# System Power Determination

Status of Drafting, Open Issues, Validation Program 27<sup>th</sup> EVE, Geneva, June 2018

### Drafting group

- Current membership:
  - Chair Mike Safoutin US EPA
  - Samarendra Tripathy Renault
  - Elena Paffumi JRC
  - Michele DeGennaro JRC
  - Jiamiao Li PSA Group
  - Matthis Naegeli VW
  - Norbert Klein Hyundai
  - Heinz Steven
  - Kendelle Anstey Canada
  - Masao Kubodera Japan
  - Shinichi Abe Japan

- Five tel-co meetings held to date:
  - 21 Nov 2017
  - 13 Dec 2017
  - 20 Mar 2018
  - 24 Apr 2018
  - 7 May 2018

#### Status of Draft GTR

- EVE 26 (Japan) agreed to make draft available before EVE 27
  - For review by EVE group
  - To assist with planning for validation program
- Clean version of Draft GTR is available on UN ECE website:
  - https://wiki.unece.org/display/trans/Power+Determination+GTR+Drafting+Group
- List of primary open issues (as seen by drafting group) also available
- These will be discussed in more detail at Drafting Group session
  - Wed 6 June, 13:30-17:00
  - NTSEL office in Geneva (80 Rue de Lausanne, 1202 Geneva)

#### Validation program – recent developments

- Canada is translating remainder of JARI report
- Japan to visit JRC Ispra June 11-12 for pre-testing exercise
  - With "Golden person" Mr. Shimamura (author of JARI report)
  - Will demonstrate vehicle instrumentation, how to run tests, how to process results
  - Test vehicle (Volvo) provided by OICA
- EPA has provided example test plan derived from draft GTR procedure
- EPA making arrangements to instrument and test 2013 Chevrolet Volt and 2013 Malibu Eco after JRC visit
- OICA has provided validation template that was used in WLTP Phase 2 to assist with data collection and documentation

#### Validation program - Considerations

- Participating labs should consider need for manufacturer participation
  - Results of ISO 1585 / R85 needed for TP1
  - Identification of vehicle speed at which maximum power occurs (to avoid need to run a sweep of different speeds)
  - Scan tool to access necessary CAN signals (HV battery SOC at minimum)
  - Any special requirements (for example, how to enter dynamometer test mode)
- Results of R85 required for TP1
  - Should be available for Euro-spec vehicles
  - May not be available for North America vehicles
    - May impact ability to perform TP1 by Canada, US
- Additional open issues may be seen at UN ECE Drafting Group website

## Open issues - Draft GTR (highlights only)

- Access to full ISO FDIS 20762 will be needed
- Standalone GTR or Annex?
  - Current draft is most adaptable to become an Annex
  - Standalone GTR will require additional work to bring in applicable provisions from GTR No. 15
- Additional open issues available at UN ECE Drafting Group website
  - These will be discussed further in Drafting group meeting
  - Wed 6 June, 13:30-17:00