

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

100th session

Geneva, 9-13 May 2016

Item 8 of the provisional agenda

Any other business

10 May 2016

Lamps switch-off in refineries

Transmitted by OICA



Lamps switch-off in refineries

Presentation for WP 15





Conflict between UN type-approval requirements and refineries rules

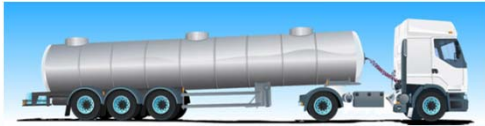
- A conflict has been identified between lighting rules applying for lighting installation certification (UN R48) and rules applying for circulation inside refineries

- UN R48 requirements (05 and 06 series)
 - Automatic switching of headlamps (AHS) in low ambient light conditions, to become mandatory
 - In some cases, Daytime Running Lamps (DRL) permanently connected to side and rear signaling lamps
 - No complete lamp switch-off possible above 10 km/h

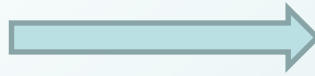
- Refineries
 - All lamps shall be OFF during circulation inside the site
 - Some refineries allow front DRL only
 - In all cases, it is forbidden to have lamps activated at the side and to the rear (under dangerous goods zone)
 - Reasons: eliminate risk of sparks (due to failing or damaged lamps/light sources)



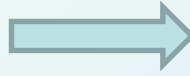
Conflict between R48 requirements and refineries rules



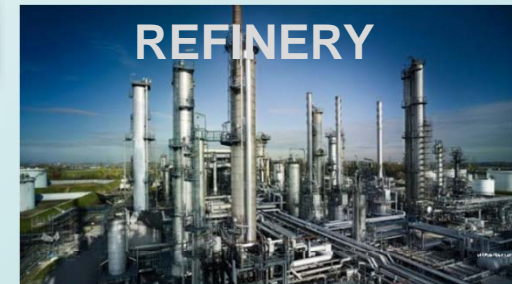
R48-03: no DRL, no AHS



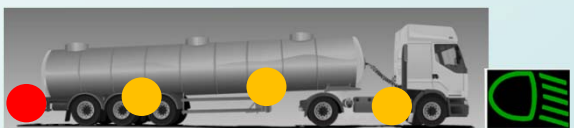
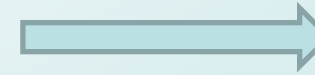
R48-04 or 05: DRL front, no AHS



or



R48-05: DRL front + position lamps, no AHS



R48-05 or 06: DRL front, with AHS

automatic





Short term solution and future issues

➤ Current solutions possible:

- Use only front DRL in day conditions (not connected with side and rear lamps)
- Use possibility to switch off DRL up to 10 km/h
- Forbid Automatic Headlamps Switching on vehicles destined for operation inside refineries (however, AHS is mandatory for New Types as from November 2017)

➤ Future situation

- As there will be no more allowed de-activation of AHS, we will not be able to guarantee that DRL alone can stay during the whole driving cycle in the refinery (if the ambient light decrease, AHS will activate automatically the dipped-beam with §5.11 lamps).
- We see no more acceptable solution for refineries when AHS is applied on mandatory basis.