



19 December 2024

Debra Kirk  
National Transport Commission  
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Dear Ms. Kirk:

Thank you for the opportunity to comment on the revision of the Australian Dangerous Goods (ADG) Code. Winchester Australia has operated in Australia since 1967 and today, we are a major importer and distributor of products for the sports, hunting, military and law enforcement industries. Winchester Australia is a stockist of Winchester Ammunition, one of the world's leading manufacturers of premium small arms ammunition

We appreciate NTC's efforts to modernize the ADG Code to facilitate the distribution of low hazard explosives. Additionally, for our products, the harmonization of the ADG with the global regulations for limited quantities (LQ) would significantly increase efficiency.

The United Nations Working Group on Explosives noted the following eligibility principles for assignment of Class 1 products to LQ when they established LQ for certain small arms ammunition:

“SAAMI described the guiding principles it used to determine why UN 0012, UN 0014, and UN 0055 presented a low risk and were appropriate for transport packed in limited quantities:

- The items must not propagate independent of packaging.
- No entries on high consequence list were selected.
- No generic entries or not otherwise specified entries were selected.
- The item must present no hazardous effects outside the package in the event of accidental initiation (as determined by use of the 6(d) test).

The working group noted that the guiding principles used by SAAMI were technically appropriate...”

As a result of the decisions taken at the UN, and the by further deliberation of modal bodies, LQ provisions are now recognized for our products by the IMDG and national regulations

such as those of Canada and the USA. Harmonization allowing shipments with LQ marks to move by air also exists.

The requirements for dangerous goods in limited quantities generally provide relief from labelling (except for air transport), placarding and segregation. By ocean, LQ is also exempt from special stowage requirements for specific ships.

Because of this, our supplier Winchester Ammunition in the USA marks all their packages in conformance with the LQ requirements for global distribution. Shipments arrive in Australia marked in this way and are delivered to our warehouse facility. However, when reshipping throughout Australia, each pallet must be disassembled, and each package must be remarked and relabeled. The cost of these operations is significant.

For these reasons and others, we greatly appreciate the work of NTC. We hope that the proposed changes to the ADG Code will be adopted.

Sincerely,



Clive Pugh  
Director and general Manager  
Winchester Australia

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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.

### Details of person submitting comments

<b>Name:</b>	Clive Pugh		
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If you are submitting comments on behalf of an association or organisation, please provide the following details.			
<b>Organisation name:</b>	Winchester Australia Limited		

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

**Note:** you are not required to answer every question.

<p><b>2.1. Code Part 1 – General</b></p> <p><b>Q1:</b> 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>SAAMI supports Option 1 allowing concessions which are essential for explosives used by the public or for facilitating the use of normal distribution channels. Otherwise, application of the requirements for the shipment of high hazard explosives to medium hazard explosives are so burdensome and costly as to prevent small shipments and widespread distribution.</p> <p>We suggest renaming the group from “low hazard explosives” to something else. The UN GHS has recently defined 1.4S to be low hazard, 1.4 as medium hazard, and all other explosives as high hazard, therefore the naming of 1.4 explosives as “low hazard” is technically incorrect. The UN defines Division 1.4 as “no significant hazard” compared to Divisions 1.1, 1.2 and 1.3 (medium hazard). The UN has criteria for 1.4S which are measurably less than 1.4, and the UN GHS defines defines this as low hazard.</p> <p><b>Q2:</b> 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>
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UN numbers are not necessary if the group is defined based on the explosive division or the compatibility group. The classification is the deciding factor, which is based on testing and quantitative criteria. The listing of UN numbers is unhelpful when it subjectively detracts from the importance of the classification, i.e., the classification is sufficient without other details. Listing UN numbers is a use-based approach instead of a hazard-based approach. Use-based approaches are inefficient, subjective, inconsistent and generally not the best way to write regulations. It also would be better not to include UN numbers so that there is less work or doubt when new UN numbers are added in the future.

For example, what is the basis for excluding UN 0501, a 1.4C explosive? This includes propellants used by the public in antique firearms. Perhaps the basis is that no one mentioned it? What about other constituencies that come forward with other UN numbers later? Why not avoid the inefficient promulgation of regulations and eliminate UN numbers in this context? The hazard classification reliably provides safety.

Another example, what is the basis for excluding UN 0055, Cases, cartridges, empty with primer? This is one of the safest 1.4S explosives.

**Q3:** Are there any entries (UN numbers, DG list entries or product descriptions) that:

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?

