1. **Project Identification**

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| **AFI Region** | **PROJECT DESCRIPTION (DP)** | DP N° **AFI-METCAL** | |
| ***Programme*** | **Title of the Project** | **Start** | **End** |
| *AREA: MET*  **Programme Facilitator: RO MET** | **AFI-METCAL: Calibration and Control of Surface-based MET Sensors and Barometers** | **01/01/2026** | **31/12/2027** |
| **Project coordinator**: [Name of the Project Coordinator] |
| **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 support the following plans:   * Global Air Navigation Plan (GANP); * Global Air Safety Plan (GASP). | | |

1. **Project Deliverables**

| **Project deliverables** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Reference** | | **Description** | **Responsible**  **party** | **Delivery** | **Status of**  **Implementation** | **Comments** |
|  | **Project Setup** | | | | |  |
|  | Selection of project team experts | | Programme facilitator | **Q1, 2026** |  | Coordinate with States and Organizations for the nomination of subject matter experts possessing the required qualifications and experience to compose the project team. |
|  | Project launching webinar | |  | **Q1, 2026** |  | Organize an initial webinar with the project team members to launch the activities of the project. |
|  | **Framework for Calibration & Control established** | | | | |  |
| 2.1 | Establish Regional Framework for Calibration & Control established | | Programme facilitator | Q2, 2026 |  | * 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. |
|  | **Development of Project Implementation Documents and Tools** | | | | |  |
| 3.1 | Develop regulatory framework for the calibration and control of MET sensors and instruments, Recordkeeping mechanisms. Calibration-related SOPs and quality assurance materials, Guidance on the Development of Calibration Infrastructure | | Project Team | Q2 -Q3, 2027 |  | * Develop guidance for the establishment or upgrade of the national calibration centre. * Develop guidance on procuring mobile or fixed calibration kits for barometers and temperature/sensors. * Develop guidance on establishing partnerships with accredited reference laboratories. * Develop SOPs and quality assurance procedures related to calibration and control * Develop comprehensive guidance on integrating calibration activities as part the QMS for MET * Identify and develop regulatory guidance materials and tools for State to ensure the calibration and control of MET sensors and systems * Develop a record keeping tool/system |
| 3.2 | Validation workshop of guidance materials and SOPs developed | | Programme facilitator | Q3, 2027 |  | Exprt workshop to revied and validate all guidance materials, SOP, Manuals developed. |
|  | **Capacity Building** | |  |  |  |  |
| 4.1. | Training needs and training catalogue related the calibration and control of MET sensors and instruments. | | Project Team | Q1, 2027 |  | Identify and develop operating training materials on the calibration and control of MET sensors and instruments |
|  | **Project Online Repository** | |  |  |  |  |
| 5.1. | Establish repository of existing qualified calibration technicians | | Project Team | Q3, 2027 |  | Identify all existing qualified and competent experts on calibration and control of MET sensors/systems. |
|  | **Project final report** | |  |  |  |  |
| 6.1. | Project final report with recommendations for further deployment | | * Programme facilitator * Project Team | Q4,2027 |  | Develop final report of the project with guidance on the deployment of the project for other States. |

1. **Resources**

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| **Resources required** | The required resources include:   * Selected CNS and MET experts from States and Organizations to conduct the project activities, based on following qualification criteria:   1. experience and good knowledge of ICAO standards and recommend practices, and procedures related to MET for MET experts;   2. experience and good knowledge ICAO standards and recommended practices, and procedures related to CNS for CNS experts;   3. at least five (5) years of operational experience in dealing with meteorological information dissemination to users;   4. at least five (5) years’ experience in State MET and CNS regulation;   5. experience and good knowledge in procedures related to MET instruments calibration and/or maintenance.   6. at least three (3) years’ experience in MET Instruments/sensors control and calibration * Funds for conducting the documents and tools validation workshop. |

1. **Project Costing**

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| --- | --- | --- | --- | --- | --- |
| **Activities** | **Expenditures** | | | | |
|  | **Total** | **2025** | **2026** | **2027** | **Total** |
| **Recapitulation** | **48,000** |  | **20,500** | **27,500** | **48,000** |
| **Deliverable 1 Project Setup** |  |  |  |  |  |
| Activity #1.1 Selection of project team experts | 0 | - | 0 | 0 | 0 |
| Activity #1.2 Project launching webinar | 0 | - | 0 | 0 | 0 |
| **Deliverables 2 Framework for Calibration & Control established** | | | | |  |
| Activity #2.1 Establish Regional Framework for Calibration & Control established |  |  |  |  |  |
| **Deliverables 3 Development of Project Implementation Documents and Tools** | | | | |  |
| Activity #3.1 Development of Regional Framework for Calibration & Control, regulatory materials, Guidance, Tools, Calibration-related SOPs and quality assurance materials | 20,500 | - | 20,500 | 0 | 20,500 |
| Activity #3.2 Validation workshop the developed materials on the calibration of MET surface-based sensors and instruments | 27,500 | - |  | 27,500 | 27,500 |
| **Deliverables 4 Capacity Building** |  |  |  |  |  |
| Activity 4.1. Training needs and training catalogue related the calibration and control of MET sensors and instruments. | 0 | - | 0 | 0 | 0 |
| **Deliverables 5 Project Online Repository** | | | | |  |
| Activity #5.1 Establish repository of existing qualified calibration technicians | 0 | - | 0 | 0 | 0 |
| **Deliverables 6 Project Final Report** |  |  |  |  |  |
| **Activity #6.1** Project final report with recommendations for further deployment | 0 | - | 0 | 0 | 0 |
| **Total** | 48,000 | - | **20,500** | **27,500** | **48,000** |