WMO of 21st Century

- Reform process
- Private sector engagement
- Administrative matters



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

Constituent body reform

Congress-17 decision 2015:

"Congress requested the Executive Council to provide recommendations to the Eighteenth Congress on constituent body constructs, as appropriate, including possible new structures for TCs, RAs, EC, and also to provide recommendations on rules, procedures, processes, working mechanisms, and duties, of constituent bodies, WMO Officers (President, vice- presidents, PRAs and PTCs) and the relationship between them and the WMO Secretariat to enhance the efficiency and effectiveness of the Organization and good governance."

⇒ REFORM IS NOT A MATTER OF WILL, IT IS A MUST

EC/Member driven process, Secretariat as facilitator



Why WMO of 21st Century? External matters

- Climate change, disasters and (lack of) water resources very high on the global agenda
- Need for climate adaptation and the expertise of NMHSs is growing
- Demand for WMO expertise has grown among development agencies and other UN agencies, like World Bank, Green Climate Fund, EU, FAO, WHO, UNFCCC & OCHA
- Cross-cutting and holistic approach is favoured instead of silos in weather, climate and water communities, need for data
- Multi-hazard and impact based services expected
- ~150 Members/PRs not engaged in WMO
- Overall UN reform under way





Why WMO of 21st Century? Internal matters

- The needs of WMO Members have changed during the past decades
- Need to optimize the use of (limited) Member and secretariat resources, wider engagement of experts in WMO activities
- Need for wide range of data & infrastructure: weather, oceans, hydrosphere, cryosphere, sea ice, terrestrial, chemical composition
- Holistic climate approach: climatology, climate services, science
- Strengthening of global hydrological co-operation
- Enhanced science-services interaction, contribution of academia
- Coordinated way of engagement of private sector in WMO activities
- Coherence between WMO strategy and its implementation by the constituent bodies
- Most Members detached from TCs, RA-TC link weak



WMO 21, Progress so far

- Cg-17 Decisions
- EC-67 & 68, EC SOPs, PRA-PTCs
- CBS, CAS, JCOMM, CHy, CCI meetings (CAgM, CAeM & CIMO 2018)
- RA II, III, IV & VI + regional meetings (CIMHET, LAS, Typhoon comm)
- Member driven process facilitated by the Secretariat
- Secretariat working groups & engagement of WMO departments





WMO STRATEGIC PLAN AT A GLANCE

Vision 2030

By 2030, a world where all nations, especially the most vulnerable, are more resilient to the socioeconomic impact of extreme weather, climate, water and other environmental events, and empowered to boost their sustainable development through the best possible services, whether over land, at sea or in the air

Overarching **Priorities**

Enhancing preparedness for, and reducing losses of life and property from hydrometeorological extremes

Supporting climate-smart decision making to build resilience and adaptation to climate risk

Enhancing socioeconomic value of weather, climate, hydrological and related environmental services

Core Values

Accountability for Results and Transparency
 Collaboration and Partnership
 Inclusiveness and Diversity

Long-Term Goals

Better serve societal needs:

Delivering authoritative, accessible, user-oriented and fit-for-purpose information and services

Enhance Earth system observations and predictions:

Strengthening the technical foundation for the future

Advance targeted research:

Leveraging leadership in science to improve understanding of the Earth system for enhanced services

Close the capacity

Enhancing service delivery capacity of developing countries to ensure availability of essential information and services

Strategic realignment of WMO structure and programmes:

Effective policy- and decision-making and implementation

Objectives

2020-2023 focus

- Strategic 1.1 Strengthen national multihazard early warning systems and extend reach to better enable effective response to the associated
 - 1.2 Broaden the provision of policy- and decisionsupporting climate information and services
 - 1.3 Further develop services in support of sustainable water management
 - 1.4 Enhance and innovate the provision of value-added. decision-supporting weather information and services

- 2.1 Optimize the acquisition of observation data through the WMO Integrated Global Observing System
- 2.2 Improve and increase access to, exchange and management of current and past observation data and derived products through the WMO Information System
- 2.3 Enable access and use of numerical analysis and prediction products at all temporal and spatial scales from the WMO Global Data Processing and Forecast System

