



WMO Risk Management Framework

April 2013



**World
Meteorological
Organization**

Weather · Climate · Water

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INTRODUCTION

Background

1. The World Meteorological Organization (WMO) Risk Management Policy (RMP)¹ provides the overall intentions and directions of the Organization as relates to risk management. The WMO Risk Management Framework presents procedures and arrangements for the implementation and continuous improvement of risk management in the Organization in line with the RMP, the mandate of the Organization as defined in the WMO Convention² and the results defined in the Strategic Plans. Its core elements include establishing the context, risk appetite, risk assessment (identification, analysis, and evaluation), risk management, information and communication, awareness and training, risk maturity and risk monitoring and review.

Governance

2. The World Meteorological Congress decides on the implementation of Risk Management as an integral part of Systems of Internal Control and Results-based Management (RBM). The WMO Executive Council ensures the adequacy of the integration of risk management in results-based management and systems for internal control. The WMO Secretary-General has the overall responsibility for internal control, including risk management. The Risk Management Committee (RMC), (Service Note No. 14/2010) is responsible for identifying, assessing and controlling all the risks involving the Organization. The Secretary-General informs sessions of the WMO Executive Council and Audit Committee of the risks involving the Organization and actions to address them. The constituent bodies shall inform the Secretariat of any risks related to decisions made within their mandates that need the attention of the Secretariat. The schematic representation of the governance structure of WMO Risk Management is provided in [Figure 1](#).

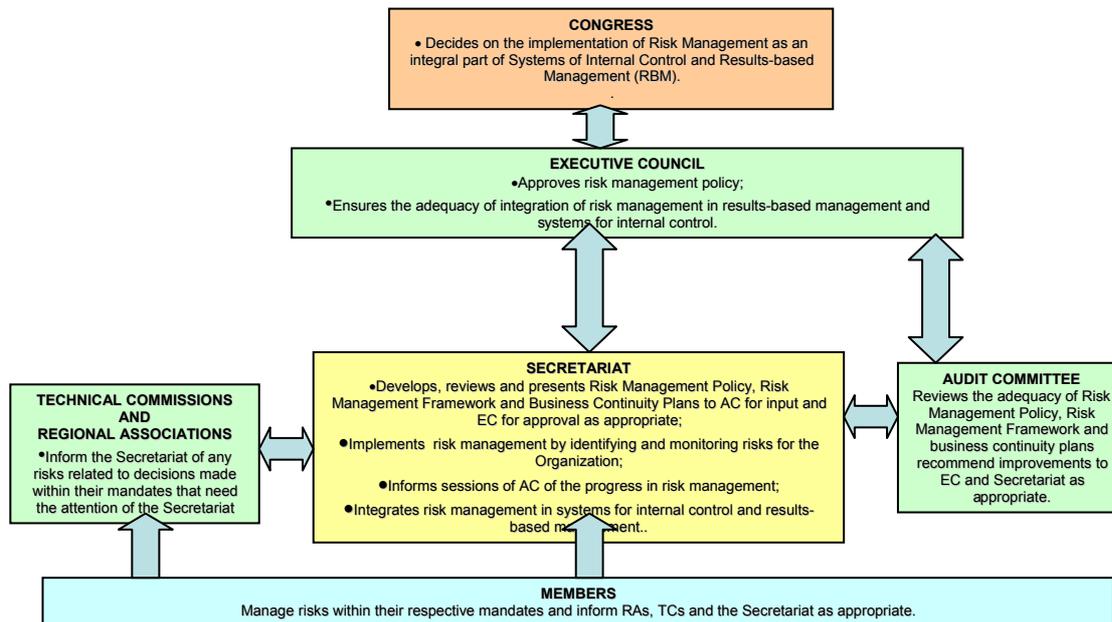


Figure 1. Schematic representation of the governance structure of WMO Risk Management

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ftp://ftp.wmo.int/Documents/PublicWeb/mainweb/meetings/cbodies/governance/executive_council_reports/english/pdf/63_session_1078_part1_en.pdf

² ftp://ftp.wmo.int/Documents/MediaPublic/Publications/Policy_docs/WMO15/15_2011_edition_en.pdf

3. It is recognized that effective risk management is part of a corporate governance framework, which provides assurance to stakeholders that their investments are in safe hands, and is a necessary ingredient for the improvement of business performance across the whole Organization.

