

# CAPACITY DEVELOPMENT IN THE CONTEXT OF SERVICES



**WMO OMM**

World Meteorological Organization

Organisation météorologique mondiale

# CAPACITY DEVELOPMENT FRAMEWORK (IN PLACE AND ONGOING)

- Personnel competency and qualification standards
- Capacity development Guidelines based on WMO-No. 1133
- Capacity development training
- Quality management systems requirements and ISO certification
- Performance metrics, reflecting capacity development
- Extrabudgetary (XB) technical advisory services and direct implementation support
- “Cascading” operational support to Members (circulation of data and products among NMHSs, regional and global centers)
- Capacity development related flagship products and communication

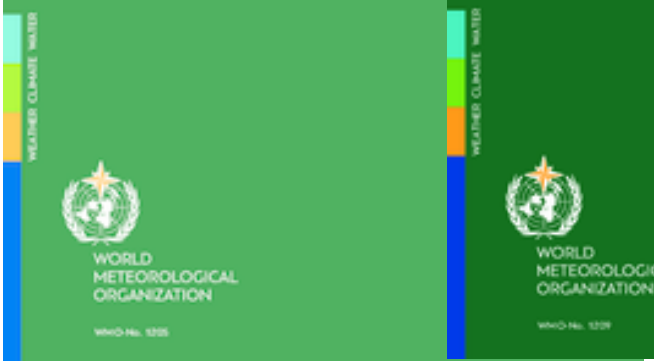


Guide to Competency

2018 edition

Compendium of WMO Competency Frameworks

2019 edition



WMO Capacity Development Strategy and Implementation Plan



Capacity Development for Climate Services: Guidelines for National Meteorological and Hydrological Services

2022 edition



Guidelines

WMO Internal use only

# ENHANCING MARINE WEATHER FORECASTING SERVICES



Implementation Plan  
March 2020

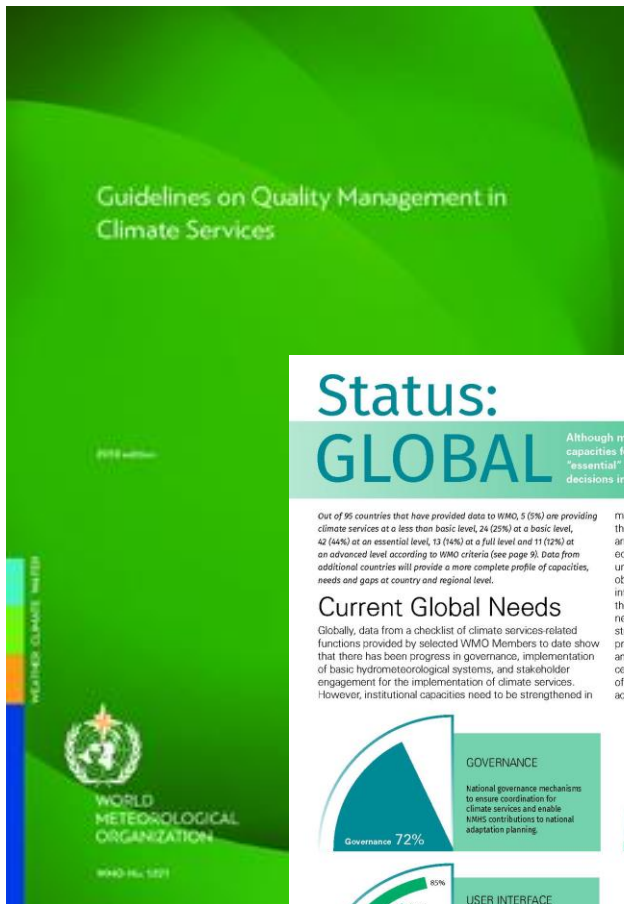


WORLD METEOROLOGICAL ORGANIZATION

Joint Initiative by:  
MAR Division (Services Department)  
ETR Office (Member Services & Development Department)



