

Electricity Network Innovation Competition Full Submission

Supplementary Answer Form

Project: Charge: Refuelling Tomorrow's Electrified Transport

Tick if this answer has been provided verbally: ☐

Project code	SPMV1	Question Number	6																		
Question date	14/08/18	Answer date	16/08/18																		
Submission section question relates to		n/a																			
Topic	Innovative																				
Question	Please explain how the activities within Method 1 are exemplary of Technology Readiness Level 5																				
Notes on question																					
Answer	<p>The definition we take for TRL is based on the following:</p> <table border="1" style="margin-left: 40px;"> <tr> <td>TRL 1</td><td>Basic principles observed and reported.</td></tr> <tr> <td>TRL 2</td><td>Technology concept and/or application formulated.</td></tr> <tr> <td>TRL 3</td><td>Analytical and experimental critical function and/or characteristic proof-of-concept.</td></tr> <tr> <td>TRL 4</td><td>Technology basic validation in a laboratory environment.</td></tr> <tr> <td>TRL 5</td><td>Technology basic validation in a relevant environment.</td></tr> <tr> <td>TRL 6</td><td>Technology model or prototype demonstration in a relevant environment.</td></tr> <tr> <td>TRL 7</td><td>Technology prototype demonstration in an operational environment.</td></tr> <tr> <td>TRL 8</td><td>Actual Technology completed and qualified through test and demonstration.</td></tr> <tr> <td>TRL 9</td><td>Actual Technology qualified through successful mission operations.</td></tr> </table> <p>From <https://publications.parliament.uk/pa/cm201011/cmselect/cmsctech/619/61913.htm></p> <ul style="list-style-type: none"> • For system development it is typical to consider the TRL as the lowest in a chain. • The attached diagram demonstrates the Charge project and outlines the inventive steps necessary for Method 1. • For completeness we have also provided the TRL of Methods 2 and 3 in the attachment. 			TRL 1	Basic principles observed and reported.	TRL 2	Technology concept and/or application formulated.	TRL 3	Analytical and experimental critical function and/or characteristic proof-of-concept.	TRL 4	Technology basic validation in a laboratory environment.	TRL 5	Technology basic validation in a relevant environment.	TRL 6	Technology model or prototype demonstration in a relevant environment.	TRL 7	Technology prototype demonstration in an operational environment.	TRL 8	Actual Technology completed and qualified through test and demonstration.	TRL 9	Actual Technology qualified through successful mission operations.
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Attachments	Charge - question 6 - TRL overview – 160818.pptx																				