

This form has been provided to assist stakeholder in making a submission on the Draft Code for the land transport of dangerous goods – Consultation Regulatory Impact Statement (C-RIS)

Submissions close on Tuesday 24 December 2024 (as per NTC website).

Details of person submitting comments

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Organisation name:	Orica Australia Pty Ltd		

Orica appreciates the opportunity provided by the National Transport Commission (NTC) to submit written comments on the Draft Code for the land transport of dangerous goods. We endorse the Project Objectives, particularly the goal of creating a cohesive, contemporary code that aligns with international standards. Importantly, the resulting Code should be simpler to use and minimise cross references to multiple other sections.

Orica has addressed the relevant questions pertaining to our Australian operations for classes 2-9, with a predominant focus on Division 5.1 oxidising substances and the associated new 'AN Vehicle' requirements.

Note: Comments on Class 1 explosives provisions, whether new or transcribed from the AEC, will be included in our response to the supplementary consultation paper on explosives transport. We appreciate the extension granted by NTC until 17 January for the submission of these comments.

The ADG Code Review is a significant change to the ADG Code, as demonstrated by the length of time the project has been underway and the high level of consultation NTC has provided to date via the Working Papers for classes 2-9, seminars, etc.

Given the scale of the project, it has been difficult to 'digest' the proposal, to provide constructive comments across all the changes, within a short period relative to the whole project timeline. It has also been difficult to identify all the implications for the widening of the tank transport requirements and the introduction of the AN Vehicle obligations. As such we would encourage further separate discussions with the relevant stakeholders, to support well informed decision making.

We look forward to ongoing consultation and communication by NTC, as the project progresses.

For any further inquiries, please feel free to contact us using the details provided above.

C-RIS questions. Please enter your comments in the row below each question.

Note: you are not required to answer every question.

5.4.6.1: Administrative controls – key changes

Q1.	How will including information in the Code, that is currently only found in the regulations, help your organisation?
<p><u>General comments</u></p> <p>Orica respectively notes three concerns in relation to the ADG Code, in relation to class 2-9.</p> <p>Firstly, Orica reiterates our concerns noted in our Working Paper 9 response in relation to Mobile Processing Units (MPUs) being included in the draft ADG Code. MPUs are currently excluded from the ADG Code and the inclusion and referencing to ADR requirements is not appropriate. MPUs are designed specifically for the manufacture of bulk explosives, with those bulk explosives being delivered directly into blast holes, and as such, MPUs need to transport the various raw materials (some of which are dangerous goods) to the blast location. Industry has proposed through the working papers to the NTC that specialist vehicles, such as MPUs, remain excluded from the ADG Code rewrite based on compliance with the comprehensive, MPU-specific AEISG Code of Practice for Mobile Processing Units ('MPU Code') that has been adopted / recognised by Australian regulators for many years. In many jurisdictions, compliance with the MPU Code is a condition of the associated explosives manufacture licence.</p> <p>Over many years regulators and industry noted a) the variations / conflicts between the ADG Code and MPU design and b) the proven ability of MPUs to safely transport the associated DG and raw materials for over 40 years. These discussions have included exemption requests considered by CAP. In 2015 AEISG sought again to formalise these conflicts through requesting a Determination from CAP. There were numerous discussions between CAP and AEISG primarily focussed on resolving the following two key conflicts. As a result of these discussions the MPU Code was updated to address regulator concerns and the exemption for MPUs from the ADG Code was granted in 2018 via changes to the MSI and the ADG Code.</p>	
Bulk tank design is not fully compliant as per AS2809	<p>MPUs have 'bins' that can contain either AN and AN, with the bin configuration being inter-changeable, depending on the predominant bulk explosive being manufactured. The ADG Code has differences between design requirements for bulk containers (solids) and tank vehicles (liquids).</p> <p>The bin design has been purpose built to match operational demands and the design has been safely used over decades.</p> <p>The core safety considerations from AS2809 are taken into account with the bin design, e.g. method of attachment to the chassis, suitable construction materials, etc.</p> <p>The shape of the bins is not encompassed within AS2809 – which is the road tanker design standard, i.e. designed for a very different function.</p>
Segregation of incompatible chemicals	As MPUs are designed for the manufacture of bulk explosives, it is necessary to transport chemical additives on an MPU, however, the ADG Code considers some of these chemical additives incompatible. On an MPU these chemical additives,

	which include process fuel and sensitising chemicals, are kept in dedicated, separate tanks / containers.
<p>Should NTC decide to retain MPUs in the ADG Code, MPUs should be identified as Special Purpose Vehicles, with additional wording included to note that for items of conflict between the ADG Code and the <i>AEISG Code of Practice – Mobile Processing Units</i> (MPU Code), then the MPU Code should take precedence. Should MPUs be re-incorporated back into the ADG Code, without additional wording in relation to the conflicts, then industry will be back to the situation that was in place prior to 2015, with the potential threat to the industry viability re: technical non-compliance. We recommend further and separate discussion on the inclusion of MPUs with stakeholders, to support well-informed decision making.</p> <p>To improve clarity on how MPUs are regulated (i.e. DG Transport vs Explosives regulations), an additional note should be included in section 1.1.3 to the effect that the design and operation of MPUs is outlined in the AEISG MPU Code and MPUs are regulated under the Explosives Regulations within Australian jurisdictions.</p> <p>To ensure consistency and standardization, the ADG code should remove all references to MEMUs and refer to MEMUs exclusively as "MPUs," as this is the relevant term in Australia. The definition of an MPU should be consistent with transport regulations and the MPU Code, including specifying that the processing unit is "vehicle-mounted." Non-vehicle-mounted processing units, such as those used solely in underground mines, should not be subject to ADG Code obligations relating to the transport of dangerous goods on public roads. The MPU Code has specifically been designed to cater for both those MPUs that may travel on public roads and those MPUs that solely operate on mine sites.</p> <p>Secondly, there are various terms for net explosive quantity (NEQ) used in the draft Code. Australian regulators and industry have standardized 'NEQ' as the primary term for the amount of explosives and this term is referenced within Explosives Regulations across the various jurisdictions. Hence, the statement in section 1.1.8.4 is appropriate: <i>"The determination of explosives risk categories shall be based on Net Explosive Quantity (NEQ), except where otherwise specified."</i></p> <p>Lastly, during the ADG Code review it was noted that definitions are scattered throughout the draft, making it challenging to understand the implications of specific sections and how these relate (or not) to other requirements within the Code. The preference is to have all definitions contained in the Definitions section e.g. AT vehicle, AN vehicle, Explosives Category, etc. Further comments on definitions are provided in the response to question 40.</p>	
Q2.	Should the dangerous goods safety advisor role be made mandatory?
<p>The C-RIS indicates that the 'transport industry' would be most heavily impacted by the introduction of a mandatory dangerous goods safety advisor (DGSA). However, the draft wording notes applicability to 'each undertaking' related to dangerous goods transport and, as such, the need for a DGSA would appear to extend to any entity involved with one or more parts of the transport process, a very wide scope.</p> <p>This suggestion for mandatory DGSA is not supported as it would introduce a significant additional obligation on industry due to the proposed role complexity, without substantial evidence of current low</p>	

compliance levels. In addition, generally the duties and responsibilities for such a role are often distributed amongst many roles within a business, rather than a centralised role. For example, procurement personnel may be responsible for arranging suitable packaging in conjunction with packaging suppliers; product managers may be responsible for package labelling; manufacturing plants are responsible for the filling of the packages and checking the packaging condition; and supply chain is responsible for the dispatch of the packages and the associated paperwork. This allows each part of the chain to create a detailed understanding of requirements specific to that function, taking ownership of compliance. Consolidation into one role has the potential to create confusion with obligations / responsibilities and dilute the overall level of understanding across a business.