Training



## Guidelines on Quality Management in Climate Services

2018 edition

WEATHER CLIMATE SERVICES



WORLD METEOROLOGICAL ORGANIZATION

WMO-114-1521



Quality Management

## Status: GLOBAL

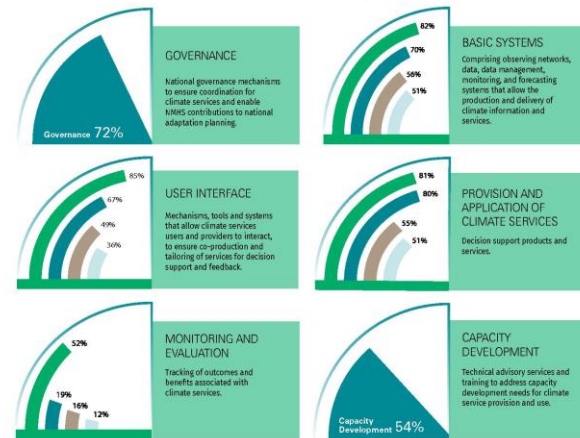
Although many countries have established basic functional capacities for providing climate services, the more advanced "essential" and "full" capacities needed to support specific decisions in the agriculture sector are often still lacking.

Out of 95 countries that have provided data to WMO, 5 (5%) are providing climate services at a less than basic level, 24 (25%) at a basic level, 42 (44%) at an essential level, 13 (14%) at a full level and 11 (12%) at an advanced level according to WMO criteria (see page 9). Data from additional countries will provide a more complete profile of capacities, needs and gaps at country and regional level.

many countries and in some regions, particularly to complete the climate services value chain for adaptation planning and decision making, and to document associated socio-economic benefits. Additional research is needed to improve underlying predictions and projections as well as underlying observations and data, and to transition research results into operation. The latter will entail interactions between the research and operational communities to address the needs of users, stakeholders and decision-makers. Further strengthening of systems operationalization is needed to promote the exchange of GFCs relevant data and products among countries and between national, regional and global centres. Monitoring and evaluation of the results and benefits of the use of climate services remains consistently weak across all regions.

### Current Global Needs

Globally, data from a checklist of climate services related functions provided by selected WMO Members to date show that there has been progress in governance, implementation of basic hydrometeorological systems, and stakeholder engagement for the implementation of climate services. However, institutional capacities need to be strengthened in



key ■ BASIC ■ ESSENTIAL ■ FULL ■ ADVANCED

The percentages of "yes" answers to checklist questions addressing each of the above areas is shown in the graphs, based on data from 95 countries who provided data to WMO. Many of the functional capacities assessed by the checklist constitute "basic", "essential", "full" or "advanced" functionalities. The graphs show the percentages of "yes" and "no" responses to the questions in each of the above areas, for each functional capacity level, from the data provided.

