



# UNECE EVE-IWG

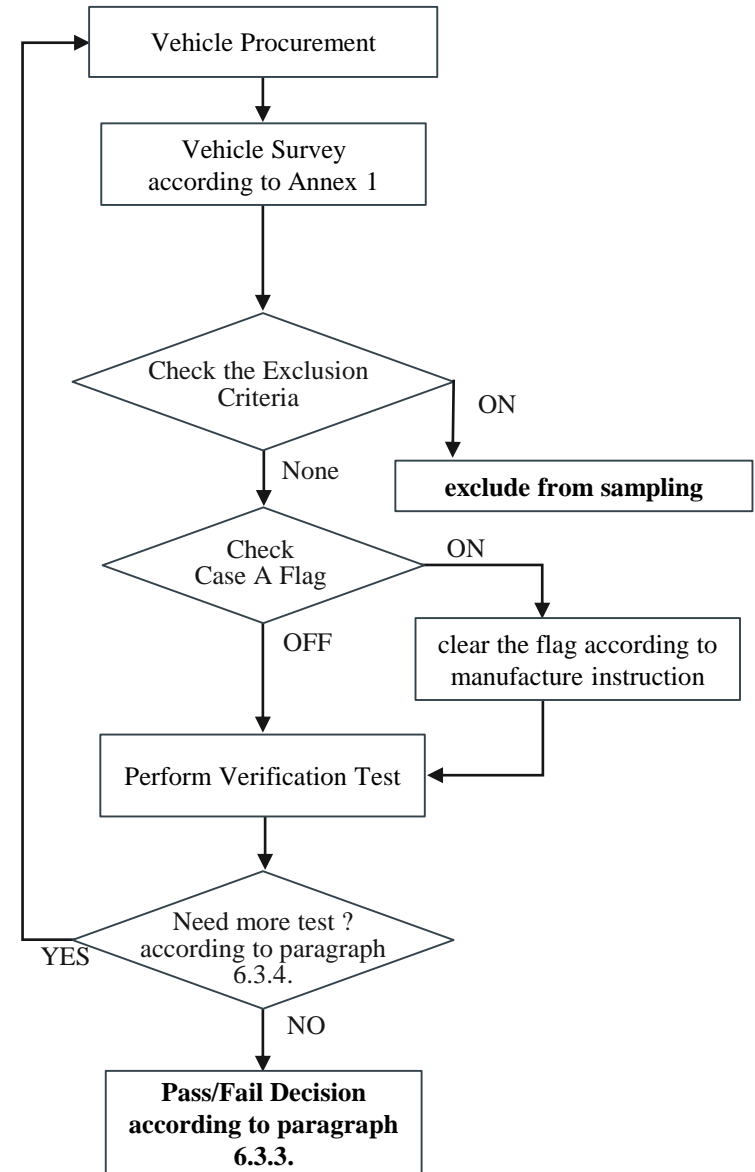
In-Vehicle Battery Durability

OICA position on  
Part A and Part B Verification of Monitors  
EVE-IWG #51  
08.-09.07.2021

# Part A: Verification of Monitors (current text)

- Improves accuracy of the SOCE value
- Concerns about systematic shift in SOCE upon clearing the Case A flag
- How will the Case A flag be displayed? Will it be visible to the consumer?

