second session) and ST/SG/AC.10/C.3/2018/41. It was explained that in paragraph 6.7.3.4.1 on the minimal shell thickness of portable tanks intended for the transport of non-refrigerated liquefied gases, no reference was made to the portable tank special provisions in 4.2.5.3. Some of these portable tank special provisions (i.e.	

	TP19 and TP21) are however applicable to the minimal shell thickness of portable tanks intended for the transport of non-refrigerated liquefied gases. Furthermore a similar reference exists in 6.7.2.4.1 that applies to the minimal shell thickness of portable tanks that are intended for the transport of substances of Class 1 and classes 3 to 9.	
<p>ST/SG/AC.10/C.3/2018/101</p> <p>5 September 2018</p> <p>Aerosols – Consequential amendments from proposal in ST/SG/AC.10/C.3/2018/80 - ST/SG/AC.10/C.4/2018/25</p> <p>Submitted by the European Aerosol Federation (FEA)*</p> <p>PDF</p>	Chapter 2.3 of the GHS related to Aerosols only has been revised at the thirty-fifth session of the Sub-Committee of Experts on the GHS (see Annex I of related report ST/SG/AC.10/C.4/70).	
<p>ST/SG/AC.10/C.3/2018/102</p> <p>5 September 2018</p> <p>Optical differentiation of labels for gases</p> <p>Submitted by the expert from Spain</p> <p>PDF</p>	Different labels corresponding to different classes differentiate themselves only by the number indicated in the lower part of the label. This occurs for labels 2.1 and 3, and labels 2.3 and 6	
<p>ST/SG/AC.10/C.3/2018/103</p> <p>5 September 2018</p> <p>Revision of names for chemical substances</p> <p>Submitted by the expert from Spain</p> <p>PDF</p>	Over the last years, Spain has been carrying out a revision of the Spanish names of the UN numbers, as the Spanish translation of the UN numbers in the different regulations (Model Regulation, ICAO Technical Instructions, IMDG Code) is not coincident. In the course of doing this, different cases have appeared where it would seem reasonable to amend not only the Spanish name, but also the English and French	

	ones. Specifically, this is the case for many chemical names.	
<p>ST/SG/AC.10/C.3/2018/104</p> <p>7 September 2018</p> <p>Revision of the Spanish names of the UN numbers</p> <p>Submitted by the expert from Spain</p> <p>PDF</p>	<p>In 2016 the Spanish expert brought forward to the Secretariat a series of inconsistencies in the Spanish names of the UN numbers in between the IMDG Code and the Model Regulations. The Secretariat systematized these differences in informal document INF.42 (forty-ninth session) organizing them into different groups. Spain has continued with this work, not only including into the scope of the study the Spanish versions of the Model Regulations and the IMDG Code, but also the ICAO Technical Instructions, ADR and RID. Spanish names of the UN numbers in these regulations are not always coincident.</p>	
<p>ST/SG/AC.10/C.3/2018/105</p> <p>5 September 2018</p> <p>Transport of barium carbonate as non-dangerous good</p> <p>Submitted by the expert from Spain</p> <p>PDF</p>	<p>Barium carbonate is a barium compound, and therefore by defect classified as UN 1564, BARIUM COMPOUND, N.O.S, in Division class 6.1.</p>	
<p>ST/SG/AC.10/C.3/2018/106</p> <p>5 September 2018</p> <p>Provision for the carriage of waste gas cartridges (UN 2037)</p> <p>Transmitted by the observer from Ireland</p> <p>PDF</p>	<p>At the one hundred and third session of the Working Party on the Transport of Dangerous Goods the delegate from Ireland presented informal document INF.18 to discuss the potential for including provisions in the ADR for waste gas cartridges (UN 2037), similar to those that are in place for waste aerosols (UN 1950). As the relevant discussions were multimodal in scope, the Working Party invited the representative of Ireland to forward the proposal to the Sub-Committee of Experts on the Transport of Dangerous Goods.</p>	
<p>ST/SG/AC.10/C.3/2018/107</p>	<p>During the fifty-third session document ST/SG/AC.10/C.3/2018/45 was presented to</p>	

