

Attachment E – Working paper consultation summary

List of stakeholders who provided submissions

1. Toll Group - Express Parcels
2. Haylock Maritime
3. Mainfreight
4. Nationwide Training
5. SafeWork SA
6. Department of Transport and Main Roads (TMR) Qld
7. ORP Consultancy
8. Accord Australasia
9. RG Chemicals
10. Chemistry Australia
11. Qld Rail
12. Haztech Environmental
13. Australia New Zealand Industrial Gass Association (ANZIGA)
14. Justice Tasmania (WorkSafe Tas)
15. SafeWork NSW
16. Gas Energy Australia (GEA)
17. WorkSafe Victoria
18. WamCorp?
19. Department of Transport and Main Roads (TMR) Qld (rail)
20. Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) WA
21. Fire and Rescue Victoria
22. NSW EPA
23. Nutrien Ag Solutions
24. Schuetz Australia
25. Orica
26. Allnex
27. CropLife Australia
28. Brenntag Australia
29. Department of Fire and Emergency Services (DFES) WA
30. The NZ Chemical Industry Association
31. Wesfarmers Chemicals, Energy & Fertilisers (WesCEF)
32. Department of Transport (DoT) WA
33. Normec Australia
34. Truck Industry Council
35. Ian Brightwell
36. Rajesh Garg
37. Australian Explosives Industry Safety Group (AEISG)
38. Dyno Nobel Asa Pacific
39. Riskom
40. Smith's Training Services
41. Australian Battery Recycling Industry (ABRI)
42. Firequip (WA)
43. Stephen Shi
44. Enviro Alliance Pty Ltd
45. Fire Stryker
46. John Weller
47. Rosenhak
48. AFAC (National Council for Fire and Emergency Service)
49. Resources Safety and Health Queensland (RSHQ)
50. Frontier Safety
51. Transport for New South Wales (TfNSW)



Attachment E – Working paper consultation summary

Summary of submissions

Working Group Paper #1 - Part 2 – Classification

	Question	Summary of responses	Response and actions taken
Q1	<p>Q1. Provision 2.2.61.1.14 of the draft code states: 2.2.61.1.14 Substances, solutions and mixtures, with the exception of substances and preparations used as pesticides, which are not classified as acute toxic category 1, 2 or 3 according to Regulation (EC) No 1272/2008, may be considered as substances not belonging to class 6.1. Three following options were proposed:</p> <p>Option 1: Retain provision 2.2.61.1.14 and replace the reference to ‘Regulation (EC) No 1272/2008’ with a reference to the GHS. All Australian jurisdictions use the GHS for classification of hazardous chemicals but may reference different versions. Work is ongoing at the UN level to align dangerous goods classification criteria and GHS classification criteria, but some differences may remain. If this option is adopted, we would like to ensure any unintended consequences are identified and addressed.</p> <p>Option 2: Retain provision 2.2.61.1.14 and replace the reference to ‘Regulation (EC) No 1272/2008’ with a reference to a suitable Australian inventory or regulation. The NTC is unaware at this time of a publicly available Australian inventory of substances mapped to GHS classification categories.</p> <p>Option 3: Delete provision 2.2.61.1.14 from the draft code. Deleting the provision would not result in any reduction from the current code but may result in potential benefits not being realised.</p>	<p>Option 1 strongly supported, with only one stakeholder preferring option 3.</p> <p>One stakeholder raised the following concerns:</p> <ul style="list-style-type: none"> In theory, a reference to GHS is appealing as an authoritative classification scheme for toxic substances. In practice, however, the benefits of referring to GHS are unlikely to be realised where Australian jurisdictions currently do, or may in future, adopt different versions of the GHS in regulation. Referring to GHS may in fact increase confusion, non-compliance and practical difficulties for regulators where a substance is classified as acutely toxic in one jurisdiction but not in another. Consistency across jurisdictions should be among the highest priorities in the review of the ADG Code. Further, it is not recommended that the ADG Code simply reference a specific version of the GHS in an attempt to resolve cross-border issues. Inconsistency between the version of GHS referred to in the ADG Code and Work Health and Safety (WHS) regulation would further erode confidence, clarity and compliance. 	<p>Provision 2.2.61.1.14 has been retained, in line with Option 1. To address the concerns raised, the reference to GHS acute toxic categories has been expanded to include categories 1 to 4. If a duty holder chooses to take this path, it will be much more conservative.</p> <p>To avoid the issue of different jurisdictions referencing different versions of the GHS. GHS has been defined in 1.2.1 of the Code as ‘Globally.Harmonized.System.of.Classification.and.Labelling.of.Chemicals means the ninth revised edition of the United Nations publication bearing this title (ST/SG/AC.10/30/Rev.9)’.</p> <p>2.2.61.1.14 has been reworded as follows: Substances, solutions and mixtures, with the exception of substances and preparations used as pesticides, which are not classified as acute toxic category 1, 2, 3 or 4 according to the GHS, may be considered as substances not belonging to class 6.1.</p>
Q2	<p>Are you aware of any instances where a substance, solution or mixture which is not classified as acute toxic category 1, 2 or 3 according to the GHS would meet the classification criteria for dangerous goods class 6.1?</p>	<p>No examples were identified.</p>	<p>Extending 2.2.61.1.14 to include GHS acute toxic category 4 will ensure all substances meeting the classification criteria of Class 6.1 are captured.</p>
Q3	<p>Are you aware of a publicly accessible Australian inventory of substances classified as acute toxic category 1, 2 or 3 according to the GHS?</p>	<p>No Australian list was identified</p>	<p>Reference to GHS only.</p>
Q4	<p>Three following options were provided for classification of environmentally hazardous substances that remained unclassified after following all of the classification steps in 2.2.9.1.10.</p> <p>Option 1 Retain provision 2.2.9.1.10.5 and replace the reference to ‘Regulation (EC) No 1272/2008’ with a reference to the GHS.</p> <p>Option 2 Retain provision 2.2.9.1.10.5 and replace the reference to ‘Regulation (EC) No 1272/2008’ with a reference to a suitable Australian inventory or regulation.</p> <p>Option 3 Delete provision 2.2.9.1.10.5 from the draft code.</p>	<p>Option 1 was preferred by the majority of stakeholders.</p>	<p>After further investigation, it was identified that the decision flows in the GHS and ADG Code are identical. No benefit would be gained by referencing the GHS. The proposed provision 2.2.9.1.10.5 has been deleted</p>
Q5	<p>Are you aware of a publicly accessible Australian inventory of substances classified as Aquatic Acute 1, Aquatic Chronic 1 or Aquatic Chronic 2?</p>	<p>No Australian inventory could be identified</p>	<p>Refer to response for Q4</p>
Q6	<p>What benefits do you think including the assignment of classification codes in the Code might have?</p>	<ul style="list-style-type: none"> They can be used to outline several important chemical and physical properties. 	<p>Clear benefits were identified from the inclusion of classification codes, particularly information on the physical and chemical characteristics. Will need to provide guidance to prevent confusion.</p>



Attachment E – Working paper consultation summary

	Question	Summary of responses	Response and actions taken
		<ul style="list-style-type: none"> • Would save a lot of cross referencing with SDS and other product information documents. • Provide a mechanism for identifying additional hazards of a dangerous good. Identification and communication of those hazards will assist everyone else in the supply chain. • A simple code that provides information in circumstances where quick access to information is required. • A simple code that provides information in circumstances where quick access to information is required. • Will benefit users of the ADG code that are not familiar with the chemicals of the listed UN numbers proposed as a quick reference to identifying the high level chemical property and hazard interpretation. • There may be benefits, such as an increased awareness of the risks associated with each of the individual sub-groups as well as the classification with the use of these classification codes. It should enable an informed user to determine the state of the gas as well as the main dangers associated with it. However, the potential downside is confusion if this change is not communicated effectively. • UN numbers must take precedence and the addition of classification codes should not add confusion in the selection of the appropriate UN code for transport. • Classification Codes are part of Explosives Regulations and the Australian Explosives Code (AEC). Essentially the classification Code is a statement of the class, Hazard division, and compatibility group to which an explosive substance or article has been assigned to. The proposal to include a similar concept for dangerous goods of class 2 to 9 provides for a harmonised and additional category that assists the duty holder to instantly recognise the chemical characteristic of particular dangerous goods. That is, is it an organic or inorganic, corrosive, flammable substance, liquid, solid, or gaseous etc.? Whilst its acknowledged that it will be a significant change and will take time for adjustment, overall it will be extremely beneficial for both duty holders, regulators and emergency services personnel. 	
Q7	What supporting guidance or information should be provided to assist industry with the familiarisation of classification codes?	<ul style="list-style-type: none"> • Additional guidance should include the Classification Codes Dangerous Goods List, Prohibited substances, use of Special Provisions etc. • Include a number of examples of common usage chemicals to be included in any familiarisation documentation. • Pocket guide, wall charts, summary sheet in ADG Code. • A simple outline document that shows users the benefits of the simpler information codes. 	Once the contents of the Code are settled, the NTC will work with stakeholders to develop guidance aimed at different duty holders. This will be done prior to commencement of the Code. All guidance will sit outside the Code so that it can be easily updated and refined as necessary.



Attachment E – Working paper consultation summary

	Question	Summary of responses	Response and actions taken
		<ul style="list-style-type: none"> • If classification codes are implemented, supporting guidance material will be useful. In general, hands-on guidance is usually the most effective form of supporting guidance. This could include training and case studies based on relevant examples or a wide variety of high-quality reference materials. However, as we are unclear on the impact of proposed classification codes, we require further information before we can determine the best ways to support industry transition. • An explanatory note with a brief intro, the code list and examples where the classification code is useful; examples drawn from various industries and applications. • To support the use of Classification Codes several worked examples would be useful. Give some proper shipping names, show how to cross reference in the codes and list the sort of information that can be obtained. Not sure if it is our job or not but some breakdown of chemical nomenclature may be worth considering. Some transport teams can find naming a little daunting and confusing, which doesn't help when sorting out load arrangements. 	
Q8	Are there any impacts (with regard to classification) you believe have not been identified?	<ul style="list-style-type: none"> • No. The review has been very thorough, from a regulator viewpoint. I am interested to hear the views of industry. • I can only foresee, some training and guidance concerns, this will depend on the quality and quantity of guidance material provided by the NTC. • The only 'impact' I can see currently is that the set-up is a change to the existing Code and people don't like change. But that is not a valid reason not to change. • We are unclear on the impact of the proposed classification codes and therefore unable to comment on the potential impacts. Our member companies have reached out to their international counterparts, including those in the EU to better understand the use of classification codes, but it appears that how classification codes are used is not common knowledge - at least not in our specific industries. • We must adopt as much of the ADR as we do not have a specific reason to reject or amend in order to make full benefit of the review process. • Classification codes need not be used for any other purpose that is not separately discussed and assessed. If we don't have them, that discussion cannot even happen. I see significant benefits from their availability and use, as a potential alternative to the IMDG detail for expanding segregation requirements. <p>Long term ADG Code users might discover they have made incorrect decisions in the past and they will need to correct their previous errors.</p>	



Attachment E – Working paper consultation summary

	Question	Summary of responses	Response and actions taken
		<p>Draft “Part 2 Classification” is based on the structure and layout used in the ADR. Whilst the basic information is essentially the same, its arrangement flows better making it easier for a duty holder to identify and apply classification, especially the new classification codes, in a manner that leads to better compliance and safety outcomes.</p>	
		<ol style="list-style-type: none"> 1. The replacement of Class 2 divisions with classification codes is a material difference to classification, even if the criteria have not changed. 2. In relation to Section 4.2.1 of the consultation paper about aerosols, our experience is not that SDS for aerosols display a classification of only "Class 2". Special Provision 63 of the ADG Code requires that an aerosol be classified in Divisions 2.1, 2.2 or 2.3 according to the hazards of its contents, and approved WHS codes of practice require that the Class and/or Division be stated in Section 14 of a SDS. A classification of Division 2.1, 2.2 or 2.3 in Section 14 of a SDS provides an instantly recognisable and understandable indication of the hazard to all readers. 3. There is no requirement in Australia that classification codes be listed in Section 14 of a SDS, nor is that concept or term used in approved WHS codes of practice for preparing a SDS. Adopting classification codes in lieu of divisions in Class 2 therefore may encourage and legitimise the practice of stating only "Class 2" in a SDS, reducing the amount of information available to SDS readers and increasing non-compliance in transport and workplaces. 4. The presence of multiple entries in the dangerous goods list does not assist duty holders who are not undertaking classification, nor does the presence of lower case descriptive text which is not considered part of the proper shipping name and often does not appear in SDS, labels or placards. 5. Although dangerous goods transport and workplace hazardous chemicals are governed by separate legislation, duty holders of all kinds depend on the two schemes working together harmoniously and predictably. A change to the ADG Code such as the removal of divisions in Class 2 in favour of ADR classification codes will have consequences for workplace concepts such as safety data sheets that could negatively effect transporters, workplaces, and systems that integrate shared activities. There may be other examples where a removal of divisions in Class 2 leads to a reduction in hazard communication downstream of the ADG Code. 	<ol style="list-style-type: none"> 1. Class 2 divisions, e.g. 2.1, 2.2 and 2.3 are identified in column 5 of the dangerous goods list. To help make this clearer, the column heading has been supplemented with the text (primary and secondary hazards). 2. See the response to 1 above. The SDS would still be expected to display the correct primary and secondary hazard(s). 3. See the responses to 1 and 2 above. 4. The additional entries for UN 1950 help duty holders identify the subsidiary hazards, which in turn helps with the application of correct segregation. It also helps duty holders in the application of LQ as not all aerosols have the same LQ volume. There are a great number of entries in the dangerous goods list that have lower case descriptive text following the proper shipping name. The descriptive text provides additional information and helps assignment to the correct UN entry. In many instances, this impacts the assignment of special provisions, packing instructions, LQ and EQ volumes. For example UN 1790 HYDROFLUORIC ACID, where the correct transport conditions are dependent on the percentage of hydrogen fluoride contained. This is differentiated in the dangerous goods list only by the lower case descriptive text.

Working Group Paper #2 – Dangerous goods list – UN entries

	Question	Key Responses	Response and actions taken
--	----------	---------------	----------------------------



Attachment E – Working paper consultation summary

Q1	Are you aware of an industry code of practice or other guidance document, for the safe transport of hay, straw or bhusa?	No known guidance for transport of hay, other than CFA guidance on preventing haystack fires	
Q2	Do you support the proposal to deregulate the transport of UN 1327 (hay, straw or bhusa) by road or rail?	Full support from all stakeholders who responded.	UN 1327 marked as 'NOT SUBJECT TO THIS CODE'
Q3	Do you support making UN 1845 (carbon dioxide, solid (Dry ice) when transported as cargo, subject only to the provisions of 5.5.3? If no, please provide your reasons	All but one submission supported the proposed changes. Discussion with the stakeholder that did not support the changes identified that they had misread the proposed changes. Once the proposed change was clarified, they supported the proposal.	The proposed amendments have been retained as drafted.
Q4	Are you aware of UN 1845 CARBON DIOXIDE, SOLID (Dry ice), being transported by sea as cargo from the Australian mainland?	It's believed that UN 1845 CARBON DIOXIDE, SOLID (Dry ice) is regularly transported to Tasmania and New Zealand.	
Q5	Do you support the proposal to reference the Australian Cold Chain Guidelines 2017 in 5.5.3.3.3?	Many stakeholders responded 'yes' to this question. Others questioned what value the Guidelines would provide. <ul style="list-style-type: none"> The Australian Cold Chain Guidelines do not appear to give advice on the control of the hazards of dry ice as coolant during transport but more on how to ensure there is no spoilage of food. The need for this type of advice in the ADG Code is questioned. The purpose of the Australian Cold Chain Guidelines is not clear in terms of supporting safe transport. The guideline is for the prevention of food spoilage through the supply chain. 	The proposal to reference the Australian Cold Chain Guidelines 2017 in 5.5.3.3.3 has not been carried forward.
Q6	Substances not accepted for transport are contained in the draft Part 2 of the code, making Appendix A of the current code redundant. Appendix A is extremely outdated. It contains terms and references that are no longer used. However, duty holders may find it helpful to have a collective list of all prohibited substances. If Appendix A is carried forward to the new code, it will require a substantial review. The following three options for Appendix A were proposed: Option 1: Do not include Appendix A in the revised code. Option 2: Include Appendix A in the revised code but replace the contents with a consolidated list of substances from 2.2.x.2. Option 3: Include Appendix A in the revised code. Replace the contents with a consolidated list of substances from 2.2.x.2, expanded to include relevant substances from the current list in Appendix A. Substances retained from the current list will need to be mapped to an item in 2.2.x.2.	<ul style="list-style-type: none"> Option 3, as we still require a section for the MAI as there is a question asking if Ammonium chlorate has been classified too dangerous to transport. I am unaware that CAP will remove this moving forward. I agree information is outdated and needs simplifying, however a list of products not meeting the standard of UN approval until dilution etc. for varying stakeholders is necessary. Appendix A is also referenced in Schedule 1 of the Dangerous Goods (storage and Handling of non-explosives) Regulations (WA) Option 3 (in the first instance). To decide about whether or not Appendix A is required, we need understand what gaps (if any) there are between 2.2.x.2 of the ADR and the current appendix A. Option 1; do not include. Duplication of information makes it harder to control changes for future updates seeing you have to update the info twice. The information is readily available in 2.2.x.2. Option 1 – Appendix A is outdated and contains terms and references that are no longer used. Even if Appendix A was updated as per the suggestions proposed in options 2 and 3, it would still result in duplication with other sections of the ADG code. Option 3 appears the most comprehensive and may be most acceptable to those concerned about losing information from the current ADG code. For ease of maintenance, entries retained from the current Appendix A and not in the ADR should be identified. 	The proposed way forward is to retain the listed prohibited substances in 2.2.x.2 and supplement these with Appendix A. Appendix A will be reworked to list the entries in 2.2.x.2 first followed by the existing list in Appendix A.