3.1 Advance scientific knowledge of the Earth system

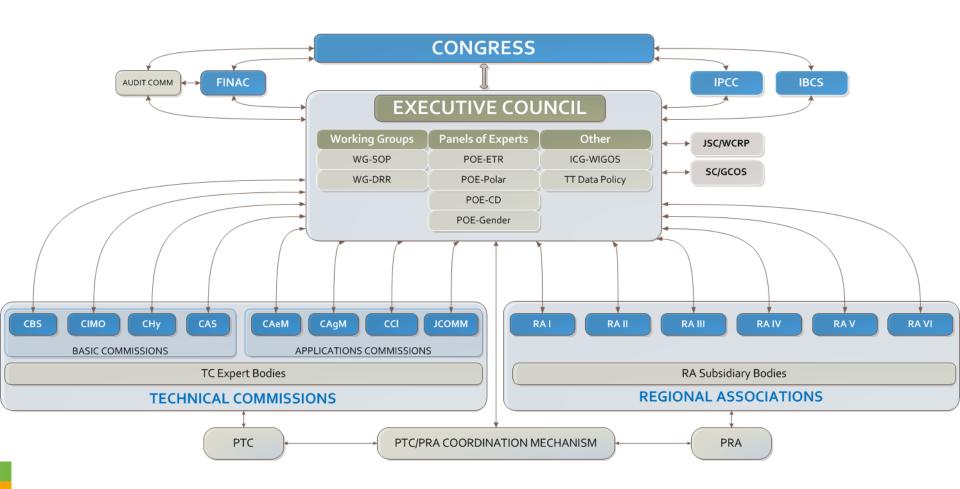
- 3.2 Enhance the science-toservice value chain ensuring scientific and technological advances improve predictive capabilities
- 3.3 Advance policy-relevant science
- 4.1 Address the needs of developing countries to enable them to provide and utilize essential weather. climate, hydrological and related environmental services
- 4.2 Develop and sustain core competencies and expertise
- 4.3 Scale-up effective partnerships for investment in sustainable and cost-efficient infrastructure and service delivery

- 5.1 Optimize WMO constituent body structure for more effective decision-making
- 5.2 Streamline WMO programmes
- 5.3 Advance equal and effective participation of women and men in governance, scientific cooperation and decisionmaking

Goal 1 - Better serve societal needs: Delivering, authoritative, accessible, user-oriented and fit-for-purpose information and services

| Strategic objective | Indicators |
|---|--|
| 1.1 Mainstream and strengthen national multi-hazard early warning systems to extend reach and better enable effective decision response to the associated risks | 1.1.1 Number of Members participating in a global alert system |
| | 1.1.2 Number of Members with a MHEWS integrated in a national DRR management system |
| | (TBD) Number of countries cataloguing high impact weather, weather and climate events using WMO standard unique identifiers |
| 1.2 Broaden the provision of policy- and decision-supporting climate information and services at all levels | 1.2.1 Number of Members with basic system for climate services |
| | 1.2.2 Number of Members with enhanced CSIS capacity |
| | 1.2.3 Number of Members offering tailored products within GFCS priority areas |
| | 1.2.4 Number of Members making use of RCCs and/or RCOFs |
| | 1.2.5 User/stakeholder assessment of the relevance, usefulness and timeliness of WMO flagship products (e.g. Statement of the Global Climate, El Niño Outlook, etc.) |
| 1.3 Further develop services in support of sustainable water management | 1.3.1 Number of Members participating in WMO status and outlook system |
| | 1.3.2 Number of Members with operational flood forecasting |
| | 1.3.3 Number of Members with operational drought warning system |
| 1.4 Enhance and innovate the provision of value-added, decision-supporting weather information and services | 1.4.1 Number of Members with QMS for selected services (aviation, marine, EWS) |
| | 1.4.2 Number of Members with socioeconomic benefit analysis conducted in the past X years |
| | 1.4.3 Number of Members with signed agreements between NMHSs and private sector/academia actors on (a) service delivery and (b) maintenance of networks |
| WMO OMM | 1.4.4 Number of Members using (a) web applications and (b) social media in service delivery |

Current structure





Observing systems and measurement Data exchange and management

Technical commissions

Joint WMO/IOC

Committee on

Oceanography and

Meteorology

Sub-committees

Research to operations

Commission for Observation, Infrastructure and Information **System**

Mostly normative work

Methods of observation and instrumentation Data processing and modelling

- Coordinated systems of observation and data management
- Standards for observation and

