

**38th Session of the Sub-Committee of Experts
on the Transport of Dangerous Goods (UNSCOE TDG)
November 29 – December 7, 2010
Summary of Proposals and Results**

Note: This is the fourth of the TDG Sub-Committee's four meetings held during the 2009-2010 biennium. The purpose of this meeting is to consider amendments to the UN Recommendations on the Transport of Dangerous Goods, also known as the "UN Model Regulations". The amendments agreed to by the Sub-Committee during this biennium will be submitted for final consideration and approval at the 5th session of the UN Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals to be held December 10, 2010. Once approved by the Committee, the amendments will be incorporated into the 17th Revised Edition of the UN Model Regulations and will be considered for adoption within the IMDG Code and ICAO TI from January 1, 2013.

*UN papers may be obtained from the UN Transport Division website at: <http://www.unece.org/trans/main/dgdb/dgsubc/c32010.html>
Visit the website of the Office of Hazardous Materials Safety's Director of International Standards at:
<http://www.phmsa.dot.gov/hazmat/regs/international> for pertinent information relative to the office's international activities including: Schedules of International Meetings, The UN Committee and Sub-Committee of Experts on the Transport of Dangerous Goods, the International Atomic Energy Agency, the International Maritime Organization's Dangerous Goods, Solid Cargoes and Containers (DSC) Sub-Committee, the International Civil Aviation Organization (ICAO) Dangerous Goods Panel, the European Agreements Concerning the International Carriage of Dangerous Goods by Road (ADR) and Rail (RID), and the North American Free Trade Agreement (NAFTA) Hazardous Materials Land Transportation Standards Sub-Committee.*

Paper #	Paper Title/Summary	Draft US Positions and Comments
DOCUMENTS RELATED TO CLASS 2 (Gases)		
44	<p><i>Aerosols (UN 1950) – Maximum volume of the liquid phase at 50°C (FEA)</i></p> <p>In this paper, FEA notes that the Aerosol Dispensers Directive 75/324/EEC (Directive 2008/47/EC – Annex § 2.4) includes a revised and more stringent requirement for the maximum volume of the liquid phase at 50°C which must not exceed 90% of the net capacity of the aerosol container, instead of 95% in the previous version. FEA proposes to amend the applicable Model Regulations text accordingly:</p> <p style="padding-left: 40px;">6.2.4.2.1.1 The temperature of the water bath and the duration of the test shall be such that the internal pressure reaches that which would be reached at 55°C (50°C if the liquid phase does</p>	<p>We are not opposed in principle to considering modification of the existing volumetric limit; however we are concerned that no justification has been provided to the Sub-Committee other than an amendment to a regional standard. Other regions have had no problems in practice with the current 95% limit.</p> <p>Result: FEA withdrew the proposal and indicated it would re-submit at a future session with more specific data to justify the change in limit.</p>

	not exceed 90% of the capacity of the aerosol dispenser at 50°C).	
45	<p><i>4.1.4.1 P200 Materials compatibility requirements for gases in pressure receptacles (ISO)</i></p> <p>In this paper, ISO provides a report of its working group which met from 11 - 12 March 2010 and completed its review of the compatibility of gases with metals. As a result of its review, ISO recommends the square brackets should be deleted from the list concerning P200 in Annex I of the meeting report (see page 23 of ST/SG/AC.10/C.3/72). In addition, ISO recommends that UN 1911 Diborane should be removed from the list since it was deemed by the ISO experts to be compatible with aluminium alloy, based on 50 years operational experience of safely transporting this gas in aluminium alloy pressure receptacles.</p> <p>ISO recommends the following amendments to Packing Instruction P200 (note that the assignment of special provision a will prohibit the use of aluminum cylinders):</p> <p>In Table 2, for UN Nos. 1008, 1076, 1741, 1859, 2189 and 2418, insert "a" in column "Special packing provisions".</p> <p>In Table 3: For UN No. 1052, insert "a" in column "Special packing provisions".</p> <p>In addition, based on a technical review, ISO recommends not to include a specific warning about chlorinated hydrocarbon solvents in ISO 11114-1 on the basis that the changes of wording adopted at the thirty-sixth session and the current application of special packing provision "a" in P200 ensure that the risks of a repeat incident are already addressed satisfactorily in the Model Regulations.</p>	<p>We supported this proposal. We have reviewed the materials identified and agree that they should be prohibited from transport in aluminum cylinders. We will continue to monitor revisions to the ISO 11114-1 standard to ensure that our concerns are adequately addressed specifically in regard to trichloroethylene.</p> <p>Result: The proposal was adopted with minor amendments.</p>

<p><i>Chapter 6.2: Approval of acetylene cylinders (Germany)</i></p> <p>In this paper, Germany proposes to amend text relative to the approval of acetylene cylinders as follows:</p> <p>"6.2.1.1.9 Additional requirements for the construction of pressure receptacles for acetylene</p> <p>Pressure receptacles for UN 1001 acetylene dissolved, and UN 3374 acetylene, solvent free, shall be filled with a porous material, uniformly distributed, of a type approved that conforms to the requirements and testing specified by the competent authority and which:</p> <p>(a) Is compatible with the pressure receptacle and does not form harmful or dangerous compounds either with acetylene or with the solvent in case of UN 1001; and</p> <p>(b) Is capable of preventing the spread of decomposition of the acetylene in the material.</p> <p>In the case of UN 1001, the solvent shall be compatible with the pressure receptacles."</p>	<p>We are not convinced this amendment is appropriate. The text is intended to ensure that pressure receptacles are of a type that conforms to the requirements and testing specified by the competent authority. We do not agree with Germany that the intent is that the competent authority only approve the porous material of the cylinder as Germany indicates in their rationale for the proposed change.</p> <p>Result: The proposal was not adopted. Germany indicated they may re-address the issue at a future session.</p>
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DOCUMENTS OTHER THAN THOSE RELATED TO CLASS 2

