

# Update on Vehicle/Battery Performance and Durability

EVE-18 Shanghai

April 11, 2016

# Recent events

- At EVE-16 (Ottawa, October 2015):
  - FEV presented comprehensive literature review of factors affecting battery durability
  - IWG initiated status report on vehicle/battery durability
    - Summarize the topic as it relates to the EVE mandate
    - Summarize findings and views to date
    - Identify available options for going forward
    - Promote discussion and eventual selection of option

# Recent events

- At EVE-17 (Geneva, January 2016):
  - Discussed draft status report (EVE-17-05e)
  - Discussion of need for coordination with WLTP
    - Desire was expressed to coordinate and avoid duplication of effort
    - Topic further discussed at WLTP meeting later in week
    - WLTP to identify vehicle durability performance requirements (e.g. perhaps a matrix?)
    - EVE to develop test procedures with respect to the performance requirements

# Example matrix of durability requirements

	Durability criterion			
	Criteria Pollutants	Range	Fuel Economy	Total CO2
HEV	Ex: within 5% for 200,000 km and 10 years	N/A	Ex: within 5% for 200,000 km and 10 years	
PHEV	Ex: within 5% for 200,000 km and 10 years	Ex: >90% for 150k km 8 years	Etc.	Etc.
	w/respect to utility factor		w/respect to utility factor	
BEV	N/A	Ex: none	Etc.	Etc.

# Recent events

- In preparation for this meeting:
  - FEV final report posted (EVE-18-04e)
  - Status report on vehicle/battery durability (EVE-18-10e) revised to incorporate IWG comments received in February 2016
  - Received Japan position on battery durability (EVE-18-12e)

# EVE-18: Objectives on durability

- Choose among options for going forward:
  - A: Recommend that developing a GTR on battery durability is appropriate
  - B: Extend mandate to continue research and gather data to inform a potential future GTR
  - C: Recommend that it is premature at this time to develop a GTR but the question should be revisited in the future
- Develop plan for making the recommendation to GRPE in June