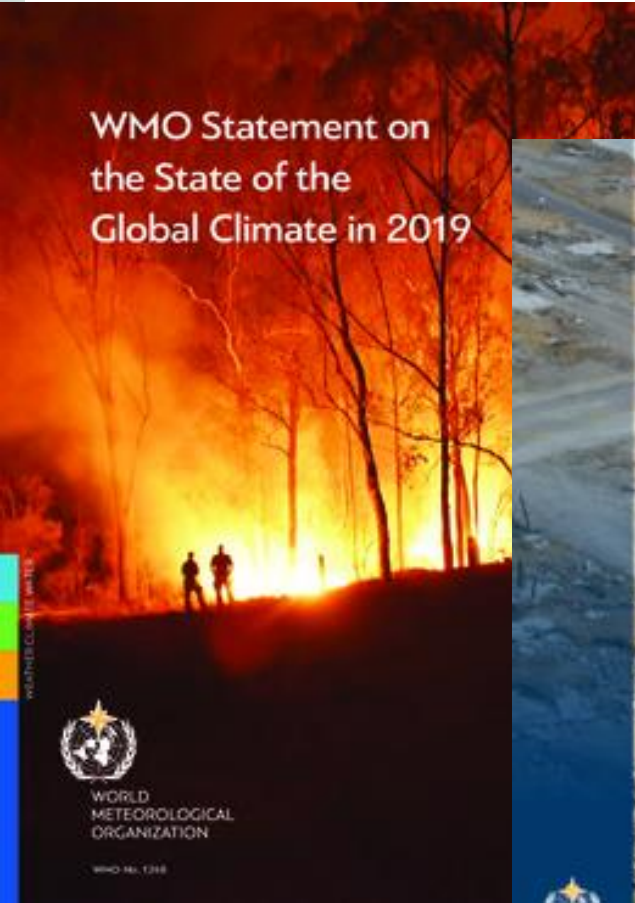
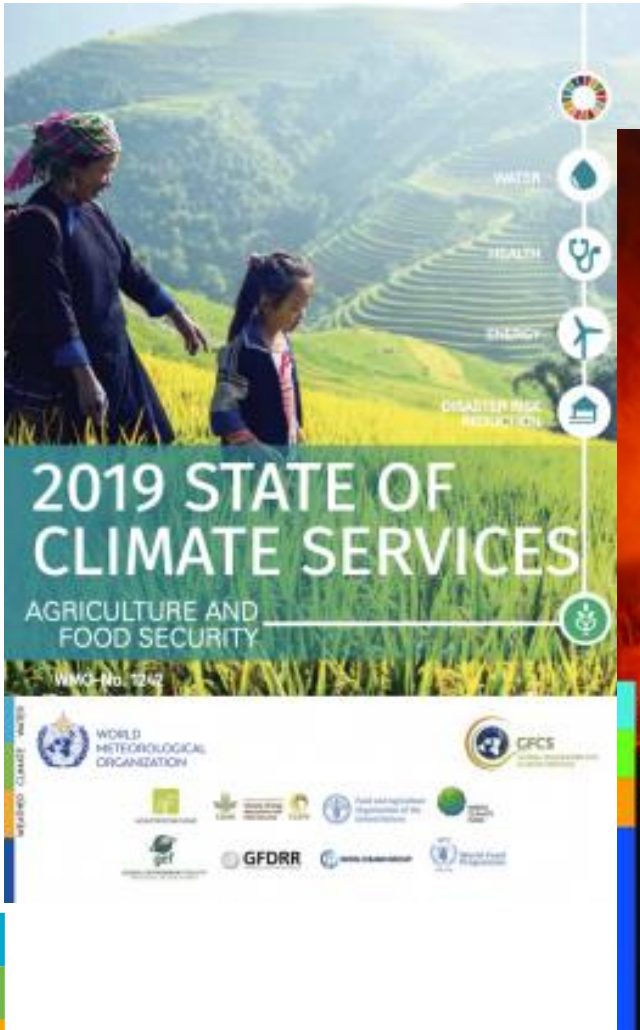


Performance metrics



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Flagship products



# RECOMMENDATIONS FOR AN INTEGRATED CAPACITY DEVELOPMENT STRATEGY

- Adherence to the overall WMO capacity development framework
- Costed comprehensive NMHS capacity development plans for incorporation in XB projects and budgets in a standard format
- Seamless earth system approach for enhancing operational support and service delivery, with exchange of data and products among national, regional and global centers
- Full value-chain XB projects as integrators, and enablers of comprehensive peer-to-peer support
- NMHS certification at multiple capacity levels by WMO to complement ISO



# CONSTITUENT BODY COORDINATION

- SERCOM – All Standing Committees and Study Groups incorporate capacity development
- Hydrological Coordination Panel (discussed separately)
- Climate Coordination Panel – CDP representation in the membership
- WMO-IOC Joint Collaborative Board (JCB) (discussed separately)

# OTHER RELEVANT ISSUES

- Difference between service areas that were previously covered by commissions and those that were not
- Permanent Representative orientation on NMHS role in high level United Nations policy and joint action
- Working with partners (UN agencies, regional and national organizations)
- Sustainability of developed capacities



# Thank you Merci



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