<p>46</p>	<p><i>Classification of Class 3 viscous liquids in packing group III (IATA)</i></p> <p>In this paper, IATA proposes a number of amendments to the provisions for viscous flammable liquids such as paints, enamels, lacquers, varnishes, adhesives and polishes with a flash point of less than 23°C that may be assigned to packing group III in accordance with the provisions of 2.3.2.2 and 2.3.2.3 in the Model Regulations and 32.3.1.7 and 32.4.2 in the Manual of Tests and Criteria.</p>	<p>We agreed in principle that the related text in the Model Regulations and the Test Manual should be consistent. However we believe further discussion is needed to ensure the proposed revisions are appropriate.</p> <p>Result: There was general support for aligning the text of the UN Model Regulations and the text of the UN Manual of Tests and Criteria. However it was recognized that some issues would need to be further discussed (i.e. the volumetric limit applicable to the exception). It was agreed to establish a correspondence working group to address the issue comprehensively.</p>
<p>47</p>	<p><i>Use of term “conveyance” in Special Provisions 289 and 356 (IATA)</i></p> <p>In this paper, IATA proposes to revise special provisions 289 and 356 as follows to eliminate the term “conveyance” and instead state “motor vehicles, boats, aircraft, etc.”:</p> <p>289 Air bag inflators, air bag modules or seat-belt pretensioners installed in conveyances <u>motor vehicles, boats, aircraft, etc.</u> or in completed conveyance components such as steering columns, door panels, seats etc. are not subject to these Regulations.</p> <p>356 Metal hydride storage system(s) installed in conveyances <u>motor vehicles, boats, aircraft, etc.</u> or in completed conveyance components for or fuel tanks intended to be installed in conveyances <u>motor vehicles, boats, aircraft, etc.</u> shall be approved by the competent authority before acceptance for transport. The transport document shall include an indication that the package was approved by the appropriate national authority or a copy of the approval shall accompany each consignment.</p>	<p>We note that this provision when originally included referred only to “vehicles” and the term “conveyances” was later employed to ensure that airbags installed in other means of transportation such as boats and aircraft would be eligible for the exception. We are not opposed to considering whether the wording could be clarified, however we question whether the use of the term “etc.” is appropriate.</p> <p>Result: During discussions, we provided alternative text which was agreed to by the Sub-Committee. The proposal was adopted with minor amendments.</p>

<p>48</p>	<p><i>Technical (pathogen) name requirements for Category A infectious substances (IATA)</i></p> <p>In this paper, IATA proposes an editorial revision to Special Provision 318 as follows:</p> <p>For the purposes of documentation, the proper shipping name shall be supplemented with the technical name (see 3.1.2.8). <u>Notwithstanding the requirements of special provision 274,</u> technical names need not be shown on the package. When the infectious substances to be transported are unknown, but suspected of meeting the criteria for inclusion in category A and assignment to UN 2814 or UN 2900, the words “suspected category A infectious substance” shall be shown, in parentheses, following the proper shipping name on the transport document, but not on the outer packagings.</p>	<p>We are not opposed to this editorial amendment, however we question the need to make an amendment and believe the Sub-Committee should consider whether the current text is more user-friendly.</p> <p>Result: There was virtually no support for the amendment. The proposal was withdrawn.</p>
<p>49</p>	<p>Special provision 272 (Germany)</p> <p>In this paper, Germany notes that special provision 272 is assigned to UN 3319 and UN 3344 but that the reference to UN 0143 does not apply to UN 3344. The corresponding entry for UN 3344 is UN 0150. Therefore Germany proposes to add a reference to UN 0150 to SP 272 as follows:</p> <p style="padding-left: 40px;">“272 This substance shall not be transported under the provisions of class 4.1 unless specially authorized by the competent authority (see UN 0143 or <u>UN 0150</u>).”</p>	<p>We support this proposal.</p> <p>Result: The proposal was adopted with minor editorial amendments.</p>

<p>50</p>	<p><i>Draft amendments to the Recommendations on the Transport of Dangerous Goods (Secretariat)</i> This document contains the draft amendments to the sixteenth revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.16) and to the fifth revision of the Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.5), adopted by the Sub-Committee of Experts at its thirty-fifth, thirty-sixth and thirty-seventh sessions.</p>	<p>There are no proposals in this paper. The draft amendments included in this report, along with any agreed to at the present session, will be incorporated within the 17th Revised Edition of the UN Model regulations and the 5th Revised Edition of the UN Test Manual once approved by the full TDG/GHS Committee scheduled to meet December 10, 2010. The amendments will in turn be considered within international modal, regional, and national regulations effective January 1, 2015. Ensuring accuracy of the amendments related to past decisions is extremely important and we solicit input on any discrepancies that may exist within the document.</p> <p>Result: The Sub-Committee reviewed and approved the draft amendments. The amendments, together with those agreed at the present session, were later endorsed by the full TDG/GHS Committee following the TDG and GHS SCOE meetings.</p>
<p>51</p>	<p><i>Division 1.4S Cartridges for tools proper shipping name (SAAMI)</i></p> <p>At its previous session, the Sub-Committee provisionally adopted an amendment to the PSN for UN 0014. In this paper, SAAMI proposes an amendment to the provisionally adopted name as shown below. The amendment proposed takes into account comments received by SAAMI from CEN/TC212’s Project Group “Fixing Cartridges” The Group supported the action of the Sub-Committee, but requested that the proper shipping name be modified to “Cartridges, blank, for industrial use”.</p> <p>CARTRIDGES FOR WEAPONS, BLANK or CARTRIDGES, SMALL ARMS, BLANK for CARTRIDGES FOR TOOLS, BLANK or <u>CARTRIDGES, BLANK, FOR INDUSTRIAL USE †</u></p>	<p>We are not opposed to this amendment and consider it editorial in nature. We would like to hear the views of other Sub-Committee members.</p> <p>Result: A number of delegates favored the description previously adopted on a provisional basis on the basis that employed the term “for tools” rather than “for industrial use”. The proposal was withdrawn, and the description provisionally adopted was approved when the Sub-Committee considered the draft amendments in 2010/50.</p>