<p>5 September 2018</p> <p>Composite Intermediate Bulk Containers (IBCs): inner receptacle marking</p> <p>Transmitted by the expert from Belgium*</p> <p>PDF</p>	<p>clarify the intent of the last sentence of the first paragraph of 6.5.2.2.4:</p> <p>“The inner receptacle of composite IBCs shall be identified by the application of the marks indicated in 6.5.2.1.1 (b), (c), (d) where this date is that of the manufacture of the plastics inner receptacle, (e) and (f). The UN packaging symbol shall not be applied. The marks shall be applied in the sequence shown in 6.5.2.1.1. It shall be durable, legible and placed in a location so as to be readily visible when the inner receptacle is placed in the outer casing.”.</p>	
<p>ST/SG/AC.10/C.3/2018/108</p> <p>5 September 2018</p> <p>Harmonization with the International Atomic Energy Agency Regulation for the Safe Transport of Radioactive Material</p> <p>Transmitted by International Atomic Energy Agency (IAEA)*</p> <p>PDF</p>	<p>An excerpt of the main issues raised when considering harmonization with the IAEA Regulations for the Safe transport of Radioactive Material at the fifty-third session of the Sub-Committee is copied below from the report ST/SG/AC.10/C.3/106 for easy reference.</p>	
<p>ST/SG/AC.10/C.3/2018/109</p> <p>7 September 2018</p> <p>Provisions for data loggers and other equipment, containing electric energy storage and production systems, in use during transport</p> <p>Transmitted by the expert from the Netherlands*</p> <p>PDF</p>	<p>Over the past few sessions, the Sub-Committee has discussed the applicability of the Model Regulations with regard to dangerous goods which are not a part of the consignment but that are transported or are a part of the transport operation. For background information and review of the discussion, see for example ST/SG/AC.10/C.3/2017/13, ST/SG/AC.10/C.3/2017/22, informal documents INF.27 (fifty-first session), INF.29 and INF.60 (fifty-second session), ST/SG/AC.10/C.3/2018/57 and informal document INF.30 (fifty-third session).</p>	
<p>ST/SG/AC.10/C.3/2018/110</p>	<p>The extensive experience in the technology of Sodium-Nickel Chloride (Na-NiCl₂) secondary</p>	

<p>5 September 2018</p> <p>Sodium-Nickel chloride (Na-NiCl₂)</p> <p>Transmitted by the expert from Switzerland</p> <p>PDF</p>	<p>batteries in electric and hybrid vehicles, in which the safety requirements are more restrictive than those of stationary storage applications, depicts batteries based in the Na-NiCl₂ technology as a non-dangerous goods for transport. The risk of fire is negligible because of the intrinsic safety of the cell chemical reactions, related to the sodium-tetrachloroaluminate (NaAlCl₄) content into the cell, which acts as a secondary electrolyte (the primary electrolyte being the ceramic β"-alumina electrolyte as common for Na-Beta batteries).</p>	
<p>ST/SG/AC.10/C.3/2018/111</p> <p>7 September 2018</p> <p>Informal working group on fibre-reinforced plastics (FRP) portable tanks</p> <p>Transmitted by the chairman of the informal working group</p> <p>PDF</p>	<p>The Sub-Committee is invited to note that the working group on FRP portable tanks will be meeting in parallel to the plenary session on Monday and Tuesday 26-27 November in Room IV (Palais des Nations) to continue work on developing requirements for FRP portable tanks.</p>	
<p>ST/SG/AC.10/C.3/2018/112</p> <p>5 September 2018</p> <p>Portable tanks with expired inspection dates and those switched from general cargo to dangerous goods content</p> <p>Transmitted by the expert from the United Kingdom</p> <p>PDF</p>	<p>At the fifty-third session of the Sub-Committee, the expert from the United Kingdom submitted informal document INF.15 which asked the Sub-Committee to consider and discuss if the Model Regulations should specify the conditions under which portable tanks can continue to be used for the transport of dangerous goods when they have missed the date for their periodic inspection or are switching from general cargo to dangerous goods. The United Kingdom expert believed that this is not addressed in the Model Regulations currently and that the lack of specific text dealing with this issue was leading to confusion amongst inspection bodies and users.</p>	
<p>ST/SG/AC.10/C.3/2018/113</p> <p>5 September 2018</p>	<p>The expert from the United Kingdom first raised this issue at the fifty-second session of the Sub-Committee through document ST/SG/AC.10/C3/2017/48 which was referred to</p>	