Attachment E – Working paper consultation summary

		<ul style="list-style-type: none"> • Option 1 as this is a direct approach to provide clarification, provides the greatest level of transparency to stakeholders and avoids the need to cross reference within the code to support compliance requirements. • Option 3, on the condition that entries are not removed from Appendix A without evidence that the substance is not "too dangerous to be transported". The high hazard associated with these substances requires that none are removed from Appendix A without evidence and consultation. Lack of evidence about a substance should not be taken as reason to allow a currently prohibited substance to be transported on public roads. • Adding entries from Appendix A into 2.2.x.2 chapters is supported in principle but may be a challenging task as these substances are not classified and a single substance may present hazards from multiple classes. A reference to Appendix A in 2.2.x.2 chapters may suffice. • Explosives and Work Health and Safety (WHS) legislation both rely heavily on the ADG Code term "goods too dangerous to be transported". The term should be retained in the ADG Code due to the extensive time, financial, administrative and legislative costs that would be incurred if the term is removed from the ADG Code. It is likely that both government and non-government stakeholders around Australia will face similar difficulties. • Option 3 as this is both a comprehensive listing and integrated into the dangerous goods list, ensuring that a duty holder only need to consult one listing leading to better compliance. 	
Q7	<p>Are you aware of any potential impacts of prohibiting these 14 UN Numbers? (UN Nos. 0020, 0021, 1798, 2186, 2249, 2421, 2455, 3097, 3100, 3121, 3127, 3133, 3137 and 3255)</p>	<p>We are supportive of providing clarity of the prohibition of the 14 UN numbers specified in section 3.2.2. We are not aware of any possible negative effects of this prohibition, and we believe that it will aid duty holders in recognizing that these particular UN numbers are not allowed for transportation.</p> <p>We are not aware of any places where these substances are likely to be manufactured or used, and note that we have not issued any packaging approvals or determinations for the purpose of Packing Instruction P101 (UN 0020 and UN 0021) or Packing Instruction P099 (UN 2186, UN 2249, UN 3097, UN 3100, UN 3121, UN 3127, UN 3133, UN 3137 and UN 3255).</p> <ol style="list-style-type: none"> 1. The ADG Code cannot prohibit small amounts of dangerous goods (for R &D) because of the exemption for small quantities. 2. It does not seem to be prudent to categorically prohibit generic N.O.S entries not knowing what exact chemicals are being prohibited; 3. Nitrogen Trioxide is better known as Dinitrogen Trioxide. Its B.P. is 3.5°C and stable as a liquid or solid of deep blue colour. It is a toxic substance and a powerful oxidizing 	<ol style="list-style-type: none"> 1. Provision 2.1.4 allows for the classification and transport of samples 2. We note that many of the substances captured by UN 3100, 3121, 3127, 3133, 3137, and 3255 are permitted if they meet the class 1 requirements (i.e. they are effectively explosives, but not classified as such), but are not using those entries. It makes sense to exclude them given the combinations of oxidising and other reactive properties. If they meet the definition of a class 1 material and can be transported, then they should be transported as explosives. The listed chemicals are all highly reactive chemicals. Given the nature of Australia's chemical industry, we doubt there would be much demand for them to be transported in Australia outside of the location where they are made (if they're used at all in Australia). In the particular case of methyl nitrite, if a chemical is listed in Appendix A, then it should be marked as prohibited in the DG list. 3. Merck Group (formerly Sigma Aldrich have confirmed that Dinitrogen Trioxide is listed in their system as 'not sold in



Attachment E – Working paper consultation summary

		agent, but it is used in the chemical industry. It is likely that the chemical industry manufactures it for its own use on site without transport? It is available on special request from Sigma Aldrich for R & D only so it used in research laboratories;	country' (Australia), this product has never been imported into Australia and there have been no sales of this product in Australia. Retained as per the consultation draft.
Q8	Do you support the prohibiting of these UN entries? If no, please provide your reasons.	The majority of responses supported these substances being prohibited. The following two objections were received. <ol style="list-style-type: none"> 1. UN2421 is no longer permitted for small consignments as there is no LQ permit. I am uncomfortable prohibiting materials that may be required for valid research, including the generic entries. If permitted with the approval of the Competent Authority, there would have to be an accepted process for assessment. Limiting package sizes to current small consignment volumes (Not suitable for UN2421) may be acceptable, assuming this concession is retained. 2. There is a lack of evidence provided for the prohibition of UN numbers 3100, 3121, 3127, 3133, 3137, and 3255 which have "Not Otherwise Specified" in their Proper Shipping Names. The consultation paper did not identify the types of substances that will be captured by these classifications or a reason to prohibit them apart from being classified that way in ADR. Prohibiting a broad category of substances without due consideration to affected candidates may lead to increased non-compliance and high costs to stakeholders and regulators forced to submit and assess a large number of exemption applications. 	<ol style="list-style-type: none"> 1. Please see response 1 to Q7 above. 2. Please see response 2 to Q7 above.
Q9	Do you support limiting the restrictions in 4.1.1.10 to metal IBCs only? Please provide your reasons	No. A decision to change longstanding ADG practice in this area should, at a minimum, be based on evidence about the justification for the reduction in regulation in ADR.	4.1.1.10 retained as per current ADG Code.
Q10	Do you have any evidence that the risk of transporting liquids with a vapor pressure at 50 °C more than 110 kPa in metal IBCs is greater than in nonmetal IBCs? Please provide your data	No evidence or rationale was provided.	4.1.1.10 retained as per current ADG Code.
Q11	Do you have information that would help us understand the significance of these temperatures for UN 3256 and UN 3257?	No information provided	Entries for UN 3256 and UN 3257 retained as per current ADG Code
Q12	Are there any impacts you believe have not been identified? Please provide details.	<ol style="list-style-type: none"> 1. Only impact I currently see, is from a training perspective, the number of columns now in the new Code, are appearing quite confusing for example truck drivers. I preferred the one page scenario in landscape up to edition 7.7, as this is much easier than trying to explain two pages of UN information. I understand the reasoning behind the extra columns, i.e breaking down Packaging, Large Packaging etc, but to the standard driver operator, this is quite overwhelming to view for someone not fully up to speed with Table 3.2.3. 2. Section 3.3 of the paper notes that SP 223 will be replaced by statements such as 2.2.3.1.7: 2.2.3.1.7 On the basis of the test procedures in accordance with 2.3.3.1 and 2.3.4, 	<ol style="list-style-type: none"> 1. A guidance document will be prepared to explain navigation of the dangerous goods list and columns. 2. The general provision for substances and mixtures that do not meet the classification criteria is contained in 2.1.3. Provision 2.2.3.1.7 relates specifically to Class 3. The wording has been simplified to: On the basis of the test procedures specified in 2.3.3.1 and 2.3.4 and the criteria set out in 2.3.3.1.7 it may also be determined that a solution or a mixture mentioned by name or containing a substance mentioned by name is not subject to the provisions for this Class. (see also 2.3.3.1)



Attachment E – Working paper consultation summary

		and the criteria set out in 2.2.3.1.1, it may also be determined whether the nature of a solution or a mixture mentioned by name or containing a substance mentioned by name is such that the solution or mixture is not subject to the provisions for this Class (see also 2.1.3). The meaning of this statement is not at all clear to either a lay or qualified reader. A more direct statement would benefit all readers, for example "A solution or mixture is not subject to the Code if it does not satisfy classification criteria, even when it is mentioned by name in the Dangerous Goods List".	
Q13	Do you have data that could help us calculate the costs savings from the deregulation of UN 1327?	No information was able to be provided	
	General comments	<ul style="list-style-type: none"> We would like to highlight our support for several changes proposed in the document. Firstly, we support the deletion of special provision SP 223 and its replacement with a statement in Part 2, to the effect that listed substances that do not meet the classification criteria are not classified as DG. Secondly, we are also supportive of the division of single UN number DGL entry to multiple lines, reflecting additional classification requirements as specified by special provisions SP 63, SP 204 and SP 303, and consequential deletion of the same special provisions. We are also supportive of the marking of UN numbers that are not subject to road and rail DG regulations as 'Not subject to the Code' in the Dangerous Goods List (DGL) for ease of identification. While these changes may increase the length and apparent complexity of the DGL, this is only because they make the current hidden complexity apparent. I support the proposed changes. I have concerns over the removal of SP 223 and there being no explicit link to this, however there are those who have made this mistake/assumption through not reading the Special Provision in any case. The proposal to clarify limited UN entries as "not subject to the Code" by deleting the references to Special Provisions against 14 UN and retaining "NOT SUBJECT TO THIS CODE" provides clarity and aligns with the principle that the ADG Code is primarily about Road and Rail. Duty holders are required depending on the mode of transport to consult and comply with the relevant Code e.g. ADG, IMDG, or ICAO. 	

Working Group Paper #3 – Approval of tanks, bulk containers and vehicles

NOTE: Responses to this paper were used in the development of papers #7 & #8. This paper was mainly information gathering for later work.

Question	Summary of responses	Response and actions taken
----------	----------------------	----------------------------



Attachment E – Working paper consultation summary

Q1	Is dividing approvals between receptacles used for the dangerous goods, and the vehicles that transport receptacles a sensible division?	General support - though some concern was raised that tank vehicles would not be properly approved, only tanks.	Provide separate provisions, but ensure approval of completed vehicles is included. Additionally, this will resolve the current ambiguity where it is not clear whether tank vehicles, or only tanks need to be approved.
Q2	Are you aware of any UN portable tanks in use in Australia, that were approved by Australian land transport competent authorities?	No submitted advised of Australian approval of portable tanks	
Q3	Will permitting variations in approvals (such as allowing an approval to cover a range of volumes) where safety is increased result in a more effective approvals process?	Mixed support and rejection of the concept	Further consultation may be needed on what would be permitted to ensure that it is restricted to a manageable level.
Q4	What evidence and record keeping in relation to variations is reasonable for a tank designer to have to support this?		
Q5	Will incorporating the provisions relating to modifications in the ADR in the future Code provide additional certainty for industry and regulators about when further approval is needed for modifications?	There was support expressed for including modifications as a formal provision.	May need to undertake further consultation on what is permitted under modification provisions. Ultimately, decisions on what constitutes a modification that needs a new approval will be subject to some dispute.
Q6	Are there any additional provisions or guidance that you consider would be needed to manage further approvals for modifications?	Submitters did not feel that further guidance is required	The NTC notes that the Competent Authorities Panel has been undertaking work on this issue, which may provide additional guidance.
Q7	Does the Australian tank manufacturing industry have sufficient access to AS 17020 accredited organisations to enable inspections of tanks for class 2 and UN 1790 (greater than 85%)?	Submitters felt that this type of accreditation is generally available.	Given that this primarily affects class 2 tanks, need to consider along with other issues affecting class 2.
Q8	If AS 17020 accreditation is not accessible, are there alternative standards that may be referenced to provide for these controls?	Submitters were generally unsure. There was one reference to AICIP who provide competency certification.	
Q9	What approval processes are currently in place in Australia for bulk containers that don't comply with ISO 1496-4:1991?	WA's bulk container process appears to be the only document currently available.	Review for comparison with draft code.
Q10	What additional sources of information are available for the design of bulk containers that don't comply with ISO 1496-4:1991?	None available.	
Q11	Are you aware of any BK3 flexible bulk containers currently in use in Australia (in dangerous goods service)?	No knowledge of BK3 in use in Australia.	Follow ADR provisions.
Q12	Will using the approval processes provided in the ADR sections on road transport be sufficient for rail transport?	Submitters were unsure about this.	Develop provisions and consult further as needed.
Q13	Are there additional requirements that need to be incorporated into the Code from RID to ensure that tanks for rail transport are properly approved?	Submitters could not provide information on this.	review RID, develop provisions and consult.
Q14	Who should be able to verify that a vehicle meets the technical requirements for approval? Please provide your reasoning.	Submitters provided a range of responses. Some were satisfied with an authorised vehicle examiner, while others felt that only a professional engineer would be suitable.	Develop provisions and consult on appropriate requirements. Align to requirements for tanks where possible.
Q15	Should the Code provide clear requirements on who should undertake the initial inspection?	Submitters felt that this would be useful.	ADR manufacturing supervision requirements would be useful here.
Q16	If an annual technical inspection requirement was introduced, who should be responsible for carrying out this inspection of the vehicle?	There was general support for an annual technical inspection.	Develop provisions further and consult. Consider how this fits into the Australian system of 3-monthly inspections set out in AS 2809.1.
Q17	Can this technical inspection be undertaken as a part of the normal inspection and maintenance of a tank vehicle?	Submitters felt that in some cases this could be done.	develop provisions and consult
Q18	What record keeping should be expected for the technical inspection of the vehicle?	A suitably detailed inspection checklist should be used. There was a reference to inspections done in accordance with AS 3788, which applies to pressure vessels.	Consider how to reference AS 2809.1 or possibly develop checklist for inclusion. Address use of AS 3788 for pressure vessels to avoid unnecessary duplication



Attachment E – Working paper consultation summary

Q19	Are there alternatives to a competent authority approval process for vehicles available, and appropriate? (e.g., certification by a suitably qualified person with associated record keeping).	Submitters replied with a few alternatives, though generally competent authority approval was favoured.	stay with competent authority approval - ensure suitably qualified person
Q20 & 21	Are there schemes available (such as the VSCCS scheme in NSW) that could be utilised to ensure that vehicles are appropriately designed and constructed for dangerous goods service? Please provide details. Where such a scheme exists, is it able to take on the tasks that would be required to undertake these assessments?	Submitters noted that such schemes do exist, but that workload could be an issue.	Consider when developing provisions further
Q22	What alternative methods could be implemented to ensure that vehicles remain fit for dangerous goods service during their lifetime?	Generally, submitters noted that the existing regime is the better option.	Consider when developing provisions further
Q23	Is it appropriate to leave issues relating to rail wagon (though not tank) approval to rail safety authorities?	Submitters provided a range of responses on this. Generally, workload was seen as a potential issue, as well as the specialised nature of rail transport..	Consider when developing provisions further
Q24	Would there be any issues with incorporating these concepts [detailed administrative controls] into the Code?	No major issues were foreseen with including more detail on administrative controls in the code.	Consider when developing provisions further
Q25	Do the general parameters for approvals make sense to the tank and vehicle industries, and to regulators?	There was general support for the approval parameters as presented to be included in the code.	Consider when developing provisions further
Q26	Would it be appropriate to make the information required mandatory, or should this be left to competent authorities to define?	Submitters felt that including this information in the code would improve clarity and provide certainty to stakeholders.	Consider when developing provisions further
Q27	Are there specific requirements that need to be adopted for tank vehicles where the modifier is not the holder of the original approval?	Some submitters felt that a new approval should be issued. Some felt that a modification should be noted on the approval plate or licence.	Consider when developing provisions further.
Q28	Would including expiry and withdrawal dates in the list of standards (modified to reflect standards in Australia such as AS 2809) support a more effective transition process for new design standards?	Submitters were generally supportive of including this information in the code.	Consider when developing provisions further
Q29	Should the new Code provide for automatic withdrawal of an approval after a certain date if an entry is made in column (5) of the table of standards, instead of requiring a competent authority to withdraw it (as written in ADR)?	Submitters were generally supportive of automatic withdrawal of standards, as this would clarify the existing situation where tank approvals are unclear.	Consider when developing provisions further

Working Group Paper #4 – Safety equipment for dangerous goods transport

NOTE: Responses to this paper were used in the development of paper #12

	Question	Summary of responses	Response and actions taken
Q1	Should a driver undertake emergency response actions once the dangerous goods in the load are involved (other than evacuation and minimising harm to the public and environment, where safe to do so)?	There was support expressed that drivers should take action for minor incidents, less so for more significant incidents. Training was also mentioned as important e.g. The driver, provided they are adequately trained, should be able to carry out very basic actions (such as putting out small fires with hand held fire extinguishers, stopping minor leaks, etc. However, a driver should not be expected to undertake major response actions in the event of an emergency response incident.	Include a requirement that drivers that are expected to undertake emergency response receive training to do so.



