

# WMO Monitoring and Evaluation System

April 2012



**World  
Meteorological  
Organization**

Weather · Climate · Water

WMO-No. 1089



# WMO Monitoring and Evaluation System

WMO-No. 1089



**World  
Meteorological  
Organization**  
Weather • Climate • Water

April 2012

WMO-No. 1089

© **World Meteorological Organization, 2012**

The right of publication in print, electronic and any other form and in any language is reserved by WMO. Short extracts from WMO publications may be reproduced without authorization, provided that the complete source is clearly indicated. Editorial correspondence and requests to publish, reproduce or translate this publication in part or in whole should be addressed to:

Chair, Publications Board  
World Meteorological Organization (WMO)  
7 bis, avenue de la Paix  
P.O. Box 2300  
CH-1211 Geneva 2, Switzerland

Tel.: +41 (0) 22 730 84 03  
Fax: +41 (0) 22 730 80 40  
E-mail: [publications@wmo.int](mailto:publications@wmo.int)

ISBN 978-92-63-11089-3

#### NOTE

The designations employed in WMO publications and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of WMO concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Opinions expressed in WMO publications are those of the authors and do not necessarily reflect those of WMO. The mention of specific companies or products does not imply that they are endorsed or recommended by WMO in preference to others of a similar nature which are not mentioned or advertised.

This publication has been issued without formal editing

# Contents

1.	Introduction	1
2.	Context	3
3.	System architecture	4
4.	Planning process	6
5.	Planning documents	10
6.	Monitoring & Evaluation Governance and operations	11
7.	Monitoring outputs	15
8.	Impact	17

## 1. Introduction

This publication presents the architecture of the WMO Monitoring and Evaluation (M&E) System. It is developed on the basis of the request of the Sixteenth World Meteorological Congress (May/June 2011) to the Executive Council and the Secretary-General to continue with further development and implementation of the M&E System, in particular with regard to the need for the M&E System to be precisely defined and correctly applied. It is intended for use by the constituent bodies and the Secretariat. Its application is guided by the WMO M&E Manual presented in a separate publication.

WMO is using a monitoring and evaluation system to measure the progress being made towards the achievement of expected results defined in the WMO Strategic Plan.

The M&E system has been designed to address a number of critical questions:

- How can we measure each key performance indicator?
- What data do we need?
- What is the best type of method(s) to collect data for each KPI? And when, where and who should be responsible for this?
- What types of resource support is needed to set up such a system?
- Who will collect, collate, enter and analyse the data collected by this system?
- What format should the feedback be in for WMO and its stakeholders?
- How can we support the use of this information to enhance organizational performance?

Further, these questions have to be considered at three different levels:

- Short-term or immediate (deliverables/outputs; for example, *20 trained meteorologists*).
- Medium-term or intermediate (outcomes; for example, *NMHSs integrated into national emergency systems*).
- Longer-term or strategic (expected results; for example, *enhanced capabilities of Members to reduce risks and potential impacts of hazards caused by weather, climate and water, and related environmental elements*).

These three levels of results form the *Results Chain* and are an integral part of a results-based M&E system.

Resources → Activities → Deliverables → Key Outcomes → Expected results  
KPTs KPIs

The M&E System requires that WMO measures its:

- Inputs.
- Outputs/deliverables of activities conducted.
- Outcomes, as a result of the achievement of deliverables.
- Impact, or longer term contribution, as stated in the expected results.

The WMO M&E System is designed to:

- Enable the senior management and programme managers of the Secretariat, the WMO constituent bodies and the scientific steering committees of WMO joint programmes to track the progress of the Organization's activities, enhance performance and impact, and identify areas where corrective action is required with respect to activities and deliverables.
- Enable the Secretariat to demonstrate organizational effectiveness, efficiency, accountability and transparency externally and when reporting to WMO governing bodies.
- Facilitate dialogue and discussions at meetings of WMO constituent bodies, with partner organizations and donors, as well as other stakeholders.

WMO M&E information and data should be *valid, verifiable, transparent* and widely *available* to key internal and external stakeholders, including the general public.

It is expected that results-based management (RBM) will assist WMO to take timely, remedial action when and where it is needed, in order to achieve the expected results of its Strategic Plan (SP) and its associated Operating Plan (OP).

## 2. Context

The Fifteenth World Meteorological Congress (Cg-XV, 2007)<sup>1</sup> established results-based management (RBM) as the fundamental concept for managing the planning, implementation and performance assessment of WMO's Programme activities.

The sixty-first session of the Executive Council (EC-LXI, 2009)<sup>2</sup> endorsed the recommendations of its WG/SOP to implement Monitoring and Evaluation (M&E) in three phases which include a Preparatory Phase (2009), a M&E Pilot Phase (2010–2011) and the full M&E System (as of 2012) (EC-LXI, paragraphs 7.2.12–7.2.14).