<p>Amendments to the list of items assigned to LP101</p> <p>Transmitted by the expert from the United Kingdom</p> <p>PDF</p>	<p>the Working Group on Explosives. During the discussions in the working group, the expert from Canada expressed some concerns that could not immediately be resolved and the United Kingdom document was withdrawn at that time.</p>	
<p>ST/SG/AC.10/C.3/2018/114</p> <p>7 September 2018</p> <p>Reassigning packing instructions PP67 and L1 to a new special provision</p> <p>Transmitted by the expert from the United Kingdom*</p> <p>PDF</p>	<p>During the discussions on ST/SG/AC.10/C.3/2017/48 a subsidiary issue emerged relating to the understanding and application of PP67 and its companion L1 found in large packaging. The idea considered at the fifty-third session of the Sub-Committee was to move the text from the packing instructions to the additional requirements for explosive packaging in Chapter 4.1</p>	
<p>ST/SG/AC.10/C.3/2018/115</p> <p>7 September 2018</p> <p>Dimensions of the lithium battery mark</p> <p>Transmitted by The Rechargeable Battery Association (PRBA) and the Advanced Rechargeable & Lithium Batteries Association* (RECHARGE)</p> <p>PDF</p>	<p>During the fifty-third session of the Sub-Committee, PRBA and RECHARGE explained in informal document INF. 41 the unique challenges the industry has incurred with complying with the dimensions of the lithium battery mark found in 5.2.1.9.2 of the Model Regulations. These challenges can often raise questions on whether companies are fully compliant with the marking requirement. To help mitigate these issues, PRBA and RECHARGE are proposing a change to the dimensions of the lithium battery mark that would make them consistent with the limited quantity and excepted quantity marks.</p>	
<p>ST/SG/AC.10/C.3/2018/116 ST/SG/AC.10/C.4/2018/24</p> <p>7 September 2018</p> <p>Tests for oxidizing liquids (Test O.2) and oxidizing solids (Tests O.1 and O.3)</p>	<p>During the period 2014-2016 an extensive work was carried out for the replacement of Whatman CF11 cellulose by means of Round Robin Testing (RRT) and other studies with the participation of the following 14 laboratories from 8 different countries: BASF SE (Germany), BAM Division 2.2 (Germany), BAYER Technology Services (Germany), Canadian Explosives</p>	

<p>Consequential amendments of cellulose replacement to test descriptions</p> <p>Transmitted by the expert from France</p> <p>PDF</p>	<p>Research Laboratory - CERL (Canada), CONSILAB (Germany), Health and Safety Laboratory - HSL (United Kingdom), INERIS (France), Institute of Industrial Organic Chemistry - IPO (Poland), LONZA (USA), Shanghai Research Institute of Chemical Industry - SRICI (China), SIEMENS AG (Germany), SOLVAY (Germany), TNO (The Netherlands) and YARA Technology Centre (Norway).</p>	
<p>ST/SG/AC.10/C.3/2018/117</p> <p>5 September 2018</p> <p>PDF – French Only</p>		
<p>ST/SG/AC.10/C.3/2018/118</p> <p>12 September 2018</p> <p>PDF - French Only</p>		
INFORMAL PAPERS		
UN Paper	Summary	Industry Segment
<p>UN/SCETDG/54/INF.3</p> <p>4 September 2018</p> <p>Use of the Manual of Tests and Criteria in the context of the GHS</p> <p>Transmitted by the Chairman of the Working Group on Explosives of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) on behalf of the Working Group</p> <p>PDF</p>	<p>ST/SG/AC.10/C.3/2018/61–ST/SG/AC.10/C.4/2018/15 contains the list of amendments to sections 20 to 28 of the Manual of Tests and Criteria, agreed by the Working Group on Explosives and recommended for adoption by the TDG and GHS subcommittees.</p>	

