





Green Software Measurement Process V2 (GSMP2)

▼ Phase I: Scope Definition






-  T1.1 Elicitation of requirements
-  T1.2 Define the goal
-  T1.3 Choose one or more software entities
-  T1.4 Development of Test Cases

▼ Phase II: Preparation of the Measurement Environment

▼ A2.1. Measurement Environment Settings





-  T2.1.1 Select the architecture style to measure
- ▼  I2.1. Iteration
 -  T2.1.2 Select a measuring instrument
 -  T2.1.3 Select a DUT
 -  T2.1.4 Configure the DUT
 -  T2.1.5 Close unnecessary software applications and processes

▼ A2.2. Measurement Package Implementation

-  T2.2.1 Determine number of repetitions of measurements
-  T2.2.2 Instrument the code of the Soft-UT
-  T2.2.3 Configure the Soft-UT
-  T2.2.4 Implementation of Test Cases for each SE
-  T2.2.5 Create the measurement package

▼ Phase III: Perform the Measurements



▼ I3.1 Iteration

-  T3.1 Obtain the baseline power consumption of the DUT
-  T3.2 Measure the Test Case Run
-  T3.3 Collect the raw data
-  T3.4 Return to DUT ready to measure status

▼ Phase IV: Data Analysis



▼ A4.1 Test Case Data Analysis

▼ I4.1 Iteration



-  T4.1.1 Prepare and describe the raw data from the test case that is to be analysed.
-  T4.1.2 Statistical analysis of test case measurement

▼ A4.2 Software Entity Data Analysis

▼ I4.2 Iteration

-  T4.2.1 Calculate the statistical values of the SE
-  T4.2.2 State conclusions about the software entity's data

▼ Phase V: Reporting the results

-  T5.1 Create the laboratory package
-  T5.2 Document the case study