5.4.7.1: Security requirements – key changes

Q3.	<p>We seek to understand to what extent transport providers already have measures in place to ensure the security of dangerous goods and costs associated with this. In particular:</p> <ul style="list-style-type: none"> – Do you have a security plan in place for dangerous goods of security concern? If so, what costs are associated with the development and implementation of this per annum? <p>What, if any, additional costs would be expected from complying with these security Provisions?</p>
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The explosives industry is involved with the storage and transport of **security sensitive products**: class 1 explosives, ammonium nitrate and ammonium nitrate emulsion – which encompasses both the raw materials (Division 5.1 oxidising substances, that are also defined as Security Sensitive Ammonium Nitrate - SSAN) and the finished product (Class 1 explosives). In addition to the DG transport obligations, each jurisdiction has detailed security obligations for security sensitive products under the associated explosives / SSAN regulations, including specific requirements for security plans.

Orica supports the maintaining of **one set of rules** for security sensitive products. The security management system required to obtain the necessary SSAN / explosives licences encompasses the entire lifecycle of handling these specific dangerous goods, including transport. The proposed additional security plan obligations in the ADG Code draft, for transport, would add another administrative 'layer' of obligations, without demonstrated improvements in security outcomes. Overlapping regulation creates confusion and should be avoided.

Of significant benefit to industry would be the harmonisation of security obligations across the various jurisdictions into one set of obligations. Given that the security sensitive product obligations are part of explosives / SSAN regulations, i.e. separate to DG Transport legislation, it is highly unlikely that explosives / SSAN regulators will adopt the proposed ADG Code draft in lieu of their existing regulations. A separate further discussion with industry, the explosives regulators and other key stakeholders should occur, to support well-informed decision making.

Due to the complexity of the existing regulatory framework for security sensitive products across Australia, Orica respectfully recommends that SSAN and explosives are completely excluded from potentially the entire section of the proposed security obligations or, if needed, specifically in relation to section 1.10.3. One option could be to re-write Note 2 in Chapter 1.10. The reworded Note would direct the reader to consult with the relevant jurisdiction if they are transporting SSAN or class 1 explosives.

Similarly, section 1.10.3.2.3 should be reviewed to determine how much of the AEC3 wording still needs to be retained, given that the majority of explosives / SSAN regulations have been revised in recent years. Duplication and overlapping of regulations should be avoided.

It is unclear what regulatory mechanism would be used to enact section 1.10, given that the existing MSI does not include 'security'.

Q4.	Do you consider the thresholds for high consequence dangerous goods, which would require the preparation of a security plan, are appropriate? If not, please explain why?
<p>Further clarification is required on Table 1.10.3.1.2 – to identify specifically what product(s) would be included under Division 5.1 Oxidising substances “Perchlorates, ammonium nitrate other than security sensitive ammonium nitrate”.</p> <p>It is noted that the definition of SSAN adopted by all jurisdictions specifically excludes Ammonium Nitrate Liquid (UN2426). Nor is UN2426 listed as a chemical of security concern by the Australian Government in the national Code of Practice for Security of Chemicals of Security Concern. Definition consistency and standardisation alignment needs to be maintained with the COAG definition of SSAN and National list of chemicals of security concern and for this reason UN2426 should specifically be excluded from the table.</p> <p>Please refer to the response for Q3 for recommendations related to SSAN and class 1 explosives.</p>	

5.6.2.2.1: Special provisions that provide full or partial exemptions	
For each concessional exemption applicable to your organisation (please include the special Provision number(s) in your response).	
Q5.	How many consignments of impacted goods do you consign per annum, on average?
Q6.	Can you provide an estimate of the annual savings in dangerous goods surcharges these concessions would provide your business?

5.6.2.5.1: Australian specific special provisions	
For all changes proposed for AU special provisions:	
Q7.	Are there any impacts you believe have not been identified and addressed?
Q8.	If so, please indicate the applicable special Provision number(s) and the associated impact(s).
For AU01	
Q9.	If your operations are impacted by the changes made to AU01, what industry do you operate in and what articles would be impacted?
Q10.	If any, what operational implications would there be for your industry?

Q11.	How many large capacity consignment/packages would this change impact per year? What proportion of total consignments does this represent?
Q12.	If possible, please provide an estimate of the additional costs associated with this change, including packaging, preparation of transport documentation, and marking and labelling costs.

5.7.1.1: Packing instructions	
For all proposed new or amended packing instructions applicable to your organisation (please include the provision number(s) in your response):	
Q13.	If your operations are impacted by these changes, what industry does your business operate in?
Q14.	What are the implications on your operations?
Q15.	What is the volume of goods impacted by these changes?
Q16.	Are there any additional or reduced costs associated with the proposed new or amended provisions?

5.7.2.1: Use of portable tanks and MEGCs	
If you transport dangerous in tube-vehicles:	
Q17.	Will the proposed new provisions for tube-vehicles have any impacts on your operations?
Q18.	What is the volume of goods impacted by these changes?
Q19.	Are there any additional or reduced costs associated with the proposed new or amended provisions?