<p>UN/SCETDG/54/INF.4 UN/SCEGHS/36/INF.4</p> <p>4 September 2018</p> <p>Use of the Manual of Tests and Criteria in the context of GHS</p> <p>Transmitted by the Chairman of the Working Group on Explosives of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) on behalf of the Working Group</p> <p>PDF</p>	<p>ST/SG/AC.10/C.3/2018/62–ST/SG/AC.10/C.4/2018/16 contains the list of amendments to Part III of the Manual of Tests and Criteria, agreed by the Working Group on Explosives and recommended for adoption by the TDG and GHS sub-committees.</p>	
<p>UN/SCETDG/54/INF.5</p> <p>27 August 2018</p> <p>Data sheet for UN 2383 – Dipropylamine</p> <p>Transmitted by the expert from the Germany</p> <p>PDF</p>	<p>This document provides the data sheet for document ST/SG/AC.10/C.3/2018/63</p>	
<p>UN/SCETDG/54/INF.6 UN/SCEGHS/36/INF.5</p> <p>7 September 2018</p> <p>Use of the Manual of Tests and Criteria in the context of the GHS</p> <p>Transmitted by the Chairman of the Working Group on Explosives of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG Sub-Committee) on behalf of the Working Group</p>	<p>ST/SG/AC.10/C.3/2018/88–ST/SG/AC.10/C.4/2018/26 contains the list of amendments to section 28 of the Manual of Tests and Criteria to include the determination of the SAPT, recommended for adoption by the TDG and GHS sub-committees.</p>	

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<p>UN/SCETDG/54/INF.7</p> <p>5 September 2018</p> <p>Transport of barium carbonate as non-dangerous good</p> <p>Submitted by the expert from Spain</p> <p>PDF</p>	<p>Safety Data Sheet for barium carbonate (refer to document ST/SG/AC.10/C.3/2018/105)</p>	
<p>UN/SCETDG/54/INF.8</p> <p>5 September 2018</p> <p>Sodium-Nickel chloride (Na-NiCl₂)</p> <p>Transmitted by the expert from Switzerland</p> <p>PDF</p>		
<p>UN/SCETDG/54/INF.9</p> <p>13 September 2018</p> <p>Submitted by the expert from Spain</p> <p>PDF</p>	<p>In 2016 the Spanish expert brought forward to the Secretariat a series of inconsistencies in the Spanish names of the UN numbers in between the IMDG Code and the Model Regulations. The Secretariat systematized these differences in informal document INF.42 (forty-ninth session) organizing them into different groups. Spain has continued with this work, not only including into the scope of the study the Spanish versions of the Model Regulations and the IMDG Code, but also the ICAO Technical Instructions, ADR and RID. Spanish names of the UN numbers in these regulations are not always coincident</p>	
<p>UN/SCETDG/54/INF.10</p> <p>5 September 2018</p>		

<p>Informal working group on fibre-reinforced plastics (FRP) portable tanks (ST/SG/AC.10/C.3/2018/111): project plan timeline</p> <p>Transmitted by the chairman of the informal working group</p> <p>PDF</p>		
<p>UN/SCETDG/54/INF.11</p> <p>25 September 2018</p> <p>Fibre-reinforced plastics (FRP) tanks</p> <p>Transmitted by the expert from the Germany</p> <p>PDF</p>	<p>German experts have elaborated a contribution to the discussion within the informal working group on FRP tanks. The informal working group agreed to use the proposals in the Annexes of the proposal by the Russian Federation (ST/SG/AC.10/C.3/2017/40) as a basis for establishing the requirements to be met by FRP tanks. In revising the draft text, the requirement established by the informal working group to elaborate the new chapter 6.9 required for FRP tanks to complement section 6.7.2 was taken account of. The suitable format of the chapter (final, separate chapter 6.9 or additional provisions in chapter 6.9) should, however, be discussed again</p>	
<p>UN/SCETDG/54/INF.12</p> <p>13 September 2018</p> <p>Meeting of the working group on lithium battery classification</p> <p>Transmitted by the International Air Transport Association (IATA)</p> <p>PDF</p>	<p>At the fifty-third session it was agreed to hold a meeting of the working group on lithium battery classification following the fifty-fourth session of the Sub-Committee</p>	
<p>UN/SCETDG/54/INF.13</p> <p>12 October 2018</p>	<p>At the thirty-fifth session (July 2018), the GHS Sub-Committee noted and welcomed the progress achieved by the informal</p>	

