

# Product Breakdown Structure (PBS)

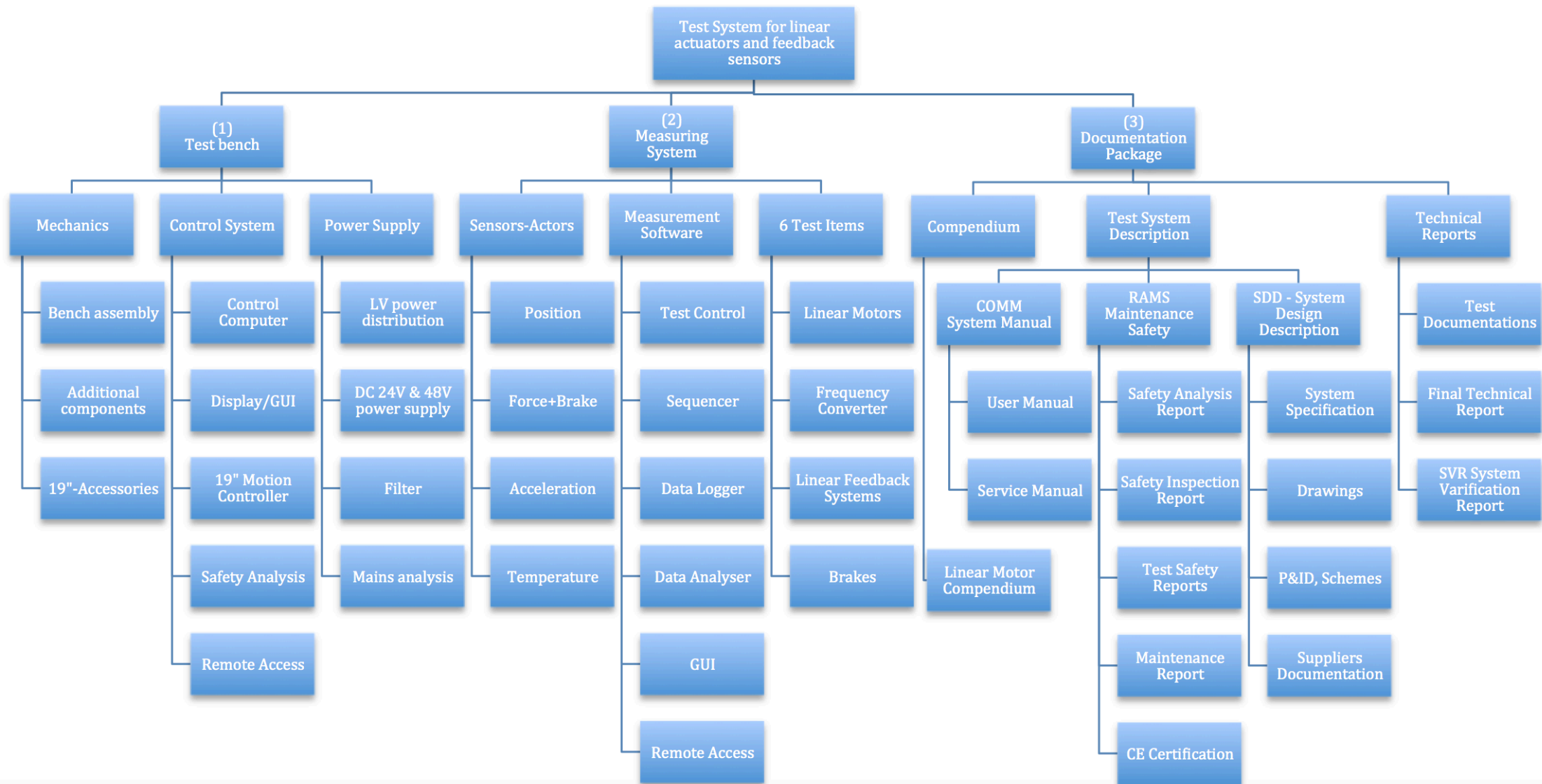
In-kind project NIK5.3#5  
Test Package for Linear Motion Technology