Supported by OICA

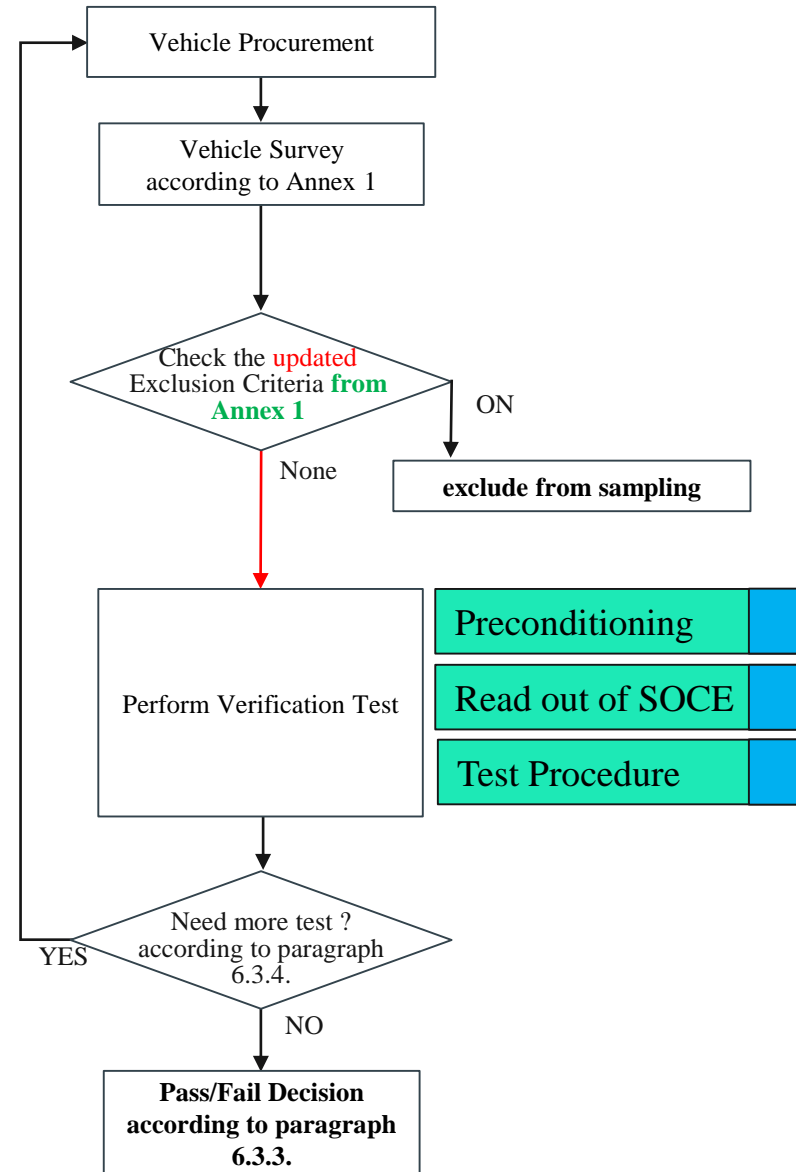


# Part A: Verification of Monitors

## (no Case A flag)

- Could the Annex 2 Case A criteria be moved to Annex 1 Vehicle Survey (exclusion criteria)?
- Annex 2 Case A:  
*“The vehicle has not done a full charge-discharge cycle during the last month”*
- **Wording of criteria will need rephrasing / defining further**

Acceptable for OICA with SOCE readout after preconditioning.