Attachment E – Working paper consultation summary

Q2	If you believe a driver should undertake emergency response, should this be a requirement within the ADG Code or left for organisations to determine on a case-by-case basis?	There was limited support for including this as a note in the code, but generally leave to organisations to determine. “The requirement should be left for organisations to determine based on the type of dangerous goods, quantities, training, equipment, resources and many other complex factors. The code could suggest a minimum standard of response, but the emergency response is best assessed by the organisation.”	Same as response to Q1
Q3	Should the Code include a requirement to carry written instructions about when and how the required emergency equipment is expected to be used?	There was support for including this, but a preference that they are kept simple. There was also support for allowing companies to make suitable amendments to instructions appropriate to their operations.	Page 1 of instructions in writing provides this. Include, but provide scope for appropriate changes to be made (i.e. don't mandate exact wording)
Q4	Should the Code use the format of the ADR instructions as a standardized in-cab “quick reference guide” for transport?	The support for instructions in writing was limited. Some respondents felt that it would be useful, others responded that it duplicates the instructions in writing.	Address instructions in writing as part of development of Part 5.
Q5	Should this information be in addition to, or in place of, the required emergency information contained in the ANZ-ERG?	If the instructions in writing are included, needs to be additional to the ANZ-ERG	Continue to reference ANZ-ERG (in Part 5).
Q6	Which of the following three options for Australian Standards do you prefer? Option 1: If there is a relevant Australian Standard, include it as mandatory. Option 2: If there is a relevant Australian Standard, include it for reference only Option 3: Do not include Australian Standards.	There was varied support for referencing standards, but submitters noted that not all equipment has a standard.	Where references are provided, there should probably be scope for alternatives. Consider for further development.
Q7	Do you believe simplifying the list of safety equipment in the future code would have a negative impact on safety?	There was support for providing a simplified list of safety equipment in the code. e.g. “The current list is complicated and can be confusing to interpret. When loads change frequently, it can result in inadvertent non-compliance. Simplifying the list will support more effective compliance.”	A simplified list similar to ADR will be included, but ensure that it is coherent and suits Australia's needs. Develop for further consultation.
Q8	Are you aware of legislation (other than DG transport legislation) that references the equipment requirements of the Code?	No known other references to the code were provided.	N/A – it appears that this is a DG code only matter.
Q9	Are there any circumstances that you believe would require the use of wheel chocks?	There was some support for including wheel chocks as an emergency response, but support for this was mixed. Some users noted manual handling issues, while others expressed that unbraked trailers are very rare in Australian use.	Include in future code, but only for unbraked trailers (which would be a very small subset of trailers in Australia).
Q10	Which of the following two options for specifying portable warning triangles do you prefer? Option 1: Specify requirements for portable warning triangles but only for vehicles not covered by the ARR, i.e., vehicles with a GVM not exceeding 12 tonnes. Option 2: Continue to specify requirements for all vehicles with a clarification that if there is a conflict with the requirements in the ARR, the ARR takes precedence.	Option 2 was widely supported, where the requirements are specified as applying to all vehicles. This was felt to be the most easily conveyed message.	Include 3 portable warning triangles in list
Q11	Are you aware of an Australian Standard for the design of portable warning triangles?	We were advised of the reference being AS 3790-1992 Portable Warning Devices for Motor Vehicles	NOTE: NTC have decided not to reference standard, as it is not referenced by the Australian Road Rules.
Q12	Should the requirement for eye rinsing liquid continue to specify a minimum of 250 mL?	There was strong support for including this in the list.	Modify the ADR requirement to include 250 mL as a minimum



Attachment E – Working paper consultation summary

Q13	Are you aware of an Australian Standard for eye rinsing liquid?	No	N/A
Q14 and Q15	Should a requirement to carry high-visibility clothing be incorporated into the Code? If yes, should high-visibility (day and night) workwear be deemed to meet this requirement?	There was mixed support for this. Some submitters considered this to be a WHS issue, while others expressed support for including high-visibility clothing.	NTC propose to require a warning vest or high visibility clothing, and to permit either option to be available.
Q16	Do you support extending the requirement for intrinsic safety to all torches required for dangerous goods?	There was strong support for making intrinsic safety of torches a universal requirement.	Mandate intrinsically safe torches.
Q17	Is it necessary to define the type of protective gloves that are required?	Responses were generally supportive of leaving the decision to the transporter as appropriate materials vary.,=	Keep as in ADR - selection to be left to the transporter. Consider including notes that the equipment needs to be suitable for the tasks.
Q18	Should the list of required safety equipment include eye protection for all loads?	Strong support	Include as in ADR.
Q19	Is there an appropriate standard to reference for eye protection (such as AS 1337)?	AS 1337 was noted as a relevant Australian standard.	Include reference to AS 1337 in the example provided.
Q20 and Q21	Should the list of general equipment to be carried include a shovel, drain seal and collecting container? If yes, should this requirement be extended beyond the ADR requirement (“when transporting solids and liquids of class/division 3, 4.1, 4.3, 8 or 9”)?	There was support for requiring these to be carried. Respondents generally preferred that the list be kept as in ADR, though some alternatives were noted: <ul style="list-style-type: none"> • Don’t require it for solids • Make it mandatory for solids and liquids generally 	Include these requirements as in ADR. Consider whether to simplify to either liquids, or liquids and solids generally.
Q22	Do you believe the requirements for a chemically resistant suit and boots should be retained in the standard list of safety equipment? If so, please provide your justification	Support for boots was high, less so for chemically resistant suits. Some respondents noted that more specialised equipment should be identified in the transport emergency response plan (TERP).	Definitely continue to include chemically resistant boots. Consider adding in requirement that emergency equipment identified as necessary in the TERP should be carried in the vehicle to address specific cases.
Q23 and Q24	Which of the three options do you prefer? Option 1: Blended requirement of TP13 and ADR requirements Option 2: Aligning future requirements with the ADR Option 3: Retain requirements as currently included in ADG 7 If you support Option 3, do you have data or evidence to support the need for an escape respirator to be oxygen fed?	There was mixed support across the three options.	In considering the responses, the NTC considers that option 1 best balances the risks. Will include in further consultation. We also consider that including a
Q25	Should the requirement for an escape respirator be extended to Class 8?	Support for class 8 inclusion was mixed.	NTC will include class 8 in filtering escape mask requirement. This is a reduction from the air-fed BA requirement but does not abandon it entirely. Any class 8 with TP13 will be subject to the air-fed BA requirements when transported in tanks.
	General comments	Some general commentary was received noting that the purpose of emergency equipment on vehicles is intended to primarily function as emergency protection for a vehicle crew during transport incidents, and that broader WHS protection issues are a matter for WHS regulation.	NTC will consider including notes on requirements for emergency equipment for more general WHS purposes, and the use of transport equipment for general protective purposes.

Working Group Paper #5 – Fire extinguishers for dangerous goods transport

NOTE: Responses to this paper were used in the development of paper #12

	Question	Summary of responses	Response and actions taken
Q1	Should the future code provide clearer guidance on the expectation of the driver in a fire situation?	Strong support for including this information.	If the instructions-in-writing are adopted (especially page 1), this will provide the driver with information in transport. ADR also includes a requirement for practical training of drivers in use of fire equipment. Consider this when driver training is addressed.
Q2	Should the future code permit, recommend, or require different extinguishing agents be carried?	Strong support for permitting other extinguishing agents, and many submitters also expressed support for recommending this.	Ensure that alternative extinguishing agents are permitted. Include a recommendation that the extinguishing agents are substituted in



Attachment E – Working paper consultation summary

			the load area for foam or water, and explain that it is due to their effectiveness in combating tyre fires.
Q3	Should the future code mandate the carrying of water or foam extinguishers?	There was mixed support for mandating foam or water. Some submitters were supportive of such a mandate, while others preferred that it be left to the transport company that is fitting out the vehicle.	See response to Q2. Recommend, but don't mandate.
Q4	Are there specific criteria that should be applied if substitution is permitted, recommended, or required? For example, there may be particular load or vehicle configurations where this would be appropriate.	Some submitters commented that it should be a part of a risk assessment process, while others were more definitive.	The recommendation in response to Q2, for foam or water in the load area, and reasons why will support industry to make the change where they consider it appropriate. As dry chemical powder remains the default extinguishing agent, this will remain an option.
Q5	Should the future code include a minimum fire extinguisher requirement for vehicles transporting less than a placard load of dangerous goods?	There was some support for including this, though submitters noted that this should probably equally apply to all heavy vehicles transporting freight, not just dangerous goods. Some of the challenges noted included the risk of fire generally, others noted that this should be assessed as a WHS matter, rather than a DG transport matter.	Develop a provision for less than placard loads and test in further consultation.
Q6 & Q7	Does the quantity of dangerous goods in the load matter for defining extinguisher capacity on a vehicle? If the type of dangerous goods carried affects the required amount of extinguisher capacity, what parameters should be used to decide how this should be changed?	Most responders were ambivalent about the quantity of dangerous goods being transported and noted that wheel and tyre fires are the main concern. Submitters also noted that most fire response by drivers is targeting these fires, and so the type of dangerous goods being carried does not dramatically impact the consideration for the type and volume of extinguishing agent.	See response to Q8
Q8	Is using the maximum permissible mass of the transport unit a suitable means of determining the fire extinguisher (volume) requirements in the future code?	Most submitters were supportive of the use of maximum transport mass, though a few submitters were of the opinion that this was not risk based, and that more should be provided for flammable liquids compared to corrosives.	Taken together, the responses to Q6, 7 & 8 suggest that the general alignment to vehicle mass is supported. NTC will consider developing provisions that recognise that transport of DG in packages presents a somewhat lower risk and consult on these further.
Q9	Does the proposed alignment to the heavy vehicle threshold make sense? If not, what should they be changed to, and why?	There was general support for this. Some commenters reinforced their comments made in Q6 – 8, so these have been considered above.	The divisions between vehicles types will be aligned to the heavy vehicle definitions of 4.5 tonnes.
Q10	Will transporters (and drivers) be able to easily understand and implement the modified requirements?	General commentary that it should be simple and understandable.	Consider if there is an alternative way to present the information in the table in ADR, to make it more easily understood.
Q11	Is including the requirements for additional trailers into the table an acceptable option?	There was mixed support for this.	Ensure that provisions for additional trailers are clearly specified. Consider how to differentiate load area and cab/engine extinguishers.
Q12	If the selected values in the modified table are inappropriate, what do you consider to be suitable amendments?	Some submitters provided alternatives, ranging from the current ADG Code requirements to simplified versions of the table presented.	Consider all submissions in developing new provisions for comment.
Q13	If a fixed firefighting system is permitted, what alternative criteria should be applied to this system?	Suggestions included basing this on a risk assessment, or requiring a minimum discharge time.	Consider what is best to include here. WA's explosion risk vehicle requirements will be an important consideration here.
Q14	Should these systems be "an alternative to" or "in addition to" the mandated extinguishers?	Responses to this question were mixed, spread evenly across both options.	Consider all submissions in developing new provisions for comment.
Q15	When is it appropriate to mandate these systems? Provide information on the types of dangerous goods; container types; sizes; and transport scenarios where you consider these systems should be mandated.	There were concerns expressed about mandating such systems, except for particularly high risk situations.	Follow WA's work on explosion risk goods, as ammonium nitrate is a particular example where this has proven to be a major issue.



Attachment E – Working paper consultation summary

Q16	If an automatic fire suppressant dispersing device is fitted in the engine compartment, should a DCP fire extinguisher still be required for use in the cabin?	Most submissions supported continuing to require a dry chemical extinguisher in the cab, even when an engine bay fire suppression system is included. One commenter suggested the size of the extinguisher could be reduced in this case.	Include this requirement from ADR. Consider whether a size reduction is appropriate in developing new provisions for comment.
Q17	Should the future code retain the “quick-release attachment” requirement? If yes, why, or are their alternatives?	There was support for retaining a quick release attachment requirement, though some submitters suggested that this could be made clearer to ensure that it is not interpreted too strictly. There was a few submitters opposed to retaining it.	Make sure that quick release attachment is retained, but make clear that it need not be a “bracket” specifically. A bracket may be retained only as a suggestion.
Q18	Should the future code incorporate the requirements for where extinguishers should be located on the vehicle?	There was strong support for including this information in the code.	Carry the current requirements in the ADG Code over to the new Code for where extinguishers should be located. Retain as a “should” clause, not a shall.
Q19	Are AS/NZS 1841 and AS/NZS 1850 appropriate substitutions for the EN 3- 7:2004 + A1:2007? If not, please provide alternative substitutions.	There was support for these as appropriate substitutions.	Use these Australian standards references.
Q20	Should the future code include the seal requirement?	There was general support for including this, though some recommendations that it should be modified to permit the use of the metal tag.	Adopt this requirement out of ADR. Permit “another means” or similar to not mandate a seal as the only way, e.g. most extinguishers are fitted with pressure gauges.
Q21	Should the future code include information regarding AS 1851 inspection frequencies to support clearer communication of this requirement?	There was general support for including this information in a way, though it shouldn’t override the AS 1851 requirements. Some commenters were concerned about this creating multiple sources of information.	Include this information in a note that assists users to understand their obligations, without making the ADG Code the source of the requirement.

Working Group Paper #6 – Consignment procedures

	Question	Summary of responses	Response and actions taken
Q1	Will specifically including ‘IBC’ in the headings in Chapter 5.2 help clarify that an IBC is considered by the UN MR and mode specific codes to be a package?	The majority of responses support the inclusion of IBC in the heading. Noting that it will make it easier to find the appropriate requirements and reiterate that IBCs are packages. One submission that did not support the proposal showed a lack of understanding of packaged vs bulk in the current code	The inclusion of “IBC” in the Chapter heading will be retained as per the draft proposal.
Q2	Are you aware whether Australia currently ships vehicles carrying dangerous goods by sea, e.g., across Bass Strait?	Vehicles carrying dangerous goods are regularly transported between the mainland and Tasmania, and also to Australia's other island territories, e.g. Rottneest Island.	
Q3and Q4	Is it reasonable to require overpacks and segregation devices to be marked with the UN Number and proper shipping name for each of the dangerous goods in the overpack or segregation device? What potential safety implications could result if the UN numbers and proper shipping names are not displayed?	The majority of responses supported the proposal for marking of segregation devices with the UN number and PSN for each DG contained. Without this information, it is necessary to consult the transport document or open the overpack/segregation device to determine what dangerous goods is being transported. It also enables a more rapid determination of potential incompatibilities without having to open a segregation device. This is especially true for within-class incompatibilities such as acids and bases, which are both class 8 and may be incompatible.	The provision has been retained as per the consultation draft.
Q5	Will removing the concept of a placardable unit from the code have other impacts that this paper has not addressed?	No negative impacts were raised in relation to the removal of the term 'placardable unit'. A number of positive impacts were identified. Some consequential impacts were identified in relation to the trigger for licensing.	Licensing is being addressed as a separate issue. The concept of a 'placardable unit' is not being carried forward to the new Code
Q6	Are you able to provide updated costs or data that support the removal of EIPs from IBCs?	<ul style="list-style-type: none"> There would be a time saving if EIPs were not required to be applied to IBCs. This would be quantified as the time 	The requirement for EIPs on IBCs has not being carried forward to the draft Code.



Attachment E – Working paper consultation summary

		<p>spent applying EIPs and the time spent researching and preparing the EIPs for application.</p> <ul style="list-style-type: none"> • The Australian requirement for Emergency Information Panels (EIPs) costs the Australian chemistry industry alone, over \$96 million each year while delivering no improvement in terms of safety, and can add risks to industry for being out-of-step with international practices. Industry is not asking for reduced obligation with international requirements on IBCs but seeks international parity with risk management. • Standard sized IBCs should be treated as per any other packaged goods and should require just a normal Class Diamond. The value of EIP's on IBC's is minimal due to the size. If the load of IBC's was involved in an incident, then the small EIP's will not offer any assistance to the emergency services. • We have 112 stock keeping units for IBCs manufactured in Australia. This includes 83 new manufactured IBCs and 29 reconditioned IBCs. Reconditioned IBCs are equivalent to the new made SKU design but with a re-used steel cage. A "standard" IBC is manufactured with two label plates, one at front (above the discharge valve) and one at rear. The standard design is modified to suit customer needs and design requests. Of these 112 SKUs, 51 articles are non-standard, with customers requesting either extra label plates, or extra-large label plates on IBCs. 42 articles have more than two label plates. An extra-large or extra label plate adds approximately \$20 to the cost of the IBC. We have designed our manufacturing facilities to maximise production volume. Deviations from standard design require additional labour or cost additional time. • In 2017 we participated in the Chemistry Australia review, providing information on the issues caused by the requirements for EIPs on IBCs. The impact from Covid has seen both increased costs and a reduced flexibility in international supply channels. Hence, it is highly likely that the costs have increased since this review was completed. The reviews conducted indicate that changing to international (IMDG Code) markings, supplemented by the ADG Code placarding will not undermine the risk management of the transport of dangerous goods. The addition of the GHS markings will provide further information on product hazards, from a work, health and safety (WHS) point-of-view. Over the years industry has occasionally sought and received regulator dispensation from EIP markings on IBCs, through demonstrating that there is no significant adverse impact to the safe transport of these products. 	
--	--	---	--



Attachment E – Working paper consultation summary

		<p>There are WHS benefits through the provision of additional space on the predominant (i.e. more visible) side of the IBC to allow for the incorporation of the GHS warnings. This will increase the visibility, and hence, the safety benefits of the GHS warnings that are designed to elevate the end-user's knowledge of the product hazards during handling. Currently, in many cases the GHS warnings have been attached via additional tags or on the alternate sides of the package, i.e. on locations which are less likely to be read. Industry trials have demonstrated that it is very difficult to apply stickers with GHS warnings to the woven flexible substrate of flexible IBCs.</p> <ul style="list-style-type: none"> The cost of additional EIP label would be roughly \$3 per label. The greatest cost experienced would be >\$20 per IBC to accommodate additional panels to locate the labels. 	
Q7	Do you have data and evidence showing that EIPs on IBCs (as opposed to vehicle placarding) have led to safer outcomes than would be provided by the marking and labelling shown in Figure 2?	<p>No data was provided to demonstrate that EIPs on IBCs has led to safer outcomes. On the contrary, the evidence shows that they have led to less safer outcomes.</p> <ul style="list-style-type: none"> The label information required by all states in compliance with GHS requirements provides better information for chemical categorization than an emergency information panel. GHS labelling includes ingredient information and hazard phrases, while the EIP only identifies the UN number if the material is classified as Dangerous Goods. We use a special crimping tool when affixing label plates to the metal cage of the IBC. This crimp system is designed to minimise potential damage to the inner plastic container in the event that the label plate is pushed against the inner bottle, and hence prevent leaking of chemicals or other filling goods. IBC reconditioners do not necessarily have crimping tools for affixing extra or new label plates, and many reconditioners use screws or bolts. This creates the potential for the plastic inner bottle to be pierced during normal transport or handling. The requirement for an EIP, which often leads to a requirement for extra or larger label plates, therefore creates a risk of leaking IBCs when these are modified by IBC reconditioners. In this way, the requirement for EIPs on IBCs actually leads to less safe outcomes than GHS labelling currently provides. 	See Q6 above
Q8 and Q9	Should the requirement to placard an IBC with an EIP retained for larger IBCs, e.g., capacity greater than 1500 kg/l? If your answer to question 8 is yes, please provide the suggested capacity and your justification for it	All but one submission was opposed to requiring EIPs on larger IBCs. FR NSW did not oppose it but raised concerns that it would need to be carefully managed so as to not cause confusion.	This draft requirement has not been carried forward. EIPs are not required on IBCs, regardless of their size.
Q10	Are you aware of any potential impacts on WHS regulations that we have not identified?	No implications for the WHS Regulations were identified.	The requirement for EIPs on IBCs has not being carried forward to the draft Code.



