

# Dangerous Goods and Special Cargoes Section:

## Transport of dangerous goods in road tunnels

Olivier Kervella

(Chief of the Dangerous Goods and Special Cargoes Section)

28 September 2011



UNITED NATIONS

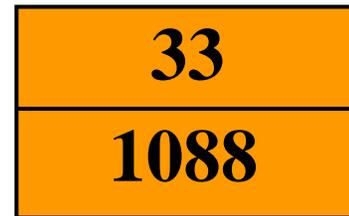
# Dangerous goods marking

## Dangerous goods

- In packaged form, above certain quantity
- In tanks (several substances)
- In bulk (several substances)



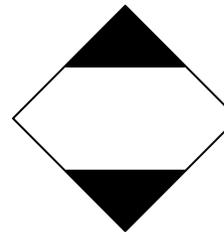
- In tanks (single substance)
- In bulk (single substance)



- Packed in limited quantities (total load above 8 tonnes)



or



Since 1/1/2011 until 31/12/2015

Since 1/1/2011

# Signs C,3h

- Without additional panel: prohibit access to vehicles with orange plate markings in accordance with 5.3.2 of ADR



C, 3<sup>h</sup>



# Sign C,3m

- Without additional panel: prohibit access to vehicles with orange plate markings in accordance with 5.3.2 of ADR (explosives, flammable)
- As from 1 January 2010, shall not be used for indicating prohibitions in tunnels

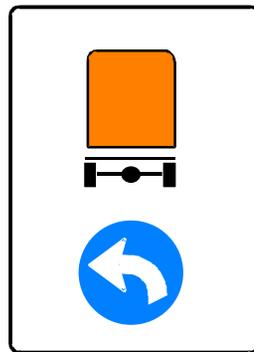


C, 3<sup>m</sup>



# Signs D,10a D,10b and D,10c

- Indicate directions in which vehicles carrying dangerous goods shall proceed;
- Without additional panel: indicate access to vehicles with orange plate markings in accordance with 5.3.2 of ADR



D, 10<sup>a</sup>



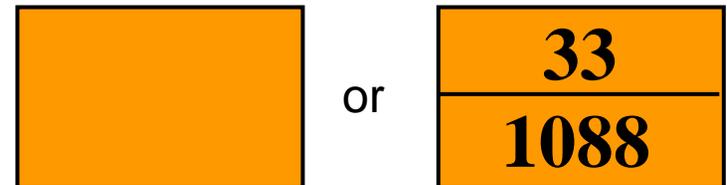
# Tunnel categories

- Competent authorities shall assign road tunnels to one of the tunnel categories A to E depending of the tunnel characteristics, risk assessment including availability and suitability of alternative routes and modes and traffic management considerations
  - Tunnel category A: No restrictions for the transport of dangerous goods;
  - Tunnel category B: Restriction for dangerous goods which may lead to a very large explosion;
  - Tunnel category C: Restriction for dangerous goods which may lead to a very large explosion, a large explosion or a large toxic release;
  - Tunnel category D: Restriction for dangerous goods which may lead to a very large explosion, to a large explosion, to a large toxic release or to a large fire;
  - Tunnel category E: Restriction for all dangerous goods other than UN Nos. 2919, 3291, 3331, 3359 and 3373.

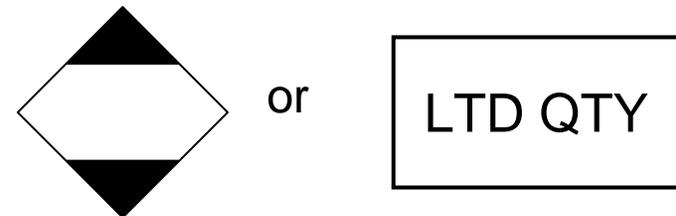


# Tunnel restrictions

- Tunnel restrictions apply to vehicles that are required to bear orange plates



- As from 1 July 2013, tunnel restriction for category E will also apply to vehicles carrying dangerous goods packed in limited quantities for which a marking is required (> 8 tonnes)



**To facilitate implementation, these provisions will be grouped in 1.9.5.3.6 of ADR applicable as from 1 January 2013**

1.9.5.3.6 Tunnel restrictions shall apply to transport units for which an orange-coloured plate marking in accordance with 5.3.2 is required and, for tunnels of category E, they shall apply also to transport units for which a marking in accordance with 3.4.13 is required or carrying containers for which a marking in accordance with 3.4.13 is required.

Tunnel restrictions shall not apply when dangerous goods are carried in accordance with 1.1.3, except when vehicles carrying such goods are marked in accordance with 3.4.13 as defined in 3.4.14.



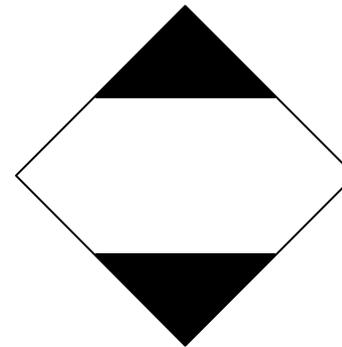
# Provisions for road signs and notification of restrictions

- Use signs C, 3h and D, 10a, 10b and 10c to indicate tunnel prohibitions and alternative routes
- When access to tunnels is restricted or alternative routes are prescribed, the signs shall be displayed with additional panels B, C, D or E



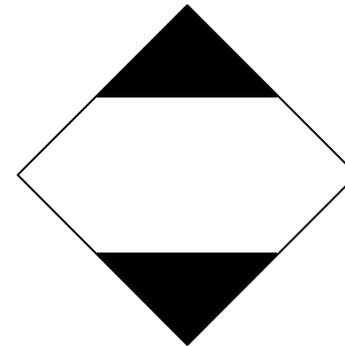
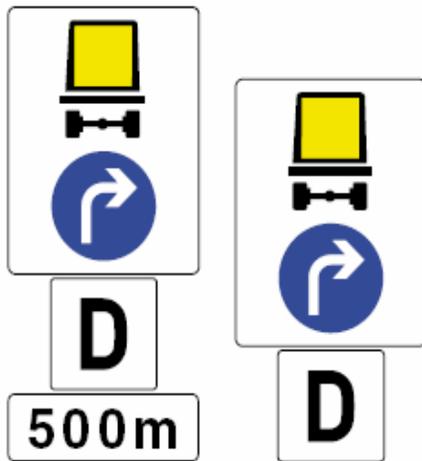
# Signs C,3h

- With additional panels B, C, D and E : no entry for vehicles with orange plate marking and for tunnel of category E, no entry for vehicles carrying dangerous goods in limited quantities for which a marking is required



# Signs D,10a D,10b and D,10c

- Indicate directions in which vehicles carrying dangerous goods shall proceed;
- With additional panels B, C, D and E : directions for vehicles with orange plate marking and before access to tunnels of category E, no entry for vehicles carrying dangerous goods in limited quantities for which a marking is required



(only if panel E is displayed)

# Notifications

- Contracting Parties shall notify the secretariat of UNECE of restrictions in road tunnels and of specific operating measures
- The secretariat shall make this information publicly available on its website:  
[http://www.unece.org/trans/danger/publi/adr/country-info\\_e.html](http://www.unece.org/trans/danger/publi/adr/country-info_e.html)



# Thank you!

<http://www.unece.org/trans/danger/danger.htm>