<p>52</p>	<p><i>Permissive use of the environmentally hazardous substance mark (DGAC)</i></p> <p>In this paper, DGAC proposes to add the following sentence at the end of special provision 331 and 5.2.1.6.1 regarding application of the environmentally hazardous substance mark:</p> <p style="padding-left: 40px;">“The mark may also be applied to packages containing other substances transported under UN 3077 or UN 3082 based on a designation by the competent authority of the country of origin, transit or destination or that are wastes covered under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (see 2.9.2).”.</p>	<p>This proposal was withdrawn.</p>
<p>53</p>	<p><i>Organic peroxides - new formulations to be listed in 2.5.3.2.4 and IBC520 (ICCA)</i></p> <p>In this paper ICCA notes that several new peroxides and formulations have become commercially available and proposes to update the 2.5.3.2.4 and packing instruction IBC520 accordingly. A list of new products, proposed classification, the accompanying competent authority approval references and a summary of the supporting test data are given in the annex to this document.</p>	<p>We have reviewed the data provided with respect to these new formulations and support this proposal.</p> <p>Result: The proposal was adopted with minor amendments.</p>
<p>54</p>	<p><i>Portable tank provisions for chemicals under pressure (ICCA)</i></p> <p>At its previous session, the Sub-Committee adopted provisions for the classification and packing of “chemicals under pressure” on the basis of a related proposal by ICCA (see ST/SG/AC.10/C.3/2010/38). In this paper, ICCA proposes to authorize chemicals under pressure described under the newly created descriptions to be transported in T50 portable tanks. A number of amendments to T50, and to Part 4 and Part 6 of the Model Regulations, are proposed.</p>	<p>We support this proposal in principle. We may offer some amendments for consideration by the SC based on a technical review of the proposed provisions.</p> <p>Result: The proposal was adopted.</p>

<p>55</p>	<p><i>Use of flexible IBCs for calcium peroxide (UN 1457) (ICCA)</i> In this paper, ICCA proposes to authorize the transport of calcium peroxide in flexible IBCs, noting that a number of similarly classed substances are also authorized in such packagings. The paper also references a number of additional substances that should also be considered for such an authorization if the SC is in agreement.</p>	<p>We support this proposal. We believe that flexible IBCs with a water resistant liner provide an acceptable level of safety and in fact a higher level of safety than</p> <p>Result: The proposal was put to a vote – because the result was a tie, the proposal was not carried. ICCA indicated they may submit a future proposal with additional justification.</p>
<p>56</p>	<p><i>Chapter 3.3, amendment to special provision 296 for UN 2990 and UN 3072 (life-saving appliances, self-inflating and not self-inflating) (UK/EIGA)</i> In this paper, the UK/EIGA propose to amend special provision 296 of Chapter 3.3 by adding a new final paragraph for UN 2990 and UN 3072 as follows: “Life-saving appliances packed in strong rigid outer packagings with a total maximum gross mass of 30 kg, containing no dangerous goods other than Division 2.2 compressed or liquefied gases with no subsidiary risk in receptacles with a capacity not exceeding 120 ml, installed solely for the purpose of the activation of the appliance, are not subject to these Regulations.”.</p>	<p>We support this proposal in principle. We note that the HMR, for other than air transport, currently exempts life-saving appliances containing CO2 cylinders with a maximum capacity of 100 cm³ when packaged in rigid outer packagings with a maximum gross mass of 40 kg.</p> <p>Result: The proposal was adopted with an amendment to authorize a maximum gross mass of 40 kg (consistent with the existing provisions of the HMR and IMDG Code).</p>
<p>57</p>	<p><i>Amendment to the Guiding Principles (UK)</i> In this paper the UK proposes to add text to the Guiding Principles regarding “de minimis” quantities of dangerous goods.</p>	<p>We support this proposal in principle and note much of the text was taken from the original US proposal.</p> <p>Result: The proposal was adopted.</p>

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Possible use of flexible bulk containers (FBCs) for the transport of dangerous goods (IDGCA)
In this paper, IDGCA proposes to add a new packaging authorization to permit the use of large flexible containers for a number of PG III solid materials. Specific design and testing provisions are proposed as well a new “BK3” designation to address the use of such bulk containers.

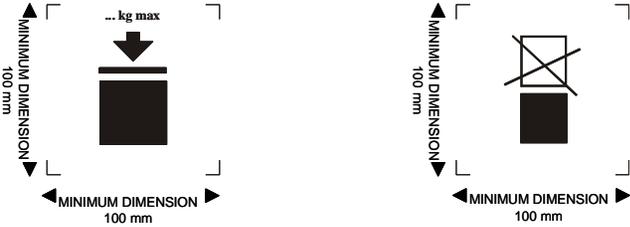
We have worked closely with IDGCA on this issue and support this proposal. We have authorized the use of similar packagings via approval. The design, construction and testing provisions provide a level of safety equivalent to that of other currently authorized packagings for such materials. In addition, the materials authorized are limited appropriately to lower hazard solid materials.