The Sixteenth World Meteorological Congress (Cg-XVI, 2011)<sup>3</sup> took note of the progress in the development and implementation of the WMO Monitoring and Evaluation (M&E) System, agreed with the decisions of the sixty-second session of the Executive Council (EC-LXII<sup>4</sup>, 2010, paragraphs 7.2.12–7.2.15) and requested the EC and the Secretary-General to continue with further development and implementation of the M&E System, with a particular focus on the following areas:

- (a) The M&E System should be precisely defined and correctly applied;
- (b) The M&E System should be simplified to the extent possible to reduce the workload associated with its implementation;
- (c) Financial information should be incorporated into the M&E System to ensure that the relationship between expended resources and achieved results is transparent to all stakeholders;
- (d) Since not all indicators of high-level results are easily measurable or quantifiable, qualitative measures should also be considered with a standardized rating scheme (Cg-XVI, paragraphs 8.4.1–8.4.4).

Cg-XVI agreed that full implementation of the M&E System should start in 2012 and encouraged the technical commissions and regional associations to continue to contribute to its further development and implementation.

Congress requested the Secretary-General to ensure that all staff are well trained in the M&E methodology and have ownership of the M&E System. It requested the Secretary-General to promote the sharing of experiences on M&E Systems within the Secretariat.

---

<sup>1</sup> [ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/congress\\_reports/english/pdf/1026\\_E.pdf](ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/congress_reports/english/pdf/1026_E.pdf)

<sup>2</sup>

[ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/executive\\_council\\_reports/english/pdf/61\\_session\\_wmo\\_1042\\_part1\\_en.pdf](ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/executive_council_reports/english/pdf/61_session_wmo_1042_part1_en.pdf)

<sup>3</sup> [ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/congress\\_reports/english/pdf/1077\\_en.pdf](ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/congress_reports/english/pdf/1077_en.pdf)

<sup>4</sup>

[ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/executive\\_council\\_reports/english/pdf/62\\_session\\_wmo\\_1059\\_part1\\_en.pdf](ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/executive_council_reports/english/pdf/62_session_wmo_1059_part1_en.pdf)



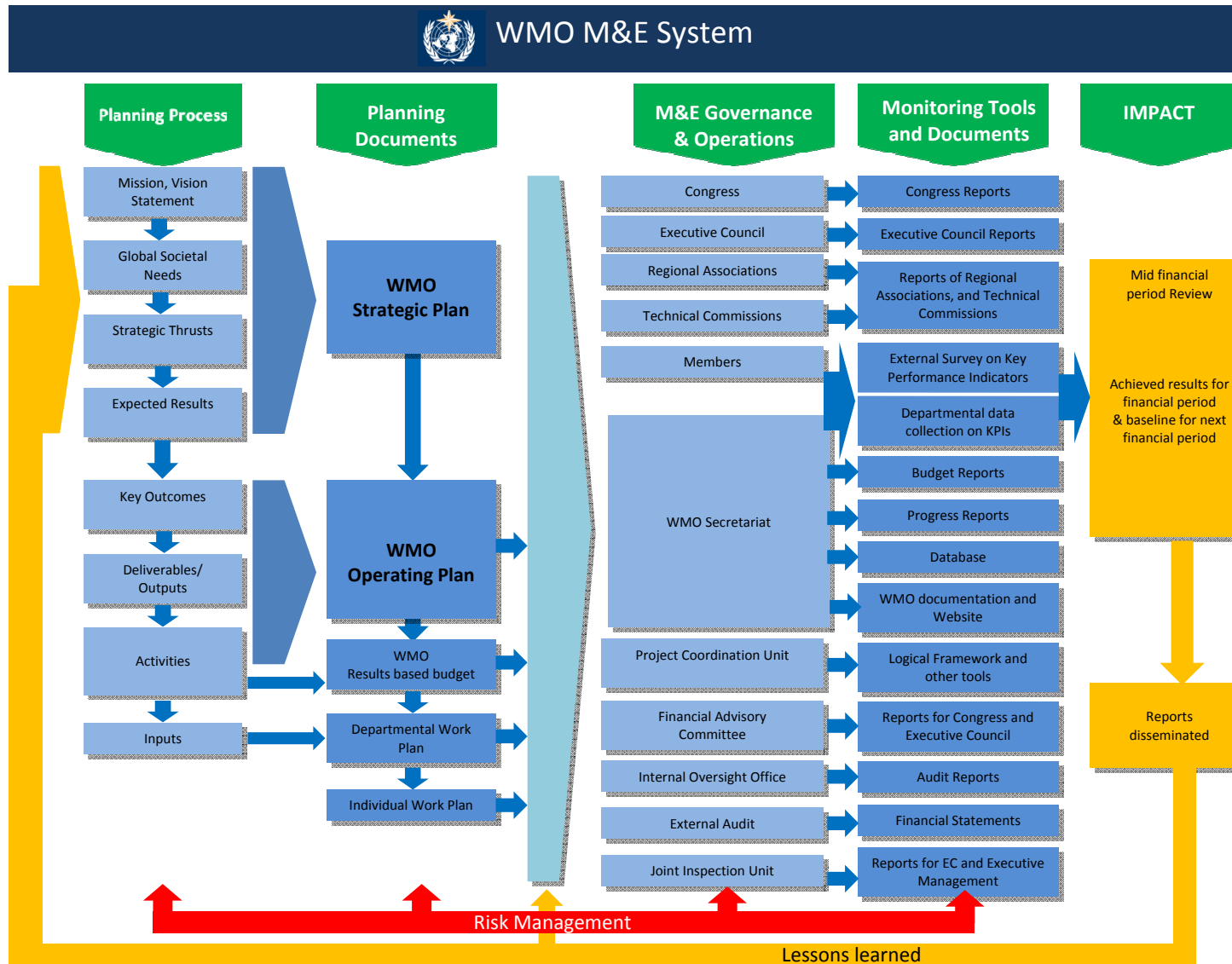
---

### 3. System architecture

The M&E System is built on the following principles:

- Performance measures from the WMO Strategic Plan and WMO Operating Plan.
- Connecting the expected results and outcomes achieved to the use of resources, implementation of activities and production of deliverables/outputs.
- A bottom-up, flexible approach to ensure relevance, credibility and accuracy in the system, with uniform formats for reporting purposes.
- A system that will evolve over time to allow experience and lessons learned to be captured.
- A results-based culture.
- Encouraging learning and accountability with a focus on programme improvement and identifying new approaches that may be needed to address recurring or new needs.
- Quality assurance of performance data is important, while acknowledging that information may never be perfect.
- Consistency with the WMO Quality Management Framework initiative and the ISO 9004:2000 quality management systems.
- Cost-efficient solutions for the implementation and operation of the system are a priority in line with EC requests.

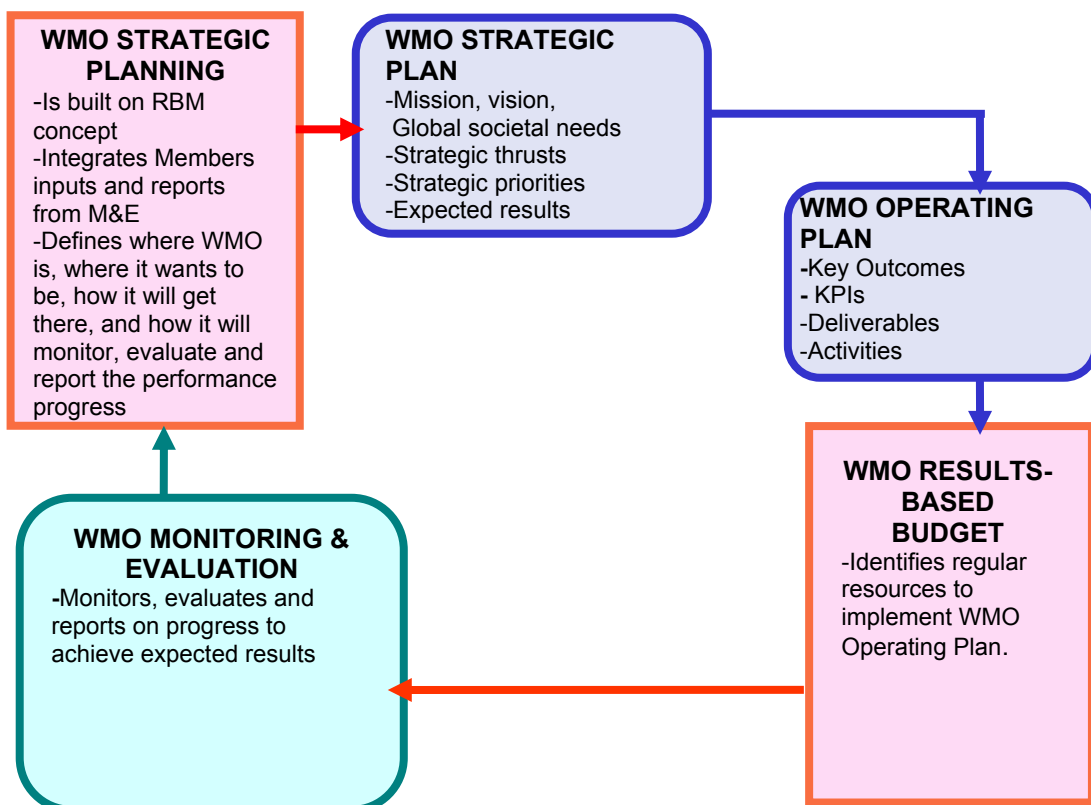
The graphical representation of the WMO M&E System is provided in the diagram below.



## 4. Planning process

The WMO strategic planning process begins with the integration of Members' input into a high-level planning document that defines the global societal needs, strategic thrusts, strategic priorities and expected results.

The four building blocks of the WMO RBM Framework are the WMO Strategic Plan (SP), the WMO Operating Plan (OP), WMO Results-based Budget (RBB) and WMO Monitoring and Evaluation (M&E) System. The schematic representation of the planning process is shown below:



## WMO mission and vision

The vision of WMO is to provide world leadership in expertise and international cooperation in weather, climate, hydrology and water resources and related environmental issues and thereby contribute to the safety and well-being of people throughout the world and to the economic benefit of all nations.

The mission of WMO is to:

- Facilitate worldwide cooperation in the establishment of networks of stations for the making of meteorological observations as well as hydrological and other geophysical observations related to meteorology, and to promote the establishment and maintenance of centres charged with the provision of meteorological and related services.
- Promote the establishment and maintenance of systems for the rapid exchange of meteorological and related information.
- Promote standardization of meteorological and related observations and to ensure the uniform publication of observations and statistics.
- Further the application of meteorology to aviation, shipping, water problems, agriculture and other human activities.
- Promote activities in operational hydrology and to further close cooperation between Meteorological and Hydrological Services.
- Encourage research and training in meteorology and, as appropriate, in related fields, and to assist in coordinating the international aspects of such research and training.