5.7.3: Vacuum-operated waste trucks (vacuum tankers) and mobile explosives manufacturing units (MPUs)
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Q20.	Do you have any concerns with the inclusion of vacuum waste tankers directly in the ADG?
<p>Orica is surprised that the C-RIS suggests that it is difficult for duty holders to locate the requirements for MPUs, given the wide adoption of the AEISG MPU Code by Australian regulators. All of AEISG's codes of practice are available, free of charge, from the AEISG website. A quick google search shows the AEISG code in the top search results.</p> <p>Please also refer to the response provided in Q1 under section 5.4.6.1.</p> <p>As noted in Q1 response, MPUs are special purpose vehicles that have been used safely for many decades across Australia and, as such, should not be included under either the proposed ADG Code or the class 1 supplement, particularly as the AEISG MPU Code has been recognised by various regulators for several years. The existing ADG Code exemption dating from 2018, reflected in the MSI, gives effect to the unusual nature of these vehicles that result in MPUs being unable to fully align with ADG Code requirements due to, among other things, the need to:</p> <ul style="list-style-type: none"> • Transport 'incompatible' products essential for the manufacture process, in separate tanks / containers on the MPU, along with the Division 5.1 raw materials; • Have custom designed, industry-specific bulk bin designs for the Division 5.1 raw materials, to allow the feeding of the raw materials into process equipment for the bulk explosives manufacture. <p>We note that MPUs are not included in the existing Australian Explosives Code. It is unclear why NTC have included MPUs in the class 1 supplement as MPUs are not currently used for transporting class 1 explosives on public roads. If NTC progress with the proposal as is, it is confusing and inconsistent with the objective of the ADG Code review for operators of MPUs to have provisions split between both the ADG draft and the class 1 supplement, noting many states recognise both existing codes but under different legislation.</p> <p>The AEISG MPU Code was developed to bridge the gap between the ADG Code (for transporting oxidizing substances and other raw materials), the Explosives Regulations and the Australian Standard 2187 for the manufacture of bulk explosives. The origin was the WA regulator's Guidance Note, which was adapted by industry as the MPU Code and has been considerably developed over the years to provide detailed requirements for MPUs.</p> <p>Due to the specialized application of MPUs (as noted above), the MPU Code covers the design and operational use of MPUs. This code is reviewed and managed by industry professionals with specific knowledge of the vehicle and with the benefit of in-field experience, with feedback sought from regulators across the country whenever the code is reviewed.</p> <p>We are unaware of an equivalent document to the AEISG MPU Code in Europe. This potential legislative gap may have led to the ADR incorporating requirements for these vehicles. MPUs designed as per the MPU Code have operated safely in Australia for many decades. The industry association sets a high standard through collaboration with regulators to frequently review and update the MPU Code, including identifying any improvements as a result of incidents or changes in parallel codes, in a manner similar to but more timely than the process of reviewing and updating Australian Standards.</p>	

5.8.1.1: Consignment procedures	
Q21.	If the requirement for placards to be reflective is retained, what do you believe would be an appropriate transition time for compliance?
	Note: this will be commented on as part of the class 1 explosives supplementary review.
Q22.	Are there any additional impacts/benefits from the removal of EIPs from IBCs that have not been considered?

	<p>The significant benefits from the removal of the EIP label format from IBCs has been recognised previously in several industry submissions and discussions with CAP / MAG and will be welcomed by industry and adopted once finalised for inclusion in the new revised code.</p> <p>NTC may not be aware that in 2016 there were parallel discussions on the removal of the EIP label format from class 1 IBCs as per the Australian Explosives Code (AEC), in addition to the CAP discussion re dangerous goods as per the ADG Code. The removal of the EIP format for class 1 explosives IBCs was agreed at AFER in 2016, with each regulator to put in place the dispensation from the associated section in the AEC.</p>
Q23.	What are the additional costs associated with the requirement to carry 'Instructions in Writing'?
	<p>It is noted that the ADR does <u>not</u> include an equivalent to the ADG Code requirement for 'Emergency Information' to be carried on the vehicle.</p> <p>The ADG Code allows the Emergency Information to be in the format of either the Australian & New Zealand Emergency Response Guidebook (ANZ-ERG) or appropriate Emergency Procedures Guides, which are specific to the actual product being transported.</p> <p>The addition of Instructions in Writing appears to result in significant duplication of the Emergency Information requirement currently in the ADG Code. Hence, it is recommended that a review is undertaken to avoid potential duplication.</p>
Q24.	Do you have any comments or concerns with any of the changes to Part 5 of the Code?

5.9.1.1: Desing and construction of containment systems

Q25.	If you design, manufacture or use tanks and tank vehicles, do you foresee using the ADR-style tank designs in your operations?
Q26.	If you use segregation devices in your transport operations, do you consider that the updated requirements for segregation devices, or packagings used for segregation will affect your operations?
Q27.	If yes to Q25 or Q26, please provide information
Q28.	Do you have any comments or concerns with any of the changes to Part 6 of the Code?

5.10.1.2.1: Provisions concerning carriage of packages

For all V codes proposed:	
Q29.	Are there any implications on your operations?

	– If so, please indicate the applicable V code(s) and the associated impact(s).
Q30.	Are there any additional or reduced costs associated with the proposed new or amended provisions? – If so, please indicate the applicable V code(s) and the associated increase or reduction in costs.

5.10.2.1.1: Provisions concerning loading, unloading and handling	
For all CV codes proposed:	
Q31.	Are there any implications on your operations? – If so, please indicate the applicable CV code(s) and the associated impact(s).
Q32.	Are there any additional or reduced costs associated with the proposed new or amended provisions? – If so, please indicate the applicable CV code(s) and the associated increase or reduction in costs.

5.10.2.2.1: Segregation	
Q33.	Do you agree with the proposal to allow segregation to be achieved using partitions?
Q34.	If the proposal for partitions is retained, should they be permitted only for non-liquid dangerous goods?

5.10.2.3.1: Stowage	
Q35.	Do you agree with separating stowage and restraint requirements for protecting dangerous goods from the load restraint performance standards that apply to all vehicles (vehicle stability and loss of load)?
Q36.	If the load restraint performance standards are included in the Code, what measures should be in place to ensure they remain current with the relevant legislation)?

It was noted that section 7.5.5.2.3 (c) states “*Packaged explosives shall only be carried in compartments that meet the requirements of 6.12.5;*” However there is no section 6.12.5 in the draft supplementary code for class 1 explosives.

5.11.1.1: Requirements for vehicle crews, equipment, operation and documentation

For all changes proposed in Part 8:

Q37. Do you have any concerns or comments regarding the proposed changes.

Q38. If so, please indicate the applicable change and the associated commentary.

5.12.1.1: Requirements concerning construction and approval of vehicles

For all changes proposed:

Q39. Do you have any concerns regarding the proposed changes for vehicles?

Yes – please refer to the below comments.

Q40. If so, please indicate the applicable change and the associated commentary.

Following multiple reviews of the requirements for AN Vehicle, our interpretation of this section on the construction and approval of vehicles was that the proposed wording is confusing, particularly with the interrelationship between the different definitions.

The title of Chapter 9.2 is “*Requirements for FL and AT vehicles used for the transport of **tanks***”.

Section 9.1.2 requires AT vehicles (which includes AN vehicles used for ‘*tank transport*’) to be approved. The industry commonly transports loose bulk solid AN in tipper vehicles or as loose bulk solid within shipping containers.