Attachment E – Working paper consultation summary

		<p>All WHS impacts identified showed negative impacts from the current requirement for EIPs and supported the removal of this requirement.</p> <ul style="list-style-type: none"> The EIP on IBCs are a requirement for transportation purposes only, and sites today can have UN labelling on IBCs. However, we do consider that removing the EIPs will support better outcomes with WHS obligations, as it will allow all critical information to be placed on a predominant space of the container, thus improving risk management. The main potential impact on work health and safety regulations is the potential for workers to be exposed to hazardous chemicals in the event of a leaking IBC caused by screws or bolts in label plates that pierce the plastic inner bottle of an IBC. The risk of leaks is reduced if the requirement for EIPs is removed, as reconditioners are less likely to replace label plates or add extra label plates, if customers do not require these. 	
Q11	<p>Which of the following three options do you prefer?</p> <p>Option 1 - Continue the use of UN 1270 as per the current code. Potentially expanding the list in Table 3.1 to include other refined petroleum products classified as UN 3082 that are category 4 flammable liquids.</p> <p>Option 2 - Follow the requirements of 5.3.2.1.3 as currently drafted but expand the list of UN numbers to include other refined petroleum products of Class 3.</p> <p>Option 3 - Follow the requirements of 5.3.2.1.3 as currently drafted but expand the list of UN numbers to include other refined petroleum products of Class 3 and category 4 flammable liquids classified as UN 3082.</p>	<p>Of the 11 submissions received, only 5 expressed a view on this. Of these, the majority supported option 3 which was to follow the requirements of 5.3.2.1.3 as drafted but expand the list of UN numbers to include other refined petroleum products of Class 3 and category 4 flammable liquids classified as UN 3082</p> <p>Option 1 = 1 Option 2 = 1 Option 3 = 3</p>	<p>Provision 5.3.2.1.3 has been retained as per the consultation draft but has been expanded to include all Class 3 Flammable Liquids carried together, or with a flammable liquid that meets the criteria for GHS Category 4 flammable liquids and UN 3082.</p> <p>For multi-compartment tank vehicles or transport units or wagons having more than one tank carrying Class 3 Flammable liquids with or without a combustible liquid with a flashpoint $\geq 23^{\circ}\text{C}$ but $< 60^{\circ}\text{C}$ and meeting the criteria for UN 1993 with no other dangerous substance the emergency information panel prescribed in 1993.7 and 1993.8 shall bear the emergency action code and the UN number proper shipping name and placard(s) prescribed for the substance with the lowest flash point. The Emergency Action Code for the load shall be the highest calculated for all substances in the load.</p>
Q12	<p>If you transport different flammable liquids (Class 3 or category 4) in multi compartment tanks, please provide a list of commonly transported UN numbers and substance names.</p>	<ul style="list-style-type: none"> Traditionally composite loads are Diesel and Petrol. There may be odd occasions where UN 1223 and 1299 may be transported but a multiload EIP suffices provided the Class 3 diamond only is used not mixed class. Aviation fuels such as 1863 are generally never transported with or contain previous product of anything other than aviation fuels. UN 1203(Petrol) with UN 1202 (Diesel) UN 1203 (Petrol) with a class 9 (UN 3082) UN 1203 (Petrol) with UN 3475 (Ethanol, Petrol mixture). 	<p>See Q11 above.</p>
Q13 and Q14	<p>If the draft requirement that EIPs have a reflective background is retained, what transition period should be allowed?</p> <p>Do you have data that can help quantify the additional costs for reflective backgrounds for EIPs, or the improved safety benefits of them?</p>	<p>Suggested transition times varied greatly. Many submissions did not support the requirement for reflective EIPs. One raised the potential for conflict with the Australian Design Rules.</p>	<p>The requirements for reflective EIPs has not been carried forward, other than for Class 1 Explosives. Note: all placards for Class 1 Explosives are required to be reflective.</p>



Attachment E – Working paper consultation summary

Q15	Should handwriting on EIPs be specifically prohibited?	There was some support for prohibiting handwriting. However, it was recognised that there may be circumstances where it was necessary to handwrite and EIP. Where handwriting was permitted, it must meet the legibility and size requirements.	Provision 5.3.2.2.2 has been retained as per the consultation draft.
Q16	Is 10 mm an appropriate thickness for the proper shipping name when displayed over two lines?	Most responses were in favour of the 10mm minimum thickness. Some response identified that this could be an issue if the space doesn't permit it.	The 10mm allowance has been designed to allow a PSN that takes two lines. Where the PSN can fit on a single line, the requirement is 15mm. The requirement has been retained as or the consultation draft.
Q17	Which of the following options do you prefer? Option 1 - Specify the requirements relating to a TERP in Chapter 5.4 of the code, grouping it with other document requirements. Option 2 - Create a new Chapter in Part 8 – Requirements for vehicle crews, equipment, operation and documentation, for TERP requirements.	The responses were mixed but most favoured Option 2.	The TERP requirements have been specified in Chapter 1.8, administrative controls for dangerous goods transport.
Q18	Are there consequential impacts that you believe have been missed?	There is need to include details on the transport of unused empty cylinders that have been prelabelled and are being shipped before first fill. This was previously covered under chapter 5 of the ADG code where unused pre-labelled dangerous goods packaging should be clearly identified as such on any transport documentation, any outer packaging or the exterior of the cargo transport unit in order to avoid inappropriate emergency response.	These will be specifically exempted in Part 1 of the code. A note has been added to 5.4.1.5 re the inclusion of non-dangerous goods on the transport document.

Working Group Paper #7 – Tanks and bulk container provisions

NOTE: The responses to this paper were further used to develop the tank and vehicle provisions presented in paper #11.

	Question	Summary of responses	Response and actions taken
Q1	Is there a reason why the future code should not adopt the system of specifying FL and AT vehicles, and associated requirements?	Submitters were unsure of the inclusion of this. Some felt that this would create unnecessary complexity in the code, and may not be the best course of action. One submitter noted that this makes more sense in the European context. Others felt that including this system would provide additional clarity for users of the code. It would also provide more certainty for the provisions that apply.	Include FL and AT vehicles, but ensure that the provisions as written are not overly complicated.
Q2	Is there a reason why the future code should not extend this requirement to vehicles that are used for tank transport (that are not tank vehicles)?	There was general support expressed for this. However, some submitters noted that this may reduce flexibility or increase costs. One submitter noted that this is a current regulatory gap that would be closed.	Consider whether there are ways to avoid impacts on flexibility.
Q3	If the future code does include requirements for vehicles used for tank transport (other than tank vehicles), what is a reasonable time frame for the transition period.	Submitters varied on transition times. Some felt that 2 years is sufficient, as this is the normal lifetime of a code revision, while others suggested 5 or even 10 years.	Need to consider this when developing transitional provisions.
Q4	Are there requirements in parts 2 – 5 of AS 2809 that you consider should be included in the vehicle requirements of the future Code?	Most submitters were not aware of any, though brake interlock drive away protection was referenced, and some general comments were provided about ensuring coverage.	Make sure that all concerns are addressed in final code.
Q5	Should the future code capture these “pseudo tank vehicles” using portable tanks, tank-containers, or similar?	There was support for properly capturing vehicles that are effectively used as tank vehicles.	Consider in developing further provisions.
Q6	Should these provisions be extended to IBCs that are filled or emptied on a vehicle?	There was support for including IBCs that are fitted on a vehicle. Submitters noted that these are currently captured by the transfer provisions.	Consider developing provisions that address packages used as a tank. Also consider as a part of transfer provisions.



Attachment E – Working paper consultation summary

Q7	Should an exemption be provided for single filling or emptying of a tank when in intermodal service (as in AS 2809)?	Support was mixed for continuing to provide the single filling exemption as written in AS 2809. Some submitters felt that the exemption works well, while others were concerned about its impact.	Address as a part of drafting provisions relating to the use of tanks.
Q8	If an exemption for single filling or emptying of a tank is appropriate, should it be limited to certain items that are impracticable to comply with? If yes, please advise what items should be exempted, and reasons why.	Submitters who were in favour of providing such an exemption noted that it should be restricted to items that cannot easily be retrofitted, or complex functions like brake interlock driveway protection that interact between the tank and the vehicle.	Consider how to address these comments in developing final provisions.
Q9	Is there a reason not to incorporate the requirements relating to vehicles for packages, bulk containers and temperature-controlled substances into the future code?	There was support for including these provisions in the Code.	Include in the code.
Q10	Are there requirements other than those in chapter 9.4 of the ADR that should be incorporated into the code for the transport of dangerous goods in packages?	Most were satisfied, there was one suggestion to include permanently attached segregation devices in this requirement.	Consider how to address permanently attached segregation devices (maybe elsewhere, rather than here).
Q11	Are there requirements other than those in chapter 9.5 of the ADR that should be incorporated into the code for the transport of dangerous solids in bulk?	Most were satisfied with the provisions as presented. WA's development work on explosion risk goods was mentioned in one response.	WA's work on explosion risk goods will be addressed during the development process.
Q12	Are there requirements other than those in chapter 9.6 of the ADR that should be incorporated into the code for the transport of dangerous goods requiring temperature control?	No submitters offered additional provisions.	N/A
Q13	Should the future code include detailed inspection and maintenance requirements (similar to AS 2809.1) or refer to the requirements in AS 2809.1?	There was support for including the detailed requirements in the code, rather than referring to AS 2809.1	Consider how to include these requirements in the Code. Need to balance workability and other considerations. Some of this content may be better addressed in guidance.
Q14	Should the future code contain inspection and maintenance requirements for vehicles other than FL and AT vehicles?	There was some support for this. Submitters noted that the current code is light on detail in this area. Another submission noted that basic inspection requirements such as those of the NHVR Heavy Vehicle Inspection Manual would be appropriate.	Include general inspection and maintenance provisions for all vehicles.
Q15	Should the future code include a requirement that vehicles be fitted with an endurance braking system?	Submitters noted that vehicles may be fitted with an endurance braking system, but felt this is best left to general vehicle design rules. However, one submitter felt that this would benefit overall road safety if it was introduced.	ADR mandates an endurance braking system for some vehicles. Include the requirements that it doesn't create a risk, but don't mandate in the ADG Code.
Q16 and Q17	Should the future Code include a requirement that dangerous goods vehicles be fitted with a speed limiting device? Please explain your reasoning, and when you think this should apply?	Submitters generally felt this was best left to general road safety / vehicle compliance legislation.	Consider requiring that a speed limiter that is fitted is operational, but don't specifically mandate for DG vehicles.
Q18	Which of the following 3 options do you consider most appropriate for the future code (or an alternative)? Option 1: General reference requiring compliance with AS 2809 Option 2: Detailed listing of requirements in AS 2809 that apply Option 3: Direct incorporation of requirements into the future code	There were mixed responses to this question. Responses were generally balanced between options 2 and 3, Submitters noted that more information is useful to industry. One submitter mentioned that an appendix detailing the requirements would be more appropriate than direct inclusion in the body of the code.	At minimum, detail the AS 2809 requirements that apply. Consider whether an appendix is appropriate if direct incorporation is not taken forward.
Q19	Are there any vehicle requirements that are found elsewhere (in the code or in other rules or instruments) that you consider must be incorporated into the vehicle requirements of the future code?	One submitter referenced endurance braking and a requirement to carry landing legs needing to be incorporated.	Consider if there is a need to address this in the code.
Q20	Are there any assignments ("tank", "tank and vehicle", "FL only" or "FL and AT") in Appendix A that you consider to be incorrect? If yes, please advise how you would correctly assign items you consider incorrect.	Commenters were generally satisfied with the assignments made, though some expressed concern about the challenges maintaining and updating such a list.	Consider how best to make this simple and straightforward to apply.



Attachment E – Working paper consultation summary

		Responses suggested that there may be alternatives to this, such as permitting AT tanks to not apply issues that apply to flammables.	
Q21	Are there items missing in these provisions that you consider essential to be included in the vehicle requirements?	Two items were mentioned. The WA work on requirements for vehicles transporting explosion risk goods, and the fitting of permanently mounted segregation devices.	Already noted. These will both be addressed as the code is developed.

Working Group Paper #8 – Vehicles for dangerous goods transport

NOTE: The responses to this paper were further used to develop the tank and vehicle provisions presented in paper #11.

	Question	Summary of responses	Response and actions taken
Q1	Are there other tank or bulk solids transport scenarios that you are aware of, where the current code creates issues that can be addressed using information from the ADR (or another source)?	Identified issues include: certain 3077 mineral concentrates risks arising from the transport of ANE Bitumen crack sealing vehicles	ensure these are addressed appropriately.
Q2	Are there tank use provisions in Chapter 4.3 of the ADR that if adopted would significantly impact your transport operations?	One commenter noted the impact of ADR's 7500 L compartment size.	Compartment size is addressed in Q21
Q3	Are there FRP tank use provisions in Chapter 4.4 of the ADR that if adopted would significantly impact your transport operations?	No known impacts were identified	Incorporate FRP tank use provisions into the code
Q4	Are there vacuum tank use provisions in Chapter 4.5 of the ADR that if adopted would significantly impact your transport operations?	No known impacts were identified	Incorporate ADR vacuum tank provisions into the code
Q5	Which of these options do you consider the most practicable for the development of the future code? Option 1: Fully incorporate ADR Chapters 6.8 - 6.10, while referencing Australian Standards Option 2: Incorporate the general tank design principles from ADR Chapters 6.8 - 6.10, with references to Australian standards Option 3: Rewrite the current Chapter 6.9 (edition 7.8) of the code	The various comments were split across options though options 2 & 3 were more preferred. Various reasons were provided, such as maintenance of the code, the level of work and the benefits to industry in this information being provided. There was general support for providing clear, unambiguous requirements for duty holders.	NTC will consider either 2 or 3 - these are similar, with varying degrees of work required to develop the provisions. In practice, a rewrite of the current 6.9 may not line up with the review principles.
Q6	If ADR tanks are permitted as an alternative means of compliance, do you foresee this being useful for your operation?	Commenters generally noted that this would be useful to the transport industry, especially in situations that AS 2809 does not address.	N/A
Q7	Is there a reason why ADR tanks should not be permitted as an alternative means of compliance?	There were some concerns expressed about how these might be incorporated into the ADG Code. In particular, there were concerns about designers mixing and matching between AS 2809 and ADR-style tanks.	Include ADR-compliant tanks as an alternative means of design. Ensure that competent authority approval will still be required for the tank. This should address concerns about oversight. Also clarify that the design is to either one set of standards or the other to avoid issues with mixing and matching requirements.
Q8	If the ADR is permitted as an alternative means of compliance, are there situations where you consider this should be restricted?	Commenters did not foresee any particular situations where ADR-style tanks would need to be restricted.	N/A
Q9	With the ADR as an alternative means of compliance, should: (a) the relevant content from the ADR be incorporated into the future code, (b) should reference be made to the ADR and users directed to consult the ADR, or (c) (c) something else?	No clear preference was expressed for the best way of referencing ADR tanks.	Reference ADR as an alternative means of compliance in this code by referring to the relevant ADR provisions. If there is significant uptake of the provisions, or demand from the industry, consider including in a future version of the Code. This will retain primacy for AS 2809, while clearly providing a link to ADR.
Q10	Do you have any examples where EN 14025 has been accepted as an alternative means of compliance for transportable pressure vessels in Australia?	Has been used for UN 1040 - and one submitter noted that AS 1210 accepts EN 14025 designed pressure vessels as an alternative means of design.	N/A



Attachment E – Working paper consultation summary

Q11	Are you aware of any dangerous goods currently being transported in tank vehicles that are listed in Appendix B?	Ethylene Oxide was noted in one response.	Ethylene oxide (UN 1040) is included in both ADR and Portable tanks, so no issues are expected.
Q12 & Q13	Should dangerous goods be permitted for transport in a tank vehicle where there is no portable tank instruction? If yes, what additional controls would be appropriate? Should dangerous goods be permitted for transport in a tank vehicle where there is no ADR tank instruction? If yes, what additional controls would be appropriate?	Submitters noted that competent authorities have a determination power that may be used in situations where a tank instruction is not provided.	Ensure that existing uses of vehicles are covered by transitional provisions as they are developed. Determination power (or similar) can continue to cover any novel uses of tanks that might be found to be necessary.
Q14	Is there a reason why the future code should not include ADR tank codes in the dangerous goods list?	Submitters generally agreed that ADR tank codes should be included. One submission expressed concern about including ADR tanks generally.	Include in DG list and ADG Code. Ensure that provisions are properly written to avoid correct interpretation, namely that the meaning of the codes only applies to ADR-style tanks.
Q15	Is there a reason why the future code should not include ADR special provisions for tank use in the dangerous goods list?	Submitters were in agreement generally that the ADR special provisions for tank use would be useful.	Include in DG list and ADG Code.
Q16	Are you aware of a current transport scenario where applying the ADR tank use codes (TU) would have a significant impact on the transport?	None known	N/A
Q17	Is there a reason why the future code should not include ADR special provisions for tank design and construction in the dangerous goods list?	It was generally agreed that these provisions should be included, no reasons against were provided other than those already expressed regarding ADR tanks.	N/A
Q18	Are you aware of a current transport scenario where requiring compliance with the ADR tank use codes (TU) would have a significant impact?	Submitters were not able to identify any cases where ADR TU Codes would cause compliance issues.	N/A
Q19	Is there a reason why the future code should not incorporate intermediate (2.5 years) and periodic (5 year) inspections for tanks?	The intermediate and periodic inspections were generally accepted. One submitter noted that this might be a reduction in the case of pressure vessels.	Include in the code. However, ensure that pressure vessels that are properly inspected under pressure vessel legislation are deemed to comply. The ADG code can't offset this legislated requirement, and it would be best if the code does not increase complexity by requiring overlapping inspections.
Q20	Is there a reason why the ullage rules for tank vehicles should not be moved to Part 4 of the future code?	Commenters generally agreed that the tank ullage provisions can be moved to part 4.	Include in part 4.
Q21	Which of the following two options for the large compartment threshold do you support? Option 1: Permit tanks built to the existing threshold of 8,600 L to continue to use that threshold, and require tanks constructed in future to comply with a threshold value of 7,500 L. Option 2: Continue the existing threshold of 8,600 L in the future code.	Both options were supported by different submitters. Some noted that 8,600 L has functioned effectively in Australia, while others noted that alignment to international practice may be beneficial. Concern was expressed by at least one submitter that existing tanks are able to be used with an 8,600 L threshold.	Select option 2. Also ensure that existing tanks are able to use 8,600 L.
Q22	Which of the following two options for the large compartment restrictions do you support? Option 1: Align the thresholds to the ADR and portable tank values of 20% and 80%. Option 2: Continue to use the current code values of 15% and 80%.	General support for degree of filling to remain aligned to current regime, especially where 8600 L is the large compartment value	Option 2 will be followed, using the 15% and 80% thresholds. Note that the current code will not use "ullage" terminology but degree of filling.