## Global Societal Needs

The Global Societal Needs (GSNs) represent the shared societal needs identified by Members of WMO to be addressed, within the mission of WMO, through a set of strategic directions represented by strategic thrusts. They form the basis for the strategic direction of WMO in a financial period.

1. Improved protection of life and property (related to the impacts of hazardous weather, climate, water and other environmental events and increased safety of transport on land, at sea and in the air).
2. Poverty alleviation, sustained livelihoods and economic growth (in connection with the Millennium Development Goals) including improved health and social well-being of citizens (related to weather, climate, water and environmental events and influence).
3. Sustainable use of natural resources and improved environmental quality.

## Strategic thrusts

Strategic thrusts are broad indications of strategic directions to address the global societal needs (GSN) to achieve expected results.

1. Improving service quality and service delivery.
2. Advancing scientific research and application as well as development and implementation of technology.
3. Strengthening capacity building.
4. Building and enhancing partnerships and cooperation.
5. Strengthening good governance.

### Expected results

An expected result is a top level statement that predicts a high level outcome (change in Members' or societal conditions) to be achieved in the long-term by WMO as a whole (the Secretariat, technical commissions, regional associations and Members).

1. Enhanced capabilities of Members to deliver and improve access to high-quality weather, climate, water and related environmental predictions, information, warnings and services in response to users' needs, and to enable their use in decision-making by all relevant societal sectors.
2. Enhanced capabilities of Members to reduce risks and potential impacts of hazards caused by weather, climate, water and related environmental elements.
3. Enhanced capabilities of Members to produce better weather, climate, water and related environmental information, predictions and warnings to support in particular disaster risk reduction and climate impact and adaptation strategies.
4. Enhanced capabilities of Members to access, develop, implement and use integrated and interoperable Earth- and space-based observation systems for weather, climate and hydrological observations, as well as related environmental and space weather observations, based on world standards set by WMO.
5. Enhanced capabilities of Members to contribute to and draw benefits from the global research capacity for weather, climate, water and the related environmental science and technology development.
6. Enhanced capabilities of NMHSs, in particular in developing and least developed countries, to fulfil their mandates.
7. New and strengthened partnerships and cooperation activities to improve NMHSs' performance in delivering services and to increase the value of the contributions of WMO within the United Nations system, relevant international conventions and national strategies issues.
8. An effective and efficient Organization.

### Key outcomes

Key outcomes are the likely or achieved short-term and medium-term effects of accomplished deliverables/outputs related to programme areas that define the parameters for the unique contribution by WMO in the progress to achieve expected results. There are several outcomes for each expected result. For each outcome, there are a set of KPIs to measure the achievement of the outcome. These are listed in the WMO Operating Plan.

**Key Outcome 1.1:** Improved access to seamless weather, climate, water and related environmental products and services (e.g., warnings, forecasts and supporting information)

**Key Outcome 1.2:** Delivery of weather, climate, water and related environmental products and services to users' communities is improved

**Key Outcome 2.1:** Multi-hazard early warning systems are implemented

**Key Outcome 2.2:** National integrated flood management plans are developed

**Key Outcome 2.3:** Drought and early warning systems are improved

**Key Outcome 3.1:** Improved long range forecasts and long-term projections

**Key Outcome 3.2:** Climate information and prediction products for climate adaptation and risk management are improved

**Key Outcome 3.3:** Hydrological information and products, including water resource assessments, are improved

**Key Outcome 3.4:** Drought information and prediction for risk management is improved

**Key Outcome 4.1:** WMO Integrated Global Observing System is implemented

**Key Outcome 4.2:** WMO Information System is developed and implemented

**Key Outcome 4.3:** Progress in implementing the Global Climate Observing System

**Key Outcome 5.1:** Research in climate prediction/projection to improve the skills of seasonal, decadal and longer timescales is enhanced

**Key Outcome 5.2:** Research in the prediction of high-impact weather on time scales of hours to seasons is enhanced

**Key Outcome 5.3:** Atmospheric chemistry observations and assessment meet needs of environmental conventions and policy assessments

**Key Outcome 5.4:** Seamless forecasts of weather, climate, water and the environment from months to seasons are developed

**Key Outcome 5.5:** Predictions/projections of El-Niño/Southern Oscillation (ENSO) and monsoons are improved

**Key Outcome 6.1:** Visibility and relevance of NMHSs and Regional Centres in regional and national development agendas is improved, particularly in developing and least developed countries

**Key Outcome 6.2:** Infrastructure and operational facilities of NMHSs and Regional Centres are improved, particularly in developing and least developed countries

**Key Outcome 6.3:** Education and training development activities at national and regional levels are improved, especially in developing and least developed countries

**Key Outcome 6.4:** Capacities of NMHSs are enhanced through cooperation and partnerships with other national and regional organizations

**Key Outcome 7.1:** WMO leadership and contribution in relevant UN system and other international partners' initiatives and programmes is improved

**Key Outcome 7.2:** Public, decision-makers and other stakeholders are increasingly aware of key WMO and NMHSs issues, activities and priorities through enhanced communication

**Key Outcome 8.1:** Effective and efficient WMO Congress and Executive Council

**Key Outcome 8.2:** An effective and efficient Organization

**Key Outcome 8.3:** Effective and efficient constituent bodies (RAs and TCs)

### **Activity**

An activity is an action, or a group of actions, implemented to generate products or services. The implementation of one or more activities leads to the production of a deliverable/output. Activities stipulated in the WMO Operating Plan are based on the contributions of the technical commissions, regional associations and the Secretariat. Additional activities that contribute to the achievement of expected results are related to the WMO joint Programmes and partners.