The following definitions are highlighted:

*“Tank” means a shell, including its service and structural equipment. When used alone, the term tank means a **tank-container**, portable tank, demountable tank or fixed tank as defined in this Section, including tanks forming elements of tube-vehicles, tube-wagons or MEGCs (see also “Demountable tank”, “Fixed tank”, “Portable tank” and “Multiple-element gas container”);*

*“**Tank-container**” means an article of transport equipment meeting the definition of a **container**, and comprising a shell and items of equipment, including the equipment to facilitate movement of the tank container without significant change of attitude, used for the carriage of gases, liquid, powdery or granular substances and, when used for the carriage of gases as defined in 2.2.2.1.1, having a capacity of more than 0.45 m³ (450 litres)*

Under the ‘container’ definition:

*NOTE: The term “container” does **not** cover conventional packagings, IBCs, **tank-containers** or vehicles. Nevertheless, a container may be used as a packaging for the carriage of radioactive material*

These definitions collectively create confusion. Our interpretation is that the transport of loose bulk AN in a tipper is subject to the AT vehicle requirements. The transport of loose bulk AN in a shipping container is **not** subject to the AT vehicle requirements.

"AN vehicle" is defined as a vehicle that is intended for the carriage of UN 3375, UN 2426, UN 1942 or UN 2067 in tanks, bulk containers or IBCs. Where an AN vehicle is used for tank transport, it shall additionally comply with the requirements of an AT vehicle. AT vehicles then require Competent Authority approval. It is difficult to foresee what approval will be required for AN vehicles other than road tankers, and the justification behind this approval process, given that the existing fleet of vehicles have operated safely for decades.

Similarly, it is unclear what safety benefits will result from section 9.1.7.1 for 'completed' and **ongoing 3 monthly inspections** for AN vehicles, with these inspections required for all vehicle types including road tank vehicles. AN vehicles are already subject to stringent maintenance schedules that include inspection of the condition of the vehicles. Will these maintenance checks satisfy section 9.1.7.1?

Section 9.2.2 covers requirements applicable to AT and FL vehicles. Section 9.2.3 title is '*Additional requirements applicable to FL vehicles*', however, section 9.2.3.2 states "*electric power trains shall not be used for FL or AN vehicles*". It is unclear why AN vehicles are included under this section as it appears to be in contradiction of the title heading.

In relation to section 9.2.3.2 industry is concerned this is a blanket prohibition ('shall not'), without consideration of alternative controls that may apply to address the hazards. Electric power trains should be able to be considered as long as they comply with the opening sentence in this section "*The engine propelling the vehicle shall be so equipped and situated to avoid any danger to the load through heating or ignition.*" This prohibition appears to stifle innovation and modernisation of transport. Electric vehicles (including hybrids) should be acceptable provided an extensive quantitative risk assessment, demonstrating equivalent safety outcomes, has been completed and shared with the Competent Authority.

Section 9.2.4 – Additional safety requirements concerning AN Vehicles

Our interpretation is that Mobile Processing Units (MPUs) are included and defined as an AN Vehicle. As noted in the previous comments, MPUs are special purpose vehicles, with a purpose-built AEISG MPU Code of practice covering both design and operation of these vehicles. MPUs are not distribution / DG transport vehicles and, due to the nature of the vehicle, cannot fully comply with ADG Code requirements, however, industry has safely operated these vehicles for decades. The AEISG MPU Code has been recognised by all Australian regulators and is updated on a regular basis, a process that includes seeking input from both explosives and dangerous goods regulators. Therefore, it is not necessary for the ADG Code to include specific requirements for MPUs.

Chapter 9.8 Additional requirements for complete and completed MPUs

Please refer to previous comments on MPUs noting the specific AEISG Code of Practice for Mobile Processing Units (MPU Code). We support maintaining one set of rules for MPUs using the MPU Code.

Section 9.8.7.2 states a requirement for MPUs is mandatory protection of the load by metal thermal shields against a tyre fire. Limited information is provided on the metal thermal shield. Until further information is known, it is difficult to understand the scale of this change, noting that industry operates >500 MPUs in Australia. We support further discussion with key stakeholders to support well informed decision making.

MPU placarding in accordance with the AEISG MPU Code is supported. The placarding requirements in the MPU Code were updated as part of the CAP / AEISG discussion for the MPU exemption from the

ADG Code. Alternative placarding in accordance with the ADG Code would create confusion and provides emergency services with a lower level of information compared to the MPU Code placarding.

AS2809 has been in operation in Australia for many years and is well known to DG road tanker manufacturers. As noted in the C-RIS a lengthy transition period will be needed, as there will now be two 'sources' of requirements: general requirements in the ADG Code, which will now apply to a wider range of DG transport vehicles, and the technical requirements for road tank vehicles in AS2809.

Please note comments on Chapter 9.3 for Class 1 explosives transport will be incorporated into Orica's comments on the Class 1 supplementary consultation.

5.13.1.5: Regulation of diesel as dangerous goods for transport

For all changes proposed:

NOTE: As discussed in the C-RIS, this will be subjected to further investigation. Responses to these questions will be used to determine the appropriate course of action for this work.

Q41. If you transport diesel for your own use or supply, what is the maximum quantity you transport at one time?

- If you typically transport more than 3,000 L of diesel at one time, please advise what volumes are typical, and what purpose you transport it for?

Q42. If you are a fuel transport company, do you transport loads of diesel only (without Class 3 flammable liquids) in tanks or tank vehicles that do not have a dangerous goods design approval issued by a Competent Authority?

- If you use tanks without an approval, please advise why, and the type of tanks you use?

Q43. Please advise if you support the following requirements for diesel transport for more than the low volume threshold (3,000 L in this proposal)?

- Placarding of vehicles to provide hazard communication
- Emergency preparation, including developing a plan for incidents
- Fire extinguishers and emergency response equipment
- Transport documents and carrying emergency information
- Are there any other controls in transport you consider would be necessary?

It is unclear how this change affects the transport of process fuel (diesel) on an MPU. The process fuel is carried in a separate tank and typically 1000 – 1500 litres capacity.

5.13.2.1: Mixed load EIPs for refined petroleum products

Q44. Which of the following two options do you prefer?

	<p>Option 1 Retain the Provision 5.3.2.1.3 as redrafted above.</p> <p>Option 2 Limit the use of 5.3.2.1.3 to refined petroleum products of Class 3 and GHS Category 4 flammable liquids</p>
Q45.	Are you aware of any unintended consequences if Option 1 is adopted?

5.13.3.4: Incorporation of Class 1 explosives into the Code	
<p>The NTC is seeking information on the inclusion of Class 1 explosives into the ADG Code:</p> <p>Note: the incorporation of class 1 explosives into the Code will be commented on as part of the class 1 explosives supplementary review submission.</p>	
Q46.	If you transport Class 1 explosives, are there any provisions for the transport of these substances or articles in the draft Code that will significantly impact your transport operations?
Q47.	If you transport Class 1 explosives, are there any provisions for the transport of these substances or articles in the draft Code that you consider need to be included in the draft Code?
Q48.	Do you consider applying the high security risk load requirements to all explosives Category 3 loads appropriate?
Additionally, the NTC is seeking data or information on the following:	
Q49.	<p>Do you undertake any transport of Class 1 explosives in tanks?</p> <p>– If yes, please provide information about types and quantities.</p>
Whilst industry does not currently transport class 1 explosives in tanks, the preference is to retain the relevant sections to minimise the need for lengthy code changes, should this activity be conducted in the future.	
Q50.	<p>Do you undertake any transport of Class 1 explosives in IBCs?</p> <p>– If yes, please provide information about types and quantities.</p>
Please refer to the response provided to question 22. There are exemptions in place from the requirement to have the EIP label format for IBCs of class 1 explosives.	