Attachment E – Working paper consultation summary

Q23 and Q24	Which of the following two options for the ullage value options do you support? Option 1: Align the future code to the ADR ullage values, which are more complex but provide additional capacity in certain circumstances. Option 2: Align the future code to the portable tank ullage values, which are simpler and may be more readily understood by users. Are there alternative options for addressing this problem?	Option 2 was generally preferred by submitters, aligning to the same method as for portable tanks.	Option 2 - use portable tank values
Q25	Are you aware of any transport that occurs in bulk containers that will be significantly impacted by incorporating the requirements from the ADR into the future code?	No significant impacts were identified.	Additional consultation on bulk container provisions might be required, to be covered in part 7. Note that they are currently captured by the existing code.

Working Group Paper #9 – Part 4 Packing and tank provisions

	Question	Summary of responses	Response and actions taken
Q1	Does the wording of the following draft NOTE at the start of Chapter 4.1 provide clarity that if a competent authority has issued a UN Packaging Approval, that the approval is recognised for land transport in Australia? NOTE: Packagings, including IBCs and large packagings, marked in accordance with 6.1.3, 6.2.2.7, 6.2.2.8, 6.2.2.9, 6.2.2.10, 6.3.4, 6.5.2 or 6.6.3 but which were approved by a non-ADG competent authority may nevertheless be used for carriage under this Code.	Inclusion of the was broadly supported by stakeholders but some submissions suggested the following alternative wording. NOTE: Packaging, including IBCs and large packagings that has the markings required by the ADG Code Part 6 for packaging of its type, in confirmation that the packaging is ADR approved, ICAO approved, IMO approved, RID approved or UN approved is approved for the purposes of the ADG Code.	The wording of the Note has been revised as follows: NOTE: Packagings, including IBCs and large packagings, marked in accordance with Part 6 of this Code for packaging of its type, in confirmation that the packaging is ADR approved, ICAO approved, IMO approved, RID approved or UN approved may nevertheless be used for carriage under this Code.
Q2	Does removing the requirement for competent authority approval for the use of UN 3509 and replacing it with specific requirements add clarity and transparency of requirements?	Supported by all other than one regulator who raised concerns that it would remove the ability for emergency services and EPA input.	Special provision 663 restricts the substances that UN 3509 can be used for, to prevent its use for packagings that have contained more harmful substances. Retained as per the draft.
Q3	Will the revised wording of 4.1.1.19.1 provide greater clarity as to what packagings are permitted for use as salvage packagings? 4.1.1.19.1 Damaged, defective, leaking or non-conforming packages, or dangerous goods that have spilled or leaked may be carried in salvage packagings mentioned in 6.1.5.1.11 and in large salvage packagings mentioned in 6.6.5.1.9. This does not prevent the use of a larger size packaging, an IBC of type 11A or a large packaging of appropriate type and performance level and under the conditions of 4.1.1.19.2 and 4.1.1.19.3.	The proposed wording was supported. One stakeholder made the following comment: <ul style="list-style-type: none"> The wording of 4.1.1.19.1 “an IBC of type 11A or a large packaging of appropriate type...” is clear, however the discussion uses the wording “that only IBC of type 11A are permitted”. Is this intended to stop the use of IBC that are not 11A but are considered “appropriate type”? 	Provision 4.1.1.18.1 of the current code does not permit the use of any IBCs as a salvage packaging. Provision 4.1.1.19.1 of the draft code extends the packagings that can be used as salvage packagings to include IBCs of type 11A. Retained as per the consultation draft.
Q4	Will explicitly permitting type 11A IBCs for use as a salvage packaging provide greater flexibility for transporting dangerous goods that have been recovered from a spill or leak?	All responses were positive.	Retained as per the consultation draft
Q5	Are there assimilation methods currently used in Australia that are different to those in the draft of 4.1.1.21?	No information on current methods was provided. <ul style="list-style-type: none"> The inclusion of the assimilation guidance 4.1.1.21 is likely to be useful guidance. Members are not aware of additional procedures. 	Retained as per the consultation draft.
Q6	Will the proposed amendment to the transport of UN 2800 impact your operations?	Supported by those who offered comment. Most submitters did not comment on this question. <ul style="list-style-type: none"> The realignment with ADR 23 provisions will provide transporters of batteries including used batteries meeting 	Retained as per the consultation draft.



Attachment E – Working paper consultation summary

		the technical requirements of the special provision greater flexibility and operational efficiencies.	
Q7 and Q8	The following Note has been added to application section of P110(a) and P110(b), to clarify that Division 1.1A must not be transported without approval of the competent authority. NOTE: Explosives of Division 1.1A shall only be transported with the approved of the Competent Authority. Should this stay as a Note, or should it be included in the standard text? Please provide your reasons. Will adding the requirement to the packing instruction make it more obvious that approval is required?	All but one response was that the wording should be included as standard text rather than a Note. One stakeholder questioned the need for the text given that these explosives have to first be authorised by the CA.	The wording from the draft Note has been changed to standard text
Q9 and Q10	The following UN entries have been included in the list of UN numbers assigned to PP40. UN 1395 ALUMINIUM FERROSILICON POWDER UN 1396 ALUMINIUM POWDER, UNCOATED UN 1436 ZINC POWDER or ZINC DUST UN 2805 LITHIUM HYDRIDE, FUSED SOLID PP40 prohibits the use of bags for packing group II. P Are you aware of any packing group II substances of these UN numbers currently being transported in bags in Australia? Do you believe the extension of PP40 to UN numbers 1395, 1396, 1436 and 2805 appropriate?	No known transport of these substances in bags. The inclusion of PP40 was supported.	Retained as per the consultation draft.
Q11	Is there a reason why these removable head single packagings should not be included in P504 of the future code?	The only concern raised was their suitability for air transport. That is not a consideration for the ADG Code.	Retained as per the consultation draft.
Q12	P601 now requires the expert conducting inspections of these packagings to packaging to mark the packagings with their stamp. Are there circumstances where the person conducting the tests or inspections would not have an official stamp?	<ul style="list-style-type: none"> Provided that the process as outlined in the discussion paper is correct, that is the person conducting the verification inspections is issued with a verification stamp recorded in a register maintained by JAS-ANZ, then we cannot envisage a situation that the person conducting the test would not use an official stamp that can be traced for auditing purposes. 	Retained as per the consultation draft.
Q13 and Q14	Should a Note be added to P650 (14) advising duty holders that they may be subject to other requirements under state or territory legislation?	The addition of a note was supported but no references were identified that could be included in the note.	Not carried forward as without a reference to point to, the note adds no value.
Q15	Please provide your initial thoughts on the changes to B1 and B2. Your input will help inform the future discussion on special provisions for carriage.	<ul style="list-style-type: none"> Agree with the proposal to align the standard with the transport process. Changes to B1 and B2 special provisions for packing instructions and inclusion of new vehicle packing instruction in Part 7 is a positive step forward. Changing packages and IBCs special packing provisions, increasing from two to four provisions will improve the exact criterion that the dangerous goods must loaded and transported. This will need to be looked at on a case by case basis to ensure there is no reduction in safety when transitioning to new special provisions. 	The complete analysis of existing against proposed is detailed in working group paper #10.
Q16	Are there any land specific special packing provisions (RR, BB, LL) that you disagree with?	The special packing provisions were supported.	Retained as per the consultation draft.



Attachment E – Working paper consultation summary

Q23 and Q24	Should the requirement to provide evidence of the tests required in 4.2.1.13.1 be included in the future code?	<p>Given the hazardous nature of these two classes of dangerous goods, being thermally unstable and readily combustible, and that the Dangerous Goods list has a number of entries of class 5.2 and class 4.1 without a specific packing instruction. The provision should be included so that the competent authority can be better involved and better informed in such rare situations.</p> <p>A portable tank that is manufactured and used to store, handle or transport dangerous goods of class 4.1 and 5.2 should be approved and manufactured to a standard and assurance of the design method is displayed on relevant plates or alternately written evidence is attained.</p> <p>The new wording in 4.2.1.13.1 may need to be improved for Australia. The ADG Code is for land transport of dangerous goods and the new wording refers to competent authority of the country of origin and competent authority of the country of destination. This should be left to the IMDG Code.</p>	This is still being investigated.
-------------	--	--	-----------------------------------

Working Group Paper #10 – Special provisions and conditions of carriage, loading unloading and handling

	Question	Summary of responses	Response and actions taken
Q1, Q2 and Q3	Is there a compelling reason that special provisions marked for deletion in the draft code should be retained in the future code?	All but one of the responses supported the deletion of these special provisions.	These special provisions have been deleted as per the consultation draft.
Q5	Are the requirements in SP 209 relevant for land transport?	Some comments received raised concerns regarding the potential for increases in pressure due to rising temperatures in vehicles during transport.	The SP refers to the pressure at the time the containment system is closed. Temperatures during transport would not impact this. SP 209 has been deleted as per the consultation draft
Q6	Is there a valid reason the special provisions (that assist in assigning the correct entry in the dangerous goods list, or provide additional information) should not be included in the future code?	<p>The addition of these special provisions was supported by those who responded. The one exception was a concern raised regarding SP 657 which provides a reminder that UN Nos. 1011, 1969 and 1978 are to be used for the technically pure substance only. Mixtures of LPG components are to use UN 1965 or UN 1075. The concern raised was that this would prevent the addition of additives such as odorant to single gases such as butane.</p>	<p>The intent of SP 657 is to clarify that mixtures of gases, e.g. butane and propane together, are not permitted to use a UN number intended for only one of those gases.</p> <p>Note 2 of provision 2.2.2.1.1 states that A pure gas may contain other components deriving from its production process or added to preserve the stability of the product, provided that the level of these components does not change its classification or its conditions of carriage, such as filling ratio, filling pressure, test pressure.</p> <p>These special provisions have been retained as per the consultation draft.</p>
Q7	Is there a valid reason special provisions 584, 586, 587, 588, 590, 591, 592, 593, 594, 596, 597, 598, 600, 601, 635, 637, 639, 643, 646, 647, 648, 653, 665, 668, 669, and 676, should not be included in the future code?	<p>Responses were generally supportive with the exception of the following.</p> <ol style="list-style-type: none"> 1. SP 584 could be improved and should be amended with limits placed on the maximum allowable quantity to be exempt. 2. SP 598 would be reducing the regulation of batteries. This is a significant change from the existing ADG Code. 3. SP 591 UN 1794 Lead sulfate with more than 3% free acid 4. SP 597 UN 2790 Acetic acid solution, with no more than 10% pure acid by mass 5. SP 596 UN 2570 Cadmium compound - Cadmium is a heavy metal Division 6.1 Toxic Dangerous Good. Even in 	<ol style="list-style-type: none"> 1. SP 584 specifies the quantity limits that the exemption applies to. The limits are very small, e.g. not more than 25 gm and not more than 0.75 g per m3 of capacity. 2. This is not a reduction in safety. The SP only applies to new batteries or used batteries that are being carried for recycling at the end of their life. There is no reduction in packaging requirements. For used batteries, the packaging is greater than current. 3. SP 591 provides clarity that lead sulfate with more than 3% free acid does not meet the classification criteria as Class 8 dangerous goods. This represents no change for the current code.



Attachment E – Working paper consultation summary

		<p>trade waste streams, it is prohibited to be present at concentrations exceeding 2 mg/L.</p> <p>6. SP 647 UN 2790 Acetic acid solution (vinegar and acetic acid food grade with not more than 25 % pure acid by mass) – There is a risk that significant leaks of acetic acid solutions of UN 2790 in road transport may produce a vapour hazard exceeding the IDLH and present a risk to emergency responders and the public.</p>	<p>4. SP 597 provides clarity that Acetic acid solution, with no more than 10% pure acid by mass does not meet the classification criteria as Class 8 dangerous goods. This represents no change for the current code</p> <p>5. SP 596 has not been carried forward. This retains the conditions for UN 2570 as per the current code.</p> <p>6. SP 647 has not been carried forward. This retains the conditions for vinegar and acetic acid food grade with not more than 25 % pure acid by mass meeting UN 2790 as per the current code.</p> <p>All other proposed special provisions have been retained as per the consultation draft.</p>
Q8 and Q9	Do you have any questions or concerns relating to special provisions SP 636 or SP 670, which provide conditional concessions for lithium batteries for collection facilities? What impact will SP 636 and SP 670 have on your operations?	Concerns were raised by two competent authorities regarding the relaxing of packing instructions provided by these special provisions.	<p>SP 636 aligns with the current practice for collection services provided at supermarkets and council depots.</p> <p>SP retained as per consultation draft.</p> <p>SP 670 applies only to household equipment such as refrigerators, dishwashers, etc. that have a small integrated cell or battery that is not used to power the equipment. For example, button cell batteries used for data integrity.</p> <p>These special provisions have been retained as per the consultation draft.</p>
Q10	Are the transport conditions in Australia significantly different from overseas, such that the substances (prohibited for carriage under ADR) could be transported safely?	<p>Responses received were supportive of retaining the prohibition on the transport of these substances. The following concerns were raised in relation to the assignment of SP 611 to UN 1942.</p> <ol style="list-style-type: none"> 1. Prohibiting the carriage of specific substances would imply that these substances are too dangerous to transport. UN2067 Ammonium Nitrate Based Fertiliser (division 5.1) may contain up to 0.4% combustible substances. There is also Ammonium Nitrate Based Fertiliser, UN2071 (class 9). Neither of these dangerous goods (UN2067 and UN2071) have a similar proposed new Special Provision prohibiting transport, as per UN1942. 2. In the current Code, the presence of more than 0.2% combustible substances is a classification criteria that requires UN 1942 to be reclassified as an explosive (i.e. UN 0222). It is an explicit part of the proper shipping name. Moving this information to a transport prohibition makes it less visible and means that the classification does not need to be reviewed when AN becomes contaminated, it only prohibits the transport. This subtle difference may lead people with contaminated AN to believe it is rightly classified UN 1942 unless and until it is transported. It is recommended that this information be duplicated in the classification section or the proper shipping name. 3. It would be preferable that contaminated AN is simply classified as UN 0222 	<ol style="list-style-type: none"> 1. The PSN for UN 1942 is 'AMMONIUM NITRATE, with not more than 0.2% total combustible material, including any organic substance calculated as carbon, to the exclusion of any other added substance.' By definition, AN with more than 0.2% combustible material is already prohibited from being transported as UN 1942. The following excerpt contains the substances and mixtures that are prohibited from transport. For AN with more than 0.2% combustible material it can be transported only if it is a constituent of a Class 7 substance or article; For AN based fertilisers, the AN content is determined as per the flow chart in the Manual of Tests and Criteria. 2. This information is contained in 2.2.51.1.7 and 2.2.51.2.2. 3. Is it possible for AN to be a constituent in a Class 1 substance or article that is not UN 0222 <p>SP 611 represents no change from the requirements under the current ADG Code, it simply makes them more transparent. These special provisions have been retained as per the consultation draft.</p>
Q11	Do you have any questions or concerns relating to these special provisions that add additional requirements or restrictions?	All responses received supported the inclusion of these special provisions.	These special provisions have been retained as per the consultation draft.