### **Inputs**

Inputs are the financial, human, and material resources from the Members, TCs, RAs, WMO Secretariat, WMO joint Programmes and partners, used to implement the Strategic Plan to achieve the expected results.

### **Impact**

In its broadest sense impact is the positive and negative, primary and secondary long-term effect associated with the accomplished deliverables/outputs or outcomes.

## 5. Planning documents

### WMO Strategic Plan

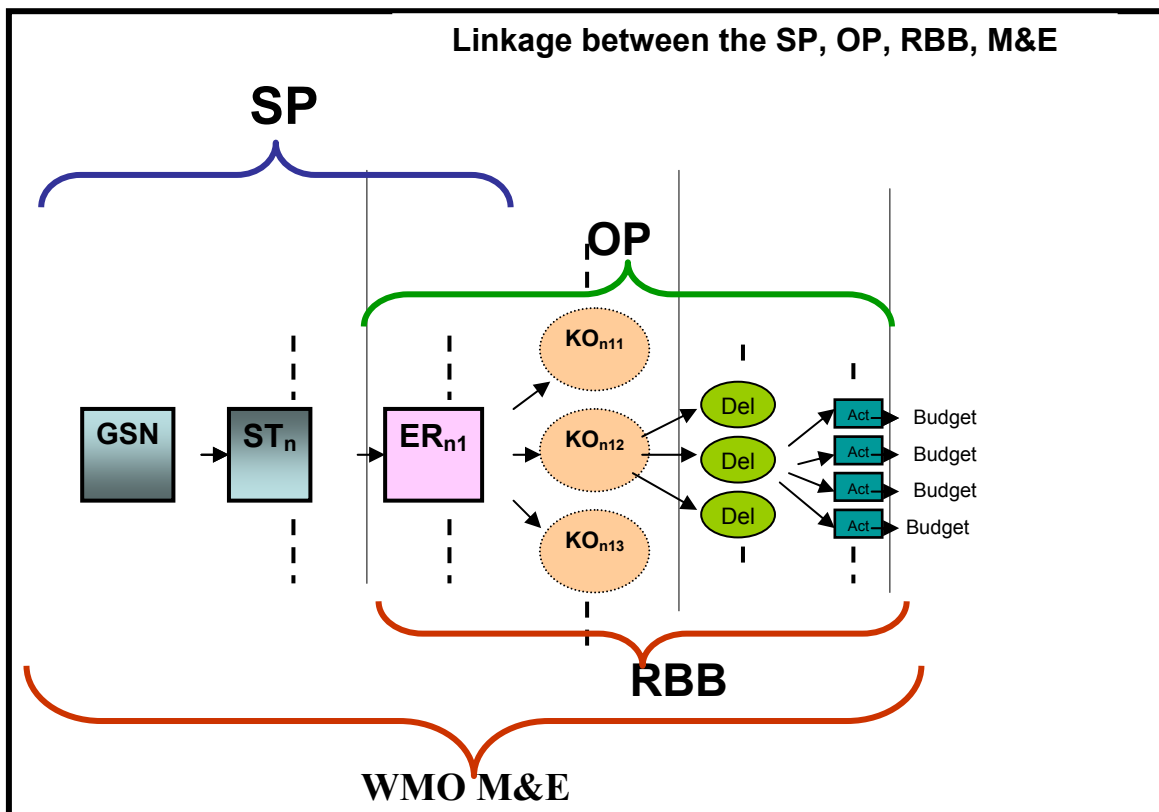
The WMO Strategic Plan indicates the unique strategic contribution of WMO to the attainment of the global societal needs. It is composed of the following elements: global societal needs, strategic thrusts, a series of expected results and strategic priorities.

### WMO Operating Plan

The WMO Operating Plan provides details on key outcomes, deliverables and programme activities and projects contributing to the achievement of expected results, which are used to guide resource estimates and allocations in the results-based budget.

### WMO result-based budget

The WMO results-based budget identifies resources derived from assessed contributions of Members as well as from voluntary contributions, to implement programme activities and projects in the WMO Operating Plan. It is approved once every four years by Congress. A schematic representation of the linkages among the WMO Strategic Plan, Operating Plan and RBB as well as monitoring and evaluation is presented below.



### Departmental work plan

Every department at the WMO Secretariat has a work plan. This gives the desired level of performance (milestones) to be achieved during a financial period.

### Individual work plan

Individuals prepare work plans as part of performance appraisal reporting and forward work planning.

