

AASPG DISMET-AFI Project
AFI-METCAL: Calibration and Control of Surface-based
MET Sensors and Barometers

AFI-METCAL — PROJECT ROADMAP

AFI-METCAL — Calibration and Control of Surface MET Sensors and Barometers

Rationale

Reliable meteorological observations are vital for safe and efficient aviation. Errors in temperature, pressure, wind, or humidity can compromise flight planning, aircraft performance, and aerodrome operations. Annex 3 requires integrated automatic systems with calibrated displays, traceable MET data, and regular maintenance. Yet:

- Many AFI States have not fully complied with these provisions.
 - Most lack certified reference instruments and documented procedures.
 - Calibration is irregular or outsourced without proper traceability, posing safety and compliance risks.
 - Calibration is often poorly integrated into MET Quality Management Systems (QMS).
- This project aims at support States in developing operational mechanism to ensure regular control and calibration of surface-based MET sensors and instruments.

Objective

To improve the safety, efficiency, and reliability of aviation and weather services through accurate, traceable, and sustainable calibration of surface-based meteorological instruments and sensors.

SCOPE

Selected AFI States with longstanding issues on the calibration and control of surface-based MET sensors and systems.

METRICS

- Number of guidance materials and SOPs developed
- Number of qualified calibration Technicians recorded in the repository
- Report on Inventory and Assessment of Calibration Capabilities in AFI States
- Number of States with operational calibration systems
- Final project report

STRATEGY

Senior CNS and MET experts, with proven experiences from the Civil Aviation Authorities and the Industry, selected as per the AASPG Procedural Handbook, will implement the project. ICAO MET Regional Officers (ESAF and WACAF) will provide support as needed. The Project Team Coordinator (PTC) will coordinate activities, assign tasks, and prepare progress reports.

Activities may be delivered online, hybrid, or in-person. The PTC will present performance reports to the AASPG IIM/SG.

RELATED PROJECTS

This project is linked to the following :

- DISMET-AFI - Improving OPMET Delivery and MET Product Access for Safer and More Efficient Flight Operations in the AFI Region.

RELATIONSHIP WITH THE REGIONAL PLANS

This project supports the following plans:

- Global Air Navigation Plan (GANP);
- Global Air Safety Plan (GASP).

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Work Programme for the Implementation of AFI-METCAL Project

1. Task Allocation Among Project Team Members (7 Members)

1. Task assignment

N°	Function	Main Responsibilities
1	Project Team Coordinator (PTC)	Overall coordination, project monitoring, reporting, liaison with AASPG IIM Sub-group
2	Project Expert 1	Technical framework ¹ for MET sensor calibration
3	Project Expert 2	Identification and Development of SOPs and quality procedures
4	Project Expert 3	Technical integration, automatic systems and traceability
5	Project Expert 4	Integration of calibration activities into MET QMS
6	Project Expert 5	Identification of training needs and Development of training materials and guides
7	Project Expert 6	Technical directory, archiving and monitoring tools

2. Work Programme

PHASE 1: Project Launch and Organisation

Period: T2 2026

Activities	Lead Responsible	Support
Organization of the launch webinar	PTC	All
Development of the detailed work plan	PTC	All
Task allocation and schedule	PTC	All

Expected Deliverables

- Project team established;
- Validated work plan;
- Activity schedule;
- Minutes of the launch webinar.

PHASE 2: Establishment of the Regional Calibration and Control Framework

Period: T2 2026

Activities	Lead Responsible	Support
Development of the regional calibration policy	Project Expert 1	All
Development of the technical traceability guide	Project Expert 2	All
Identification of reference centres	Project Expert 3	All
Designation of national focal points	PTC	All

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- ¹ Develop and adopt a regional policy and technical guide for calibration and traceability.
 - Designate national focal points for calibration and control.
 - Identify and calibration reference centers.
 - Establish a monitoring and reporting system for compliance.

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Activities	Lead Responsible	Support
Development of the compliance monitoring mechanism	Project Expert 4	All

Expected Deliverables

- Regional policy;
- Technical guide;
- List of reference centres;
- Lis of Focal Points
- Compliance monitoring system.

PHASE 3: Development of Technical Documents and Tools

Period: Q3 2026 – Q2 2027

Activities	Lead Responsible	Support
Development of calibration SOPs	Project Expert 6	All
Development of quality assurance procedures	Project Expert 5	All
Guide for setting up calibration centres	Project Expert 4	All
Guide for procuring calibration kits	Project Expert 3	All
Development of regulatory tools	PTC	All
Development of the record-keeping system	Project Expert 2	All
Development of technical manuals	Project Expert 1	All

Expected Deliverables

- Validated SOPs;
- Technical manuals;
- Regulatory guides;
- Record-keeping tools;
- Quality procedures.

PHASE 4: Capacity Building

Period: T1 2027 – T3 2027

Activities	Lead Responsible	Support
Identification of training needs	Project Expert 1	All
Development of the training catalogue	Project Expert 2	All
Development of training materials	Project Expert 3	All
Training and awareness sessions	PTC	All

Expected Deliverables

- Training catalogue;
- Training materials;
- Training reports.

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PHASE 5: Establishment of the Regional Repository

Period: Q2 – Q3 2027

Activities	Lead Responsible	Support
Identification of qualified technicians	Project Expert 5	All
Development of the regional repository	Project Expert 6	All
Data collection and validation	PTC	All

Expected Deliverables

- Regional technician repository;
- Operational database.

PHASE 6: Validation and Project Closure

Period: Q3 – Q4 2027

Activities	Lead Responsible	Support
Organization of the validation workshop	PTC	All
Validation of guides, SOPs, and manuals	All	All
Development of the final report	PTC	All
Recommendations for regional deployment	Project Expert 3	All

Expected Deliverables

- Validation workshop completed;
- Final project report;
- Regional recommendations.

3. Operating Arrangements of the Project Team

Meetings

- Monthly coordination meeting;
- Thematic technical meetings as required;
- Quarterly follow-up meetings with the AASPG/IIM-SG.

Working Tools

- Online collaborative platform;
- Activity tracking dashboard;
- Shared document repository;
- Action and risk tracking tool.

Reporting

- Monthly progress report;
- Quarterly performance report;

Final project report.