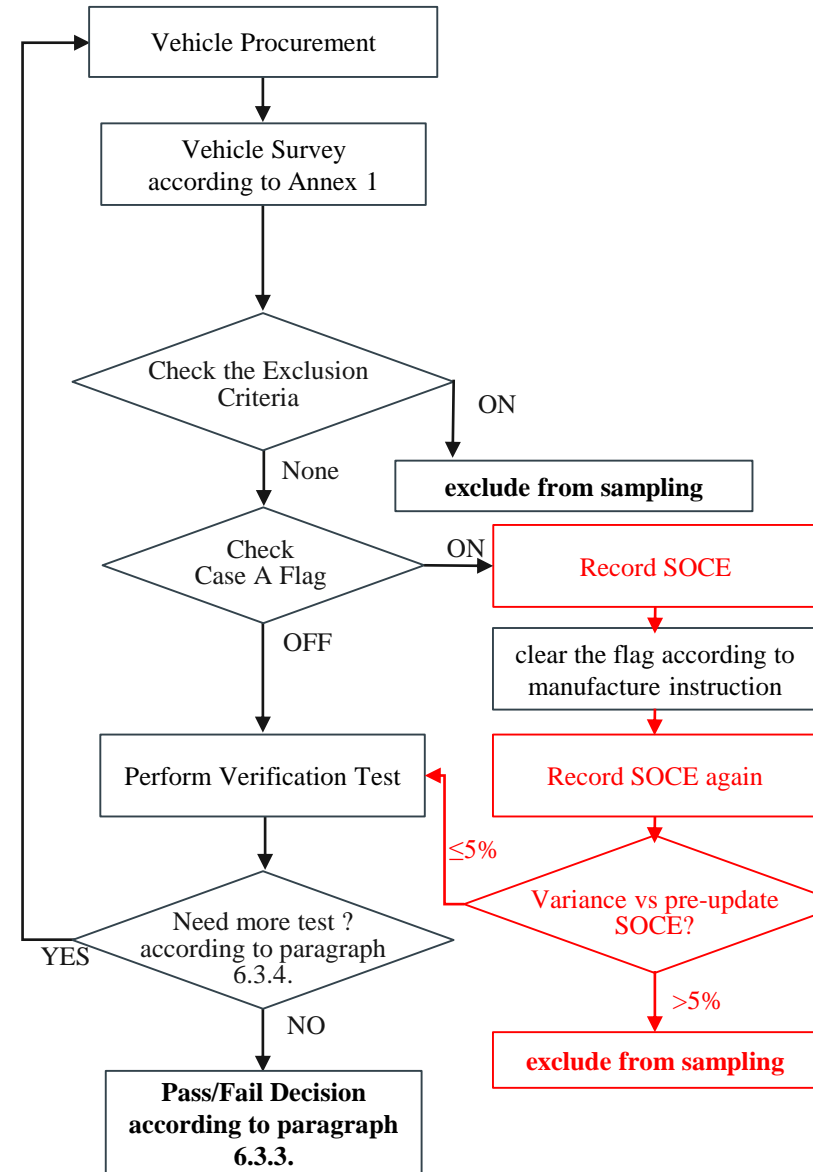


# Part A: Verification of Monitors (USEPA, SOCE %var)

Mike Olechiw

- Suggestion to record SOCE before and after VM update and have a permitted variance between values, e.g. 5%
- Is this double-counting 5% tolerances?

Not supported by OICA



# Part B: Verification of Battery Durability (current text – no Case B flag)

- Ensures accuracy of the SOCE value
- Concern that large number of Case A flags could be excluded
- Concern that poor performing vehicles may be hidden by Case A flags

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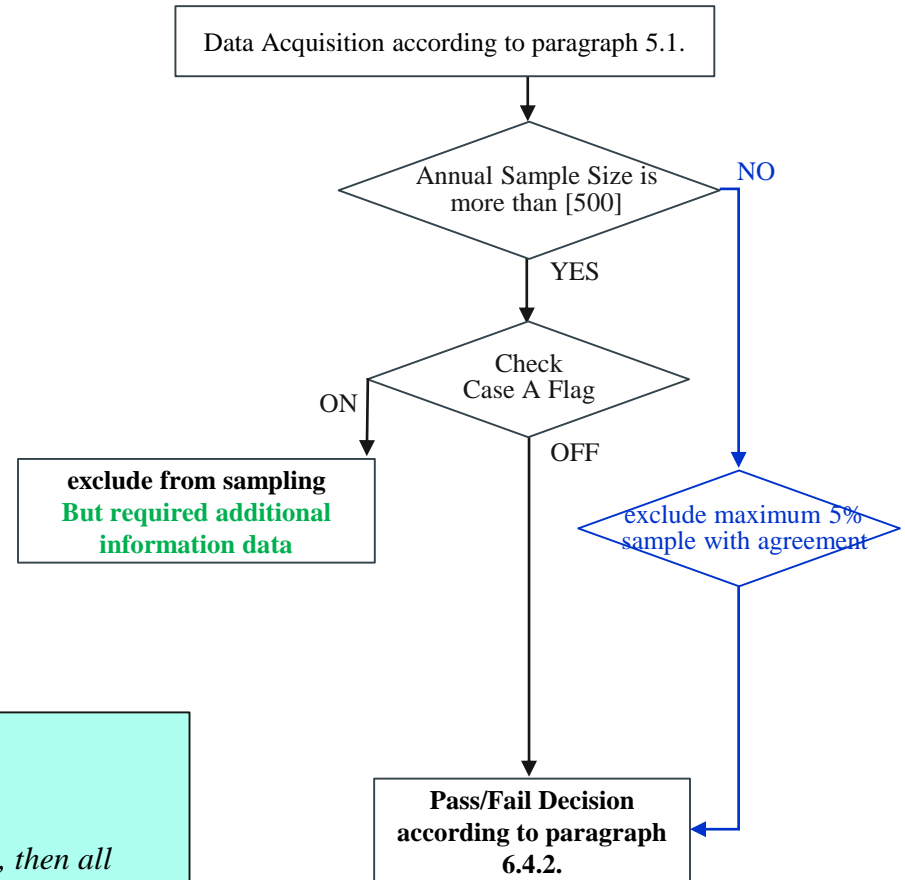
## No Case B flag:

The following sentence to be added to paragraph 6.4.1.:

(...)