15.3.4.1: Transitional provisions for the draft Code	
Q51.	Do you support the NTC introducing more detailed transitional provisions into the Code?
Q52.	Do you have any concerns with the proposed principles for transitional provisions?

We support further discussion with a wide variety of key stakeholders, including industry, to ensure well informed decision making in relation to transitional provisions.

5.13.5.4: Transport categories

For all questions, please provide any supporting information you have to assist us in finalising these provisions.

Q53. After reviewing the draft provisions in 1.1.3.6, please advise:

Q54. Should all infectious substances be subjected to a “0” threshold?

Q55. Are there particular transport scenarios for Category B infectious substances that require a specific concession or exemption?

Q56. Should toxic or corrosive gases be subjected to a lower threshold than “250”?

- Note for comparison, ADR uses a threshold of “20” for these substances.

Q57. Should self-reactive substances and organic peroxides be further divided up?

- Note for comparison, ADR assigns a threshold of “20” for types B & C, and any of these substances that require temperature control to remain stable in transport.

Q58. Should aerosols be treated like other gases, and be subjected to a lower threshold for higher risk aerosols?

- Note for comparison, ADR assigns a threshold value of “20” for toxic and corrosive aerosols, and “333” for flammable aerosols.

Q59. Do you consider that including the transport categories in the dangerous goods list will assist you to determine if a load is a small load or not?

Q60. The specific concessions for transporters of small loads are included in 1.1.3.6.6. Are there any concessions that you think are, or are not, appropriate to include?

Q61. Do you consider there are other substances or articles that should be included in the “0” threshold category? Placarding is mandatory for anything included in this category.

Q62.	Do you consider there are other substances or articles that should be included in the “unlimited” threshold category? Placarding is not required for anything included in this category.

5.13.6.2: Driver licensing	
NOTE: As discussed in the C-RIS, this will be subjected to further investigation. Responses to these questions will be used to determine the appropriate course of action for this work.	
Q63.	Do you support different requirements for driver and vehicle licensing?
<p>We support the existing driver training and driver licensing regime, which provides a positive example of mutual recognition across the jurisdictions. The C-RIS does not provide any data on safety incidents to support changes to the existing system for the licensing of vehicles or drivers.</p> <p>It is important to note that Work Health and Safety (WHS) regulations provide detailed training obligations on Persons Conducting a Business or Undertaking (PCBUs). These WHS regulatory training obligations would apply for situations such as the transferring of dangerous goods.</p> <p>We support further discussion with key stakeholders, including industry, to ensure well informed decision making in relation to licensing MPU drivers. The harmonisation of explosives regulations in relation to this matter should be part of the discussion.</p>	
Q64.	Do you consider that formal training for drivers would be useful in cases where a driver does not need a licence?
Please refer to the above comment in relation to WHS obligations.	
Q65.	Do you support the introduction of a notification scheme for vehicles that don't require a licence?
<p>The introduction of a notification scheme is not supported. It places unnecessary burden on transporters and it is unknown what would be required as part of a notification, for example: is it a one off notification or per each load/movement.</p> <p>It is assumed that the existing licensing regimes have previously been determined by regulators based on applying an acceptable risk level, i.e. where the safety benefits from the licensing assurance process exceed the costs.</p>	

6.2.2.4: Change in one-off costs required to comply with the draft Code (suppliers and manufacturers)	
Q66.	How many people within your business will need to be retrained to support compliance with the draft Code? What is the expected training cost per person?
Q67.	How much will it cost to update your systems to incorporate the proposed changes to the DGL and placarding thresholds?
Q68.	How much will it cost to update processes and documentation?

Q69.	Are there any one-off costs anticipated for your business?

6.2.2.5: Change in ongoing costs required to comply with the draft Code (suppliers and manufacturers)	
Q70.	We are keen to understand the expected benefits and costs of key changes presented in Error! Reference source not found. , and particularly welcome any data or case studies to evidence these impacts.

6.3.2.3: Change in one-off costs required to comply with the draft Code (transport industry)	
Q71.	How many people within your business will need to be retrained to support compliance with the draft Code? What is the expected training cost per person?
Q72.	How much will it cost to update processes and documentation?
Q73.	How much will it cost your business to update firefighting and emergency equipment to comply with the draft Code?
Q74.	What are the cost savings associated with the changes to the requirement for emergency escape masks?
Q75.	Are there any one-off costs anticipated for your business?

6.3.2.4: Change in ongoing costs required to comply with the draft Code (transport industry)	
Q76.	We are keen to understand the expected benefits and costs of key changes presented in Error! Reference source not found. , and particularly welcome any data or case studies to evidence these impacts.

6.4: NTC, Regulators and Competent Authorities	
Q77.	We seek data from each State & Territory on the number of dangerous goods inspectors and other staff that are actively involved in the administration and enforcement of the Code.

6.4.1.2: Reduced complexity and difficulty in administering compliance with the Code	
Q78.	Referring to Section 3.3 Special Provisions, which remove the need for Competent Authority intervention (see Section 5.6.2.4), we'd like to understand from Competent Authorities: <ul style="list-style-type: none"> – Approximately how many interventions of this type are currently made per year, on average. – Approximately how much time is associated with each intervention, on average (i.e. the time it takes for a Competent Authority to reach an outcome/decision from when first approached). – Approximate effort associated with each intervention, on average (i.e., number of hours by staff level and wage per hour).
Q79.	By comprehensively addressing gaps and errors in the current Code, the NTC is expecting that this will reduce the number of industry submissions to Competent Authorities, in particular the number determinations. We seek data from Competent Authorities on the effort expended on each determination, on average (i.e., number of hours by staff level)?

6.4.1.3: Government costs associated with implementing the draft Code	
Q80.	We seek estimated costs from each State & Territory to implement the draft Code, as per the breakdowns provided in the list above.
Q81.	Are there any State or Territory specific impacts that need to be considered? Please provide details.

6.5.1.1: Avoided dangerous goods transport incidents due to improved compliance with the draft Code (avoided costs to the community and government)	
Q82.	We seek any updates on the data set out in this section including data on the: <ul style="list-style-type: none"> – The number of dangerous goods road and rail incidents. – The proportion of incidents involving a fatality, serious injury, minor injury or spill. – The costs associated with each type of incident above.