Please provide your reasoning.

The listing of only certain UN numbers is unhelpful. All 1.4S explosives should be included.

Classifications 1.4C and 1.4G include explosives that are routinely used by the public and are therefore appropriate to be included for facilitation. These classifications each have the same safety criteria, e.g., maximum 4 meter radius flame ball and maximum 20J projectile. The UN numbers inside these divisions are tested to comply with those criteria.

We suggest expanding the current-proposed-low-hazard group to cover all Division 1.4 (medium hazard) explosives, as these explosives are defined to preclude mass explosion and predominantly lethal effects. Otherwise, application of the requirements for the shipment of high hazard explosives to medium hazard explosives are so burdensome and costly as to prevent small shipments and widespread distribution. Should this suggestion not be adopted, adding 1.4C and 1.4G is better than doing nothing.

If our suggestions to include all 1.4 explosives, or at least all 1.4C, 1.4G and 1.4S, explosives are not accepted, then the following UN numbers should be added: UN 0055, UN 0338, UN 0339 and UN 0501.

**Q4:** Do you consider that the limits provided in the draft (in 1.1.3.14.3) are appropriate? Please provide your reasoning.

A quantity of 500 kg would be more realistic in terms of the average size of shipments. This value is normal in other jurisdictions, such as Canada. It must be born in mind that the consequences of being over the threshold preclude the use of normal transport options. Only specialist carriers can comply with the full requirements, and the associated infrastructure and costs eliminate the possibility of making small shipments. This drives the quantities of shipments up to 1,000's of kgs, adding risk to transport and reducing options and flexibility for commerce.

**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>Yes, they are appropriate. This avoids unusually high insurance; security plans and provisions; and specialized vehicles.</p>
<p><b>Q6:</b> 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"> <li>1. outline the scenarios where this occurs; and</li> <li>2. appropriate controls to manage it.</li> </ol> <p>Please provide your reasoning.</p>
<p>The expansion to include all 1.4 explosives would be helpful, versus requiring differing approaches based on UN numbers. This division-based approach would align with the regulations of the International Civil Aviation Organization and the International Maritime Organization.</p> <p>The acceptance and handling of 1.4S explosives should be facilitated at ports, see IMO guidance.</p>
<p><b>Q7:</b> After reviewing the draft provisions for Chapter 1.1, do you have any comments, concerns or suggested amendments? Please provide details.</p>
<p>V2 should not be applied for Division 1.4 explosives. Requirements for the use of EX vehicles is burdensome for products which are classified as “no significant hazard” (compared to 1.1, 1.2 and 1.3 explosives).</p>
<p><b>Q8:</b> After reviewing the draft duties intended for Chapter 1.4, do you have any comments, concerns, or suggested amendments? Please provide details.</p>
<p><b>Q9:</b> What do you consider to be an appropriate level of insurance for incidents involving the transport of explosives? Please provide your reasoning.</p>
<p>A \$5 million minimum for high hazard explosives (all explosives other than Division 1.4); A \$1 million minimum for medium hazard explosives (Division 1.4). We see these values in the USA and they seem to be working. A \$5 million policy can be difficult to obtain but seems to be appropriate for high hazard explosives.</p>
<p><b>Q10:</b> After reviewing the draft administrative controls for drivers in 1.8.11, do you have any comments, concerns, or suggested amendments? Please provide details.</p>
<p><b>Q11:</b> 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.</p>
<p>We suggest a tweak to the approach for Division 1.4.</p> <p>Unlike for safety, the use of UN numbers can be appropriate for security. The United Nations Model Regulations limit high consequence dangerous goods of Division 1.4 to UN Nos. 0104, 0237, 0255, 0267, 0289, 0361, 0365, 0366, 0440, 0441, 0455, 0456, 0500, 0512 and 0513. We support this approach.</p>
<p><b>Q12:</b> After reviewing the draft provisions for Chapter 1.10, do you have any comments, concerns, or suggested amendments? Please provide details.</p>

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**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.

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**Q14:** Is there a reason why the LQ values for class 1 should not be included in the DG list? Please provide your reasoning.

LQ values should be included.

The LQ system was developed at the UN. The UN Guiding Principles document states: "The rationale behind limited quantity provisions is that selected dangerous goods packed in small quantities and in good, robust packaging pose a lesser risk in transport than do the same goods packed in larger volumes, and on this basis some relief from the requirements may be accepted."