## 6. M&E Governance and operations

The M&E System responsibilities are shared among different organs of WMO.

### **The World Meteorological Congress**

The World Meteorological Congress (Cg) is the supreme body of the Organization. It assembles delegates of Members once every four years to determine general policies for the fulfilment of the purposes of the Organization as set out in the Convention; to make recommendations to Members on matters within the purposes of the Organization; refer to any body of the Organization any matter within the provisions of the Convention upon which such a body is empowered to act; to determine regulations prescribing the procedures of the various bodies of the Organization, in particular the General, Technical, Financial and Staff Regulations; and to consider the reports and activities of the Executive Council and to take appropriate action in regard thereto, among other responsibilities. The Congress determines the maximum expenditure which may be incurred by the Organization on the basis of the estimates submitted by the Secretary-General after prior examination by, and with the recommendations of, the Executive Council (WMO Convention, Article 23a).

In terms of M&E, Congress is very much concerned with overall direction rather than the details. The primary documents to be considered are related to the 'achievement of results' for a preceding financial period, and Strategic Plan and results-based budget for the next financial period.

### **Executive Council**

The Executive Council is the executive body of the Organization that is responsible to Congress for the coordination of the Programmes of the Organization and for the utilization of its budgetary resources in accordance with the decisions of Congress during the intersessional period. The Council implements the decisions taken by Congress or decisions arrived at by correspondence; examines the programme and budget estimates for the following financial period prepared by the Secretary-General and presents its observations and its recommendations thereon to Congress; and administers the finances of the Organization in accordance with Articles 23 and 24 of the Convention, among other responsibilities. The EC is mandated to establish working groups to assist it achieve its mandate. The EC meets once every year. It consists of the President and Three Vice-Presidents of the Organization, the presidents of the regional associations, and twenty-seven Directors of Meteorological or Hydrometeorological Services of Members of the Organization.

The EC is mandated to establish working groups. A key working group for M&E is the 'Working Group on Strategic and Operational Planning', which assists EC to address issues related to strategic and operational planning, and monitoring and evaluation, among others.

With regard to M&E, the EC seeks evidence on performance progress against expected results and outcomes, and on use of resources to ensure that they are used efficiently and effectively.

### **Regional associations**

The six regional associations (RAs) {Region I (Africa), Region II (Asia), Region III (South America), Region IV (North America, Central America and the Caribbean), Region V (South-West Pacific) and Region VI (Europe)} are responsible for the coordination of meteorological, hydrological and related activities within their respective Regions. The RAs promote the execution of the resolutions of Congress and the



Executive Council in their respective Regions; and make recommendations to Congress and the Executive Council on matters within the purposes of the Organization, among other responsibilities. They are composed of Members of the Organization and mandated to meet as often as necessary. The time and place of the meetings shall be determined by the presidents of the regional associations in agreement with the President of the Organization.

The RAs monitor the implementation of their respective operating plans that are aligned with the WMO Strategic Plan. The results of their monitoring forms an input to Organization-wide reports on progress.

### ***Technical commissions***

The eight technical commissions {Commission for Basic Systems (CBS), Commission for Instruments and Methods of Observation (CI MO), Commission for Hydrology (CHy), Commission for Atmospheric Sciences (CAS), Commission for Aeronautical Meteorology (CAeM), Commission for Agricultural Meteorology (CAgM), Commission for Climatology (CCI), Joint WMO-IOC Commission for Oceanography and Marine Meteorology (JCOMM)} established by the Congress and composed of experts designated by Members, study and make recommendations to Congress and the Executive Council on the subjects within their areas of responsibilities, including recommendations on new activities or Programmes and on Technical Regulations, etc. The TCs monitor the implementation of their respective operating plans that are aligned with the WMO Strategic Plan. The results of their monitoring will form an input to Organization-wide reports on progress.

### **Members**

The Members are concerned with WMO delivering the agreed expected results in a cost-efficient and effective manner. Members are also major contributors to the achievement of expected results through activities supported by their governments and are key sources of data to measure progress associated with most of the KPIs. Every Member will complete a 'Questionnaire on Impacts of Achieved Results' twice in a financial period to provide information of achieved results at the middle and end of the period. The results at the end of a financial period provide baselines for the next financial period as well as results for the concluded financial period.

### **WMO Secretariat**

The Secretariat is headed by the Secretary-General, who is appointed by Congress. The Secretary-General has the responsibility to appoint all Secretariat staff, including the Deputy Secretary-General and the Assistant Secretary-General, in accordance with regulations established by Congress and with the approval of the Executive Council. The Secretary-General is responsible for the overall technical and administrative work of the Secretariat.

Departments at the Secretariat have responsibilities to monitor deliverables/outputs and gather any information on KPIs that becomes available in the process of implementing their respective activities.

Monitoring the implementation of programme activities is a continuous process that provides information on the progress of the achievement of expected results, for which the individual programme managers and WMO departments bear responsibility. The monitoring process tracks performance against what was planned, through regular collection and analysis of data on the progress of the implementation of activities against KPIs. Monitoring looks at both programme processes (transformation of inputs to deliverables/outputs) and changes in conditions brought about by programme activities (outcomes). It also identifies strengths and weaknesses in a programme. The

performance information generated from monitoring enhances dialogue, learning from experience and improves decision-making.