*If the number of vehicles in the sample is equal or more than 500, then all vehicles shall be included in the sample.*

*Vehicles that have not been properly maintained may be excluded from the sample regardless of sample size. Evidence shall be provided to the responsible authority.*



# Part B: Verification of Battery Durability (no flags)

- To be discussed

If no Case A flag → further discussion required about possible solutions within IWG EVE

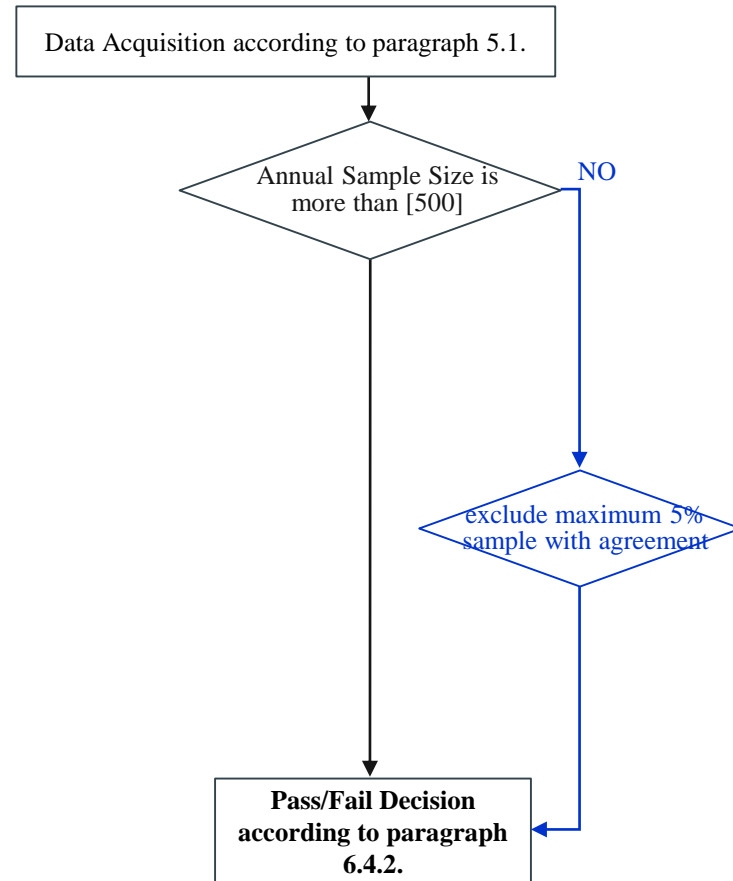
## No Case B flag:

The following sentence to be added to paragraph 6.4.1.:

(...)

*If the number of vehicles in the sample is equal or more than 500, then all vehicles shall be included in the sample.*

***Vehicles that have not been properly maintained may be excluded from the sample regardless of sample size. Evidence shall be provided to the responsible authority.***



# Part B: Verification of Battery Durability (JPN, record flag data)

- By recording SOCE/virtual mileage even when Case A flag is on, possible to probe the data to detect potential misuse
- Where is the data being recorded? Who is monitoring the data for misuse?
- Concerns whether action could be taken if misuse was detected

