



Department
for Transport

Meeting Document F&SC-09-11
9th F&SC cluster meeting, 14th October 2025

UK DfT positions on priority issues

Based on issues presented in F&SC-08-09e

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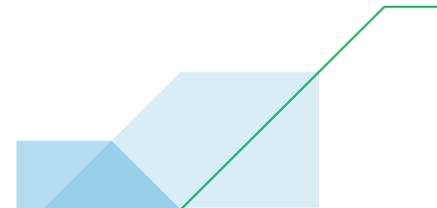
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Issue #1 – Scope

Need to establish what is the scope of vehicles

- Focus only on DC charging (AC charging is outside the scope of FPRC, including wireless charging)
- Fast charging for BEVs and PHEVs
 - Can this be confirmed?

We agree on the scope being DC charging only. BEVs and PHEVs with relevant fast charge capability should be in scope.

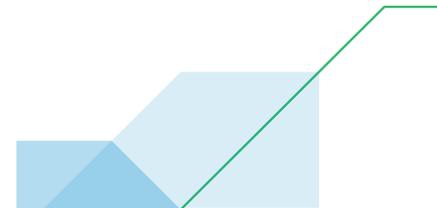


Issue #2 – Definition of fast charge power

Need to establish where the charge power boundary is for fast charging

- According to ISO 12906, the lower boundary is 22 kW
- Other sources (Charin, Alternative Fuels Infrastructure Regulation) have 50 kW as minimum
- Can the lower boundary of 50 kW for fast charging be agreed?

No strong position. 50kW can be accepted as lower boundary.

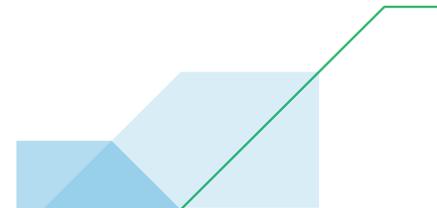


Issue #3 – Family criteria

Need to establish which vehicles may be grouped into the same family

- Basic family criteria will be defined (e.g. battery chemistry, capacity and pre-heating system)
- Proposed to apply the worst-case principle: test the family member with the expected worst performance
- At the option of the manufacturer the family may be split
 - Can the worst-case principle be agreed?

Yes, a worst-case principle would make sense, as per other family approaches in regulations.



Issue #4 – Battery SOC determination

- **Proposal to base the procedure on SoC indicated to the driver (not the ‘technical’ SoC)**

- Can this be agreed?

We support the use of the SoC indicated to the driver

- **Since this SoC is controlled by the manufacturer there is a need for verification**

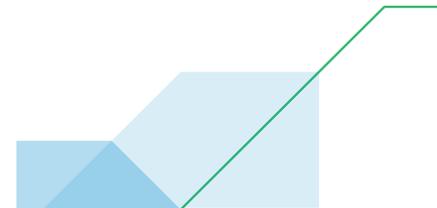
- Is there support to verify the SoC indication?

We support this

- **Best option seems to verify SoC is to monitor Discharged Battery Energy against SoC in WLTP charge-depleting test (electric range and UBE determination)**

- Can this approach be adopted?

This seems like a sensible option to minimise or avoid the need for further testing



Issue #5 – Key performance indicators

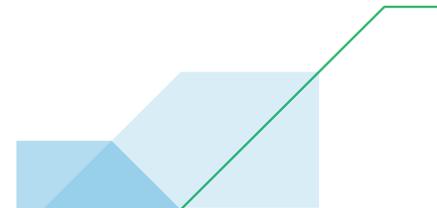
- **Accepted KPIs by all members of the drafting team:**

- Charging time from 10-80%
- Maximum charging power

We agree to inclusion of these two metrics

- **Other KPIs:**

- For the standard to be useful for consumers, the KPIs need to be simple and representative of their charging experience
- We should avoid requiring too many metrics that are interesting to the engineer, but of little relevance to the consumer
- We would support inclusion of:
 - Charging time from 10-100%
 - Average charging power



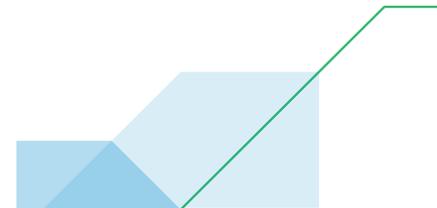
Issue #7 – Pre-conditioning

- **Should the vehicle be preconditioned by a soak period, followed by a mandatory driving phase?**

We agree with the suggestion of a soak followed by mandatory driving phase to ensure the test is representative of a typical fast-charge scenario.

- **If that is agreed, what should the mandatory driving phase look like? (fixed or open)**

In order to make the test repeatable and reproducible, fixing some parameters of the driving phase may be required.



Issue #8 – Applicability

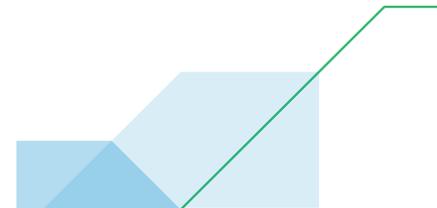
Need to decide if the FRPC test can make use of public chargers

If yes, this means:

- the temperature window after the soak needs to be widened
- the mandatory drive of the preconditioning phase needs to be flexible
- use of a chassis dynamometer for the preconditioning drive cannot be mandatory

- Is it the intention that the FRPC test can also be executed at a public charger location?

No strong position. If including, repeatability/reproducibility of test results needs to be understood and conditions controlled appropriately.

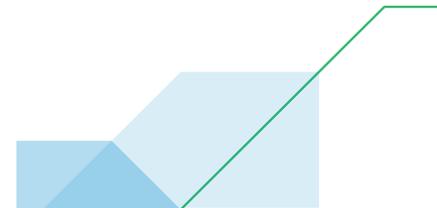


Issue #9 – Test vehicle

Need to decide the eligibility criteria for the test vehicle

- Run-in requirement from ISO 12906 is at least 300 km or the distance of one full charge, no maximum distance set
- It can be useful to establish a maximum age for the vehicle, since the useful battery energy will decline with age
- Battery age could be based on the State of Certified Energy (SoCE)
 - Can it be agreed to add a maximum battery age based on SOCE?(e.g. 98% of the original UBE)

A limitation on SOCE would seem to be sensible, but this shouldn't be too limiting. Would 95% or 90% provide more flexible vehicle selection whilst ensuring the outcome is not significantly impacted by lower UBE?



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