

REESS conditions under Low Temperature Test Procedure:

- Pre-Setting of the REESS is identified as one of the most important discussion points besides the actual low temperature test
- *Low Temp Test Procedure should reflect a representative customer behaviour (heating on, soak time according to overnight parking time, ...)*

Pre-Setting	Soak	Low Temperature Test
<ul style="list-style-type: none"> - Background: Pre-Setting has to be performed to derive – after pre-setting and before starting the soak – stable and repeatable conditions concerning the REESS temperature - There have to be boundary conditions defined for the pre-setting procedure <ul style="list-style-type: none"> - At which temperature? - Which driving profile (WLTC cycle or constant speed driving or ...)? - If there would be a REESS operating temperature which the REESS will remain under normal driving conditions, would this be a stable and representative starting point for the soak period? 	<ul style="list-style-type: none"> - The temperature when starting into the soak should be stable and repeatable (maybe REESS operating temperature) - Questions which need to be answered for the soak: <ul style="list-style-type: none"> - Charging during soak? - Soak length? (according ATCT?) - Heating up the vehicle cabin when the vehicle is connected to the grid? - How much does the charging event heat up the REESS? Is the REESS temperature at the end of the soak (with charging event) depending on the temperature which the REESS has at the beginning of the soak? 	<ul style="list-style-type: none"> - The temperature when starting into the test should be stable and repeatable - How much time does it take to heat the REESS up to the REESS operating temperature? Is there a significant influence of the REESS temperature at the beginning of the test sequence on the derived values? - Which procedure shall be performed? <ul style="list-style-type: none"> - A procedure according to the Type 1 Test Procedure but in case of the low temperature test then at the selected low temperature? - Should there be an alternative procedure?

Some questions (not all) which need to be answered:

- Effects of temperatures levels during Pre-Setting/Soak/Test on test results?
- What parameter do have an influence on the REESS temperature at the beginning of the test? How shall the discharge and charge be performed?
- Is the approach to have the REESS operating temperature in advance of the test a reasonable one? How can this REESS operating temperature be reached?