Attachment E – Working paper consultation summary

Q12	<p>Special provision 664 appropriate for Australia as written or does it require modification?</p>	<p>Submitters were generally supportive of the inclusion, however some comments were made that suggested minor changes:</p> <ul style="list-style-type: none"> The tank construction requirements should be left to chapter 6.8 The section on training of drivers was suggested to be removed and the requirements for placarding and marking of the vehicle still be required. 	<p>While there may be merit in breaking up the provisions, we consider that this would impact the code's cohesiveness, while not bringing commensurate value. The comment remains a valuable consideration when writing special provisions.</p> <p>We concur that the training requirement as written is unnecessary, and will remove it.</p> <p>The requirement to placard the vehicle is a reference to the vehicle placarding, not the tank itself. This ensures that the vehicle placarding continues to reflect the risks of the load on the vehicle.</p>
Q13	<p>Do you believe that the total exemption in the current code, including the absence of minimum safety requirements for lithium batteries should continue?</p>	<p>Most responses were very supportive:</p> <ul style="list-style-type: none"> SP 123 in ADG Code 7.8 provides a total exemption from technical risk control requirements (safety measures) set out in the code for vehicles including e- scooters classified as UN 3166 and UN 3177. This is an unacceptable position given that lithium batteries when fitted to vehicles and equipment have led to numerous fires and explosions. We support the measures as proposed by NTC to ensure UN 3166 and UN 3177 are required to be subject to SP 388, 667, 669, 404 and 405. Arguments provided by NTC are adequate to justify the proposed change, not to mention empirical incident evidence gathered by emergency services. Lithium batteries are subject to many regulations, not just dangerous goods regulations. We need to be careful not to duplicate requirements of other regulations. Is there evidence to link the high incidence of e-scooter fires to the road transport of e-scooters as a cargo. Most incidents appear to occur in residential settings and most lithium batteries are imported into Australia. 	<p>The amended special provisions for UN 3166 and UN 3177 are only requiring minimum safety to be met to qualify for the exemption.</p> <p>These special provisions have been retained as per the consultation draft.</p>
Q14	<p>Do you believe the conditions in SP 663 for the use of UN 3509 are appropriate and proportionate to the risk?</p>	<p>Most responses received supported the removal of competent authority intervention and believed that the specified conditions were appropriate and reflected the risks associated with these packagings.</p> <p>One response raised concerns as to whether the specified conditions appropriately identified the hazards associated with the original content of the packagings and addressed the risks they present.</p>	
Q15 and Q16	<p>Do you believe the requirements in SP 667 (b) are appropriate and proportionate to the risk? Will having pre-defined requirements enable a quick and safe response in the event of an incident?</p>	<p>All responses received supported the proposal to replace the need for competent authority intervention with the provisions in SP 667(b).</p> <p>One stakeholder suggested the following:</p> <ul style="list-style-type: none"> Until fire services have established procedures and/or guidelines in dealing with damaged batteries and EVs that can be codified, the Code could also include a statement along the lines of "Precautions shall be taken to minimise the likelihood of thermal runaway and/or propagation" 	<p>The requirements of the special provision are designed to minimize the likelihood of thermal runaway. Specific response actions are detailed in the manufacturer's emergency response guides for individual vehicle models. Adding a further statement in the code is unlikely to provide the necessary warnings to emergency responders.</p> <p>This special provision has been retained as per the consultation draft.</p>



Attachment E – Working paper consultation summary

Q17	Is the concessional exemption in SP 672 appropriate and proportionate to the risk?	All responses received supported the inclusion of SP 672.	This special provision has been retained as per the consultation draft.
Q18 and Q19	Do you consider the draft requirements for waste paint products of UN 1263 to be proportionate to the risks?	<ul style="list-style-type: none"> • The use of SP670 and UN1263 allows the waste paint industry/transporters to have a consistent safe process to transport waste paint nationally. • SP 650 from the ADR sets out technical requirements designed to ensure that flammable waste paint UN 1263, are transported safely. • We are supportive of addressing the issue of waste paint products of UN1263 and providing options for industry. • (CA response) We do not support the introduction of SP 650. The waste industry does not use flexible IBCs and does not have leakproof vehicles. We suggest the following provisions be included in a SP for waste paints and waste suspected flammable liquids. <ul style="list-style-type: none"> ○ Waste paints (and suspected flammable liquids in small containers) collected at waste collection facilities must be transported in containers that: <ul style="list-style-type: none"> ○ Do not exceed 8m9 in volume (we are seeking containers that fit a standard pallet space) ○ Are made from steel fitted with a latched lid that is latched closed during transit ○ Are liquid tight other than at the lid (see examples below) ○ Have paint tins contained within a liquid tight plastic liner (minimum 06 micron) that is closed-sealed during transit ○ Has the paint tins are relatively tightly packed to minimise movement and the container is not transported partly filled ○ Are marked with fUN.7809.WASTE.PAINT?9?If?or. fUN.7809.WASTE.PAINT?9?PG.If and a class 9 label etc ○ Leaking paint tins need to be placed in separate plastic bags with absorbent material and tied off before being placed with other paint tins; ○ A simplified transport document identifying the number of waste paint containers rather than the number of tins; • (CA response) P650 is specifically written for residues only. It does not provide for containers with a quantity of free liquid, and it is inevitable that these quantities will be carried in the paint and flammable liquid waste streams. P650 may be acceptable as a solution for residues only, where there is nothing to spill. P650(b) is inadequate for packages that contain any measurable amount of liquid because it amounts to carrying liquid in a bag. 	<p>Following further consultation, SP 650 has been redrafted as follows:</p> <p>206AWaste consisting of packaging residues?solidified residues and liquid residues of paint may be carried under the conditions of packing group II; In addition to the provisions of UN Noj.7809. packing group II?the waste may also be packed and carried as follows;</p> <p>(a) The waste may be packed in a pallet box capable of meeting the requirements in 710 for a Type II segregation device?fitted with a lid that shall be latched during transport</p> <p>(b) Leaking paint tins shall be placed in separate plastic bags with absorbent material and tied off before being placed in the pallet box;</p> <p>(c) Paint tins must be placed upright and tightly packed to minimise movement?eg; by completely filling the pallet box or through the use of a tightly closed plastics bag;</p> <p>(d) Carriage in bulk in sheeted vehicles?sheeted wagons? movable roof wagons?closed containers or sheeted large containers?all with complete walls is allowed; The body of vehicles?wagons or containers shall be leakproof or rendered leakproof?for example by means of a suitable and sufficiently stout inner lining</p> <p>(e) If the waste is carried under the conditions of this special provision?the goods shall be declared in accordance with 107;7;9;7 in the transport document?as follows;. fUN.7809.WASTE.PAINT?9?If?or. fUN.7809.WASTE.PAINT?9?PG.If;</p>



Attachment E – Working paper consultation summary

		<p>P650(c) requires tests be conducted on the packages using a representative sample of the waste. That seems to be left to the waste packer and is unlikely to occur.</p> <p>Many parts of P650 are written as "may"; this creates provisions that are not mandatory and not enforceable.</p> <p>P650(d) describes sheeted vehicles with complete walls and which are leakproof. This description is not very clear but vehicles that meet this description likely do not exist in Australia, especially with regard to spill containment.</p> <p>WE recommend that waste paint products are carried in approved packaging. P002 identified in P650(a) would be an acceptable option, without options (b)-(d). Reasons include:</p> <ul style="list-style-type: none"> ○ Preventing loss of containment and exposure to people is the most fundamental objective in dangerous goods transport. We achieve this objective principally by using tested, approved, and above all closed containers. This is a strong argument against using containers that do not close fully and cannot retain liquid when tipped over. ○ 200 L steel or plastic drums are a viable compliant option for transporting waste paint containers. 200 L drums are ubiquitous, affordable, recyclable, leakproof, available in open head versions, and can be stacked on a pallet and a rack. They satisfy many of the necessary functions in the form of an approved UN packaging that will not leak. <p>Any decision to exempt the need for approved packagings should be made with a more thorough assessment of risk and what is reasonably practicable for compliance than was offered in Working Group Paper 10.</p>	
Q20, Q21 and Q22	<p>Are you aware of an Australian equivalent standard to EN ISO 9994:2019 "Lighters – Safety Specification?</p> <p>Do you consider the draft requirements for waste lighters of UN 1057 to be proportionate to the risks?</p>	<p>All responses received supported the draft amendments. References to the following additional Standard were provided:</p> <ul style="list-style-type: none"> – ASTM F400:2010 Standard Consumer Safety Specifications for Lighters – EN 13869:2016 Lighters – Child Safety Requirements for Lighters - Safety Requirements and Test Methods Consumer Goods (Disposable Cigarette Lighters) Safety Standard 2019 	<p>This special provision has been retained as per the consultation draft.</p> <p>The two additional Standards will be reviewed to see if they are relevant. If so, they will be added to the SP</p>
Q23	<p>What impact with the inclusion of special provision 658, as an alternative to domestic consumable dangerous goods, have on your business?</p>	<p>No responses were received. On further investigation, it is apparent that Domestic Consumer Dangerous Goods in the ADG Code were originally modelled on SP 658 of ADR.</p>	<p>This special provision has been retained as per the consultation draft.</p>
Q25, Q26 and Q27	<p>If you are a consignor of UN 3077 or 3082, what impact do you believe this the removal of AU01 (replaced by SP 601, SP375A and exclusion from placarding thresholds) will have on your business?</p> <p>Do you feel that the requirement to identify these substances or to ensure that are properly packed, is unjustified?</p>	<p>Most of the responses received agreed that these substances need to be appropriately identified and were generally supportive of the proposed changes. Concerns were raised regarding the potential of carriers imposing a DG surcharge.</p> <p>The following concerns were raised by two workplace regulators:</p>	<p>The amendments relating to UN 3077 and UN 3082 were drafted in close consultation with industry. The primary concern raised was in relation to the DG surcharge imposed by carriers. To alleviate this, SP 375A has been further amended to read:</p>



Attachment E – Working paper consultation summary

	<p>If you transport these substances, will you charge a dangerous goods surcharge?</p>	<ol style="list-style-type: none"> Class 9 UN 3077 and UN 3082 products are NOT dangerous goods for storage and licencing. This is because the State's Dangerous Goods (Storage and Handling of Non-Explosives) Regulations exclude these products by referencing the special provisions of the ADG code. If the special provision AU 01 is removed from the ADG Code, the products with UN numbers 3077 and 3082 WILL be DGs and will need to be included in the DG site licences, be stored in a bunded location, and be included in the risk assessments that support the licences. It also means that the quantities of these products will have to be considered when calculating the threshold quantity for a site to require a DG licence. The threshold is <10,000 litres for the total of all DGs on the site. Above the threshold a licence is required. Additional costs related to using UN tested and approved DG packaging and applying Dangerous Goods labelling will be incurred in the change and it would be anticipated that these additional costs are most likely to be passed on to customers, although the extent of these costs would need to be further investigated. It should be noted that not all Dangerous Goods of UN3077 and UN3082 will be classified as Hazardous Chemicals. GHS label marking is only required where the product is classified as a Hazardous Chemical. 	<p>375A These substances are not subject to any other provisions of this Code provided the following are met:</p> <ol style="list-style-type: none"> when carried in single or combination packagings containing a net quantity per single or inner packaging of 30 l or less for liquids or having a net mass per single or inner packaging of 30 kg or less for solids, the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. NOTE: In the UN Model Regulations the maximum net quantity is 96 kg. The 96 kg applies only to transport by road or rail wholly within Australia; when carried in single or combinations packagings with a capacity exceeding 30 l for liquids or having a net mass per single or inner packaging exceeding 30 kg for solids: <ol style="list-style-type: none"> packagings meet the relevant provisions of 4.1; and they are marked and labelled in conformity with 5.2.1 and 5.2.2. <ol style="list-style-type: none"> Workplace regulators can amend their regulations as necessary to reflect their requirements. This should not be a driver for appropriate regulation in transport. It's also expected that the relevant EPA regulator would already require mitigation to prevent these substances entering waterways, etc. The alignment between GHS and UN DG classification criteria means that all substances classified as UN 3077 or UN 3082 are also classified as environmentally hazardous according to the GHS. It's unfortunate that some Australian jurisdictions have not picked up Part 4 of the GHS. All imported EHS are already in UN Approved packagings and marked and labelled in compliance with the UN MR.
<p>Q28 and Q29</p>	<p>Which of the following three options for AU02 do you prefer?</p> <p>Option 1: Keep the current requirements as written.</p> <p>Option 2: Classify C1 diesel as Class 3 for transport.</p> <p>Option 3: Classify C1 diesel as Class 3, only when transported in a multicompartment tank that is also transporting a Class 3 flammable liquid.</p> <p>Are there any particular matters you would like considered when reviewing the potential future regulation of diesel.</p>	<ul style="list-style-type: none"> Option 3 is preferred. If the initial regulation was based on concerns regarding C1 diesel, it makes sense to acknowledge C1 diesel Combustible (GHS Flammable Cat 4) classification specifically as a contributor to transport risk. The treatment of diesel under the ADG Code has for some time created considerable operational regulatory confusion and has resulted in almost total exemption without the need to meet any basic safety requirements or minimum controls. For the rest of the world, diesel is treated as a Class 3 and is also subject to being marked and labelled with an Environmental Hazardous Substances mark. Option 2 is preferred as this aligns with the rest of the world position in regulating diesel, removes the unjustified concessions and ensures that diesel is regulated like any other dangerous goods. Even though the majority of diesel in large quantities is carried in Class 3 liquids road tankers, 	<p>The future regulation of diesel is still unresolved and requires further consultation. It's anticipated that minimal safety controls will be implemented as part of the Code review, with a view to separating out the regulation of diesel for a separate review process.</p>



Attachment E – Working paper consultation summary

		<p>Industry should be given a generous transition period of at least two years to lessen any regulatory burden.</p> <ul style="list-style-type: none"> • Option 3 • Diesel and other C4 flammable liquids (combustible liquids) should be classified the same way as they are in GHS and labelled as flammable liquids. While diesel poses a significant environmental pollution risk when spilled in a dangerous situation in transport, there is a greater risk if it ignites. The fire/ignition risk should be identified for emergency services and the general public. We support the retention of UN1270 as this enables emergency services to immediately recognise the presence of both petrol and diesel on a tank vehicle. • The classification of diesel as flammable liquid will have an impact on a proportion of the fuel transport industry departing the Port Botany fuel terminals. It will only affect tankers transporting diesel-only loads (and some other C4 products), which will be prohibited from using tunnels. However, diesel-only loads are a relatively small proportion of the fuel delivery task ex-Sydney and it is the belief of the EPA that this will not place an unreasonable extra burden on the industry. While the alternative routes are not as efficient, the EPA believes the impact on industry will not be significant. • Option 3: Classify C1 diesel as Class 3, only when transported in a multicompartment tank that is also transporting a Class 3 flammable liquid. In saying so, our members are assuming this extends to different tank trailers in road trains as well. This is appropriate to the risk. 	
Q31 and Q32	Do you have any background on the origins of the exemption for Natural 'greasy wool' fleece and bales?	<p>Only one response was received.</p> <ul style="list-style-type: none"> • Greasy natural wool has a wax secreted by the sebaceous glands of wool-bearing animals. In general, greasy wool is combustible but hardly flammable and as such would be difficult to be allocated into Division 4.2. Division 4.2 is for substances liable to spontaneous combustion, and which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up in contact with air, and being then liable to catch fire. Bearing this in mind it was it was decided in 2007 to remove regulatory controls. 	The exemption for Natural 'greasy wool' fleece and bales has been carried forward as SP 589A
Q33 and Q34	Do the proposed changes achieve the outcome intended in AU06 for GMMO and GMOs? Do 2.2.9.1.11 and special provision SP 637 provide clearer guidance on the classification and requirements for GMMOs and GMOs?	<ol style="list-style-type: none"> 1. To avoid confusion we should not use the term competent authorities in this case. We should create a new term such as "GMMOs and GMOs authorization authorities" and then list them in a definition. 2. The draft provisions provide less clarity than those they are seeking to replace. Although UN3245 provides an agreed upon, albeit flawed, definition of GMOs / GMMOs for international transport, it is not fit for purpose when considering Australian road and rail transport. As such it should not be incorporated into National Code. 	<ol style="list-style-type: none"> 1. This has been addressed by a footnote for 2.2.9.1.11, which specifies who the relevant CA are. 2. The definition of GMO and GMMO in 2.2.9.1.11 of the draft Code clarifies that it does not apply to naturally occurring changes. This definition is repeated in SP 637 which is assigned to UN 3245. SP 219 exempts GMO and GMMO provided they are packed as per P904. SP 601 exempts ready to be administered pharmaceuticals from the requirements of the Code.



