Economic Commission for Europe
Inland Transport Committee
Working Party on the Transport of Dangerous Goods

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Any other business

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

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

R48-05 or 06: DRL front, with AHS
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.