At the previous session, this proposal was considered by a lunchtime working group chaired by the Vice Chairman (USA). During the working group meeting, a number of delegates expressed concerns about the use of large FBCs in road transport and the practicality of testing such large packages. A second informal discussion also led by the Vice Chairman was held to chart a way forward to address the issue. It was agreed that further intercessional discussions should be held taking into account the following key areas of concern:

- Types of materials authorized;
- Appropriateness of the specification (BK3) proposed with respect to design type elements (such as banding etc.) to ensure the integrity of the package;
- Testing provisions; and
- Operational considerations (if any).

The Vice Chairman volunteered to lead a correspondence group that would consolidate comments and work with ICCA to make appropriate revisions to the proposal. The results of this effort are documented in related proposal 2010/82 (see below).

Result: The WG considered the proposal in detail during a number of sessions led by the Vice-Chairman. After significant deliberations a number of amendments were agreed to that satisfied the majority of delegates’ concerns. The proposal, as amended by the working group, was adopted.

<p>82</p>	<p><i>Comments on ST/SG/AC.10/C.3/2010/39 - Possible use of flexible bulk containers (FBCs) for the transport of dangerous goods (Chairman of the CWG)</i></p> <p>This paper documents the comments received in relation to IDGCA's proposal to authorize the use of flexible bulk containers for certain PG III solids. The comments are categorized to facilitate discussion by the working group that will meet during the present (38th) session.</p>	<p>There are no proposals in this paper. It is anticipated that IDGCA will provide additional information to address the comments documented in this paper.</p> <p>Result: See discussions on 2010/58</p>
<p>59</p>	<p><i>Stacking symbol (Sweden)</i></p> <p>In this paper, Sweden proposes to clarify the minimum dimensions of the stacking symbol for IBCs and large packagings by adding additional text to the markings as follows:</p> 	<p>We support this proposal. We agree the intent is for the pictogram to be sized proportionally within a 100x100 mm area as shown. This paper is related to a submission by the UK in 2010/62 proposing to more comprehensively clarify the dimensions of labels and markings.</p> <p>Result: The proposal was adopted.</p>
<p>62</p>	<p><i>Description of the dimensions and shape of labels or marks etc (UK)</i></p> <p>In this paper, the UK proposes that the Sub-Committee consider clarifying the dimensions of certain labels and markings required by the Model Regulations.</p>	<p>We note that the UK is not asking for a decision to be taken at this meeting. We are supportive of clarifying the dimensions and ensuring that the current requirements are as clear as possible.</p> <p>Result: It was agreed to continue discussions on this issue in the upcoming biennium.</p>
<p>60</p>	<p><i>Changes to screening test for substances that may have explosive properties (ICCA)</i></p> <p>This paper proposes that during the next biennium the Sub-Committee consider exclusion of adiabatic calorimetric techniques from the methods to determine the thermal decomposition energy of substances and mixtures. Possible amendments to subsection 20.3.3.3 of the Manual of Tests and Criteria are included in the proposal.</p>	<p>This paper is under technical review. We anticipate this paper will be deferred to the Explosives Working Group which will meet at the following session.</p> <p>Result: The paper was deferred to the following session for consideration by the explosives working group.</p>

<p>61</p>	<p><i>Used health care products (Switzerland)</i> In this paper Switzerland proposes to adopt provisions for used health care devices within the Model Regulations. Specifically, they propose to adopt a definition and exception as follows:</p> <p>Add the following definition in 2.6.3.1: <i>“Used health care product means a medical, diagnostic, or research device or piece of equipment, or a personal care product used by consumers, medical professionals, or pharmaceutical providers that does not meet the definition of a diagnostic specimen, biological product, or regulated medical waste. It can be contaminated with potentially infectious body fluids or materials, and is not decontaminated or disinfected to remove or mitigate the infectious hazard prior to transportation.”</i></p> <p>6. Add the following paragraph in 2.6.3.2.3 (Exemptions): <i>“2.6.3.2.3.x Used health care products are exempted from these Regulations if they have been drained of free liquid and have been decontaminated or disinfected to remove or mitigate the infectious hazard prior to transportation. Small diagnostic devices for single-patient use (e.g. devices for monitoring the blood sugar) need not to be treated by a disinfectant if they are completely free of liquid and show no visible contamination on their outsides.”</i></p>	<p>We support considering appropriate provisions for the international transport of used health care products. However, the provisions proposed by Switzerland are not as comprehensive as those contained in the U.S. HMR. In particular, the U.S. provisions provide additional packaging and hazard communication requirements as a basis for regulatory relief that is not included in this provision. We are also concerned with the proposal to exempt small diagnostic devices on the basis that they show “no visible contamination on their outsides”. We believe further discussion is warranted and that a more cautious approach should be considered, but would like to see the issue resolved this session if possible.</p> <p>Result: The proposal was considered by an informal working group which considered the issue over the course of several meetings. Based on these discussions, the text was amended to provide for more specific hazard communication and appropriate packaging provisions taking into account our concerns as well as those of other delegates. The text, as amended by the working group, was adopted.</p>
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Used health care products (COSTHA)

In this paper, COSTHA supports in principle the proposal by Switzerland to include provisions for the transport of used health care products in the UN Model Regulations. However COSTHA proposes that an approach more similar to that currently taken in the U.S. HMR be considered – one that includes a marking such as the BIOHAZARD marking recognized in the HMR.

As stated in relation to 2010/61, we support further discussion on this issue. We support this proposal in principle since it is more consistent with the provisions of the HMR. Specifically, this proposal includes enhanced packaging requirements (3 layers), and the BIOHAZARD marking to alert handlers of the presence of potentially infectious materials.

Result: As a result of discussions by the informal working group established to address this topic, an approach satisfactory to all concerned parties was agreed to. See discussions on 2010/61.