WMO community

 Mechanisms to engage international partners beyond the

Research Board

Weather and DRR Climate Hydrology Marine

Commission for Weather, Climate and Water Services and **Applications**

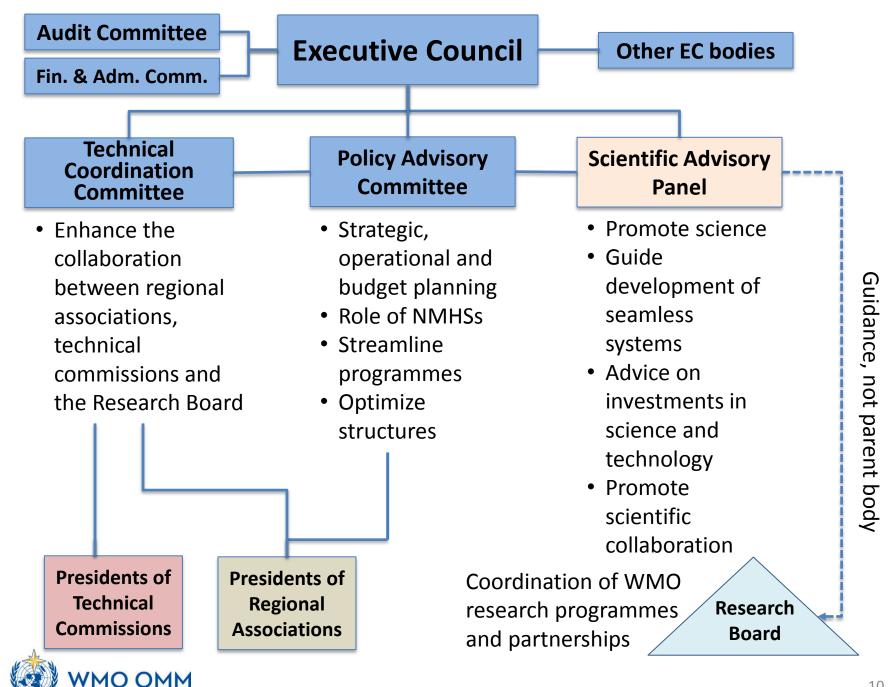
Aviation *Agriculture* Urban, health and energy

 Harmonized services for decision-making and socioeconomic benefits

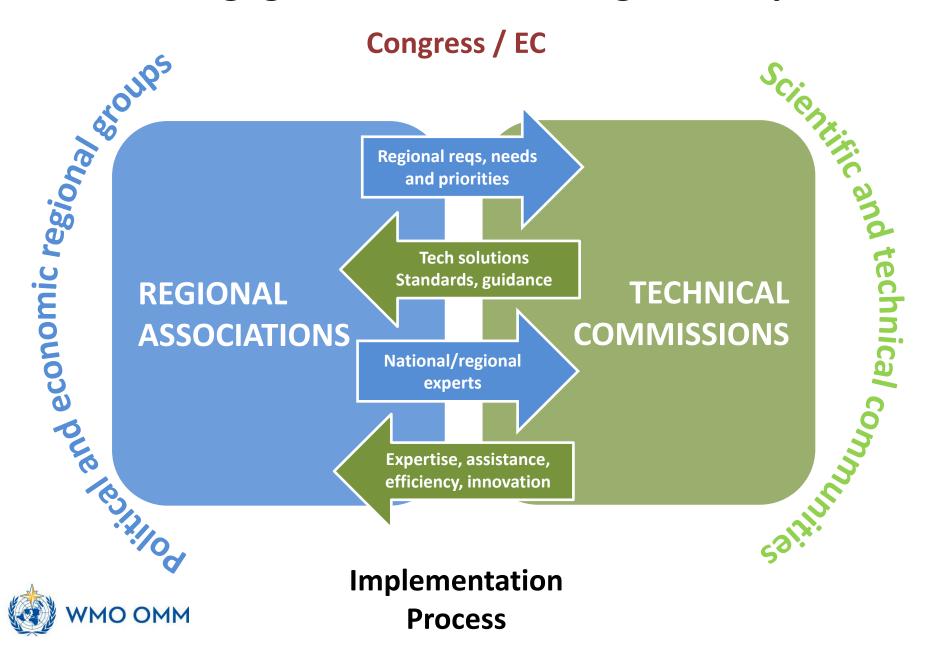
measurements MMO OM

Science to services

Standing Comm.



