WEATHER CLIMATE WATER
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Needs from Humanitarian Agencies

including outcome of WMO consultation workshop (Geneva, 3-5 DEC 2018)

29 March 2019

WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

Background – EC-70 decisions & requests to meet WMO International Commitments

Through Decision 4 (EC-70) EC decided:

- To develop a ***coordination mechanism*** that enables easy access to authoritative information and provision of expert advice to the UN and other HAs before/during/after disasters
- To ***align its development with the development of the GMAS concept***, by engaging and utilizing the ***GDPFS centres*** and benefitting from relevant demo projects
- To request ***Members, RAs and CBS, in coordination with other TCs, to contribute to the development of the coordination mechanism*** (guided by the EC WG/DRR)
- To request the SG to (a) ***Consult regularly with relevant UN and other HAs on their requirements***, (b) ***Facilitate development of an appropriate mechanism***, in collaboration with Members, RAs, GDPFS Centres and TCs, and (c) ***Support strengthening of Members' capacities to provide services to the UN and HAs***

Selected Needs – Consultation workshop between WMO and Humanitarian Agencies

- ***User requirements for preparedness and response*** (both technical and decision-making requirements). Special groups need special information!
- ***Timely, processed information*** on (i) ***All time scales***, ranging from short term warnings to monthly/seasonal forecasts, historical climate information (e.g. for calibrating their models, risk assessments, etc.) and future climate forecasts, and (ii) ***All spatial scales*** (especially at the local level, although global and regional data is also key for monitoring), ready for operational use in specific projects and locations.
- ***Longer climatologies*** (including seasonal information/forecasting for specific trends, e.g. for new settlements or refugee camps), and ***model / scenario data downscaled to the country and local level*** (e.g. El Niño forecasts and impacts, potential climate change impacts, etc.), ***Guidance on the skill or approach to reaching a consensus forecast***.

Selected Needs – cont.

- (II) "***Forecasts within regular climate variability***" for large operations where even seasonal normal events might exacerbate an existing situation, and (ii) "***Forecasts of extreme events***" which are likely to trigger humanitarian operations or would have negative impacts on them.
- ***Shift towards impact-based forecasting***
- Categorize any information provided according to severity and likelihood, i.e. to ***clearly communicate the range of (un)certainty***/ probability to the end user.
- ***Possibilities to consult face-to-face*** with NMHSs, RSMCs and other experts who have local knowledge and can put the information into context,
- Senior UN officials may need access to more ***sensitive, confidential information,*** with the ***risk*** that this information might come from non-authoritative sources, in the absence of reliable authoritative information.

Current sources of meteorological, hydrological and climate information

- **NMHSs** (and **GDPFS** centres) and other national government agencies,
- International and regional specialized centres (e.g. IRI & Red Cross Climate Centre, CIIFEN, **JRC**)
- **Information portals of WMO** (e.g. the World Weather Information System (WWIS) & SWIC), Flood Help Desk/APFM Desk (email-based, not 24/7), GDPFS
- **Humanitarian information portals**
  - For alert and emergency management: Global Disaster Alert and Coordination System (GDACS), /VOSOCC, ReliefWeb, Humanitarian.info
  - For data exchange: Humanitarian Data Exchange (HDX) for humanitarian data sharing, MapX: UN-backed geospatial data platform.
  - For DRR: PreventionWeb, Link to HydroSOS, FEWSnet, PEDRR, Ecosystems for Adaptation and Disaster Risk Reduction
- Mechanisms such as the UN Disaster Assessment and Coordination (UNDAC) Associated Partners where participating agencies have specific MoUs and SOPs with OCHA, the Global Crisis Centre Network (GCCN) or the (informal) OCHA Analysis and Assessment Cell (essentially a Skype group), UN Environment/OCHA Joint Unit response partners, OCHA's new Simulation and Training Network, Bonn Network, SURF initiative, IASC, INFORM (JRC)

Current challenges for WMO to meet the needs

- There is **no clear agreement within the WMO** community **on protocols for the provision of global and regional scale guidance** directly **to users outside the WMO** community. Such information which may at times differ in detail from NMHS-issued forecasts is one requirement of the globally-acting HA community.
- **Weather, climate and hydrology are dealt with separately within WMO** as well as within **WMO Members** where most NMHSs are split up into two or more agencies. This makes it difficult to **provide services seamlessly** across all temporal and spatial scales.
- While a user-engagement and service culture is building up within WMO, a framework to enable operational engagement with the HAs such as the WCM has not been established, nor the necessary resources identified.
- The **WMO** community typically **uses meteorology-specific formats** to exchange information **rather** than **standard geo-referenced formats**. The metadata needs of the HAs have not as yet been defined.
- While the WMO community tends to verify models and numerical products, user-led verification and validation is not yet widely practiced.
- **Although Resolutions 40 (Cg-) & 25 (Cg-) support the free exchange of data, data is often seen as an asset which is sold or not easily accessible**, especially in/between LDCs which are likely to be of the HAs' interest.

