

DIG-AC A digital traceability chain for ac voltage and current

<https://digac.gum.gov.pl/dig/the-project/wp4/2590,Work-Package-4-Validation-of-new-traceability-chain.html>
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Work Package 4: Validation of new traceability chain

The aim of this work package is to provide characterisation and validation of the components and overall system to be used for digital traceability. This will ultimately allow the approval and integration of the new traceability method for dynamic measurements into measurement institutes. Following the selection of suitable commercial digitisers in WP1, the definition of the measurement system for digital traceability in WP2 and the production of software for data processing in WP3, this work package will provide validation of the system. Using the requirements identified in WP1, commercial digitisers (identified in Task 1.1), resistive dividers and current shunts (identified in WP2) will be characterised against Josephson voltage standards (Task 4.1). The digitisers will be characterized from 10 Hz up to 1 MHz, up to 1 V input and at uncertainty levels determined by stakeholders in WP1 (Task 1.1). The resistors and current shunts will be characterised from 10 Hz to 1 kHz, up to 2 A input and at uncertainty levels to be determined by stakeholders in WP1.