63

Comments on toxic subsidiary risk for mercury (IATA)
In this paper IATA notes that adding a toxic subsidiary risk to Mercury will have substantive repercussions on the air transport of mercury. Specifically, stowage and segregation provisions will be affected and it will no longer be possible to load mercury in the same compartment of an aircraft which contain animals or substances marked as or known to be foodstuffs, feeds or other edible substances unless it is loaded in a separate, non-adjacent unit load device. In addition IATA notes that in at least one State operators have filed variations prohibiting transport of toxic materials aboard passenger aircraft.

We share IATA's concerns and are not convinced that the addition of a toxic subsidiary risk to Mercury is warranted. We expressed reservations when Germany proposed to add the 6.1 subsidiary risk at the SC's previous (37th) session. We note that the EPA-managed NAC/AEGL Committee in which PHMSA participates, has developed proposed Acute Exposure Guideline Levels (AEGLs) for Mercury vapor (CAS Reg. No. 7439-97-6). The Committee reviewed the paper cited in the German proposal (F Livardjani et al., Toxicology 66 (1991) 289-295). Two groups of 32 Wistar rats inhaled (whole-body) analytically-determined concentrations of 26.7 mg/m³ (3.25 ppm) of mercury vapor for one hour or 27.0 mg/m³ (3.29 ppm) of mercury vapor for two hours. No rats exposed to 26.7 mg/m³ of mercury vapor for one hour died and no clinical signs were evident. Rats exposed to 27.0 mg/m³ of mercury vapor for two hours showed dyspnea and 20 rats died within five days of exposure. Based on these results, a LC50 value for a one hour exposure could not be calculated and an LC50 value for a two hour exposure could only be estimated. Therefore in addition to concerns with the substantive repercussions on transport of Mercury, whose properties are well known, we have concerns with the data used to validate the German proposal. We plan to oppose this proposal on these grounds.

Result: We submitted an additional informal document (INF 44) to address this issue. Although the Sub-Committee recognized the conflicting data presented by Germany, there was not sufficient support to overturn the previous decision that a subsidiary Division 6.1 risk should be applied. Recognizing a need to ensure the concerns of the air transport sector were addressed, the Sub-Committee agreed to add a new entry with a unique UN# for mercury contained in equipment (see INFs 15 and 51 <http://www.unece.org/trans/main/dgdb/dgsubc/c3inf38.html>).

<p>64</p>	<p><i>Proposal for a new UN number and special provision for a new type of confetti-shooters (Germany)</i></p> <p>In this paper, Germany proposes to add a new description for “Articles containing pressurized receptacles”, in Division 2.2, to the Dangerous Goods List. The description would address a new type of confetti shooter employing a pressurized receptacle to expel the confetti. A special provision is proposed which among other requirements would require subjection to a fire test 6(c) (paper mistakenly references 6(b)) and a package test similar to the 6(d) test.</p>	<p>We do not support this proposal as drafted. We have a number of technical concerns with the proposed provisions. In addition, we are not convinced a new description is necessary. For example there is an existing Division 2.2 description for “receptacles small, containing gas” which may be appropriate. Lastly, we do not believe it is appropriate to include a new description with criteria that when applied fully deregulate the articles to the extent that the proper shipping name is never used.</p> <p>Result: A number of delegations expressed reservations about deregulating what was perceived as a significant volume of gas at high pressure. Germany withdrew the proposal and indicated they may re-address the issue at a future session.</p>
<p>66</p>	<p><i>Combination packagings – additional outer packagings (Germany)</i></p> <p>In this paper Germany proposes to allow non-removable head drums as outer packagings of combination packagings in a number of packing instructions as shown below:</p> <p><i>Whenever the codes 1A2, 1B2, 1N2, 1H2, 3A2, 3B2 or 3H2 are indicated for drums or jerricans permitted as outer packagings of combination packagings in the packing instructions of Chapter 4.1, insert the codes 1A1, 1B1, 1N1, 1H1, 3A1, 3B1 or 3H1 as appropriate and delete the words “removable head” if relevant (applies to packing instructions P001, P002, P010, P110(a), P111, P112(a), P112(b), P112(c), P113, P114(a), P114(b), P115, P116, P130, P131, P134, P135, P136, P137, P138, P139, P140, P141, P142, P143, P144, P400, P403, P404, P410, P501, P502, P503, P504, P520, P600, P601, P602, P800, P802 and P804).</i></p>	<p>We are not opposed to this proposal. In the rare instances where such drums would be used as outer packagings, they would still need to be certified as prepared for transport in accordance with all applicable testing requirements.</p> <p>Result: The proposal was adopted.</p>