This form has been provided to assist stakeholder in making a submission on the Supplementary Consultation Paper – Provisions for the transport of explosives in the ADG Code).

Submissions close on Tuesday 17 December 2024 (extension granted until 17 January)

Details of person submitting comments

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Organisation name:	Orica Australia Pty Ltd		

General Comments

NTC is to be commended for taking ownership of the Australian Code for the Transport of Explosives by Road and Rail, 3rd Edition (AEC3) and pursuing the incorporation of the AEC3 into the revised ADG Code.

We note that the significant revision of the ADG Code has occurred over the past couple of years, including the issuing of the various consultation working papers, as it is a large code and the review included both changes to content and the strategy to align with the ADR. Similarly, the proposed changes to the AEC3 involve both a re-write of the code content and major structural changes through incorporation of the AEC3 into various sections of the ADG Code. Whilst the AEC3 is a smaller code, it regulates the high hazard activity of transporting explosives. In comparison to the ADG Code, only a very short consultation period (the supplementary consultation paper was released 29 October) has been given for the combination of both the AEC3 changes and the integration into the ADG Code, making it challenging for industry to undertake a detailed review, particularly in the busy pre-Christmas period.

This paper examines changes for class 1 transport that have been recommended by the Explosives Working Group and the NTC. As the draft changes have been compiled for formal consultation with the wider community of explosives stakeholders, including consignors, carriers, drivers and regulators, a reasonable consultation period should be granted for stakeholders to provide due consideration.

There are a number of significant changes and / or the introduction of new provisions that require more transparent and wider consultation across all stakeholders. Some examples of these changes include:

- prohibition of the use of electric vehicles (EV) or hybrid powered vehicles;
- initial inspections of Category 3 explosives vehicles (EX3) to be undertaken by an independent professional engineer;
- missing details for the design of class 1 compartments on MPUs;
- loading/unloading of explosives in a public place being prohibited; and
- changes in security provisions.

Hence, Orica welcomes that the NTC has identified that additional consultation will be required on specific issues raised in response to this paper and that the NTC will be undertaking issue-specific consultation on these as final recommendations are developed.

Orica notes that currently most jurisdictions directly reference the AEC3 in their Explosives legislation. Consequently, the integration of the AEC3 into the ADG Code will represent a significant challenge for regulators to update the legislation.

For the above two reasons, a recommended interim solution may involve appending the AEC3, as a complete document (with the finalised updated content) to the new revised ADG Code, i.e. use a two-step staged approach. This will allow efficient and complete consultation with all stakeholders on the content and once this stage is finished the AEC3 can be amalgamated within the ADG in the most appropriate way with legislation changes occurring in parallel.

Consultation paper questions. Please enter your comments in the row below each question.

Note: you are not required to answer every question.

<p>2.1. Code Part 1 – General</p>
<p>Q1: Which of the following options do you support for the definition of low hazard explosives? Please provide your reasoning.</p> <p>Option 1: Only low hazard explosives meeting the description suggested by the Explosives Working Group (as per the table), or</p> <p>Option 2: Continuing the AEC approach of concessions only for explosives of classification code 1.4S.</p>
<p>Q2: Should the table of low hazard explosives in the ADG Code include UN numbers in addition to the classification code and product description? Please provide your reasoning.</p>
<p>Q3: Are there any entries (UN numbers, DG list entries or product descriptions) that:</p> <ol style="list-style-type: none"> 1. Are listed in the table above that should not be considered low hazard explosives, or 2. Are not listed in the table above that should be considered low hazard explosives? <p>Please provide your reasoning.</p>
<p>Q4: Do you consider that the limits provided in the draft (in 1.1.3.14.3) are appropriate? Please provide your reasoning.</p>
<p>Q5: Do you consider the conditions set out for transport of low hazard explosives and other dangerous goods are appropriate? Please provide your reasoning.</p>
<p>Q6: Are there other import or export scenarios that you consider require conditional concessions to prevent unnecessary intermodal barriers? Please:</p> <ol style="list-style-type: none"> 1. outline the scenarios where this occurs; and 2. appropriate controls to manage it. <p>Please provide your reasoning.</p>

NTC is to be commended for the removal of the restriction on first destination imports in shipping containers, that restricted any type of interim laydown for safety or efficiency reasons between import and the first destination. The remote location of Port Alma in Queensland, used for almost all industry imports, has resulted in challenges in managing the safety risks from driver fatigue. It is noted that compliance with chapter 8.6 on route planning for vehicles carrying dangerous goods outlines requirements to manage hazards of the transportation of import product.

Q7: After reviewing the draft provisions for Chapter 1.1, do you have any comments, concerns or suggested amendments? Please provide details.

It is noted and supported that the term used to quantify explosives is net explosive quantity (NEQ) and this term has continued to be used throughout this draft AEC3.

Q8: After reviewing the draft duties intended for Chapter 1.4, do you have any comments, concerns, or suggested amendments? Please provide details.

As noted in the general comments above, Orica supports the statement in the supplementary consultation paper for explosives:

“the NTC will need to undertake further work on this chapter to ensure that it is properly drafted in a manner that it is enforceable and effective and is readily able to be referenced in legislation, as necessary. This additional work will take place alongside the work to draft the new model regulation and the duties for explosives will be considered at the same time. The NTC will also undertake additional consultation on this as required.”

In relation to section 1.4.5.2 - the explosives industry is involved with the storage and transport of security sensitive products: class 1 explosives, ammonium nitrate and ammonium nitrate emulsion – which encompasses both the raw materials (Division 5.1 oxidising substances, that are also defined as Security Sensitive Ammonium Nitrate - SSAN) and the finished product (Class 1 explosives). In addition to the DG transport obligations, each jurisdiction has detailed security obligations for security sensitive products under the associated explosives / SSAN regulations, including specific requirements for security plans.

Orica supports maintaining one set of rules for security sensitive products. The security management system required to obtain the necessary SSAN / explosives licences encompasses the entire lifecycle of the handling of these specific dangerous goods, including transport. The proposed additional security plan obligations in the ADG Code draft, solely for transport, would add another administrative 'layer' of obligations, without demonstrated improvements in security outcomes. Overlapping regulation / obligations creates confusion and should be avoided.

Of significant benefit to industry would be the harmonisation of security obligations across the various jurisdictions into one set of obligations. Given that the security sensitive product obligations are part of explosives / SSAN regulations, i.e. separate to DG Transport legislation, it is highly unlikely that explosives / SSAN regulators will adopt the proposed ADG Code draft in lieu of their existing regulations. A separate further discussion with industry, the explosives regulators and other key stakeholders should occur, to support well-informed decision making.