The first level monitoring, to be conducted on a six monthly basis, is concerned with the collection of data and analysis of the following elements:

- Tracking of the use of resources (post and non-post) within the allotted budget allocations (this concerns, in particular, the Secretariat).
- Timeliness, quality and cost-efficiency of activities and outputs (meetings, capacity building events, studies completed, persons trained, technical guidance and instructions).

The second level monitoring, to be conducted less frequently, is concerned with the collection of data and analysis of the following elements:

- Progress made or achievement of deliverables (measured by the KPIs).
- Progress made towards achieving expected results, as compared to the baseline (measured by the KPIs).

Internally, within the Secretariat, the benefits will be applied to all departments to improve their delivery and ensure that the activities directly lead to the achievement of the expected results.

#### **Internal Oversight Office**

The responsibilities of the Internal Oversight Office (IOO) of the WMO Secretariat are defined in Article 13 of the Financial Regulations of the World Meteorological Organization. The IOO was established by the Secretary-General to provide an internal, independent verification of financial, administrative and operational activities of WMO, including programme evaluation, monitoring mechanisms and consulting services. It is also responsible for investigating all allegations or presumptions of fraud, waste, mismanagement or misconduct, and for conducting inspections of services and organizational units. The IOO reports to the Secretary-General. The Office submits a summary report annually to the Secretary-General and bi-annually to the Audit Committee, with a copy to the external auditor, on its activities, including the orientation and scope of such activities, and reports to EC and Congress.

The Internal Oversight Office ensures:

- The regularity of the receipt, custody and disposal of all funds and other financial resources of the Organization.
- The conformity of expenditure with the appropriations or other financial provisions voted by Congress or approved by the Executive Council, or with the purpose and rules related to trust funds and special accounts.
- The compliance of all financial and other management activities with the established legislation.
- The timeliness, completeness and accuracy of financial and other administrative data.
- The effective, efficient and economical use of all resources of the Organization.

The IOO is also responsible for investigating all allegations or presumptions of fraud, waste, mismanagement or misconduct and for conducting inspections of services and organizational units.

**Project Coordination Unit**

The Project Coordination Unit at the WMO Secretariat coordinates project implementation across WMO Technical Programmes and Regional Offices, liaises with donors, and ensures timely reporting and visibility of projects. An excellent M&E tool for project management is the logical framework which is now widely used by multilateral and bilateral aid agencies and non-governmental organizations. It provides the basis for the development of a monitoring system during implementation, as well as a framework for the evaluation of a specific project.

**Financial Advisory Committee**

The Financial Advisory Committee (FINAC) is established by the Congress to provide advice from WMO Members to Congress and the Executive Council in a transparent fashion on the affordability, sustainability and implementation of the results-based budget and financial matters of the Organization. The Committee makes its reports available to all WMO Members.

The specific functions are to:

- Advise on the adequacy of the linkage between the results-based budget and the WMO Strategic Plan.
- Advise on the adequacy of regular and extrabudgetary resource allocations against expected results.
- Advise on financial matters, such as proportional contributions and Financial Regulations and any surplus.
- Advise on the overall budget level, taking into account issues of affordability and sustainability.
- Consider the reports of the external auditor, the Audit Committee and other relevant bodies, as necessary, in the deliberation of these functions.

**External audit**

Article 15 of the Financial Regulations of the World Meteorological Organization defines the procedure of appointing an external auditor, tenure of office, and the scope of an audit. The article also indicates that the external auditor must issue reports on the audit of the financial statements and relevant schedules. These reports must include such information as the external auditor deems necessary in regard to observations with respect to the efficiency of the financial procedures, the accounting system, and the internal financial controls and, in general, the administration and management of the Organization (Regulations 15.4 and 15.9). The external auditor reports annually to the EC and to Congress.

**Joint Inspection Unit**

The Joint Inspection Unit (JIU) is composed of not more than 11 inspectors appointed by the General Assembly on the basis of their special experience in national or international administrative and financial matters. This experience is to include asking management questions, with due regard to the principle of equitable geographical distribution and of reasonable rotation. Inspectors serve in their personal capacity and are appointed for a term of five years, renewable once.

The JIU conducts investigations, inspections and evaluations, and makes proposals on efficiency and effective measures including reforms largely focusing on broad, system-wide questions/activities. The JIU reports are received by the EC and executive management.

---

## 7. Monitoring outputs

### **Congress reports**

Congress reports are produced every four years and contain specific resolutions and guidance on strategic planning. Congress will review key summary documents. Congress reports are made public on the WMO Website.

### **Executive Council reports**

EC reports are produced after each EC meeting and provide details and guidance to the Secretariat. Executive Council reports are made public on the WMO Website.

### **Regional associations and technical commissions**

Reports by regional associations and technical commissions, giving details and findings, are produced after each meeting and made available on the WMO Website.

### **External survey on key performance indicators (KPIs)**

The expected results reflect the desired outcomes to be achieved by WMO as a whole (that is, WMO Members, WMO constituent bodies, WMO joint Programmes and the Secretariat). The associated KPIs are the agreed measurements which will enable WMO, as an Organization, to assess the achievement of the expected results.