Acceptable for OICA

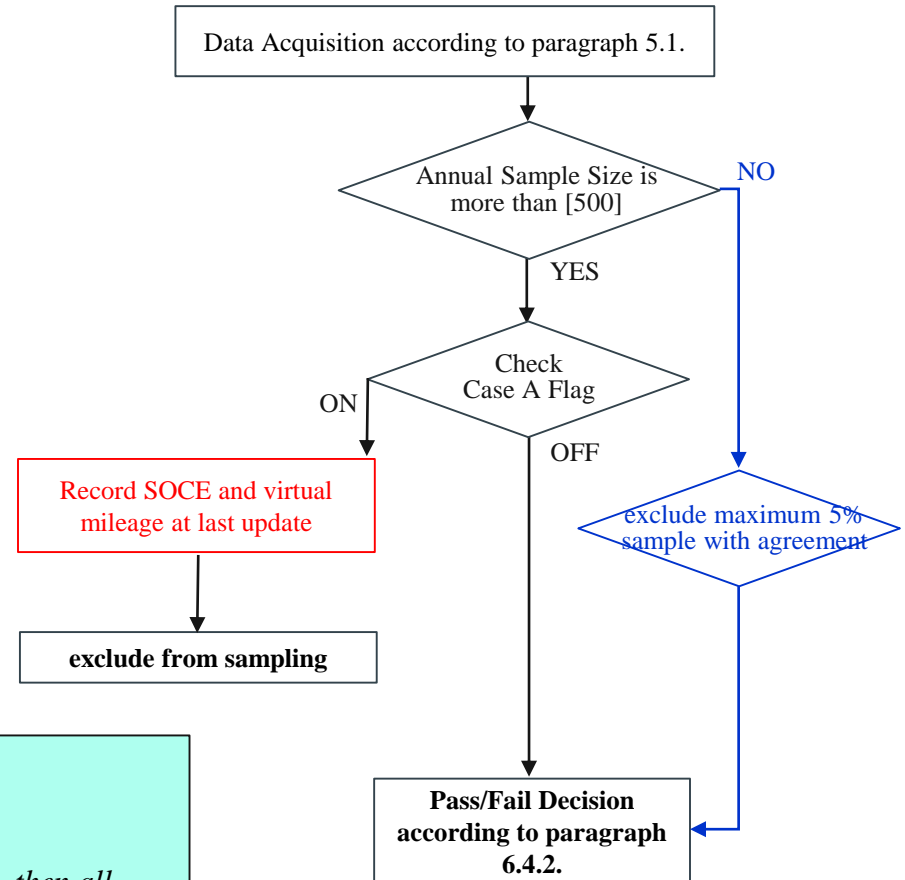
No Case B flag:

The following sentence to be added to paragraph 6.4.1.:

(...)

*If the number of vehicles in the sample is equal or more than 500, then all vehicles shall be included in the sample.*

***Vehicles that have not been properly maintained may be excluded from the sample regardless of sample size. Evidence shall be provided to the responsible authority.***