Due to the complexity of the existing regulatory framework for security sensitive products across Australia, Orica respectfully recommends that SSAN and explosives are completely excluded from potentially the entire section of the proposed security obligations or, if needed, specifically in relation to section 1.10.3. One option could be to re-write Note 2 in Chapter 1.10. The reworded Note would direct the reader to consult with the relevant jurisdiction if they are transporting SSAN or class 1 explosives. Similarly, section 1.10.3.2.3 should be reviewed to determine how much of the AEC3 wording still needs to be retained, given that the majority of explosives / SSAN regulations have been revised in recent years. Duplication and overlapping of regulations should be avoided.

It is unclear what regulatory mechanism would be used to enact Chapter 1.10, given that the existing MSI does not include 'security'.

Q9: After reviewing the draft administrative controls for drivers in 1.8.11, do you have any comments, concerns, or suggested amendments? Please provide details.

Q10: What do you consider to be an appropriate level of insurance for incidents involving the transport of explosives? Please provide your reasoning.

Q11: Do you support the proposal to treat all explosives other than low hazard explosives as high consequence dangerous goods for transport? Please provide your reasoning.
Q12: After reviewing the draft provisions for Chapter 1.10, do you have any comments, concerns, or suggested amendments? Please provide details.
Please refer to the response to Qu 8 above.

2.3. Code Part 3 – DG list and special provisions
Q13: Is there a reason why special provision 616 and the exudation test in 2.3.1 should not be included? Please provide your reasoning.
Q14: Is there a reason why the LQ values for class 1 should not be included in the DG list? Please provide your reasoning.
Q15: If you currently import or export articles of UN 0012, UN 0014 or UN 0055 please provide details of any anticipated costs savings from the proposed LQ provisions.
Q16: Do you support the removal of tank instructions for the transport of class 1 substances? Please provide your reasoning.
The removal of these tank instructions is not supported and our preference, like the NTC's, is to retain the relevant sections to minimise the need for lengthy code changes, should this activity be conducted in the future or should there be changes to regulatory classifications.
Q17: Do you have any comments, concerns or suggested amendments relating to Part 3 of the draft ADG Code? Please provide details.

2.4. Code Part 4 – Packaging and tanks
Q18: After reviewing the draft provisions for Chapter 4.1, do you have any comments, concerns or suggested amendments? Please provide details.
The preference is to retain the tank instructions for 0331 0332. Please refer to the response to Qu 16.

2.5. Code Part 5 – Consignment procedures
Q19: Is there a reason why the markings on inner packagings should not refer to the GHS requirements? Please provide your reasoning.

This item may require further review and consultation. It is generally supported that inner packagings of dangerous goods (including explosives) are marked as per the GHS requirements, as the warnings on inner packagings are not visible / required during transport and at times country-specific labelling is a barrier to international trade.

We note that GHS labelling requirements are not required for products with class 1 explosive hazards in Australia as per the SafeWork Australia *Model Code of Practice: Labelling of workplace hazardous chemicals*, which is referenced via Work, Health and Safety regulations.

Q20: Is it necessary to retain the provisions relating to marking and labelling on articles and wrappings in the ADG Code? Please provide your reasoning.

Q21: After reviewing the draft provisions for Chapter 5.2, do you have any comments, concerns or suggested amendments? Please provide details.

The significant benefits, including reducing costs and removing trade barriers, from the removal of the EIP label format from IBCs has been recognised previously in several industry submissions and discussions with CAP / MAG. This change will be welcomed by industry and adopted as soon as this is finalised for inclusion in the new revised code.

NTC may not be aware that in 2016 there were parallel discussions on the removal of the EIP label format from class 1 IBCs as per the Australian Explosives Code (AEC3), in addition to the CAP discussion re dangerous goods as per the ADG Code. The removal of the EIP format for class 1 explosives IBCs was agreed at AFER in 2016, with each regulator enacting dispensation from the associated section in the AEC3.

Q22: After reviewing the draft provisions for Chapter 5.3, do you have any comments, concerns or suggested amendments? Please provide details.

NTC is to be commended for removing the requirement to placard the explosives Compatibility Group on both single and mixed loads as per the proposed section 5.3.1.1.2 "*Compatibility groups shall not be indicated on placards if the vehicle, wagon, container or special compartments of MPUs are carrying substances or articles belonging to **two or more compatibility groups***". Emergency Services are unfamiliar with the information conveyed by the Compatibility Group and the predominant hazard of explosives being transported is suitably conveyed with other vehicle markings (e.g. 'EXPLOSIVES' signs).

The underlying justification relates to the Compatibility Group and that the removal of this from the vehicle placard will not affect safety. Hence, the proposed change is assumed to, and is appropriate to, apply across all loads, both single compatibility group (e.g. a load of 1.1B detonators) and mixed loads (e.g. a load of 1.1B detonators and 1.1D boosters).

Section 5.3.7.2 proposes that compartments containing detonators are marked with the word DETONATOR in red lettering at least 150mm high. Consideration should be given to the security aspects and not 'advertising' that the vehicle contains detonators, which are a high security risk product.

With vehicles transporting Category 2 quantities (e.g. Shotfirer vehicles) the required marking size for this sign may be difficult to physically attach to small compartment explosives carry boxes due to limited surface area.

<p>Q23: Which of the following options do you consider the ADG Code should follow:</p> <p>Option 1: Permit placarding of MPUs with EIPs as set out in the MPU Code (see above).</p> <p>Option 2: Require that MPUs are placarded with the appropriate EIPs for the dangerous goods being transported.</p> <p>Please provide your reasoning.</p>
<p>Placarding of MPUs should be as outlined in the AEISG MPU Code. This placarding was reviewed, discussed and agreed between Competent Authorities and industry when AEISG sought acknowledgement of the special purpose nature of MPUs. Please refer to Orica's comments on the ADG Code for further information.</p> <p>Industry highlights that marking as per the ADG Code results in considerably less information in the EIP to guide emergency services on the products being carried and, therefore, offers less guidance on the appropriate emergency response, e.g. EIP will have a blank Proper Shipping Name section vs 'Ammonium Nitrate Products'; and the UN number section will be 'Multiload' vs 'UN1942/3375'.</p>
<p>Q24: After reviewing the draft provisions for Chapter 5.4, do you have any comments, concerns or suggested amendments? Please provide details.</p>

<p>2.6. Code Part 6 – Containment systems</p>
<p>Q25: After reviewing the draft provisions for Chapter 6.16, do you have any comments, concerns or suggested amendments? Please provide details.</p>

<p>2.7. Code Part 7 – Loading, unloading and handling</p>
<p>Q26: After reviewing the draft provisions for Chapter 7.2, do you have any comments, concerns or suggested amendments? Please provide details.</p>
<p>Q27: Do you consider that special provisions V3 and V12 need to be retained? Please provide your reasoning.</p>
<p>Q28: Are there reasons why section 7.5.5.2.3 should not be deleted, allowing explosives to be transported on MPUs? Please explain your reasoning.</p>

This item may require further review and consultation.

