

PTB project “Metrology for Digital Transformation – International Cooperation” CABUREK Global Program

Working Group: WG-2 DCC, Ethiopia
National project title: Transformation of EMI Physical Format Calibration Certificate to DCC in Electrical Laboratory
Members of the national team: Ethiopian Metrology Institute (EMI)
Coach: Centro Nacional de Metrología (CENAM), Argentina's National Institute of Industrial Technology INTI, PTB

Metrology for Digital Transformation

Digitalization ensures integrity, traceability, and accessibility of calibration data. At EMI, it drives efficiency, transparency, and customer confidence.

Our National Project

- ⇒ Defined a foundational Digital Calibration Certificate (DCC) knowledge framework aligned with CABUREK–PTB guidance.
- ⇒ Explored both open-source PTB Digital Calibration Certificate (DCC) tools and commercial FLUKE solutions (MET/TEAM, MET/CAL).
- ⇒ Conducted basic and intermediate training on MET/TEAM and MET/CAL software.
- ⇒ Implemented MET/TEAM for calibration management and created DCC templates with strong stakeholder engagement.

Achievements & Good Practices

- ⇒ Implemented MET/TEAM system, built DCC knowledge through PTB collaboration, tested DCC workflows, trained staff and secured strong stakeholder support.

Challenges & Lessons Learned

Challenges:

- ⇒ Limited expertise in writing calibration procedures and uncertainty budgets using MET/CAL.
- ⇒ Lack of local as well as regional resources for advanced Digital Calibration Certificate (DCC) software training.

Lessons Learned:

- ⇒ Continuous collaboration and knowledge exchange through CABUREK and PTB accelerate progress and,
- ⇒ Proper resource allocation are vital for sustainable digital transformation.

Way Forward

- ⇒ Code more calibration procedures in MET/CAL,
- ⇒ Expand Digital Calibration Certificate (DCC) use across EMI
- ⇒ Pilot Digital Calibration Certificates (DCCs) issuance,
- ⇒ Strengthen collaboration with CABUREK, PTB,, BIPM and potential stakeholders for harmonized DCC adoption