The data is collected from Members. The main tool is the questionnaire on 'Impacts of Achieved Results on Members' that is completed by Members and provides a measurement of KPIs as seen by Members. The KPIs refer to a specific outcome and the data to be collected from each Member, as shown below. The number indicates the result and outcome that the KPI is linked to. For example, KPI 1.1.1 is the KPI for Expected Result 1 and Key Outcome 1.1. Data is collected using the 'Questionnaire on Impacts of Achieved Results on Members'. This is not done for all KPIs, as some remain wholly the responsibility of the Secretariat to collect.

### **Departmental data collection for KPIs**

The effectiveness of performance measurement at WMO depends, *inter alia*, on the quality of performance metrics contained in the WMO Strategic and Operating Plans. Indicators must overcome a number of measurement challenges, including the challenge of attribution/contribution, the qualitative nature of some expected results and the time frame needed to achieve results. Good indicators are the cornerstones for measuring performance and it is, therefore, desirable that they fulfil the SMART or similar criteria.

Indicators are signs or manifestations that make something known. In M&E, indicators are used to measure evidence by which we can assess the level of achievement of results.

Departments are responsible for measurement of KPIs that relate to their activities.

### **Audit reports**

The IOO reports to the Secretary-General. The Office must submit a summary report annually to the Secretary-General and bi-annually to the Audit Committee, with a copy to the external auditor, on its activities, including the orientation and scope of such activities and reports to EC and Congress. At the request of the head of the Office, any such report must be submitted to the Executive Council together with the Secretary-General's comments thereon.

**Budget reports**

WMO Secretariat produces budget reports as required.

**Progress reports**

To facilitate the reporting of monitoring information, an 'Implementation Monitoring Report Template' (IMRT) is used by the WMO constituent bodies and the Secretariat departments. The format of the template is simple, whilst ensuring that it adequately serves its intended purpose. The Secretariat compiles the information contained in the IMRTs and produces a summary overview for the sessions of the Executive Council.

The Performance Monitoring and Evaluation Reports are submitted to EC and Congress at mid-term and at the end of each financial period, in accordance with the decisions of Congress. These reports draw on the monitoring and self-evaluation reports prepared by the WMO constituent bodies, the Secretariat and the independent evaluations conducted during the period under review.

Self-evaluations by WMO constituent bodies and the Secretariat coincide with the preparation of input into the WMO Monitoring and Performance Evaluation Report at mid-term (second year) and at the end of each financial period (fourth year).

Self-evaluation reports are submitted by the WMO constituent bodies and the Secretariat, on a biennial basis, as inputs into the WMO Monitoring and Performance Evaluation Report (at mid-term and end of the financial period) to be submitted to the relevant sessions of EC and Congress.

A summary of the results of independent evaluations form an integral part of the WMO Performance Monitoring and Evaluation Reports. This summary is prepared by the Secretariat and included in the biennial WMO Performance Monitoring and Evaluation Report submitted to EC and Congress.

**Database**

Departments each keep their own relevant databases.

**WMO documentation and Website**

All reports are made available and most are uploaded to the WMO Website. The Secretariat compiles the WMO Performance Monitoring and Evaluation Reports at mid-term and at the end of each financial period for submission to EC and Congress.

**Logical framework**

The log frame is a tool that is used by many international agencies and those working in aid delivery. WMO uses the logical framework for funded projects as a monitoring and evaluation tool.

---

## 8. Impact

In its broadest sense, impact assessment is the process of identifying the anticipated or actual impacts (effects) of an intervention on stakeholders that the intervention was designed to affect, or affected inadvertently.

At the end of each financial period, an assessment will be carried out to establish the achievement of the expected results and any other unintended impacts, both negative and positive. The assessment will measure all of the KPIs. NMHSs, as key stakeholders, will be involved in the assessment. The assessment will determine what impacts have occurred, their direct and indirect causes, and their importance in relation to targets and quantification of impact.

The results will provide information that will be integrated in the processes to prepare the next strategic plan and define steps to be taken to eliminate or reduce any significant adverse impacts or to compensate for them.

Impact assessment findings will be disseminated amongst stakeholders in a way that contributes to learning (that is, by the WMO Website, workshops, meetings and circulation of reports) and obtain stakeholder agreement to the reports and agree on follow-up actions.

An interim review will take place half way through a given financial period to determine why the results are, or are not, being achieved. This will be conducted through a questionnaire on impacts and utilize any information gathered by departments at the Secretariat in the process of implementing their respective activities.

### **Reports disseminated**

The reports of independent evaluations will be made available, electronically, to Members, TCs and RAs.

The WMO constituent bodies and the Secretariat will ensure that information generated by monitoring and evaluation is used on a continuous basis to improve the performance of respective work programmes and to support effective coordination between programmes.



For more information, please contact:

**World Meteorological Organization**

7 bis, avenue de la Paix – P.O. Box 2300 – CH 1211 Geneva 2 – Switzerland

**Communications and Public Affairs Office**

Tel.: +41 (0) 22 730 83 14 – Fax: +41 (0) 22 730 80 27

E-mail: [cpa@wmo.int](mailto:cpa@wmo.int)

[www.wmo.int](http://www.wmo.int)