



World Meteorological Organization

Weather • Climate • Water

# DRR-related mandates and relevant activities and projects of the *Commission on Instruments and Methods of Observation (CIMO)*

2015 Meeting of the Disaster Risk Reduction Focal Points of WMO Regional Associations, Technical Commissions and Programmes (DRR FP RA-TC-TP)

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*DRR Focal Points for CIMO*

# Role of CIMO

## Instruments and Methods of Observation Programme

- CIMO will provide guidance and recommended practices (*standards*) on instruments and methods of observation, to be used by all other WMO Programmes
- CIMO will not state the specific requirements on data quality, *but inform on the state of the art and what is feasible* based on requirements defined by the other TCs
- CIMO is *pro-active* and helpful to define requirements



2013 (1 st) Coordination Meeting of Disaster Risk Reduction Focal Points of Technical Commissions and Programmes (14-16 October 2013 )

Annex X

Mapping of WMO Technical Commissions and technical Programmes, WMO Departments as relevant to the engagement in the Multi-Hazard, Multi-Sector Demonstration Project proposed to be implemented in Southeast Asia

Hazards		Observations (equipment and networks)	short-term Forecasting (0-5 d)	Sub-seasonal and seasonal predictions	Policy, Institutional cooperation and user interface and requirements in DRR	Service Delivery
Tropical Cyclones	<p>CIMO (IMOP) CCL-OPACE I – CDM ICG – WIGOS CBS WIS</p>	Tropical Cyclone Program (TCP), WDS CAS – WWRP - TCPR AREP/RES  UNESCAP WMO Typhoon Committee RSMC Tokyo		<p>CCL-Chy-CaGM – EGCFW CBS-CCL ET-OPSLTS JCOMM-ETOOFs CBS-ETLRF WWRP-WCRP S2S Research Project</p>	<p>DRR UI EAG – Hazard Risk DRR UI-EAG- MHEWS DRR UI-EAG-DRF and Insurance DRR UI EAG – SWG IASG Preparedness DRRP WDS CCL - WCSP – OPACE 4</p>	<p>CBS-OPAGE-PWS // EC WG SD with focus on DRR CaGM - ET WAMIS CaAeM Chy JCOMM - SFSPA</p>
Storms surge and coastal Inundation => Salination		JCOMM- ET-WCH, CIFDP, MMOP, WDS  CAgM, AgMP CLW				
Severe Weather (Precipitation)		CBS- OPAG DPFS SWFDP DPFS WDS CCL- OPACE II – TTDEWCE – WW CER CLW CAS – WWRP AREP/RES WCRP – S2S – ET CCDI RES				
Flash Flooding Riverine flooding		CHY – OPACHE – HFP HWRP CLW				
Other severe weather Tornados		CBS- OPAG DPFS SWFDP DPFS WDS				
Heat waves		CCL-OGAC III – TTGSCU CLW				



# Position of CIMO (1)

- to serve all other programmes (or TCs), not only WWW, with guidance
- will not state requirements on the quality of observations (the user should do)
- will promote and guide recommended methods for reliable measuring techniques
- will produce standards on observation and measurements techniques
- will advice of the feasibility of measurements in reply to users' requirements
- stimulates the establishment of regional instrument centres to support national services
- will organize international instrument intercomparisons to demonstrate the feasibility of specific instruments, the techniques involved



## Position of CIMO (2)

- will inform on the current state of measurement technology and indicate performance improvement
- stimulates technology knowledge transfer by frequently organized Technical Conferences (TECO) and workshops to train instrumentalists
- publication for hydro-meteo services and the general public of IOM reports and CIMO Guide.
- co-operates with industry (HMEI) on further improvements.
- Stimulates Members' awareness to improve the quality of observations
- Co-operates with other standardization organizations to develop standards (e.g. ISO on Hydrometry, Air Quality, Radiation)



## ***FIRST:***

### **Availability of observations over the networks:**

**“///// or 9999 or 93,4 m/s?”**

- To support forecasts, warnings for expected Hazards
- To continue during and after a Hazard

→ Availability to be guaranteed, *also after a hazard*

- Necessary for nowcasting the weather to help rescue teams
- So not only for adequate forecasting hazardous events



## ***FIRST:***

**Availability of observations over the networks:  
“///// or 9999 or 93,4 m/s?”**

Typical constraints and requirements:

- stable, reliable instruments and systems
- designed to withstands the extreme environmental impacts to be expected
- well maintained, inspected and managed
- integrated in a network, with sufficient redundancy and back-up

*how? See CIMO Guide (WMO-No. 8)*



## *CIMO XVI (10 to 16 July 2014 )*

CIMO recognizes two concrete areas where it could contribute significantly to the implementation of DRR Work Plan:

- (1) The Commission could contribute significantly towards the development of guidelines, recommended practices and standards on **durability and resilience** of the instruments to various natural hazards as in many cases natural hazards could severely damage the instrumentation installed for observing, monitoring and detection of hazards, thus causing significant gaps in monitoring, until the instrumentation was fixed or replaced;





## *CIMO XVI (10 to 16 July 2014 )*

CIMO recognizes two concrete areas where it could contribute significantly to the implementation of DRR Work Plan:

- (2) It noted that a critical aspect of DRR projects was the **development and strengthening of the observing networks** for monitoring and detection of hazards. Participation of the Commission, particularly in relation to the evaluation and provision of recommendations for the instruments that could be most suitable for the design of observing network for monitoring, and detections of hazards to support risk analysis and MHEWS, would be an excellent opportunity to engage in a more integrated way with other WMO TCs and TPs, the National Meteorological and Hydrological Services and their users.



## ***CIMO XVI (10 to 16 July 2014 )***

7.(4).3 The Commission noted that, to contribute to Disaster Risk Readiness and Reduction, NMHS of member states should be encouraged to proactively implement **Business Continuity Plans (BCP)**. BCPs can help preparation for and increase capacity for *rapid recovery of day-to-day weather and climate service operations* in the event of a disaster or major interruption.



# Mandates and priorities in DRR

What are your RA's/TC's/TP's the mandates and priorities in DRR?

→ *MG member, acting on behalve of P.CIMO*



# Priority projects & activities related to DRR

What priority projects & activities related to DRR is your RA/TC/TP working on?

→ *Guidelines on sustainable instruments withstanding harsh environments*



# Guidelines, manuals & standards related to DRR

What guidelines, manuals, and standards related to DRR is your RA/TC/TP developing?

→ *Guidelines on sustainable instruments withstanding harsh environments, to be published in CIMO Guide and IOM reports*



# Leveraging projects and activities of other RAs/TCs/TPs

How are projects and activities of other RAs/TCs/TPs leveraged to ensure holistic DRR outcomes of your RA's/TC's/TP's projects and activities?

→ *Specific task in workplans only*



# Challenges when ensuring holistic DRR outcomes

What challenges does your RA/TC/TP face to ensure holistic DRR outcomes of its projects and activities?

→ *Tests, intercomparisons in hazardous regions (today: polar regions, other regions to be recommended)*