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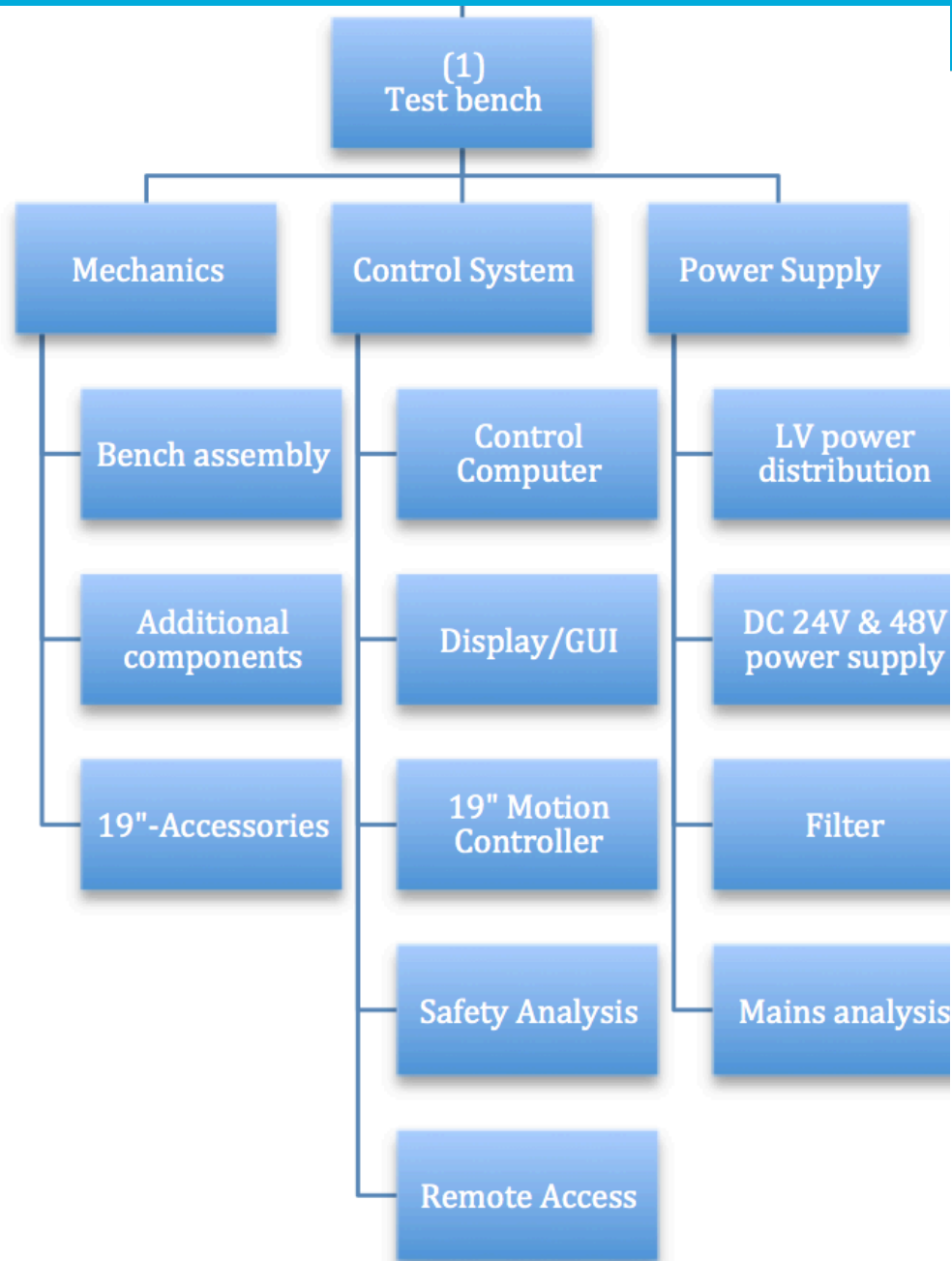
Project Kick-Off Meeting, FZ Juelich,  
21<sup>st</sup> November 2017

- The deliverable item consists of three parts, as laid out in the Product Breakdown Structure:
  - Motion control test benches,
  - The measuring system with test items and
  - The documentation package. Documentation includes the test reports with the performance results of the six test item sets as the main result of the work package.
- The whole test system will be delivered to ESS ERIC for future performance tests of this technology in the workshop of the ESS ERIC Motion Control & Automation Group.

