**Workplan of the Expert Team on Operational In-Situ Technologies (2014-2018)**(Version: Revised after ET webex call 24.03.2017)

| **No.** | **Task description** | **Priority[[1]](#footnote-1)** | **Person responsible** | **Action** | **Deliverable** | **Deadline for deliv.** | **Status****[%]** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. | **Guidelines on combining information from composite observing systems**  | **2** | **Toshihiro Hayashi**Ahmed Saad | 1. Develop guidance material on QC procedures for precipitation amounts and intensity measured by precipitation gauges.
2. Develop guidance material on the use of precipitation gauge data in support of weather radar quality control.
3. Develop guidance material on the integration of surface-based in-situ, surface-based remote sensing, and space based technologies to provide composite information with added-value.
 | 1&2. IOM Report or other document type if appropriate (CIMO Guide update, document for meeting or for AWS Portal, etc.)3. End of intersessional period (2018) | 1&2. Draft report for 31.12.2015, final report for 31.12.2017 (harmonization with deadlines ET-ORS)3. End of intersessional period (2018) | 1. 50
2. 50
3. 0
 | Draft report was made by T. Hayashi (31.12.2015) and was reviewed by ET-OIST.CIMO MG-11CIMO-16 §4.9, 4.10(in collaboration with ET-ORS)Request from OSCAR 🡪 what type of request (Yves-Alain to clarify with Jörg Klausen) 🡪 No request so farFormuler un exemple sous format XML compatible avec le schéma défini par TT-WMD/IPET MDRDDraft report submitted to the MG early 2016 (MG meeting in Offenbach 5-8 April), no feedback yet (Kruno will investigate)New version will be prepared by Toshihiro until early June, working document for the A1/A2 joint meeting in Geneva (21-23.6.2017)CIMO Guide update 🡪 submit a proposal to MG by November 2017 at the latestDeliverable 2: Ongoing project at MeteoSwiss (follow-up SPICE and know-how transfer to radar community), which could be used for this task. |
| 2. | **Further develop and finalize guidelines on migration from manual to automated observations** | **1** | **Mike Molyneux**Bernd MergardtAhmed SaadHenry Karanja | 1. ~~Teleconference to clarify structure and expected content~~
2. ~~Finalize draft IOM report~~
3. ~~Examine whether parts of the IOM report should be included into CIMO Guide~~

Share the draft of training courseReplace the task by “CIMO will actively promote the organization and support of a training course”Review/refine the training course during joint meeting in June | 1. ~~Teleconference~~
2. ~~IOM Report~~
3. ~~Updates to CIMO Guide~~

1 | ~~1. March 2015~~~~2. 31.12. 2015~~~~2. 31.12. 2016~~ | 1. 302. 0 | Now part of a larger activity under WIGOS: Development of an AWS Handbook. WMO project that goes beyond technical question: capacity building, procurement guidance, preparation of the person to manage the process properly.Climatology involved?Link with Meteomet: A. Merlone to provide input docs on measurement uncertainty of AWS and impact of transition on data, for workshop in GenevaCIMO-16 §4.12, CBS/OPAG-IOS (ET-AWS-6)/Doc. 7(1), (7.7.2010), submitted by Mike MolyneuxCapture output from WIGOS AWS workshopsInform C1 - Task on Minamata and mercury. |
| 3. | **Siting classification** | 1 | **Yves-Alain Roulet**Olaf SchulzeToshihiro HayashiAndrea Merlone | 1. Address challenges faced by Members (Nordic countries in particular) with implementing the classification. Coordinate updates, if required.
2. Develop guidance material from the lessons learned on how to implement the classification, including benefit achieved with it.
3. Maintain liaison with ISO re maintenance of WMO/ISO standard
 | 1,3Updated classification if required2 IOM Report with contribution from Norway, Austria, Switzerland, Japan, UK, Hong Kong, Germany,…(tbd)Reports from members for discussion during June meetingNordobs Report published, will not be published as an IOM report (copyright issues), but we be referenced on WMO classification webpage | 1. 31.12.20172. 31.12.20173. Ongoing  | 1. 50%2. 50%3. Ongoing | Link with Meteomet2 activity: Measurement protocol for evaluation of siting uncertainty for temp measurements (review from ET-OIST to A. Merlone).Support to the METEOET siting experiment.Link with metrology well established through regular exchange with A. Merlone.Y.-A. Roulet member of the Metrology for Meteorology and Climate" Conference MMC-2016 scientific committee.CIMO-16 §4.3, 4.4, 4.6, 4.7To be integrated into OSCARErcan BUYUKBAS (B2, B3)A. Merlone to liaise with relevant Meteomet2 actions.ET-OIST in charge of the implementation and supervision (?) |
| 4. | **Sustained performance classification for observing stations on land** | 1 | **Olaf Schulze**Francesco FotiAhmed SaadHenry Karanja | 1. Finalize the development of the classification
2. Develop guidance material on how to apply the classification
 | 1. New WMO standard2. Updated CIMO Guide | 1. 30.06.20172. 31.12.2017 | 1. 502. 0 | ET members should consider whether to split this classification into components: e.g, instrument, maintenance regime, calibration regime. 🡪 further discussion neededCIMO-16 §4.3To be integrated into OSCAR 🡪 Propose classification 🡪 CR to OSCAR for new metadata fieldsSee minutes last ET-Standardization meeting (26.6.2014)Yves-Alain Roulet to first clarify with M. LeroyET-OIST in charge of the implementation and supervision (?) |
| 5. | **Metadata standards**  | 2 | **Yves-Alain Roulet**Olaf SchulzeAhmed Saad | 1. Ensure CIMO priorities regarding metadata are incorporated into WIGOS metadata activities.
2. Develop additional CIMO metadata contribution to the WIGOS metadata, if appropriate
 | 1. Demonstrated contribution to TT-WMD2. Expanded metadata standard (if appropriate) | Ongoing |  | CIMO-16 §4.2Link within MeteoSwiss (TT-WMD with J. Klausen)Ercan BUYUKBAS (B2, B3) is CIMO Representative in ICG-WIGOS TT-WMD.CBS ET-AWS, already published (Guide to the GOS) |
| 6. | **Standard for the classification of instruments for rainfall intensity measurements** | 1 | **Henry Karanja**(Luca Lanza) | 1. Provide draft standard in English
2. Contact other relevant WMO Programmes (in particular CHy)
3. Further develop standard to meet their requirements
4. Incorporate comments from CHy and other stakeholders into the standard document