Gaps and Challenges

- NMHSs often wanting to be certain before issuing warnings. This ignores that even **little information is better than none**. Obstacle to pursue more innovative approaches such as anticipatory financing
- Using private sector information and service providers where the national authoritative institution(s) do(es) not have the adequate capabilities
- Consistent warnings and forecast information (at all timescales)
- Discoverability of information
- Forging and maintaining viable partnerships
- Countries are retaining more and more ownership, including on issuing information products even when international assistance is requested

Experiences with supporting UN & other HAs so far

- **Letter from SG to PRs** asking for support to the United Nations Operations and Crisis Center UNOCC (9 January 2018)
  - Approx. ***15 responses to the Letter to date***
    (Armenia, Austria, Bangladesh, Brazil, Cyprus, Hong Kong, Israel, Macedonia, New Zealand, Russia, Slovakia, Sri Lanka, Thailand, Togo, UK)
- ***ZAMG, MeteoSwiss, CMA, DWD, UKMO, HKO declared their support to WMO Coordination Mechanism as requested by EC-70***

  → nominating focal points;
  → suggesting ***that RSMCs and NMHSs in the regions where the humanitarian operations take place should take the lead*** and liaise with the WMO New York Office/UNOCC.

Proposed WMO Coordination Mechanism (WCM)

Objective:

- Enable easy ***access to authoritative information and provision of expert advice to UN and other HAs*** to respond to their immediate **requests in anticipation of, during or after major hydrometeorological hazard situations on a global scale**

  → *Based on UN and other HAs' routine or ad-hoc demands in humanitarian hot spots, e.g. war zones, refugee and migration areas and other areas highly vulnerable and/or exposed to natural hazards*

- Provides support for **assessing potential hazard impacts** and **post-disaster assessments**, incl. in trans-boundary situations

Components – WCM as the overarching umbrella:

- leverages the ***GDPFS centres, ERA Programme, WIS and Global Multi-hazard Alert System (GMAS);***
- Ensures contribution from WMO Members,
- utilizes a ***WMO Coordination Hub*** and is built on ***bilateral partnerships and multilateral engagements with the UN and other HAs and their networks***
- ***Suggestion: Create a Network RSMC for assistance to UN and other HAs***