Orica notes that the carriage of class 1 explosives on an MPU is an accepted practice in other countries. Retaining this provision may require further consultation and investigation. For example, aspects that should be investigated are:

- Approval process(es) used in the relevant countries where carriage is allowed;
- MPUs transporting class 1 explosives solely within a minesite vs public road transport;
- Detailed risk assessments that assess and control any additional risks associated with the practice.

Modernisation, automation and innovation of explosives handling systems is occurring. The provision should allow this transport to occur, subject to demonstration that the practice does not result in any increased risks. It is noted that the section on the carriage of explosives on MPUs includes:

(a) The competent authority shall authorize the transport operation within its territory;

As part of the consultation, consideration should be given to the necessity of any extra burden on the competent authority in relation to the proposed 'authorisation' vs industry being responsible for and demonstrating that a detailed risk assessment has been conducted.

Q29: After reviewing the draft provisions for Chapter 7.5, do you have any comments, concerns or suggested amendments? Please provide details.

Please refer to the above response to Qu 28.

It was noted that section 7.5.5.2.3 – Carriage of explosives on MPUs, item (c) states “*Packaged explosives shall only be carried in compartments that meet the requirements of 6.12.5*”; however, there is no section numbered 6.12.5. Hence, further information is required in order to review and comment on this item.

2.8. Code Part 8 – Vehicle crews and operations

Q30: Do you oppose the inclusion of a requirement to carry a 2 kg extinguisher for explosives category 1 loads? Please explain your reasoning.

Q31: After reviewing the draft provisions for Chapter 8.1, do you have any comments, concerns or suggested amendments? Please provide details.

Q32: After reviewing the draft provisions for Chapter 8.4, do you have any comments, concerns or suggested amendments? Please provide details.

Q33: After reviewing the draft provisions for Chapter 8.5, do you have any comments, concerns or suggested amendments? Please provide details.

The restrictions on loading and unloading explosives in a public place and any associated conditions that need to be met, are satisfactorily addressed in the current AEC3 and the existing content has served both regulators and industry well for many years. It should not be necessary to place an extra burden on both industry and the competent authority to have 'special permission' prior to the activity taking place.

Current AEC3 wording includes limitations on the activity i.e. *"unless appropriate safety precautions are taken, a person **must not** load or unload explosives while the vehicle is on any street, road, highway or other public thoroughfare, except:*

- (a) where there is no other means of access to the place or premises where the operation is taking place;*
- (b) where the explosives are required for immediate use in blasting operations in the vicinity; or*
- (c) in an emergency involving the vehicle."*

For example, item (b) applies where road construction blasting is underway which may technically be a public place. No allowance for these exceptions is provided in the draft wording.

In relation to section 8.5.2.1.6 industry is concerned this is a blanket prohibition ('shall not'), without consideration of alternative controls that may apply to address the hazards. Electric power trains should be able to be considered as long as they comply with the opening sentence in this section *"The engine propelling the vehicle shall be so equipped and situated to avoid any danger to the load through heating or ignition."* This prohibition appears to stifle innovation and modernisation of transport. Electric vehicles (including hybrids) should be acceptable provided an extensive quantitative risk assessment, demonstrating equivalent safety outcomes, has been completed and shared with the Competent Authority.

Q34: Do you consider that the journey planning requirements should be placed in Chapter 8.6 or somewhere else? Please provide details.

Q35: After reviewing the draft provisions for Chapter 8.6, do you have any comments, concerns or suggested amendments? Please provide details.

2.9. Code Part 9 – Vehicles

Q36: After reviewing the draft provisions for Chapter 9.1, do you have any comments, concerns or suggested amendments? Please provide details.

The requirement for an initial inspection of either EX3 vehicles or MPUs by a professional engineer is not supported.

These vehicles undergo a detailed licensing process as specified by each jurisdiction. The design of these vehicles is subject to review and sign off by a suitable, competent person / professional engineer and regular vehicle compliance audits (e.g. for service entry and ongoing usage) are conducted by competent persons within the industry. The obligation to ensure that the vehicle is safe to operate should reside with a) the company constructing the vehicle and b) the company operating the vehicle.

Q37: Do you support the provision to mandate a fixed fire-fighting system for EX3 vehicles in the new ADG Code? Please explain your reasoning.

There has been insufficient time to adequately investigate this matter with the relevant transport contractors, due to the shortness of the consultation period and the busy nature of the time leading up to Christmas. Consequently, the recommendation is that this item undergo further review and consultation.

<p>Q38: After reviewing the draft provisions for Chapter 9.3, do you have any comments, concerns or suggested amendments? Please provide details.</p>
<p>Please refer to the response to Qu 33.</p> <p>In relation to section 8.5.2.1.6 and 9.3.4.3.2 industry is concerned this is a blanket prohibition ('shall not'), without consideration of alternative controls that may apply to address the hazards. Electric power trains should be able to be considered as long as they comply with the opening sentence in this section "<i>The engine propelling the vehicle shall be so equipped and situated to avoid any danger to the load through heating or ignition.</i>"</p> <p>This prohibition appears to stifle innovation and modernisation of transport. Electric vehicles (including hybrids) should be acceptable provided an extensive quantitative risk assessment, demonstrating equivalent safety outcomes, has been completed and shared with the Competent Authority.</p>
<p>Q39: Do you support mandating the AEISG MPU Code in the new ADG Code for design and construction of MPUs? Please provide your reasoning.</p>
<p>Please refer to Orica's comments in relation to the ADG Code draft wording, providing background on the exemption of MPUs from the ADG Code as these are special purpose vehicles for the manufacturing of bulk explosives at the blast site.</p> <p>Should NTC determine that MPUs will be incorporated into the ADG Code, there should be direct references to the AEISG MPU Code, as vehicles designed and operated to this code have been safely operating for many years.</p> <p>Industry notes that AEC3 does not, and should not, cover MPUs. It is unclear why this question has been included in the supplementary consultation paper for class 1 explosives.</p>
<p>Q40: After reviewing the draft provisions for Chapter 9.8, do you have any comments, concerns or suggested amendments? Please provide details.</p>

<p>3.1. Commonwealth explosives and legislation</p>
<p>Q41: Please advise if you consider that these exemptions for commonwealth explosives should be included in the ADG Code? Please explain your reasoning.</p>

<p>3.2. Rail transport of explosives of class 1</p>
<p>Q42: If provisions are required for rail transport, then the NTC will look to run a small consultation group with affected stakeholders so the important, rail-specific provisions can be analysed, updated and included in the draft code. We may need to consider removing these provisions if insufficient information is available to update them.</p> <p>If you transport class 1 explosives by rail, please provide the following information:</p> <ol style="list-style-type: none"> 1. Typical quantities and types of class 1 explosives transported by rail; 2. The locations where this occurs, and the frequency of this transport; 3. If you are willing to be part of a consultation group to assist with updating the rail-specific provisions in the AEC.