Attachment E – Working paper consultation summary

		<p>Given the enormous complexity and rapidly emerging technology, any definition of GM products runs the risk of capturing unregulated technology or missing what might be considered regulated technologies. For example, there could be considerable debate as to the definitions of changes that ‘occur naturally’ or pharmaceuticals that are ‘ready to be administered’. Moreover, with reviews of the National Gene Technology Scheme and the FSANZ definitions of novel breeding techniques currently underway, the existing Australian regulatory landscape will change. Based on current discussions with relevant authorities, the new provisions run the risk of conflicting with changes introduced by these reviews.</p>	
Q35 and Q36	Do you currently consign or transport UN 1017 Chlorine in a placard load with dangerous goods of Classes 2.1, 3, 4.1, 4.2, 4.3, 5.2, or other dangerous goods of Class 2.3, 5.1 or 8?	Those who responded to this question supported its removal. No information on potential impacts was received.	Special provision deleted as per consultation draft.
Q37	Does the proposed change achieve the same outcome as the current AU08?	<p>Only one response was received.</p> <ol style="list-style-type: none"> The proposal to incorporate 1.1.3.6.3 of ADR will achieve the same outcomes as AU08. However, whilst the original Determination only covered UN 2794, as the majority of vehicle batteries contain acid as the electrolyte, consideration should be given to extend the coverage to UN 2795 also. However, including a requirement (25% rule for automotive batteries) as a note is not supported as this waters down the importance of a rule. We suggest that it should be included as a dot point in clause 1.1.3.6.3. 	The 25% rule has been elevated from a Note to normative text.
Q38	Q38. Is there any reason the general provisions in Chapter 7.1 of the draft code should not be included in the future code?	All responses received supported the inclusion of Chapter 7.1	Chapter 7.1 has been included. Individual provisions are discussed below.
Q39	Will extending the requirement for transport in closed or sheeted vehicles to all packages, impact your operations?	<p>The only adverse comment received was in relation to UN 3342.</p> <ol style="list-style-type: none"> We do not support allowing Xanthates to be transported in sheet vehicles. Xanthates must be transported in Closed Cargo Transport Units. 	<ol style="list-style-type: none"> The V code for UN 3342 has been amended to V15, requiring these to be transported in closed vehicles or closed containers. <p>The definition of ‘sheeted vehicle’ has been amended to specify that it means a curtain sided vehicle.</p>
Q40	Will the inclusion of V5 impact your operations?	No comments were received.	
Q41	Do you support the above argument on when transport is permitted only in a closed vehicle as opposed to when a closed or sheeted vehicle is permitted?	<p>Concerns were raised in relation to the definition of sheeted vehicles and the assignment of V1 to UN 3342 XANTHATES. The concerns relating to sheeted vehicles were based on the assumption that the definition of "sheeted vehicle" will be as per ADR 2023: "an open vehicle provided with a sheet to protect the load".</p> <ul style="list-style-type: none"> The list of dangerous goods that should be carried in closed vehicles is incomplete; one example is UN 3342 XANTHATES (see below). The reasoning provided for allowing dangerous goods in sheeted vehicles is unclear. The paper refers to risks of dusts and powders but does not explain the nature of the risk; why are dusts and powders suitable for sheeted vehicles? Dangerous goods that have hazards from exposure to water should not be permitted in 	<p>A 'sheeted vehicle' has been defined as ‘a curtain sided vehicle with a solid roof structure supported by a headboard and tailboard’.</p> <p>The V Code for UN 3342 Xanthates has been changed to V15, which requires them to be transported in a closed vehicle or closed container.</p>



Attachment E – Working paper consultation summary

		<p>sheeted vehicles because there is a significant difference in the protection provided by a sheet and a closed vehicle. Sheets are vulnerable to poor attachment, incomplete coverage and provide no mechanical protection. Closed vehicles resolve all of those hazards.</p> <p>UN 3342 XANTHATES is an example where this proposal fails. It is also an example of the inadequacy of ADR carriage provisions relative to the ADG Code.</p> <p>Xanthates are currently subject to B2 in ADG 7.8, but they are only subject to V1 in ADR 2023. Assuming that V1 applies to packages and V11/V15 apply to IBCs, this means that xanthates have no restrictions on IBC carriage in ADR, but in Australia they require closed vehicles.</p> <p>The assignment of B2 to xanthates was supported by CAP in 2015 following a number of incidents, most recently in Western Australia. It was recognised that packing group assignment to xanthates from some countries is unreliable, which can result in xanthates arriving in Australia in flexible IBCs and being at risk of mechanical damage and moisture ingress. On contact with water, xanthates generate heat and evolve carbon disulfide gas which is flammable and highly toxic. The heat accelerates the decomposition. Incidents involving xanthates are dangerous and disruptive due to these properties.</p> <p>Xanthates must be transported in closed vehicles to provide the necessary mechanical and moisture protection regardless of the packing group and packaging in which they arrive in Australia.</p> <ul style="list-style-type: none"> • UN 3342 should be subject to V15 to maintain the current level of safety in Australia, which was implemented based on actual transport incidents. • Dangerous goods that are dangerous when wet should not be permitted in sheeted vehicles. This should include goods that are dangerous when wet but are not classified in Division 4.3, as is the case for xanthates. 	
Q42	Are there other impacts (costs or benefits) we haven't considered?	<p>The proposal to allow the transport of Dangerous Goods in solid or powder form that have a dust risk in sheeted vehicles provided they have a sealed top to prevent the dust being an environmental nuisance is mandatory.</p> <p>Extending the requirements to cover the transport of the 34 UN Numbers in smaller packages and IBCs was supported. While it was expected to impact an extremely small number in the sector, it was seen as reasonable and will close a regulatory gap.</p>	See responses for Q41 above.
Q43	Will the inclusion of VC type bulk containers and the additional AP provisions provide clearer requirements and remove regulatory barriers?	<p>No objections to this proposal. Only two competent authorities responded to this question, both fully supported the proposal.</p> <ul style="list-style-type: none"> • Yes, as it takes the CA out of the picture and all the requirements are generic and can be found in one specific chapter in the Code. 	Proposals retained as per the consultation draft.



Attachment E – Working paper consultation summary

		<ul style="list-style-type: none"> Yes they do. The proposal to include VC type bulk containers as well as vehicle types (AP) for specific substances will provide a duty holder with a clearer set of additional packing instructions, for carriages in packages and bulk and removes the need to seek Competent Authority approval. 	
Q44	Will the proposed changes to Table 9.2 and the addition of Chapter 3.2, Table C assist you in determining specific segregation requirements?	<p>The proposed changes were widely accepted by all who responded. In particular, the inclusion of the list of chemical groupings in section 3.2.3 was seen as being of great assistance.</p> <ul style="list-style-type: none"> One competent authority raised concerns that they had not seen a detailed comparison and analysis of the amendments to Table 9.2. A different competent authority provided the following comment: (Table 9.2) which is aligned with IMDG Code Table (clause 7.2.4) is essentially the same as Table 9.1 of ADG Code 7.9, and coupled with Appendix A (Chemical Groupings) should better assist the duty holder with a clear set of concise rules when trying to determine how to transport different incompatible chemicals such as acids and alkali etc. 	<p>Table 9.2 was included in the draft of Part 7 of the draft code that accompanied Paper #10.</p> <p>The original content of this Table was developed to align with the IMDG Code at the time. The table in the draft code has been updated these incompatibilities to align with the current IMDG Code. The only incompatibility in Table 9.2 of the current Code that has not been carried forward is Class 6 with Nitromethane. No rationale could be found for the inclusion of this. No safety data sheets could be found to support any adverse reaction warranting segregation between these. A review of segregation requirements for nitromethane identified no specific incompatibilities. It's understood that the current incompatibility between these may have resulted from a translation error in the past.</p> <p>The table of mixed loading provisions has been further amended to remove Class 1 explosives. These are now detailed in a separate table.</p>
Q45	Are there other impacts (costs or benefits) we haven't considered?	<ol style="list-style-type: none"> In regard to handling and stowage in section 7.5.7.1. The note includes the light vehicle guide but not the NHVR Load Restraint Guide 2018, which is relevant and appropriate to this publication. We suggest the following addition: "NOTE: all loads must be restrained in compliance with applicable state or territory legislation, e.g. the Heavy Vehicle (Mass, Dimension and Loading) National Regulations, the NHVR Load Restraint Guide 2018 or the Load Restraint Guide for Light Vehicles 2018." Gates functioned as a secondary method to contain dangerous goods that come loose on a load. The paper proposes to remove this requirement and then states: "There are no negative impacts or reduction in safety outcomes expected from these changes." Does the NTC have any data or modelling on this? Perhaps another method to ensure secondary containment of the load should be considered for dangerous goods if gates are not the best solution from an WHS perspective. "4.5 Provisions concerning loading, unloading and handling (Chapter 7.5)". Our members expressed the concern that removal of information from ADG in deference to other regulation (e.g. Heavy Vehicle (Mass, Dimension and Loading) National Regulation) makes overall compliance more arduous, as an additional information source needs to be consulted by the transporter. 	<ol style="list-style-type: none"> 7.5.7.1 has been amended to include the following: "All loads must be restrained in compliance with the performance standards specified in the Heavy Vehicle (Mass, Dimension and Loading) National Regulation. Note; the performance standards for light vehicles are the same as those for heavy vehicles; Further guidance can be found in the Load Restraint Guide." The performance standards for load restraint are designed to ensure a load cannot leave the vehicle. The code contains additional restraint requirements designed to protect the dangerous goods from damage. Operators of heavy vehicles are required to comply with national heavy vehicle laws. It's not feasible or appropriate to incorporate requirements for heavy vehicles into the ADG Code to provide a "one-stop-shop". To do so would also risk the requirements becoming misaligned over time, resulting in even more confusion. Incident data from the NHVR indicates that compliance in the dangerous goods sector is generally higher than that in general the general heavy vehicle sector.



Attachment E – Working paper consultation summary

		<p>We accept the NTC point regarding duplication and the potential for conflicts/contradictions, however, there needs to be a clear pathway for operators to understand their obligations and achieve compliance. Members have observed too many incidents caused by improper load restraint to accept that this ‘bread and butter’ aspect of all road transport operations is well understood in the industry. These issues are even more critical when we are dealing with Dangerous Goods.</p> <p>Our members believe ADG should be a ‘one-stop-shop’ for the Transport of Dangerous Goods. It must make clear directions on “requirements designed to ensure the load remains on the vehicle and does not move in such a way as to affect the vehicle’s stability.” Therefore, our members disagree with the NTC assertion that “there are no negative impacts or reduction in safety outcomes expected from these changes.”</p>	
Q46 and Q47	<p>What provisions relating to transfer in the current code work well? What provisions relating to transfer in the current code don’t work well or need to change?</p>		See paper #12 and draft of Part 8.
Q48	<p>Are there any reasons that the CV codes are unsuitable for Australia?</p>	<p>Most responses supported the inclusion of CV Codes. Concerns were raised in relation to CV 10 and CV 24.</p> <ol style="list-style-type: none"> CV24 – the application of this provision to substances of division 5.1 (and most likely the other listed classes) is problematic. The intent appears to be ensuring that there are no combustible materials able to mix with the dangerous good being loaded. However, requiring vehicles and containers to be “thoroughly cleaned” before loading implies that the cleaning is both internal and external. If so, this requirement does not acknowledge that residual product is most likely to be present in the vehicles and containers dedicated to transporting one specific dangerous good. The presence of this residual product when loading the vehicle / container does not present a safety risk. Thoroughly cleaning dedicated vehicles and containers between each loading event will impose significant costs, with very limited safety benefits from doing so, and there will be considerable environmental costs associated with this activity. Dedicated vehicles and containers are checked prior to each loading to ensure they are in good condition, with minimal residual on the outside of the vehicles / containers and no visible oil leaks, etc. CV10 introduces a directive that would appear to negate pressure relief valve operation for LPG cylinders. This CV code as it stands would conflict with current safety requirements and standards and must not be used for Australia. 	<ol style="list-style-type: none"> This comment indicates that the submitter may be reading this as the tank needing to be thoroughly cleaned. That is not the case. It is the vehicle or (shipping) container that needs to be cleaned. If this is residual product in a vehicle or container, this would indicate there has been a loss of containment that has been properly cleaned up. CV10 has been amended to read: Cylinders as defined in 1.2.1, shall be transported upright in a suitable device, such as a stillage, that effectively prevents them from overturning, except where: <ol style="list-style-type: none"> The cylinder may be safely transported in another configuration; and The safety valve remains in communication with the vapour space, or the cylinder only contains compressed gas.



Attachment E – Working paper consultation summary

<p>Q49, Q50, Q51, Q52 and Q53</p>	<p>Do you consider it inappropriate to require type II segregation devices to be liquid tight?</p> <p>If the draft requirement for Type II segregation devices to be liquid tight is retained, what transitional provisions should be included?</p> <p>Are there reasons why the “non-type I underslung segregation device” should not be changed into a general “type II attached segregation device”?</p> <p>Are there reasons why the three segregation packagings should not be replaced by a single requirement including performance requirements?</p> <p>If you currently use a packaging for segregation, what do you consider an appropriate timeframe to transition to the overpack for segregation requirements?</p>	<p>Comments received identified the need for the following mandatory requirements for segregation devices:</p> <ul style="list-style-type: none"> – Expiry dates and/or retest periods for segregation device approvals, and corresponding marks. – Inspection requirements for segregation devices – Internal bunds. Language that segregation devices shall be free from cavities where spillage might collect is unhelpful to the design of proper internal bunds. <p>Other comments received included:</p> <ul style="list-style-type: none"> • With the removal of the word "underslung", the differences between a Type I and a Type II attached segregation device is not clear. Some introductory text may assist to describe the different uses. • The grouping together of Type II attached and Type II removable should be reviewed. Only Type II removable requires testing and may be more appropriate as a standalone category. Type I and Type II attached have more in common and could be grouped together, or a third category created. • Draft section 6.15.4.3 refers to design tests for Type II attached segregation devices. Should this refer to Type II /removable/ segregation devices instead, to reflect the current ADG Code? This supports the previous point by illustrating the confusion between different Type II segregation devices. • Consideration must be given to how any conditions attached to a segregation device will be communicated to all the persons likely to pack, load and carry it. For example, segregation devices not designed for stacking and hence not tested for stacking must communicate this information to the user. • Draft section 6.15.2 states there will be transitional arrangements for existing approved packagings for segregation. It may be worth investigating how many packagings for segregation have been approved and are in need of transition. • Is there a reason why a type I segregation device should be attached to the vehicle? Is there any reason for it not to be loaded onto the vehicle with DG inside. To comply with the existing Dangerous Goods (DG) Type 1 segregation guidelines, our team members are required to utilise ladders or platforms. This enables them to work at heights adjacent to the trailer, providing them access to the DG’s and the segregation container. This significantly increases the risk of fall for our team members and the DG freight. Falls from height are one of the most common causes of workplace fatalities/serious injuries, subsequently, any fall would also create the risk of a dropped carton with possible damage or DG leaks. The 	
-----------------------------------	---	--	--



Attachment E – Working paper consultation summary

		<p>Hierarchy of hazard control is a system used across all industry to prioritise possible interventions, that minimize or eliminate exposure to hazards. By using an engineering control, fixing the segregation device to a pallet, and lifting with a forklift this would minimise the risk of falls and dropped/damaged DG freight.”</p> <ul style="list-style-type: none"> • We recommend that future type II segregation devices be fitted with a sump that is liquid tight and able to be drained, similar to an enclosed drum bund rather than being completely liquid tight. We think it unlikely that door seals would remain intact, given the damage incurred by current type II segregation devices in use. • We would like the NTC to consider whether CA approval is required to be retained for type II segregation devices, or whether performance criteria might be considered as an alternative? 	
--	--	---	--

Working Group Paper #11 – Tanks and vehicles

	Question	Summary of responses	Response and actions taken
Q1	Are there other terminologies that you consider may be confusing for users of the future Code, where you consider adjustments or definitions may be needed? Note that these can be considered for adoption later in the Code development process.	Some concern was expressed by commenters about potential confusion. There was a particular concern expressed that there could be duplication created by the way tanks and vehicles for class 2 gases are specified.	<p>The NTC will be undertaking a review of the Code’s text for terminology as a part of the final compilation process. This will aim to avoid the use of inconsistent or incorrect language.</p> <p>Where unfamiliar terminology is retained (e.g. to maintain Code cohesiveness and support maintenance of the Code), information on this will be provided to industry and regulators to support the change.</p> <p>The NTC is working with interested stakeholders in gas vessel design, construction and transport to ensure that the provisions properly refer over to the pressure vessel legislation, to avoid creating unnecessary duplication of requirements.</p>
Q2	Are there specific provisions that you consider may require clarification, either in the form of notes or specific guidance?	<ol style="list-style-type: none"> 1. One commenter expressed a desire that the code be available in the form of an application. 2. There was also concern about the use of the term MEMU (in place of the Australian term MPU). 3. Similar to Q1, there was a concern from the gas industry about the interaction between transport and WHS requirements for pressure receptacles. 	<ol style="list-style-type: none"> 1. The NTC plans to release the code both in pdf and html formats, which will make the information much more readily available 2. The code will use the term MPU, in place of MEMU 3. As noted in Q1, the NTC is working with gas stakeholders to avoid unnecessary duplication between transport and WHS requirements.
Q3	Should this requirement be modified to only permit the transport with the permission of a competent authority (in situations other than a dangerous situation)?	There was general support that the provision being discussed should be modified to only allow such transport with competent authority or emergency service authorisation.	The NTC agrees, and has made this change.
Q4	Do you have any concerns with these proposed modifications to the list of TU codes?	There were mostly no objections, however there was a concern expressed that this would override Australian gas filling requirements.	Ensure that the code is clear about which requirements take precedence where there is conflict.



