

18th Session of the Executive Committee AC.3: Report from the United States 16 November 2006

This report was provided in slide format as Informal document WP.29-140-17.

Slide 1: Title slide

Slide 2: Overview

- Background on GTR Development
- Objective of Off-cycle Emission GTR
- Key Elements of draft GTR
 - World-side Not-to-Exceed
 - Prohibition of Defeat Strategies
- Current Status and Timeline

Slide 3: Background on GTR Development

- March 2005, AC.3 approved the development of a Global Technical Regulation for Off-cycle Emissions (OCE)
 - Based on a proposal from the United States under the 1998 Global Agreement
 - “The proposed regulation will be based on the additional requirements for both type-approval and certification that require adherence to a Not-to-Exceed (NTE) protocol.”
- Informal group of technical experts under GRPE
 - Regular meetings since 2002
 - Transparent process: meeting notes, presentation material, and GTR drafts available on OICA web site
 - Regular reports to GRPE on progress

Slide 4: Objectives of the Off-cycle Emissions GTR

- Address emissions from on-road heavy-duty engines under conditions which may not be well covered by certification test cycle
 - Includes both ambient conditions as well as engine operation not covered in WHDC
- Ensure that heavy-duty engines are not equipped with defeat strategies
 - Defeat strategies can be components or software on a vehicle which unreasonably increase emissions under off-cycle conditions

Slide 5: Off-cycle Emission GTR Overview

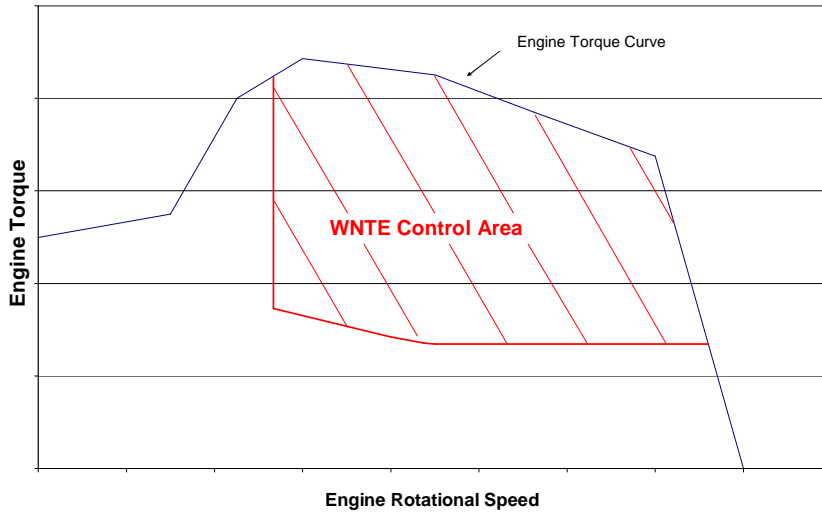
- Key elements of draft GTR
 - Provisions prohibiting the use of defeat strategies
 - World-harmonized Not-to-Exceed (WNTE) “Control Area” with performance-based emission limits
- Off-cycle Emission GTR compliments the WHDC GTR
- In-use, on-vehicle emissions testing
 - GTR does not include specifications for in-use vehicle testing or on-vehicle emission measurement equipment
 - WNTE being developed to allow for testing of compliance during in-use, on the road operation of the engine
 - Individual countries and regional authorities may specify their own in-use testing requirements to enforce WNTE

Slide 6: World-wide Not-to-Exceed

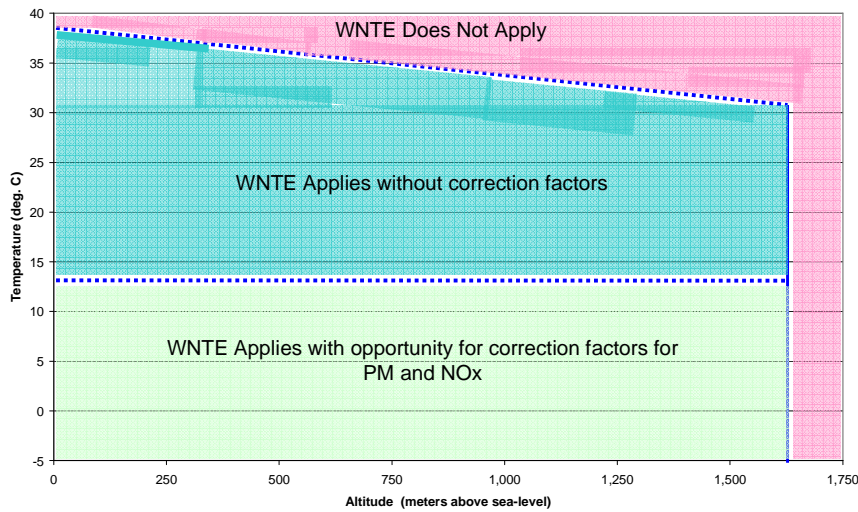
- Engines must meet performance-based numerical emission standards during:
 - Broad range of ambient conditions
 - During broad area of engine operation (e.g., engine speed and load)

- Over short time durations (as little as 30 seconds)

Slide 7: Example WNTE Control Zone Area



Slide 8: Example WNTE Altitude and Temperature Operating Range



Slide 9: Current Status

- Draft GTR well developed – working on a hand full of remaining issues
- On a path for completion within next 18 months
- Recent contractor technical report from one Contracting Party evaluates alternative approaches to controlling off-cycle emissions (final report has not been released)
 - If pursued, taking a new path could result in an additional 2-3 years development
- GRPE will continue to keep AC.3 apprised of our progress