Progress report of the informal group on REC

65th GRPE, 17 January 2013

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State of Play

- Draft regulation almost complete
- Many editorial improvements still necessary
- A number of outstanding issues to be solved before the June GRPE meeting

Outstanding issues

1. **NOx reduction performance of NOx reduction REC**

NOx to be measured in WHTC, best representing urban driving conditions where NOx reduction is most needed.

Discussion:

60% reduction requirement achievable but challenging, may require expensive and complex equipment.

< 60% requirement might be more cost effective, but some local authorities might not consider this acceptable, and continue with there own regulations for REC, requiring up to 85% in e.g. a typical bus cycle.

When measured in NRTC, 60% is less challenging due to on average higher engine loads.

Evaluation in WHTC, also for REC to be installed on NRMM?

Or higher reduction requirement for REC for NRMM?

Outstanding issues

2. **Direct NO2 emissions.**

Many DPF now successfully being applied are of the CRT type, typically showing a considerable increase in direct NO2 emissions, undesirable in situations with AAQ problems for NO2

Options already agreed upon:

a) Evaluation of direct NO2 during WHTC.

b) Separate class of REC with zero increase of direct NO2

c) Combined PM and NOx REC (class 4) pose no NO2 problem due to decrease of NOx

d) Cap on direct NO2 increase for CRT type traps.

Discussion:

Should the cap be e.g. 20% or 30%.

Many CRT type REC being applied now > 30% direct NO2. 20% cap will lead to more complex and expensive ways of (active) regeneration, also for situations where NO2 poses no AAQ problem.

Outstanding issues

3. **NOx Control diagnostic system**

To ensure e.g. the proper filling up of the reagent reservoir OICA has drafted a number of requirements incentivising the operator to keep the system operational.

These include a.o. monitoring of reagent quality and availability, and a provision causing the vehicle not tot be started when something is wrong.

Discussion:

These requirements make RECs and their installation more complex and expensive whereas many operators have an interest of their own to keep the system operational.

Outstanding issues

- Any more?

Thank you for your attention

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