67	<p><i>Dimethyl disulphide (UN 2381): subsidiary risk 6.1 (Germany)</i></p> <p>In this paper, Germany proposes to add a subsidiary risk of Division 6.1 to Dimethyl disulphide (UN 2381). A datasheet with supporting evidence is provided.</p>	<p>We have reviewed the datasheet provided as well as other published data and support this proposal.</p> <p>Result: The proposal was adopted.</p>
68	<p><i>Prevention of dangerous electrostatic discharge (Germany)</i></p> <p>In this paper, Germany notes currently the Model Regulations contain text relative to prevention of dangerous electrostatic discharge but only in relation to IBCs. Germany proposes to make this requirement more broadly applicable and move it to a new 4.1.1.15 applicable to all packagings including IBCs as follows: <i>“4.1.1.15 When packagings, including IBCs are used for the transport of liquids with a flash point of 60 °C (closed-cup) or lower, or for powders liable to dust explosion, measures shall be taken to prevent a dangerous electrostatic discharge.”</i></p>	<p>We are not opposed to this proposal in principle but question whether the words “measures shall be taken” should be supplemented with the words “when necessary” to ensure that it is understood that certain packagings by their design will ensure such discharge is not possible and as such no additional measures are necessary.</p> <p>Result: The majority of delegations did not support the proposed amendment. The paper was withdrawn.</p>
69 and 70	<p><i>Classification of chemically unstable gases and gas mixtures (Germany)</i></p> <p>In this paper, Germany proposes to add text to the GHS to address chemically unstable gases. No new hazard class is proposed but rather such gases would be considered as a subset of flammable gases. The amendments and proposed test method will also be considered for inclusion within the UN Manual of Tests and Criteria.</p> <p><i>Determination of chemical instability of gases (Germany on behalf of the IWG)</i></p> <p>In this paper Germany provides draft amendments to the UN Manual of Tests and Criteria to address unstable gases.</p>	<p>This proposal presents the culmination of several years of work to address the issue of unstable gases. We have reviewed the specific text proposed and believe the test method is appropriate. We note that the test method and hazard communication relate to supply and use, and do not affect the transport regulations.</p> <p>Result: The proposal was adopted by the GHS Sub-Committee.</p> <p>This paper relates to 2010/69 and provides the specific test method for inclusion in the UN Manual of Tests and Criteria.</p> <p>Result: We supported the adoption of the test method with minor amendments. Although we initially had concerns as to whether the test manual was an appropriate location for this method, after discussions with our GHS interagency working group, we agreed to support the proposal. The proposal was adopted.</p>

<p>71</p>	<p><i>Alignment with GHS, corrosivity criteria in Chapter 2.8 (Netherlands)</i></p> <p>In this paper, the Netherlands notes the ongoing work with respect to the alignment of the UN Model Regulations with the GHS as it pertains to the classification of corrosive materials. The Netherlands proposes to include the subject as a work item for the 2011-2012 biennium.</p>	<p>This issue has been the subject of extensive discussion during the current biennium. We believe the current TDG Regulations are fundamentally aligned with the GHS with respect to the classification of corrosive materials; however we are not opposed to considering additional references to the GHS that would reduce testing without compromising classification accuracy and transport safety. We plan to continue to collaborate with the Netherlands and other interested parties in this regard.</p> <p>Result: The Sub-Committee agreed to continue this work based on terms of reference developed by the Secretariat and approved by the TDG and GHS Sub-Committee (see 2010/85).</p>
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<p>85</p>	<p><i>Draft terms of reference for the work on corrosivity criteria (Secretariat)</i></p> <p>In this paper submitted to both the TDG and GHS Sub-Committees, the Secretariat proposes terms of reference for continued work with respect to corrosivity criteria in the GHS and TDG Regulations as follows:</p> <p><i>“The TDG and GHS sub-committees are invited to consider the following draft terms of reference for the work on corrosivity criteria:</i></p> <p><i>(a) Verify the definition of “skin destruction” as mentioned in the Model Regulations on the transport of dangerous goods complemented with references to the Organisation for the Economic Co-operation and Development (OECD) test guidelines. If the definition is not aligned with paragraph 3.2.2.4.1 in Chapter 3.2 of the GHS, propose appropriate improvements;</i></p> <p><i>(b) Identify the discrepancies between assignment to sub-categories 1A, 1B and 1C, based on testing and the one based on theoretical approaches (bridging principles, mixtures calculations, pH...);</i></p> <p><i>(c) Identify differences in assignment to categories in lists provided by different regulations and guidance documents for the most common substances. Analyse the reasons for these differences and use these results for the work under paragraphs 1, 2 and 4.</i></p> <p><i>(d) Check the way OECD guidelines are referenced to and their relevance.”</i></p>	<p>We support identifying terms of reference for continued work on this issue. Regarding the terms proposed by the Secretariat, are concerned with item (c). The extensive review proposed would be resource intensive and is not necessary in order to address the more fundamental issue of aligning the criteria to the greatest extent practical.</p> <p>Result: The terms of reference were adopted [...need to obtain final terms of reference agreed to at GHS]</p>
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<p>72</p>	<p><i>Testing of large lithium batteries and lithium battery assemblies (COSTHA)</i></p> <p>In this paper, COSTHA proposes the acceleration in the T4 test for large format batteries (>12 kg gross mass) be reduced from 50 gn to 9 gn and adjusting the duration accordingly. COSTHA notes that this value is in alignment with currently accepted standards for aircraft cargo restraint systems (where cargo would be stored), and is as much as 7.5 times higher than the maximum accelerations observed during normal transport conditions. The revised 38.3.4.4.2 Test Procedure, second paragraph would read:</p> <p style="padding-left: 40px;">However, large cells and large batteries shall be subjected to a half-sine of peak acceleration of 50 9 gn and pulse duration of [11] milliseconds. Each cell or battery is subjected to three shocks in the positive direction followed by three shocks in the negative direction of each of three mutually perpendicular mounting positions of the cell for a total of 18 shocks.</p>	<p>We support the effort to develop appropriate testing for large format batteries. We've actively participated in the work of the UN lithium battery working group to address the testing provisions and we understand the challenges the current requirements place on larger batteries. During the last several meetings of the lithium battery working group, a number of differing peak acceleration values for large cells and batteries have been discussed and varying data presented to support different values. We believe more evaluation is necessary substantiate the conclusion that 9 gn is the most appropriate value. We believe additional consideration and a more thorough review of applicable standards are warranted.</p> <p>Result: The proposal was not adopted. It was agreed the issue should be further considered in the upcoming biennium.</p>
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<p>74</p>	<p><i>Packagings for large lithium batteries (PRBA)</i> In this paper, PRBA proposes to amend Special Provision 310 as shown below:</p> <p>310 The testing requirements in Chapter 38.3 of the <i>Manual of Tests and Criteria</i> do not apply to production runs consisting of not more than 100 lithium <u>ion and lithium metal</u> cells and batteries <u>annually</u>, or to preproduction prototype cells and batteries. <u>The following packaging requirements shall be met for prototype and low production cells and batteries and equipment containing such cells and batteries; when these prototypes are transported for testing, if:</u></p> <p>(a) <u>Except as provided in paragraph (c), the cells, and batteries and equipment shall</u> are be transported in an outer packaging that is a metal, plastics or plywood drum or a metal, plastics or wooden box and that meets the criteria for Packing Group I packagings; and</p> <p>(b) <u>Except as provided in paragraph (c), each cell and battery is</u> shall be individually packed in an inner packaging inside an outer packaging. <u>Cells, batteries and equipment shall be</u> and is surrounded by cushioning material that is non-combustible, and non-conductive <u>and protected from short circuits.</u></p> <p>(c) <u>Cells, batteries and battery assemblies, or equipment containing such cells, batteries or battery assemblies with a mass of 12 kg or greater and having a strong, impact resistant outer casing, may be packed in strong outer packagings. The cells, batteries and battery assemblies or equipment shall be protected against short circuits.</u></p>	<p>We support the addition of text clarifying that the production run limit of not more than 100 cells and batteries is an annual limit. We are not convinced that the authorization for large batteries with strong impact resistant outer casings to be packed in strong outer packagings is appropriate. Smaller prototype batteries currently require a PG I performance level packaging and as noted in discussions on paper 75, a specification large packaging is under consideration for non-prototype batteries. Therefore it appears inconsistent to require only a strong outer packaging for large prototype batteries.</p> <p>Result: The proposal was not adopted.</p>
<p>75</p>	<p><i>Packagings for large lithium batteries (PRBA)</i> In this paper, PRBA proposes to add a large packing (LP) instruction for lithium ion batteries (UN 3480) and lithium metal batteries (UN 3090) because the existing Packing Instruction 903 does not authorize the use of large packagings in accordance with Chapter 6.6.</p>	<p>We support this proposal in principle. However the proposed large packaging instruction should be amended to authorize the appropriate large packaging specification and references to other packagings should be removed.</p>

