Test Case

Author _____   Version _____
Project _____   Date   _____

Name of Test Case	
Narrative and Test Objective What is to be found out with this test?	
Function(s) under Investigation (*FuI*) "relevant function realized by the object under investigation"	
Object under Investigation (*OuI*) "component(s) (1..n) that are to be qualified by the test"	
Domain under Investigation (*DuI*) "relevant domains or sub-domains of test parameters and connectivity."	
Purpose of Investigation *(PoI)* Numbered list of test purpose(s) in terms of Characterization, Verification, or Validation.	
System under Test (*SuT*): Systems, subsystems, components included in the test case or test setup.	
Functions under Test (*FuT*) Functions relevant to the operation of the system under test, including FuI and relevant interactions btw. OuI and SuT.	
Test criteria *(TCR)* Formulation of criteria for each PoI based on properties of SuT; encompasses properties of test signals and output measures.	

	Target Metrics *(TM)* Measures required to quantify each identified test criteria	
	Variability Attributes *(VA)* controllable or uncontrollable factors and the required variability; ref. to PoI.	
	Quality Attributes *(QA)* threshold levels for test result quality as well as pass/fail criteria.	

Detailed PoI and Factor Analysis	Yes / no *[filename or link to Uncertainty Structure Analysis Template (USAT)]*
Relevant Data Sets (input)	*Are there existing key data sets that will be relevant for the test design and experiment execution?*
Relevant Data Sets Produced (output)	*Will this work produce a data set that may be relevant beyond the scope of this specific test? What is the scope of the data?*

Qualification Strategy

<Insert here a table and a free text explanation of the Qualification Strategy: how are the PoI to be met by the different tests and how will the test results be combined to yield the desired PoI outcomes (see guideline on qualification strategy)>

Table 1 List of Sub-Test Specifications and their relation to TC PoI.

TS ID	Test Specification Title	Associated PoI	Remarks
TS1.1	…	e.g. PoI1, PoI3	e.g. characterize lab equipment
…			

Test Specification ##.##

Title of Test Specification	*<Title of Test Specification>*
Reference to Test Case	
Test Rationale	*<motivation and explanation of this test*
Specific Test System	*<graphic + text>*
Target measures	
Input and output parameters	
Source of uncertainty	
Reference to detailed analysis	
Test Design	
Initial system state	
Evolution of system state and test signals	
Other parameters	
Temporal resolution	
Suspension criteria / Stopping criteria	

Mapping to Research Infrastructure

<Insert here a table and free text on how the Test Specifications are mapped to experimental facilities / research infrastructure: how is it planned to distribute (map) and execute the specified test system in a given research infrastructure (free text); this section can be used to list the intended Experiment specifications.>

Table 2 List of Experiment Specifications and their relation to existing Test Specifications

ES ID	Experiment Specification Title	Research Infrastructure(s)	Rationale
ES1.1.1	…	e.g. SYSLAB, SmartEST Lab	e.g. unique equipment
…			

Experiment Specification ##.##.##

Title of Experiment	
Reference to Test Specification	
Research Infrastructure	
Experiment Realisation	
Experiment Setup (concrete lab equipment)	
Experimental Design and Justification	
Uncertainty Management	
Experimental Setup uncertainties	
Precision of equipment	
Measurement uncertainty	
Storage of experiment data	