

COWET Outcomes, Recommendations, Proposed Annual Outputs and Targets

STRATEGIC OUTCOME

COWET shall support the progressive adoption and operational use of WIS 2.0 by Caribbean NMHSs, with the objective of increasing the exchange, discovery, and utilization of meteorological, climatological, and warning information through interoperable regional and national WIS 2.0 infrastructure.

STRATEGIC RECOMMENDATIONS

Recommendation 1: Agree on the following agreed milestones:

- National WIS 2.0 Node deployment;
- National metadata update and publication;
- Increased operational data exchange;
- CAP dissemination;
- Data consumption and subscriptions.

Recommendation 2: Agree on regional targets for publication of:

Phase (1):

1. SYNOP and AWS observations on national nodes;
2. Upper-air observations;
3. CAP messages.
4. DAYCLI;
5. CLIMAT;

Phase (2):

6. IWXXM aviation products dissemination
7. Radar products dissemination
8. NWP products

Recommendation 3: Agree to support the progressive migration of aviation meteorological information in standards-based digital exchange (IWXXM) through WIS 2.0

- Recognizing that the Caribbean Meteorological Organization (CMO) is co-developing a TAC-to-IWXXM Translator, and that operational exchange mechanisms will be required for IWXXM products, COWET should explore and implement the use of WIS 2.0 for the publication, discovery, and dissemination of aviation meteorological information in IWXXM format.
- This should be supported through pilot implementations, capacity development, and the development of regional guidance and best practices.

Recommendation 4: Agree that COWET should establish and maintain a regional, version-controlled knowledge and code repository using GitHub.

- GitHub shall be use to **facilitate the sharing of scripts, automation workflows, technical documentation, training materials, implementation guidance, and lessons learned related to WIS 2.0 operations.**
- Appropriate governance arrangements should be established to define repository ownership, contribution procedures, quality assurance processes, and safeguards for sensitive information.

Recommendation 5: Agree that COWET should convene at least one in person workshop annually over the next 3 years.

- **Subject to CREWS Caribbean 3.0 or other project funding, supplemented by at least 3 virtual meetings per year.**
- **This would build and sustain the community of practice, which requires personal relationships and peer networks to be developed through face-to-face interactions.**
- **Enable hands-on-technical problem solving of complex operational WIS 2 challenges and facilitate peer to peer learning and Members to benefit from others success and challenges.**

Recommendation 6: Agree that CREWS Caribbean 3.0 should establish a Regional ICT Support Facility comprising a dedicated ICT/WIS 2.0 Specialist and a roster of regional experts drawn from COWET.

- **This mechanism would provide on-demand technical assistance, mentoring, training, and implementation support to Member States, with particular attention to NMHSs with limited ICT capacity.**
- **The ICT Specialist would be an enabler of regional capacity development rather than a permanent external dependency**

PROPOSED ANNUAL OUTPUTS

1. Expansion of WIS 2.0 Data Exchange

- a) At least 50% of participating NMHSs shall publish operational meteorological products (radar imagery, radar derived nowcasting products, public forecasts, historical climate datasets, seasonal climate outlooks, climate monitoring datasets) through WIS 2.0 by June 2027.**
- b) At least 40% of participating NMHSs shall routinely exchange DAYCLI and CLIMAT reports through WIS 2.0. by October 2026.**
- c) NMHSs operating upper-air stations shall be supported to publish upper-air observations through WIS 2.0, with 100% publishing upper air observations by the end of 2026.**

2. National WIS 2.0 Node Deployment

- **COWET shall support Members in deploying their individual national WIS 2.0 Nodes.**
- **At least three (3) additional NMHSs per year shall establish operational standalone national WIS 2.0 Nodes, while also utilizing the Caribbean WIS 2.0 Node as a redundancy and backup mechanism where appropriate.**

3. Automation of AWS Data Dissemination

- **COWET SHALL develop and maintain a documented, easy-to-follow implementation guide for the automated dissemination of Automatic Weather Station (AWS) data via WIS 2.0.**

- **As a priority, COWET shall assist all NMHSs with curtailed operational hours at manned stations to implement automated AWS data publication workflows using the documented approach to enable such stations to achieve GBON compliance of 24 hourly observations disseminated daily.**

4. Metadata Management and Governance

- **Each COWET member shall independently manage and update their station metadata within the WIS 2.0 ecosystem.**
- **At least 75% of participating NMHSs shall have reviewed and updated their station metadata records by December 2026.**

5. Adoption of CAP Dissemination

- **At least 50% of participating NMHSs with operationalized Common Alerting Protocol (CAP) products shall exchange CAP products through WIS 2.0. by 01 June 2027.**

6. Aviation Data Exchange through WIS 2.0

- a) Support participating NMHSs in configuring their WIS 2.0 Nodes to publish and disseminate IWXXM format aviation products (MEATR, SPECI, TAF, SIGMET)**
- b) Develop regional guidance and implementation procedures for the publication of aviation meteorological products through WIS 2.0.
- c) A pilot regional exchange of IWXXM products shall be conducted and documented.**
- d) By the end of 2026, at least three (3) NMHSs shall demonstrate operational publication of aviation meteorological products through WIS 2.0 in IWXXM format.**
- e) A regional implementation guide for IWXXM publication and dissemination through WIS 2.0 shall be developed and shared with Members by 1st quarter of 2027.**
- f) Participating Members shall demonstrate the ability to discover, subscribe to, and retrieve IWXXM products through WIS 2.0.

7. Demonstrated Use of WIS 2.0 Services

- a) Members shall demonstrate active consumption of WIS 2.0 data and products through subscriptions, downloads, or other approved mechanisms.
- b) At least 75% of participating NMHSs shall demonstrate regular retrieval and use of data from WIS 2.0 services using the WIS 2 downloader.**
- c) Annual reporting shall include metrics on data publication, subscriptions, downloads, and operational usage.

8. Capacity Development and Technical Support

COWET shall maintain a regional peer-support network to assist Members with deployment, troubleshooting, and operationalization of WIS 2.0 services.