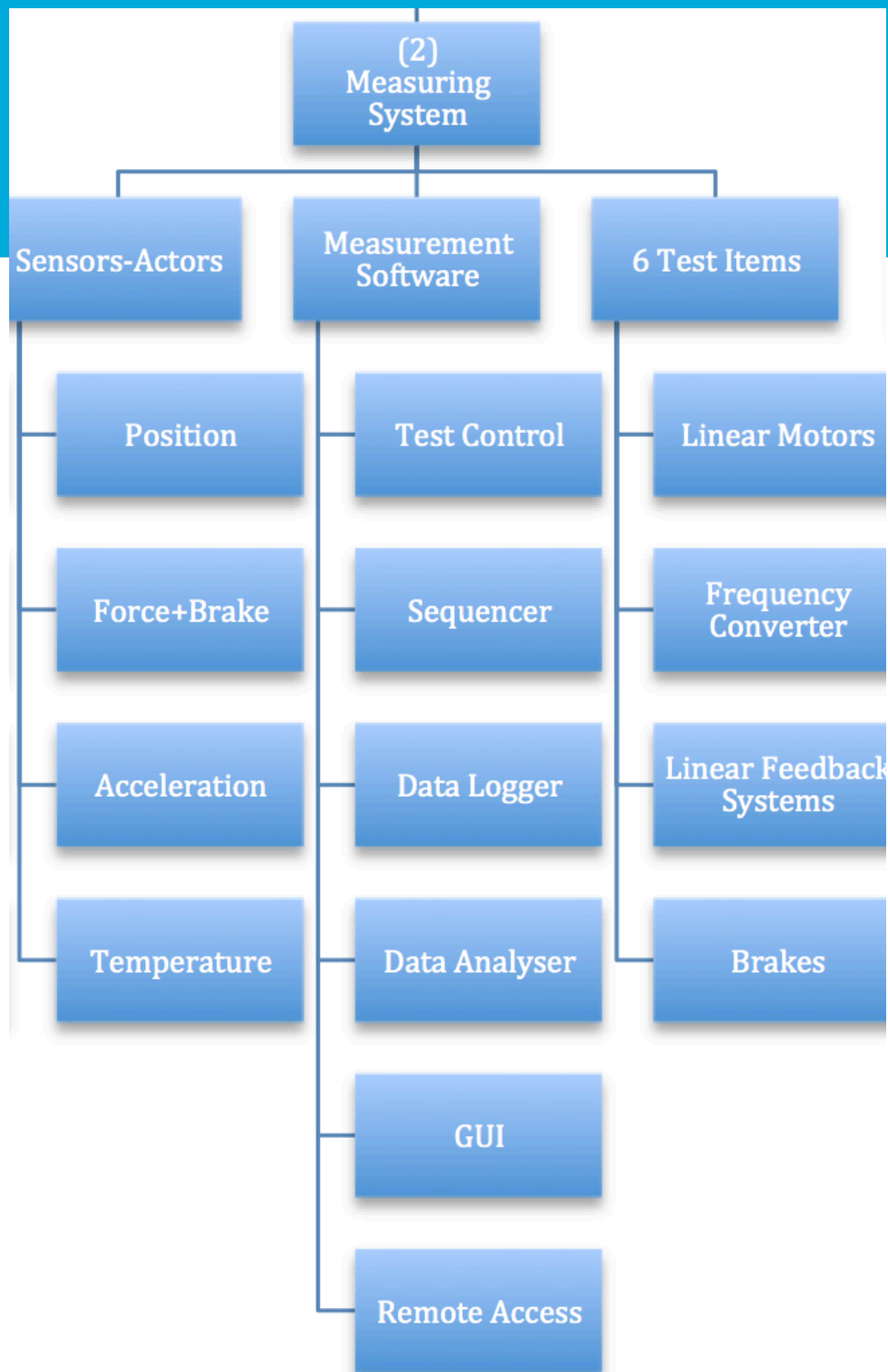
# Overview



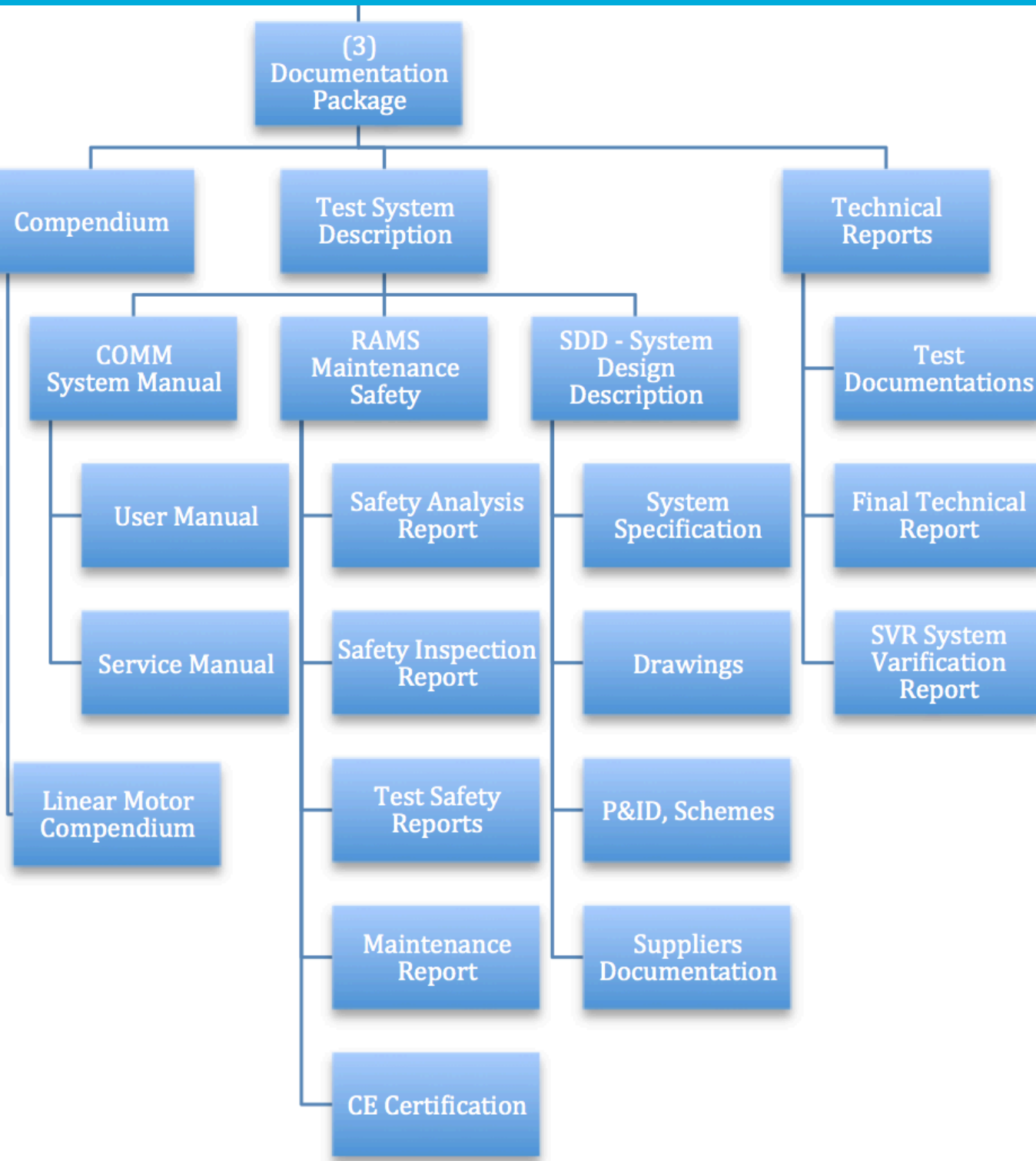
# Overview



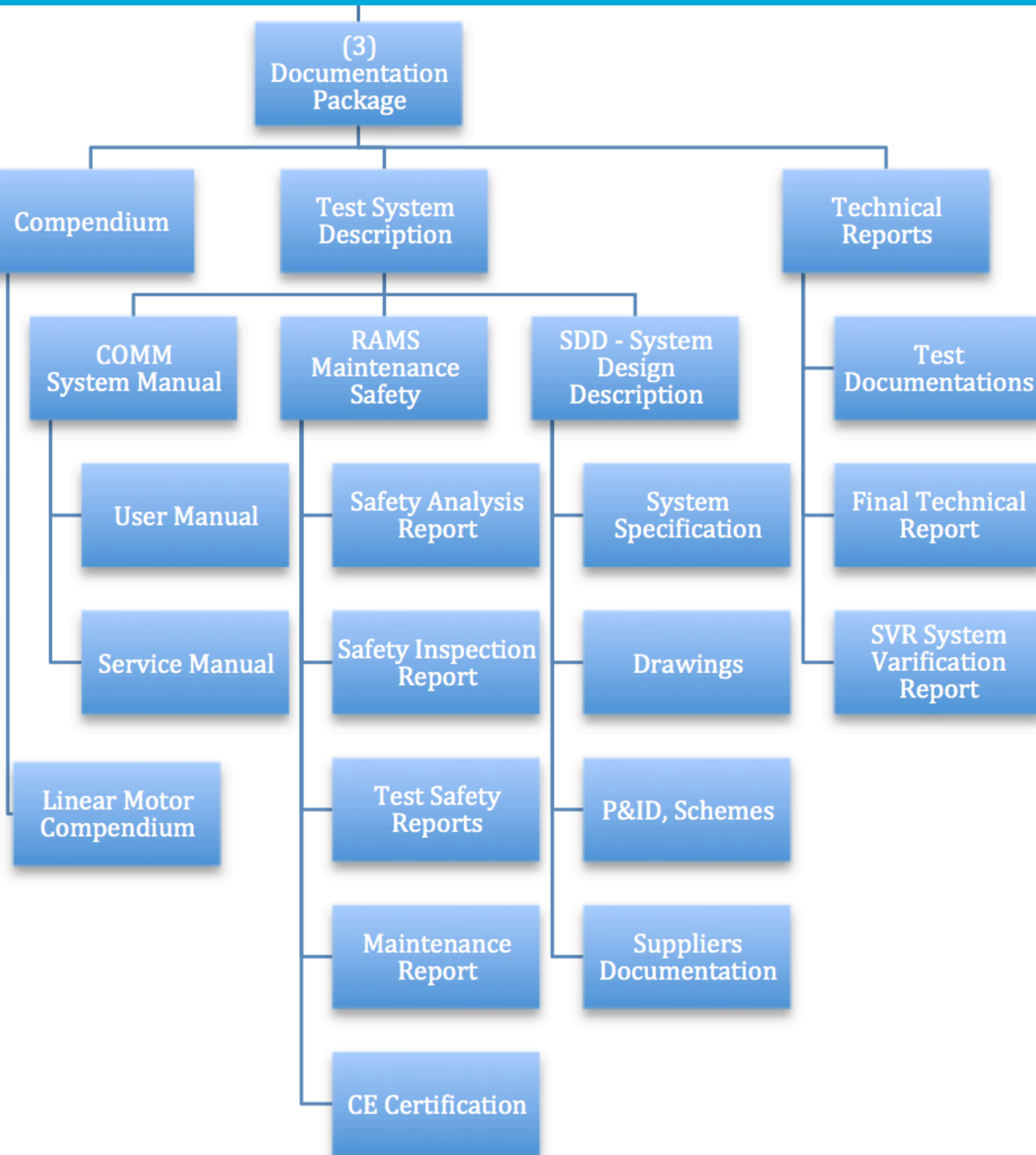
- The Partner at the end of the project shall deliver a total of 3 test bench mechanics with installed power supply.
- One test bench shall be further equipped with the control system consisting of a control computer with monitor, a motion controller and a system to safely integrate the test items from part 2 of PBS.
- The test benches shall be built according to ESS ERIC standards.



- The measuring system will be installed on one of the test benches. It consists of the sensors and actors necessary to perform the test, the measurement software to control the tests and of the 6 test item sets to perform the tests with.
- The different packages of the measurement software will run on the control computer of the test bench.
- Each test item set consists of a linear motor, frequency converter, linear feedback system, and brakes if applicable.



- The documentation package contains all system and test item performance information. It consists of a general compendium about linear motors, the Test System Description and the Technical Reports.
- The test system is documented with the manuals compiled to the COMM, the safety + maintenance reports compiled in the RAMS and the actual systems documentation in the SDD.



- The main result of the in-kind project, the performance tests of the 6 test item sets, is compiled in the test documentation as part of the Technical Reports.
- The SVR is the verification report with the results of the final acceptance test at ESS.
- The whole deliverable item will be CE certified.