	<p><i>Transport requirements for Electric Double Layer Capacitors (Ultracapacitors) (KFI)</i></p> <p>In this paper, KFI proposes an amendment to a provisionally adopted paragraph adopted at the previous session in relation to the venting of such capacitors:</p> <p>“(d) Capacitors shall be designed and constructed to safely relieve pressure that may build up in use, through a vent or a weak point in the capacitor casing. <u>By design, only a small quantity of liquid is released upon venting and the liquid is safely contained by packaging or equipment in which a capacitor is installed;</u> and”.</p>	<p>We are not opposed to this amendment in principle however we believe some redrafting of the text is necessary to ensure the language is phrased as a requirement and not as a statement.</p> <p>Result: The proposal was adopted with minor amendments.</p>
77	<p><i>Guidance for the security in transport of radioactive material (IAEA)</i></p> <p>In this paper IAEA proposes a number of amendments relative to the provisions of Chapter 1.4 (Security) pertaining to the transport of radioactive material.</p>	<p>We support the proposal in principle as it is consistent with US security actions/requirements of the Nuclear Regulatory Commission, TSA and DOT. We have some concerns with the proposed text of 1.4.2.1 in particular the text “Additional measures apply to Class 7 except when they don’t in view of relative authorities”. It is unclear from this text which authorities are authorized to make such a determination and identify specific lists of nuclides of concern. In addition we believe that the additional requirements of 1.4.2.1.1; 1.4.2.1.2; and 1.4.2.1.3 should be applied to the nuclides of concern identified in 1.4.4.1.3 and that requirements be included within or following 1.4.4.2.2.3.</p> <p>Result: The proposals in the paper were discussed by during a lunchtime working group. Many of the proposed amendments were deemed unnecessary. It was however agreed to add a new 1.4.1.4 to exempt UN 2908, 2909, 2910 and 2911 from the requirements of Chapter 1.4 under specified conditions.</p>

<p>78</p>	<p><i>Provisions for uranium hexafluoride with less than 0.1 kg per package (IAEA)</i> In this paper IAEA proposes to add a new entry to the Dangerous Goods List for uranium hexafluoride with less than 0.1 kg per package.</p>	<p>We support this proposal. It is consistent with proposed IAEA regulations (TS-R-1, 20XX edition). Regarding 2.7.2.4.1.1 (e) – we believe the words “are designed to” should be deleted. This is consistent with (b) through (d) and clarifies that the regulations apply to the actual contents of the package are rather than the package design limits.</p> <p>Result: The proposal was adopted with minor amendments.</p>
<p>79</p>	<p><i>"De minimis" quantities of dangerous goods (Norway)</i> In this paper, Norway proposes to amend the recently adopted provisions for “de minimis quantities” of dangerous goods by increasing the net quantity of material authorized per inner packaging from 1 ml to 3 ml for liquids and 1 g to 3 g for solids. Norway bases this proposal on the fact that the net per package quantities are 30 ml/30 g as opposed to 1 ml/1 g for materials assigned to E4 and E5.</p> <p>3.5.1.4 Excepted quantities of dangerous goods assigned to codes E1, E2, E4 and E5 are not subject to these Regulations provided that:</p> <p>(a) The maximum net quantity of material per inner packaging is limited to <u>3 ml for liquids and gases and 3 g for solids assigned to code E1 or E2 and 1 ml for liquids and gases and 1 g for solids assigned to code E4 or E5;</u></p>	<p>We do not support expanding the provisions for de minimis quantities at this time. The tentatively adopted provision is consistent with an existing provision in the HMR. It is based on professional technical judgment and US experience. The existing provision provides a pragmatic solution to a practical problem and we are not in favor of expanding this regulatory relief without supporting technical justification. We are open to evaluating any future proposed amendments based on their risk-based technical merits.</p> <p>Result: The proposal was withdrawn.</p>