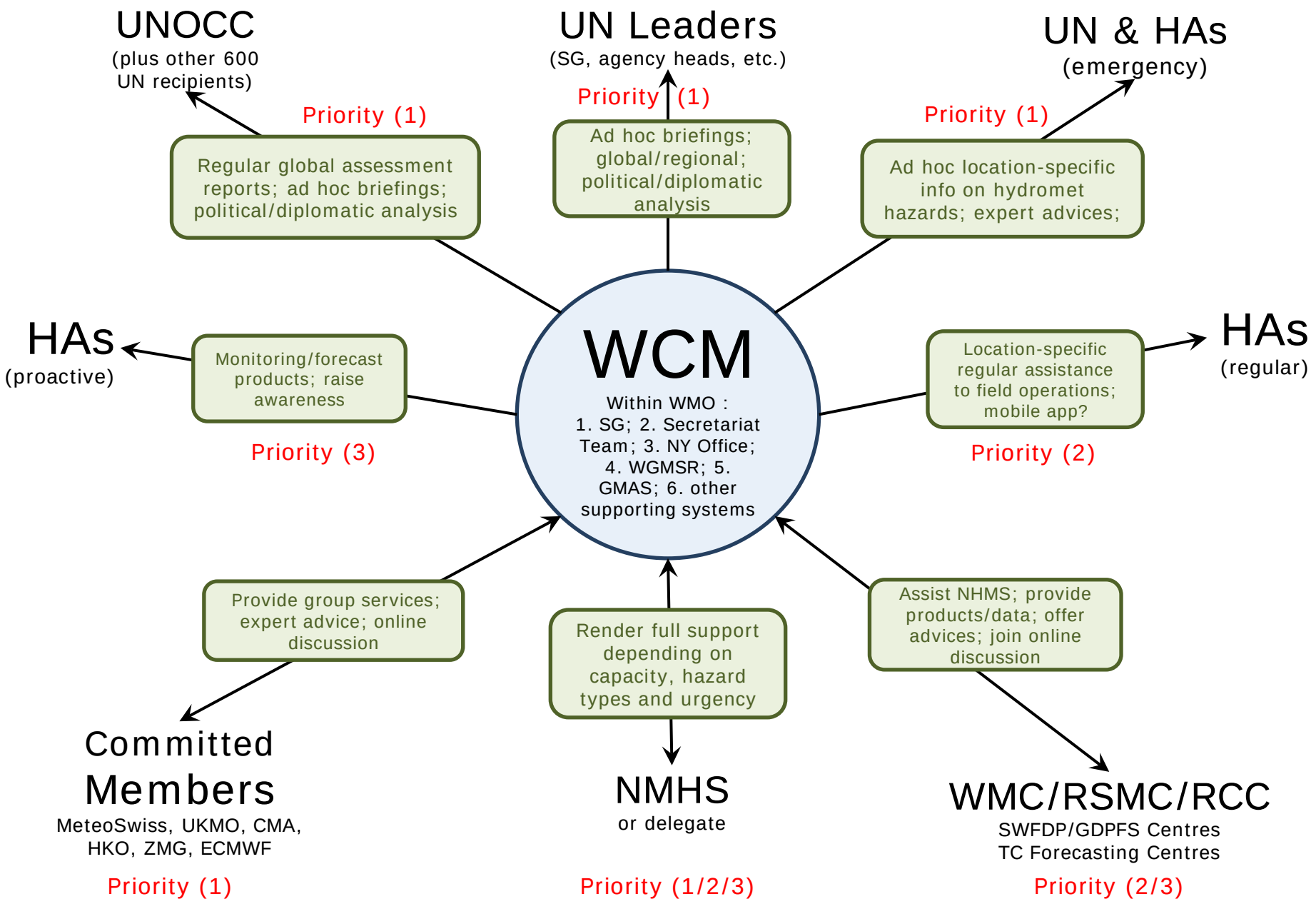
Challenge:

- Criteria for ***triggering the preparation*** of specialized products, briefings, etc.
- ***Format*** of task sheets, briefings, reports, etc.