Better engagement of RAs & Regional experts



World Meteorological Congress

WMO Convention, art. 10

- a) Congress shall normally be convened at intervals as near as possible to four years
- b) An extraordinary Congress may be convened by decision of the Executive Council

Cycle of other specialized agencies

- ICAO Assembly: 3 years
- FAO General Assembly: 2 years
- UNESCO General Conference: 2 years
- IMO Assembly: 2 years
- World Health Assembly: 1 year
- ITU Congress: 1 year



Issues being experienced

- Many Members & PRs have difficulties in engaging in WMO activities
- "150 outsiders"
- The terms of PRs are getting shorther
- Many WMO activities are run by a small number of developed country experts, commitment of several Members low

Possible practical solution

- Shorter regular Congress every 4 years focusing on general policies, budget and elections
- Short, extraordinary Congress every 2 years focusing on thematic and technical aspects selected by EC
- New structure would allow it

Engagement of private sector



- Classically instrument & IT systems
- Growingly weather & climate service provision and observing systems including satellites
- WMO interest: coordinated engagement of private sector
 - Data policy
 - National legislation
 - Code of ethics
 - Public private partnerships, Global Weather Enterprize
- Decision making by the PRs, consultation & initiatives of private sector
- ITU benchmark



Benefits of WMO 21

- 1. Clear management responsibilities: Duty of Executive Council and Congress to monitor and direct the work of constituent bodies in implementation of strategy
- 2. Better engagement of all WMO Members in WMO activities
- 3. Better engagement of key partners in WMO activities, e.g. development partners, FAO, WHO, ICAO, IMO, UNFCCC, UNESCO & humanitarian agencies
- 4. Holistic Earth system approach: meteorology, climatology, hydrology, oceanography, seismology, volcanology, air quality, greenhouse gases, space weather
- 5. Multi-hazard and impact based seamless services: weather, climate, water, aviation, marine, agriculture, urban, energy, health



Benefits of WMO 21

5. Wide climate perspective: observations, services, science, adaptation & mitigation

- 6. Engagement of hydrological services in WMO activities and weather-water synergies
- 7. Organized and controlled engagement of private sector in WMO activities
- 8. Optimal use of Member and Secretariat resources => e.g. more support for Regional activities



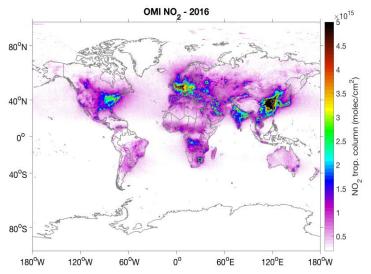
WMO 21 & Secretariat

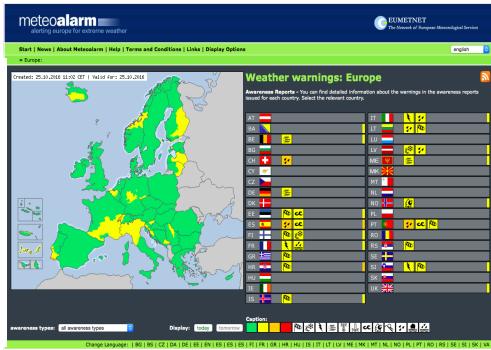
- 1. Members will decide the structures and future working practices
- 2. Secretariat is a facilitator
- 3. Our duty is to ensure that the essential elements of the current CB activities are carried forward
- 4. WMO 21 offers new opportunities for running our business in a smarter and more efficient way, please explore them & concentrate on getting the best out of the new approach
- 5. Offline campaigning among the Members is not a duty of the Secretariat
- 6. Focus on improving the proposal



Additional needs for 2020-23

- Private sector engagement staffing & meeting resources
- Urban services: air quality, disasters, climate adaptation
- Engagement of hydrological and scientific communities in WMO activities
- Global Meteoalarm implementation
- Early warning services for international organizations
- Strengthening of regional development and collaboration activities
- Management training for the PRs
- Enhanced global greenhouse gas budget monitoring
- Country database
- Data "revolution"