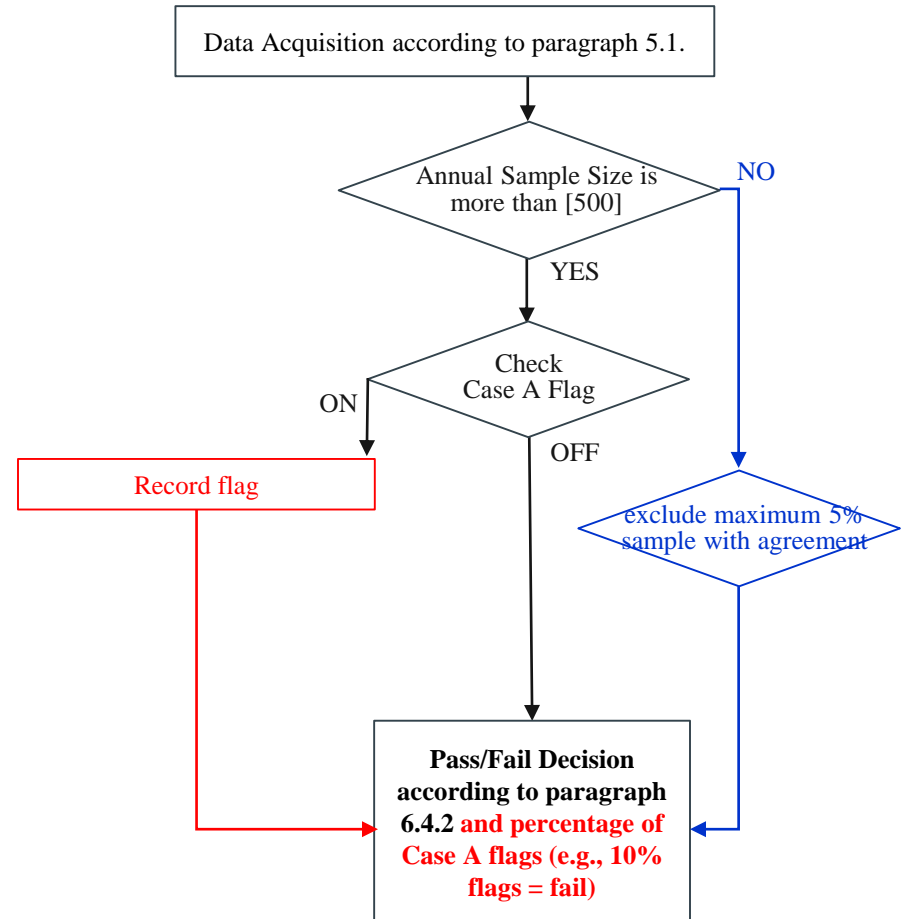


# Part B: Verification of Battery Durability (USEPA, fail on % flags)

Mike Safoutin

- Removes incentive to deliberately raise Case A flag by including them as a possible failure criteria
- What percentage would be used as a failure?

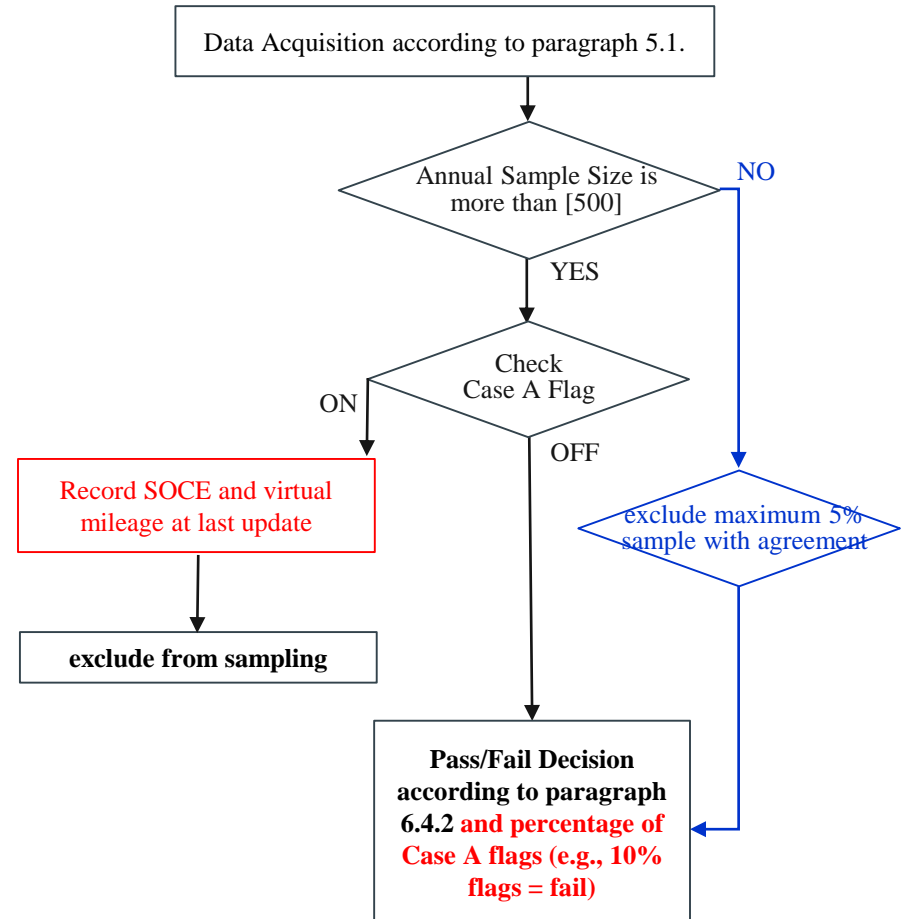
Not supported by OICA





# Part B: Verification of Battery Durability (hybrid of JPN/USEPA)

- As in JPN's proposal, if Case A flag is on, SOCE and virtual mileage at last update is recorded, but vehicle is excluded
- However, USEPA proposal of failing on % flags still applies, removing incentive to deliberately raise flag
- What percentage would be used as a failure?



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