



IDB
PROJECT



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DE METROLOGÍA



IDB PROJECT

**“Metrology for DT to Support health services in LAC
& address measurement challenges associated with pandemics such as
COVID-19”**

Feb 2021- Feb 2024

Extension for one year more (February 2025)

IDB Funding: U\$S 500.000

Counterpart: U\$S 601.400

Committed funding to be excuted (Feb 2025):

More than % 95



GENERAL OBJECTIVE

New digital metrology services developed, regionally accepted and deployed to address emerging technologies, such as technologies developed as a consequence of the COVID-19 crisis.

COMPONENTS

1. Awareness and Information
2. Development of regional pilot projects to foster the implementation of new digital metrology services
3. Institutional Strengthening



COMPONENT 1. Awareness and Information

- Diagnosis on the current situation of health related digital metrology services in at least 4 NMI in the region, and action plan: On february 2025, 3 SIM countries (Colombia, México, Panamá) will have the diagnosis and action plan finished. CENAM is leading this component.

- Awareness workshops (4)

ANDIMET: INM - Colombia – May 23, 2023

CAMET: CIM – El Salvador – August 18, 2023

SURAMET: INTN – Paraguay – November 08

CARIMET: Dominica, December 2023





COMPONENT 2: Development of regional pilot projects to foster the implementation of new digital metrology services

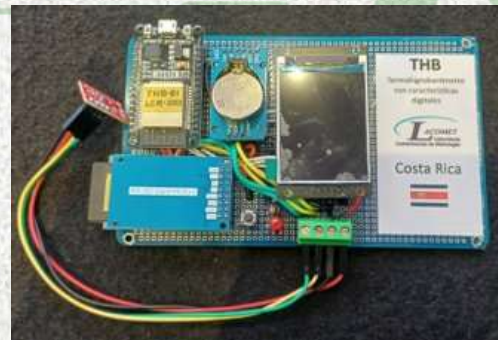
- 3 courses on technology for digitalization: Phyton training (Dominica, december 2023), and translation of virtual M4DT Colloquim (2021 and 2023).
- 4 joint R&D projects in execution, among NMIs

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1. Development of a thermohygrobarometer with digitalization criteria (ENAER, IB METRO, INEN, CENAM, LCM, CENAMEP, INACAL)- Finished !!!

Results: development of 8 different designs of 8 low cost and functional THBs with digitalization components





2. Metrological evaluation of lung ultrasound using virtual vector machine for diagnosis of acute respiratory distress syndrome (INTI, CENAM, INMETRO, NIST)

Objective: To finish on February 2025, the project aims to promote the competitiveness of digital companies related to health tech and healthcare applications, through the reliable automated tool to be applied to diagnosing diseases after Lung Ultrasound imaging

3. Time and Frequency digital platform (CENAMEP, INTI, ICE, CENAM, INM)

Objective: To create an economic and open platform for T&F measurements

4. Optical 3D measuring systems - Dimensional traceability for industrial and medical applications (INTI, INMETRO, CENAM, IBMETRO). To finish on January 2025

Objective: development of specific patterns and the study of optical 3D systems



- 4 Pilots: new services to be implemented, with regional support

CABUREK: Finished!

WG1: Digital Calibration
Certificates



WG2: Automation of labs
and remote calibration



WG3: Digital Process Management



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- Pilot N° 4: Regional SIM Metrology Cloud: The DT MWG has worked in two different proposals, to be finished on february 2025.

The first proposal includes the services of a consultancy. The first deliverable will present the development of a system that will integrate the metrological cloud that can be used for any NMI in the relationship of information transfer and management that complies with the FAIR concepts and starting with the pilot magnitudes of temperature, humidity and pressure using the THB.

In a second phase, the design of the metrological cloud architecture that meets the requirements established by the interested parties (NMI'S, SIM, BIPM) will be provided.



The second proposal explore the application of AI in metrology to support and complement the metrologist's work by applying new tools to the area. The main focus is the Artificial Intelligence quality assistance (AIQA) based on cloud services applied in metrology. This proposal is executed in the frame of a SIM initiative.

The logo for the Sistema Interamericano de Metrología (SIM) is a large, stylized green graphic that resembles a hand or a series of horizontal bars of varying lengths, with the letters "SIM" integrated into its structure.

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- COMPONENT 3: Institutional Strengthening

The objective is to support and contribute to the participation of SIM members in international fora, on Metrology and Quality Infrastructure

Through the IDB Project, up to now, more than 8 SIM representatives attended to different meetings (CIPM Consultative Committees, JCRB meeting, General Assembly)





Muchas Gracias

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