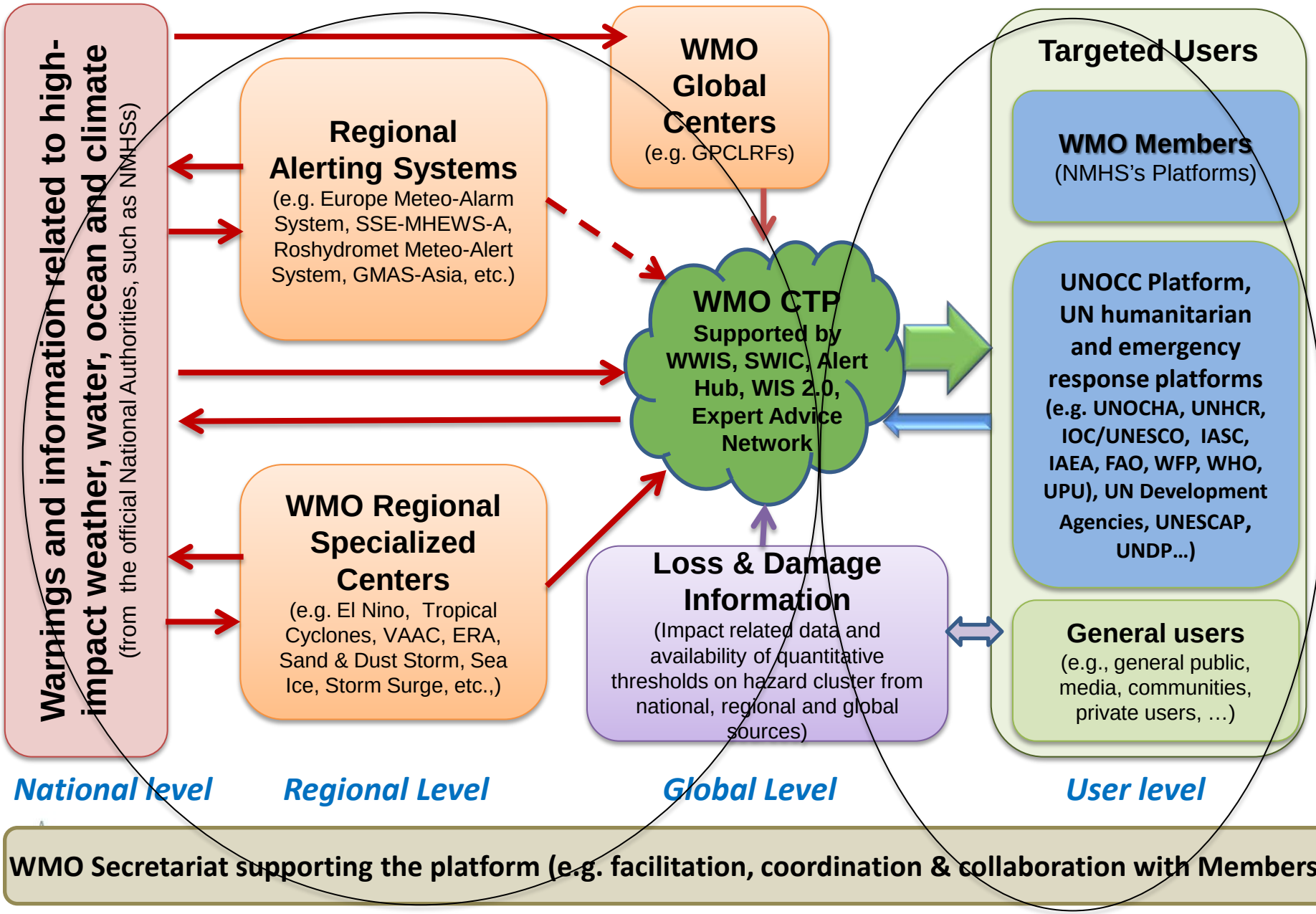
Guiding principles for a WCM

- **Engage all players** (requiring advance stakeholder mapping, focal points and a regular consultation process with Member states and stakeholders) **to understand capacities and obtain all information as well as feedbacks**
- **Facilitates access to information and expertise two-way** – from producers to users and back – through bi-directional coordination between WMO/NMHSs and the UN and other HAs, WCM should be push and pull,
- The **"watch function"** of the WCM helps to prepare humanitarian interventions but also to engage stakeholders and foster dialogue
- Needs a **monitoring and evaluation** framework to show what difference this initiative makes**, proof of concept in test cases is important** (e.g. WHO-FAO and WHO-WFP cooperation), focusing on what works already,
- Involve the Senior Managers (key stakeholders) on site who need to agree to initiatives like this, use it as a way to mobilise resources
- Participation in the WCM project from the NMHS side is voluntary**. MeteoSwiss, ZAMG, CMA, DWD, UKMO, HKO have committed to join the WCM and its Group Services**.
- Coordination within WMO community also aims at building capacities of Members to deliver better services
- Alignment of WCM with the development of Global Multi-hazard Alert System.

WCM Stakeholders - High-level Needs/Contributions



WMO Global Multi-Hazard Alert System (GMAS) Framework
with its WMO Coordination Mechanism (WMC) and Common Technical Platform (CTP), contributors and users



How to better meet the needs - Workshop

- Gather additional user requirements (e.g. survey)
- Perform table top exercises to better understand the requirements
  - WMO Joint Humanitarian/Meteorological Simulation and LearningWorkshop: “Tropical Cyclone Bangladesh”
- Data (harmonise data policies, develop a catalogue of standard information and corresponding time lines)
- Access to information has to be simple (develop a portal/website, connect HAs to WMO centres)
- Capacity Development (Train UN and HA (field) staff on how to use weather and climate information
- Set-up of the WCM incl. Coordination Hub (define trigger mechanisms, resonsibilities/SOPs, extend the current El Niño Cell)
- Collaboration (Stakeholder Mapping, work towards integration in/interoperability with existing platforms and connect to existing networks)
- Document the processes for sharing information, products and advice through SOPs and MoUs that specify activation thresholds, both bilaterally between WMO/a NMHS and a specific agency or UN CT and collectively between the UN and other HAs with the WCM, which would define types of capability, query, timescales for responses etc.
- Advocacy and outreach, communication

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Thank you
Merci

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