<p>Technical explosives classification and detailed criteria flowchart support for sub-category 2 of explosives in the GHS Chapter 2.1</p> <p>Transmitted by the United States of America, the Institute of Makers of Explosives (IME) and the Sporting Arms and Ammunition Manufacturer's Institute (SAAMI)</p> <p>PDF</p>	<p>correspondence group since the last session, through discussions at the Informal Correspondence group (ICG) meetings and parallel to the fifty-third session of the TDG Sub-Committee, jointly with the Working Group on Explosives (ST/SG/AC.10/C.4/70 paragraph 24).</p>	
<p>UN/SCETDG/54/INF.14</p> <p>12 October 2018</p> <p>Amendments to 7.1.5.4.5 provisionally adopted by the SubCommittee at its fifty-third session (ST/SG/AC.10/C.3/2018/65)</p> <p>Transmitted by the expert from the Netherlands</p> <p>PDF</p>	<p>During the 53rd session of the Sub-Committee, the expert from the Netherlands submitted document ST/SG/AC.10/C.3/2018/39 proposing amendments to 7.1.5.4.5 based on discussions carried out in the Working Party on the Transport of Dangerous Goods (WP.15) at its 103rd session. The proposal was provisionally adopted with minor amendments (see ST/SG/AC.10/C.3/2018/65) pending further review.</p>	
<p>UN/SCETDG/54/INF.15</p> <p>12 October 2018</p> <p>Differences between the English and French versions in 6.8.3.3.c) ii) and 6.7.3.5.5 of the Model Regulations</p> <p>Transmitted by the expert from Belgium</p> <p>PDF</p>	<p>In Belgium several issues have arisen concerning differences between the French and English version of the modal regulations on the transport of dangerous goods. Some of these differences trace back to text that was originally in the Model Regulations and may lead to a differing implementation of the regulations on the transport of dangerous goods. As such, we hereby propose to amend the model regulations such that these differences are eliminated. 2</p>	

<p>UN/SCETDG/54/INF.16</p> <p>22 October 2018</p> <p>Toxicity through oral ingestion and/or dermal contact</p> <p>Note by the secretariat</p> <p>PDF</p>	<p>At its fifty-third session, the Sub-Committee considered document ST/SG/AC.10/C.3/2018/38 from Canada proposing editorial corrections to the English and French text of the Model Regulations. The outcome of the discussion is reflected in paragraphs 49 and 50 of the report of that session (document ST/SG/AC.10/C.3/106)</p>	
<p>UN/SCETDG/54/INF.17</p> <p>24 October 2018</p> <p>Provisional timetable</p> <p>Note by the secretariat</p> <p>PDF</p>	<p>The provisional timetable for the plenary session, established taking account of the documents already submitted at the time of writing, is as follows. Please note that the time initially assigned for consideration of each agenda item may vary during the session to take account of documents submitted after that date</p>	
<p>UN/SCETDG/54/INF.18</p> <p>29 October 2018</p> <p>Editorial corrections and amendments to the Model Regulations</p> <p>Transmitted by the expert from Germany</p> <p>PDF</p>	<p>After submitting document 2018/73, the expert from Germany identified further editorial corrections to the 20th revised edition of the UN Model Regulations. The following corrections should be added to the editorial corrections as presented in document ST/SG/AC.10/C.3/2018/90:</p>	
<p>UN/SCETDG/54/INF.19 UN/SCEGHS/36/INF.11</p> <p>29 October 2018</p> <p>Alignment of the wording of “shall be considered” and “shall be categorised” in the Manual of Tests and Criteria in the context of the GHS</p>	<p>In the context of addressing explosives (class 1), which have a high mechanical or thermal sensitivity and therefore need to be excluded from class 1 for the purpose of transport regulations, the UN Manual of Tests and Criteria (UN-MTC) expressed this by the following wording (e. g. section 13.1 of the UN-MTC Rev. 6):</p>	

<p>Transmitted by the expert from Germany</p> <p>PDF</p>		
<p>UN/SCETDG/54/INF.20</p> <p>30 October 2018</p> <p>Dimensions of the lithium battery mark</p> <p>Transmitted by the Medical Device Battery Transport Council (MDBTC)</p> <p>PDF</p>	<p>The MDBTC supports the proposal submitted by PRBA and RECHARGE in ST/SG/AC.10/C.3/2018/115, which proposes to amend the dimensions of the lithium battery mark found in 5.2.1.9.2 of the Model Regulations. However, the MDBTC has some comments suggestions to improve the proposal based on discussions with our members</p>	