Attachment E – Working paper consultation summary

Q5	Do you support the extension of the 8,600 L and the 80/15 rule to tanks or compartments that have been appropriately divided by surge plates or partitions?	There was general support expressed for the formal incorporation of surge plates or partitions. One commenter expressed a concern about potential relaxation of the requirement for UN 3375.	
Q6	Are there substances that you consider should require the use of ADR style tanks, or principles on which this should be based?	No commenter was definitive on particular substances that should be transported in ADR-style tanks. Some specific comments addressed the following: <ol style="list-style-type: none"> AS 2809.1 should continue to apply ADR-style tanks would be useful for substances that AS 2809 does not properly consider There should not be mixing and matching of the provisions for AS 2809 and ADR-style tanks. 	<ol style="list-style-type: none"> The NTC has drafted the code so that AS 2809.1 applies to the tank vehicles operated in Australia, regardless of the tank type that is used. The NTC will include a recommendation that tank designers consider the use of an ADR tank in situations where AS 2809 is not readily applicable. The code provisions have been drafted to prevent this as far as possible, though a competent authority will continue to have the power to approve a tank that does not strictly conform to the requirements of the code, which would permit this (if the design was approved).
Q7	After reviewing the Code provisions, are there any additional transitional provisions relating to the use of tanks that you consider may be necessary?	One question was raised about whether the standard 12 month transition period for AS 2809 would apply.	The new code is structured to make transitional periods clear for when standards are applied. New standards will be available from the time they are published (if accepted by the competent authority).
Q8	After reviewing the requirements in 6.8.1.5 and 1.8.7, are there controls that you consider are missing or need to be amended?	<ol style="list-style-type: none"> There were some concerns raised about how to define a qualified person. Similar concerns as raised in earlier responses regarding alignment to pressure vessel requirements There was also one comment that expressed a desire to see the ADR tank requirements incorporated. 	<ol style="list-style-type: none"> The definition of a qualified person is complex to define in the Code. As at present, this is likely to be left somewhat to the judgement of regulators (with industry support) to define. NTC will consider if guidance can be provided on this in the code. As already noted, the NTC is working with the pressure vessel industry and regulators to align to WHS pressure vessel requirements. NTC will consider whether to incorporate this content directly, it may be possible to add this to the web version without including it in the pdf version. The key concern for the pdf version is the additional length it creates (at about 50 pages).
Q9	Are there marking requirements in the draft code that you consider are missing, excessive or should be amended?	Some concerns were expressed about possible confusion about hydraulic and hydrostatic tests	NTC will review these provisions to ensure that the code is clear about hydrostatic or hydraulic testing, including how it is to be carried out.
Q10	After reviewing the requirements in Chapter 6.8, are there controls that you consider are missing or need to be amended?	One comment expressed concern about mixing and matching between AS 2809 and ADR style tanks.	The NTC considers that the provisions are clear, however we will review them to ensure that the code is clear and readily able to be applied.
Q11	After reviewing the requirements in Chapter 6.10, are there controls that you consider are missing or need to be amended?	One comment noted that the requirements of RP 2219 that were adopted by CAP are included.	The NTC will ensure that the requirements of RP 2219 are addressed.
Q12	After reviewing the requirements in Chapter 6.11, are there controls that you consider are missing or need to be amended?	No issues were noted.	N/A
Q13	After reviewing the requirements in Chapter 6.13, are there controls that you consider are missing or need to be amended?	No major issues, one comment noted that there is potential for varying level of safety depending on the values selected by a designer.	The NTC considers that the code sets a minimum standard, based on international practice. Ultimately regulators will be responsible for approving any FRP tanks under chapter 6.13 and will need to be satisfied that the relevant design requirements are met.
Q14	After reviewing the Code provisions, are there any additional transitional provisions you consider may be necessary?	One concern was expressed that the transitional provisions must not reset when a vehicle is re-licensed and should be based on build date.	The NTC will be following principles for transitional provisions that reflect these concerns. Transitional provisions that permit ongoing use of a vehicle or equipment and will be based on when the vehicle or equipment was constructed.



Attachment E – Working paper consultation summary

Q15	What qualifications or experience do you consider appropriate for the person reviewing the completed tank and vehicle?	<ol style="list-style-type: none"> 1. Submitters generally expected that the person reviewing the completed tank and vehicle will be a qualified engineer, there was some commentary on the level of detail required. 2. One commenter suggested that this should be in the purview of the National Heavy Vehicle Regulator (NHVR) through its Heavy Vehicle Inspection Scheme. 	<ol style="list-style-type: none"> 1. The NTC will consider whether additional detail is required for this. We will consider how to refer to the administrative controls for tank approvals (in 1.8.7). 2. The NTC will consider whether there is appetite for the vehicle requirements to be transitioned to the NHVR. We note that WA and NT are not parties to the Heavy Vehicle National Law. This may need to be addressed with competent authorities and the NHVR as a primarily administrative matter. This would likely take place after the new code is implemented.
Q16	Do you consider that the Code should more clearly define a suitably qualified person?	There was support expressed for greater clarity on the definition of a competent person. One commenter referred to WorkSafe Victoria's definition of a competent person.	The NTC will consider adopting a definition of competent person into the code. We will need to work with the competent authorities on how to define and incorporate this, as they will be responsible for verifying conformance to this requirement. This may be a matter addressed as part of the work on training that will follow the Code review itself.
Q17	Do you have a preference between providing a standardised template or a list of minimum information to include here?	Commenters generally supported the use of a standardised template. Reference was made to the template used by CAP for tank design approvals.	The NTC will consider adopting the standard template used by CAP as a formal model. The NTC is undertaking work to determine when items should be included in the Code itself, rather than in supporting appendices or other documents. Inclusion in the Code itself can be restrictive and prevent flexibility, whereas supporting documents can be more readily updated, and can more readily provide additional guidance
Q18	Do you consider it necessary to include a detailed list as found in AS 2809.1?	There were mixed preferences for the level of detail that should be provided.	As with Q17, the NTC will consider whether this should be included in a document that is separate to the formal requirements in the Code.
Q19	Do you have any concerns or proposed changes to the draft definition for the AN vehicle type?	There was support expressed for including the AN vehicle requirement as developed by the WA dangerous goods regulator. One commenter noted that consideration should be given to including UN 3139 in the affected materials.	NTC will consider whether to include UN 3139 in these requirements.
Q20	Do you consider that a vehicle used for the transport of packages should be subject to any amended or additional controls?	There was support for including the requirements, provided they are properly configured for the task.	Include in the Code.
Q21	Do you consider that a vehicle used for the bulk transport of solids should be subject to any amended or additional controls?	yes - provided appropriate for the task. One commenter noted that the requirements for bulk containers are too simplistic.	Include in the Code and consider additional requirements for bulk container transport.
Q22	Do you consider that a vehicle used for the transport of temperature controlled substances should be subject to any amended or additional controls?	yes - provided appropriate for the task. One commenter noted concerns about suitability of refrigeration systems for the task, such as the choice of refrigerating agent.	<p>Include in the Code and consider requirements for refrigeration systems.</p> <p>As with Q20 and Q21, the NTC will consider how to develop these requirements in more detail. This may need to be a further project during the first biennium for the new code.</p>
Q23	After reviewing the Code provisions, are there any additional transitional provisions you consider may be necessary?	One comment expressed concerns about expiry for tank approvals.	The NTC considers that the comment expressing concerns has mixed up approval to build a tank versus its continued use. The code will be clear that a tank that has been built during the life of its approval can continue to be used beyond that expiry, provided it remains properly inspected and maintained. This reflects the current situation for tanks.



Attachment E – Working paper consultation summary

Q24	Which of the two options for regulating vehicles that are transporting a tank, where no transfer occurs, do you consider most appropriate? Option 1: Exempt these vehicles from the approval requirement of Part 9 Option 2: Exempt these vehicles from Part 9 entirely, only when no transfer occurs while the tank is on the vehicle	Option 2 was preferred. There was one comment that expressed concern about IBCs and licensing, noting the current 3,000 L exemption from licensing and the potential costs if this is not retained. Another comment was concerned about transfer being undertaken without mitigating engineering controls in place.	The NTC will likely adopt option 2 on the basis of responses. We will consider whether this can be simplified by being aligned with the requirement in Q25, with an appropriate transition period.
Q25	Which of the two options for regulating vehicles that are transporting a tank, where a single transfer occurs while on the vehicle, do you consider most appropriate? Option 1: Exempt single discharge tanks from certain requirements in Part 9 Option 2: Exclude single discharge from the scope of Part 9 entirely	Responses to this question leaned towards supporting option 1. One commenter noted a particular operation type that could be impacted by these requirements, where a tank-vehicle or tube-vehicle is used as static storage.	NTC will adopt option 1, with the specific requirements to be included in the draft code for consultation. NTC will consider how to address situations where a vehicle is used as static storage.
Q26	Do you consider that a vehicle that uses a package as a tank should require, or be exempted from approval?	Responses to this were mixed. Two commenters felt that it is appropriate to exempt them from approval, while one suggested that approval is necessary. A fourth commenter expressed concern about inadvertent use.	NTC will consider how to balance these comments and include in final draft code for consultation.
Q27	Do you consider it necessary to permit the use of combustion heaters on vehicles used for the tank transport of dangerous goods in Australia?	No commenters felt it necessary to include this requirement.	Prohibit the use of combustion heaters on vehicles used for tank transport.
Q28	Do you consider it necessary to include transitional provisions for combustion heaters for dangerous goods vehicles in Australia?	Responses to this question were mixed. No-one identified any in use of combustion heaters. One supported a transition if the industry needs it.	The NTC considers that the transition period for the new code should be sufficient.
Q29	Are there any other general comments that you would like considered that have not been addressed in earlier comments?	<ol style="list-style-type: none"> 1. One comment expressed a desire for clear guidance on terminology. 2. Another expressed concern that the changes would invalidate the use of equipment that is in use, and that it would impact the transport of gases. 	<ol style="list-style-type: none"> 1. Ensure concerns about terminology are clearly mitigated in the code and are appropriately addressed in guidance. 2. The new code should not result in significant changes in operation. Existing equipment in use at the time of the new code will continue to be permitted for use via enduring transitional provisions, proposed changes that impact on equipment are intended to be forward looking.

Working Group Paper #12 – Requirements for vehicle crews, equipment, operation and documentation

	Question	Summary of responses	Response and actions taken
Q1	Are there any requirements relating to the fire-fighting equipment you consider need to be added or amended?	There was mixed support for the provisions as drafted. In addition to support for the provisions, the following concerns were raised: <ol style="list-style-type: none"> 1. Consider referring to AS 1851 for consideration about selection of appropriate extinguishing agent, and concern with permitting industry to select extinguishing agent. 2. Concern about the use of vehicle mass as the defining feature for the quantity of extinguishers. 	The NTC has taken the following actions in response to these comments: <ol style="list-style-type: none"> 1. The Code currently permits industry to select another extinguishing agent, we don't see a reason to restrict this. AS 1851 refers to inspection and testing, not selection of extinguishing agent. 2. The NTC acknowledges these concerns and now only uses vehicle mass to differentiate between light and heavy vehicles. This provides a concessional requirement for light vehicles. We consider that the reworked provisions recognise the higher hazard presented by tank vehicles and bulk containers. We also consider that the provisions that are presented reflect the major risk to a vehicle, namely the potential fire load from tyres, reflected by the size of the vehicle.



Attachment E – Working paper consultation summary

Q2	Are there any requirements relating to the safety equipment you consider need to be added or amended?	<ol style="list-style-type: none"> Two comments suggested that wheel chocks be included, regardless of whether a trailer is braked or not. One comment questioned whether the drain seal, collecting container and shovel would be required for compressed, liquefied gases. One comment noted that the paper did not discuss whether intrinsic safety for torches would be mandated for non-flammable loads as discussed in paper 4. Another noted that self-contained breathing apparatus (SCBA) should not apply when transfer is not going to occur. Another question was raised about general WHS suitability requirements. 	<ol style="list-style-type: none"> NTC will consider including this in the final code. The NTC considers that the definition of liquid excludes compressed, liquefied gases for this purpose. We will consider clarifying this in either the code or in guidance. This was an omission by the NTC. Many commenters earlier expressed support for intrinsic safety as a standard requirement, however we will consider how best to address this and consult further. The NTC considers that the requirement for SCBA is now correctly calibrated. As it is for escape purposes, SCBA is considered appropriate for vehicles transporting certain substances in large quantities. The NTC has included a note about PPE for WHS purposes, and will consult on mandating that additional equipment that is identified as part of the transport emergency response preparation process.
Q3	Are there any requirements relating to the emergency information holder you consider need to be added or amended?	No additional requirements were noted.	N/A
Q4	Are there any transfer equipment requirements that you consider need to be added or amended?	<ol style="list-style-type: none"> “Transfer equipment in use for security sensitive loads such as UN 1942 and UN 3375 shall be capable of being locked/security sealed.” Potential confusion between Australian Standards and the requirements of the Code. 	<ol style="list-style-type: none"> The NTC considers that inclusion of security requirements in the code should address this. However, we will consider how best to include this specific information. We will ensure that the relevant Australian standards and frequencies are aligned.
Q5	Are there any crew or equipment requirements that you consider need to be added or amended specifically for rail transport?	Responses provided suggested that this should be developed in consultation with the rail industry, but also noted that some equipment should be required.	The NTC will work with rail stakeholders to determine the appropriate inclusions.
Q6 & Q7 & Q8	<p>Are there requirements for the training of all drivers that you consider should be added or amended?</p> <p>Are there requirements for drivers who require training to hold a licence that you consider should be added or amended?</p> <p>Do you consider that the amount of detail included in the code for the training course for licenced drivers is too little, about right, or too much?</p>	<p>Some very detailed comments were received on the impact of training for drivers.</p> <ol style="list-style-type: none"> One comment noted that the system works well for licensed drivers, but not so effectively for drivers who don't require a licence. This comment expressed support for strengthening the requirements for drivers who do not currently complete mandatory training. “Drivers should be trained in the credible scenarios and characteristics of the dangerous goods being transported. This promotes informed decision making and early intervention to prevent or manage incidents. Competency based training should be developed around the activities being conducted and the loads being carried.” “I believe more emphasis on companies to ensure any placarded vehicle (packages included) require further training. It would be great to see either an emphasis on packaged drivers having to complete TLILIC0001 irrespective of receptacle size.” Concern was expressed in another comment that the draft of requirements for licenced driver training is too detailed, and is best left to the vocational training requirements. 	<p>Response to comments 1, 2 & 3: The NTC is undertaking a project to review the training system for dangerous goods transport as a whole. This is commencing with a review of the skills and knowledge required for different tasks, including drivers. We hope this project will help to identify gaps in the training system, so that they can be filled as appropriate.</p> <p>Response to comment 4: The NTC has developed these provisions based on the current requirements for driver licence training. We have tried to remove training-specific requirements (rather than dangerous goods requirements). This information is currently not readily publicly available, impacting on transparency. We foresee that including this information in the code will support further development of these requirements, as the NTC commences its training project (see response above).</p>



Attachment E – Working paper consultation summary

Q9	What do you consider are appropriate situations or thresholds when a driver should undergo formal training prior to driving a dangerous goods vehicle?	There was support for the threshold for training being reduced to the level of a “placard load”.	The NTC will consider amending the requirement for formal training to be aligned to the requirement for when a vehicle requires placarding. Due to the impacts on the training and transport industries, we will need to consult on such a change, including an appropriate transition time to allow drivers to become trained.
Q10 & Q11	Do you consider that the prohibition on lighters and matches in the cabin should apply generally (option 1), or only to vehicles transporting flammable gases and liquids (option 2)? If you consider that it should only apply to vehicles transporting flammable gases and liquids (option 2), should this apply to all such transport, or only to FL vehicles?	Support was mostly expressed for option 2. Some specific concerns were raised: 1. There was some concern raised about duplication of requirements, and that this is best left to company safety management systems. 2. There was also a suggestion that it should apply to vehicles transporting classes 4 and 5. 3. One submission supported a blanket prohibition on ignition sources on dangerous goods vehicles (option 1).	The NTC will consider how best to balance the diversity of responses received and undertake further consultation.
Q12	Do any of these requirements need to be amended or added to? (Running the engine during loading or unloading; use of the parking brakes and wheel chocks; use of cables for electronic braking system)	Comments were supportive, with two concerns raised: 1. A minor concern about the use of the term “otherwise permitted” for engine running was raised. 2. There was also a comment made that drivers in hot areas may leave the engine running during transfer when it is not strictly needed.	1. Otherwise permitted is an additional requirement, meaning that running the engine should not be a default, but is permissive. This could include off-vehicle matters (such as the location the transfer is taking place. The NTC considers that this section is appropriately drafted. 2. The NTC will consider how to address this concern and consult further.
Q13	Do any of these requirements need to be amended or added to? (Breakdowns; detaching a trailer; operation of systems to heat dangerous goods)	No suggested amendments were received.	N/A
Q14	Do you consider that these updated [parking] provisions require amendment or to be added to?	Some suggested changes were suggested. The reference to a “public or private carpark” was suggested for removal, along with “not likely to suffer damage” as this was considered too vague. One comment suggested a clarification on how to interpret the “not likely to suffer damage” requirement.	The NTC will amend these provisions to reflect the comments received. This will likely result in the public or private carpark requirement being removed.
Q15	If you consider that Code should define distances for parking, please advise appropriate values.	There was support for including the distances in the current Code.	The NTC will include these distances in the definition of isolated position.
Q16	Are there any special provisions in this chapter that you consider need to be amended or added to?	One comment referenced retaining defined distances for explosives and ammonium nitrate.	The NTC considers this is dealt with in Q15.
Q17	Do you support this information [dangerous goods routing information] being included in this chapter?	Commenters supported information being included in this chapter as it would support the industry to be aware of and comply with their obligations.	N/A
Q18	Are there any provisions in this draft that require amending or adding to?	One comment was concerned that as drafted, typical LPG deliveries would not be possible. It was also noted that the requirement that the carrier and site occupant work together could be misinterpreted. The commenter suggested clearer wording for the reference to AS 1596 in the class 2 transfer section.	The suggested reference to AS 1596 has been implemented. The requirement for carriers and site occupiers to work together was deliberately drafted in a non-prescriptive manner, as it will vary by situation. Nonetheless, an additional note has been added to clarify that the level of communication varies, and that for residential storage, the carrier can simply inform the resident of their obligations, and to ensure that the transfer is carried out safely.
Q19	Do you consider that these definitions are appropriate for defining where the transfer provisions apply?	1. There was some comment on the inclusion of residential dwellings in the draft. One commenter suggested that it should be restricted when “on a premises where the transfer takes place and any part of that premises is used for residential purposes”	1. The NTC considers that this was not properly drafted, and have addressed this using the suggested text provided. This should ensure that properties used for residential purposes are subject to the more prescriptive transfer requirements of the code.



Attachment E – Working paper consultation summary

		2. Another commenter was concerned that this would impact on filling of residential LPG systems.	2. The drafted text of the code does not prohibit transfer in a public place, but ensures that the code applies when transfer is undertaken in a public place. In other situations, the transfer requirements of WHS legislation would take precedence. The NTC will consider whether clearer wording of this is required.
Q20	Are there any other general comments that you would like considered that have not been addressed in earlier comments?	One general comment was received regarding parking requirements, requesting “that requirements for parking and supervision should not impact the driver to comply with fatigue management requirements under the Heavy Vehicle National Law.”	The NTC is aware of this concern, and will consult on proposed text for the supervision section that permits a driver to park in contravention of the parking requirements when they are fatigue-limited, provided they make efforts to comply as far as practicable.