<p>80</p>	<p><i>Quality management programme for the manufacturing of lithium batteries (France)</i></p> <p>In this paper France proposes to introduce quality management assurance requirements that would apply to manufacturers of lithium batteries. France proposes that the new language could be included either in Special Provision 230 or in Chapter 2.9 (Class 9 Classification). If the latter option is chosen, France proposes to move existing text from Special provision 230(a) to this newly created section. A number of consequential amendments are also considered.</p>	<p>We support this proposal. A strong quality assurance program is essential to the manufacturing process and a key element in reducing transportation risk. We are open to considering which approach proposed by France presents the more user-friendly solution in terms of placement of the proposed text. We are also interested in discussing ways in which compliance with such a quality assurance program can be demonstrated by the manufacturer to downstream shippers, distributors, and other relevant parties in the transportation chain.</p> <p>Result: The proposal was adopted with amendments.</p>
<p>83</p>	<p><i>Updating of references to ISO standards (Secretariat)</i></p> <p>In this paper references ISO's previous proposal to update the references to ISO standards 10156:1996 and 10156-2:2005 once the amended versions were available. Now that they have become available, the Secretariat proposes the following consequential amendments:</p> <p style="padding-left: 40px;">Amend Chapter 2.2 of the UN Model Regulations as follows:</p> <ul style="list-style-type: none"> • In 2.2.2.1 (a) (ii) and 2.2.3 (a) and (d), replace "ISO 10156:1996" with "ISO 10156:2010" • In the note under 2.2.2.1 (b), replace "ISO 10156:1996 or 10156-2:2005" with "ISO 10156:2010" • In 2.2.3 (d) delete "and ISO 10156-2:2005". 	<p>We support the proposal to include the updated reference to the 10156 standard. We participated in the discussions surrounding the consolidation of the 10156 and 10156-2 standards which included incorporation of a revised definition for oxidizing gases.</p> <p>Result: The proposal was adopted with minor amendments.</p>

<p>84</p>	<p><i>Provisions for packages containing carbon dioxide, solid (dry ice) as a refrigerant</i></p> <p>In this paper IATA notes that at its previous session the Sub-Committee adopted a new section 5.5.3 addressing packages and cargo transport units containing substances used for cooling or conditioning purposes and which pose an asphyxiation risk (see informal document INF.85). Text adopted based on informal document INF.85 also resulted in an additional paragraph 1.1.1.7, consequential changes to a number of packing instructions and the deletion of special provision 297. IATA expresses concern that text as adopted means that such packages would not bear the standard marking that would normally apply to a package containing dangerous goods i.e. the UN number and proper shipping name. In addition based on the text in 5.5.3, these packages would not be required to bear the hazard label that would normally be applied, e.g. for dry ice a Class 9 hazard label.</p>	<p>We supported amendments that ensure that the hazard communication elements on packages containing dangerous goods under coolant/conditioning continue to be displayed as currently required.</p> <p>Result: An amended proposal was considered (see INF13) and the proposal was adopted.</p>
<p>86 INF 7</p>	<p><i>Hazard communication for supply and use of aerosols (FEA/UK)</i></p> <p>In this paper the UK and FEA propose amendments to the GHS text related to aerosols. The proposal would ensure the GHS text treats aerosols separately from other gases under pressure. This would allow the corresponding provisions to differ from those of gases for and ensure for example that Division 2.2 aerosols are not labeled with a non-flammable gas label.</p>	<p>The proposals in this paper are to amend the GHS text and do not directly affect the transport requirements/UN Model Regulations. We have worked jointly with CPSC, OSHA, and EPA to review this proposal and plan to support its adoption by the GHS SC.</p> <p>Result: The proposal was adopted by the GHS SC.</p>

<p>87</p>	<p>Chapter 3.4 – Dangerous goods packed in limited quantities (Secretariat) In this paper the Secretariat provides revisions to Chapter 3.4 that modifies the Chapter editorially with the goal of ensuring the provisions are self-contained. In addition amendments are made to clarify the application to various modes of transport, and that would take account of the decisions taken for articles of division 1.4, compatibility group S (informal document INF.83 and ST/SG/AC.10/C.3/74, paras 16-18 and 109).</p>	<p>We supported this proposal.</p> <p>Result: The proposal was adopted.</p>
<p>88</p>	<p><i>Establishment of a Joint group (IAEA)</i> In this paper IAEA proposes establishing a joint group involving the secretariat of the United Nations Economic Commission for Europe (UNECE), the secretariat of the IAEA, the Sub-Committee and the IAEA Transport Safety Standards Committee (TRANSSEC). The group would facilitate the preparation of proposals to TRANSSEC and the TDG SC to help in ensuring a more coordinated process for continued alignment of the relevant IAEA and TDG requirements.</p>	<p>We support this effort in principle as it would facilitate the review by both IAEA and TDG of issues of mutual interest.</p> <p>Result: It was agreed that a specialized working group similar to the existing working group on Class 1 may be beneficial to both IAEA and the TDG SC. IAEA agreed to raise the issue at the “International Conference on the Safe and Secure Transport of Radioactive Material” that will take place on 17 October 2011 and report back to the TDG SC.</p>
<p>89</p>	<p><i>Assignment of SP 274 (ICCA)</i> In this paper ICCA proposes to add text to the guiding principles regarding the applicability of SP 274.</p>	<p>We supported including appropriate guidance in the Guiding Principles.</p> <p>Result: The proposal was adopted.</p>