Impact of WMO & NMHSs expertise

- Climate and disasters briefings for UN SGs Ban-Ki Moon & Antonio Guterres
- WMO accepted as UN Climate Principals January 2018
- COP22/23, UN Ocean conference, Cancun DRR conference, UN General Assemblies, media reports on disasters and climate
- Preventive early warning services for the UN agencies at UN Headquarters in New York (high impact weather, seasonal & El Nino/La Nina services)
- Observer status in the Arctic Council: meteorology as a priority

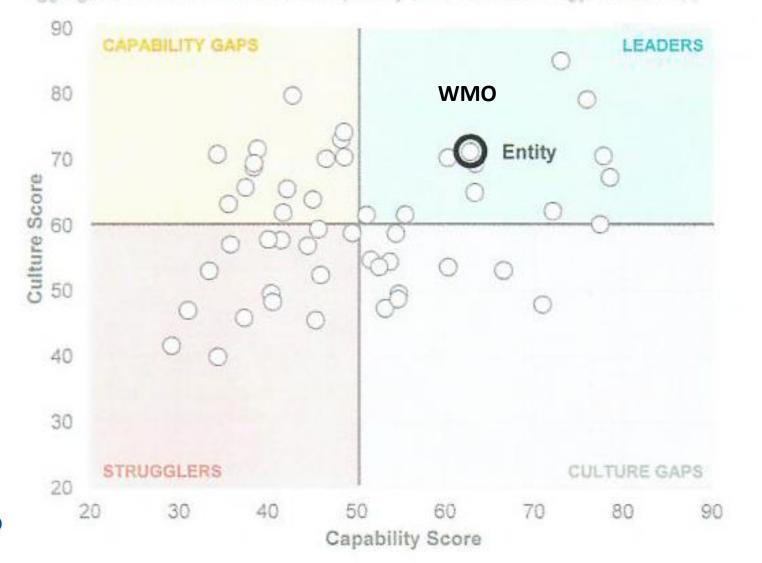


Innovativeness of 52 UN Organizations

WMO 3/52 Culture, 11/52 Capability & one of the 11 Leaders

CAPABILITY & CULTURE MAP, 52 ENTITIES (selected entity circled)

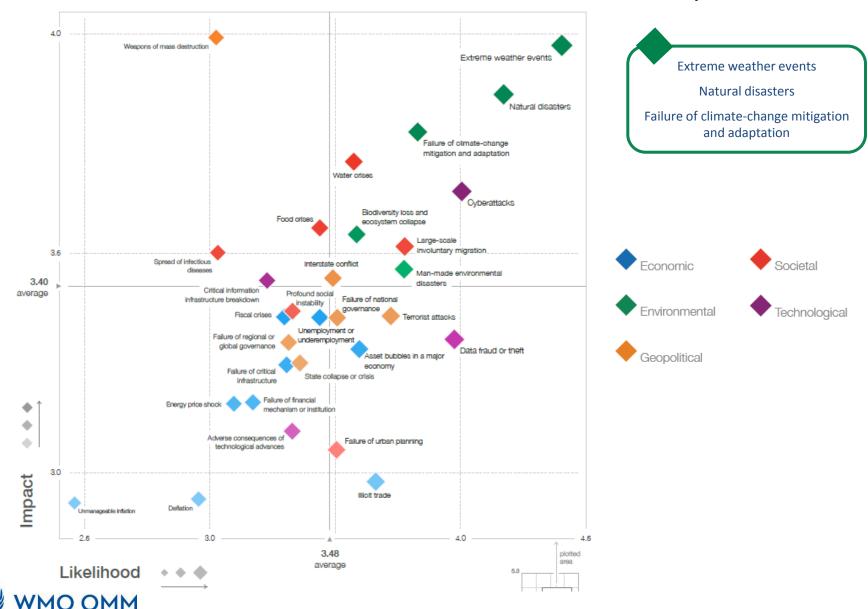
Aggregate scores for culture and capability (structures, strategy, leadership)





Weather risks are the top economic risks

World Economic Forum, Davos - Global Risk Landscape 2018



Thank you



WMO OMM

World Meteorological Organization Organisation météorologique mond