LQ is currently applied to UN 0012, UN 0014 and UN 0055. Various jurisdictions have expanded LQ in Class 1 to other commodities. The system was "future proofed" before implementation by noting the following recommended limitations for explosives designated as LQ:

- *classification as 1.4S is a prerequisite;*
- *must not propagate independent of packaging;*
- *may not include entries on the high consequence list;*
- *may not include generic entries or n.o.s. entries, e.g., no general fireworks 1.4S entry;*
- *must present no hazardous effects outside the package in the event of accidental initiation (as determined by use of the 6(d) test).*

The IMDG code has been harmonized with the UN so that LQ explosives are incorporated. For maritime transport, designation as LQ reduces segregation, and per SOLAS, specialized storage requirements in each ship's Document of Compliance are waived. LQ may be utilized for facilitation in port regulations. The European regulations incorporate LQ, and the ICAO regulations allow for LQ marks on packages.

Approximately 15 billion cartridges are manufactured per year and marked and shipped as LQ. Commerce is impeded when shipments are not designated as LQ, as LQ is so important for markets where LQ is recognized that massive efforts are required for rebuilding of pallets and package remarking. At a minimum, failure to adhere to international norms will impede Australian imports.

Small arms ammunition is safe in transport. It does not shoot at high velocity from its packaging. Because of its design, small arms ammunition does not mass explode or propagate from one cartridge to the next, irrespective of packaging. It is safer than many dangerous goods, including other goods used by the public. For domestic transport in Australia, no package testing should be required, other than a capability requirement to pass the 6d test. No dangerous goods documentation should be required for ground transport. No other limitations should be placed on ground shipments.

**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.

The cost of relabeling exceeds A\$30,000 per annum

**Q16:** Do you support the removal of tank instructions for the transport of class 1 substances? Please provide your reasoning.

**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.

#### **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.

Marking in alignment with the GHS is a good way forward. Avoiding inconsistencies will facilitate efficiency for global distribution.

**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.

Transport regulations should not require hazard communication on inner packagings. Security regulations may have such requirements.

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

The ADG code should follow the provisions for the limited quantities (LQ) system, e.g., in 5.2.1.5.1. No UN number, proper shipping name or hazard label is required in international regulations.

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

No placarding should be required for Limited Quantities (LQ).

**Q23:** Which of the following options do you consider the ADG Code should follow:

Option 1: Permit placarding of MPUs with EIPs as set out in the MPU Code (see above).

Option 2: Require that MPUs are placarded with the appropriate EIPs for the dangerous goods being transported.

Please provide your reasoning.

**Q24:** After reviewing the draft provisions for Chapter 5.4, do you have any comments, concerns or suggested amendments? Please provide details.

No safety documentation should be required for Limited Quantities (LQ) shipments by ground.

## **2.6. Code Part 6 – Containment systems**

**Q25:** After reviewing the draft provisions for Chapter 6.16, do you have any comments, concerns or suggested amendments? Please provide details.

Division 1.4 explosives are defined as having no significant explosive hazard, and should only be subject to general requirements for dangerous goods shipments. No special approaches for explosives are warranted. Special approaches unnecessarily impede commerce.

## **2.7. Code Part 7 – Loading, unloading and handling**

**Q26:** After reviewing the draft provisions for Chapter 7.2, do you have any comments, concerns or suggested amendments? Please provide details.

**Q27:** Do you consider that special provisions V3 and V12 need to be retained? Please provide your reasoning.

Special provision V3 generally should not apply to Division 1.4 explosives of high quality in compliant packaging. Certain provisions may be made for fireworks as desired.

**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.

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

## **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.

Category 1 explosive shipments should have the same requirements as other classes of dangerous goods.

**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.



**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.

**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.

**Q38:** After reviewing the draft provisions for Chapter 9.3, do you have any comments, concerns or suggested amendments? Please provide details.

**Q39:** Do you support mandating the AEISG MPU Code in the new ADG Code for design and construction of MPUs? Please provide your reasoning.

**Q40:** After reviewing the draft provisions for Chapter 9.8, do you have any comments, concerns or suggested amendments? Please provide details.

## **3.1. Commonwealth explosives and legislation**

**Q41:** Please advise if you consider that these exemptions for commonwealth explosives should be included in the ADG Code? Please explain your reasoning.

## **3.2. Rail transport of explosives of class 1**

**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.

If you transport class 1 explosives by rail, please provide the following information:

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.