Yves-Alain will ask HenryKruno will investigate at CHy | 1. Draft standard
2. Progr. Contact & focal points nominated
3. Updated standard
4. Final draft standard submitted for approval by CIMO
 | 1-31.12.20174-30.06.2017 | 50% | Deadlines need to be revised (schedule might be too tight)CIMO-16 §4.5Note: Liaise with assigned CIMO Testbeds and Lead CentresFormalize link with CHy: via SecretariatCIMO-16 §7.60 |
| 7. | **Collaborate with ISO TC 180 on review of radiation standards** | 2 | **Wouter Knap (Jitze van der Meulen)** | 1. Collaborate with ISO TC 180 through the WMO Secretariat for the review of the standards, on request from ISO
 | 1. Provide contribution to ISO on/for revised standards
 | 1. ongoing
 |  | CIMO-16 §4.8Liaise with TT-Radiation ReferenceNo expectation for the moment |
| 8. | **Update of CIMO Guide following publication of Ghardaia intercomparison report** | 1 | **Mike Molyneux**Bernd Mergardt | 1. Contact M. Leroy
2. Develop an update for relevant CIMO Guide chapters on recommended standard calibration procedures, etc. according to results of intercomparison
 | 1. Advice if update of CIMO Guide is required 1.2 Updated CIMO Guide chapter \* | 1-30.06.20162-30.06.2017 |  | Contact M. Leroy to find out what still needs to be doneSeek some support from M. Leroy, first to find out whether the report could be used for CIMO Guide update, and how to move onUpdate from DWD (current test on shelters) |
| 9. | **Guidance on Wind Measurement and Reporting** | 2 | **TBD**(Jitze van der Meulen a.i.)Mike Molyneux | 1. Liaise with CBS, CAeM and JCOMM to address concerns expressed by Hong Kong Observatory in regard to the measurement and reporting of wind
2. Organize the revision of relevant WMO guidance documentation as required.
 | 1. Doc. on how to address concerns expressed by CIMO-16
2. Updated WMO guidance material on measurement and reporting of wind
 | 31.12.2016 |  | 3 recommendations from CIMO-16 §4.38-4.41BUFR vs CIMO Guide 🡪 consistency neededToshihiro to contact Hong Kong Obs and ask to give detail information on the concern 🡪 Done, the topic will be discussed during A1/A2 meeting in June 2017, and an answer will be provided |
| 10 | **Liaise with cost action on snow measurements** |  | **Y.-A. Roulet** | 1. Monitor progress of action, inform CIMO MG of relevant activities and inform COST ES1404 of possible links to CIMO and relevant CIMO activities
2. Incorporate relevant outcomes of COST ES1404 into CIMO Guide.
3. Develop proposal for required follow-up activities by CIMO, if appropriate
 | 1. Regular com. with CIMO MG and COST action
2. Update CIMO Guide chapter
3. Recommendation for follow-up activities during 2018-2022
 | 1. On-going
2. Sept. 2017
3. March 2018
 |  | Y.-A. Roulet took part to thekickoff meeting, which took place in Grenoble (18-19.3.2015). 🡪 Minutes pending.Cost action ES1404 |

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1. 1 : Must (WIGOS high priority or « low hanging fruit ») – to be addressed urgently, 2 : To be finalized by CIMO-17 (2018), 3: Not in WIGOS [↑](#footnote-ref-1)