4. The performance of the overall risk management process at the Secretariat is kept under review by the Risk Management Committee

Purpose

5. The purpose of this Framework is to provide procedures and arrangements for the implementation and continuous improvement of risk management in the Organization to ensure that risk management is carried out in a consistent manner based on the principles defined in the RMP, and following best practice and procedures. The Framework:

- Communicates why risk management should be undertaken;
- Provides a common risk management language;
- Explains the WMO definition of risk and its approach to risk management;
- Demonstrates the value of risk management;
- Outlines roles and responsibilities;
- Provides an overview of the processes involved in the management of risks;

6. Controls are designed and implemented to help mitigate identified risks to an acceptable level of tolerance based on WMO's agreed risk appetite and understanding of the cost-benefit of identified responses.

Definitions

7. What is risk? Risk, as defined in the WMO Risk Management Policy, is a threat or uncertainty associated with an event that may have a negative effect on the achievement of the results defined in the Strategic Plans of the Organization. Issues on the other hand are a manifestation of unmanaged risks. Improving risk management will reduce the number of issues that arise.

8. What is risk management? Risk Management refers to the systematic application of principles, approach and processes to the tasks of identifying and assessing risks, and planning and implementing risk responses.

9. Why is risk management important? Risk management is unavoidable and WMO is committed to actions to manage the potential risks to protect and enhance services, and value to all of its stakeholders. Effective risk management shall provide greater confidence to Members and partners that critical risks are identified, managed and communicated throughout the Organization. The implementation of the Framework shall enable the Organization to have greater confidence in its own ability to achieve its expected results.

RISK MANAGEMENT FRAMEWORK

10. The core elements of the WMO Risk Management Framework include the context, risk appetite, risk assessment (identification, analysis, and evaluation), risk treatment, risk information and communication, and risk monitoring and review³. Risk management process shall also include training and awareness, and regular assessment of the level of maturity of risk management.

³ ISO 31000:2009, Risk management-Principles and guidelines

The Context

11. The process to manage risks involving the Organization shall take into consideration the mandate as defined in the Convention⁴ establishing the Organization; the Governance Structure of WMO and the Roles of Internal Oversight Office, External Auditor and JIU; and the strategic planning process (Appendix). The focus shall be to manage the risks that may affect the efforts to achieve the results defined in the Strategic Plans of the Organization approved by World Meteorological Congress (Cg) for every four-year financial period.

12. The categories of risks that the Organization shall focus on are presented in the WMO Risk Management Policy. The management of risks involving the development and implementation of projects shall focus on factors that may influence successful implementation of a project, which include ability to achieve the objectives of the project (appropriate skills, staff, operating environment), funding (reputation of the source, adequacy, fluctuations of currencies, mode of releasing funds, ability to manage the funds and conditionality), compliance (funding policies, procurement policies and any other legal matters), timely delivery of results and security among others.

Risk Appetite

13. WMO implements its programme activities and projects within an overall low risk. The Organization shall have the lowest risk appetite for risks related to operations and compliance, and reasonably higher risk appetite for strategic, governance and financial risks. A sample template for developing a WMO risk appetite map, based on the WMO Strategic Plan 2012-2015, is provided in Annex 1. This implies that sustaining continuous operations and meeting legal obligations shall be of the highest priority for the Organization. The WMO Business Continuity Plan is aimed at ensuring minimum interruptions to the operations of the Organization.

Risk Assessment

14. Risk assessment comprises risk identification, risk analysis and risk evaluation.

Risk Identification

15. Risk identification focuses on finding, recognizing and recording strategic, financial, operational, compliance, and governance risks involving the Organization. It is part of management's responsibility, embedded in the culture of the Organization. The RMC works with Departments at the Secretariat to identify risks within their respective areas of responsibilities. The constituent bodies identify risks specific to their respective mandates as they relate to achievement of the expected results of the Organization. The tools and processes often used for risk identification include PESTLE analysis (Political, Economic, Social, Technological, Legal, and Environmental), risk identification workshops, horizon scanning and assumption analysis.

Risk Analysis

16. Once risks are identified, the next step is to consider their causes and sources, likelihood of occurrence and the associated impacts to determine their severity. The elements that may influence the likelihood and impacts of the risks are identified taking into consideration the existing measures and their effectiveness. This will deliver what is referred to on a risk register as "the Current Score". For example, the Impact of a plane crashing into an office would be much greater than the impact of a power cut affecting that building. However, the Likelihood of a power cut occurring is much higher, which explains why in this example, an organization is much more likely to be mitigating the latter, by installation of backup power supplies, but is likely to accept the former.

⁴ Basic Documents No.1 (WMO-No.15), Geneva

17. Some types of risks, particularly financial ones, may be capable of precise expression in terms of Likelihood and Impact, but often (e.g. with reputation risk), exactitude is not possible, and a measure of judgement is required. By employing the use of standardized Likelihood vs Impact framework, it becomes more possible to ensure greater consistency when making such judgements across the whole of the Organization. To enable this, standard thresholds for Likelihood and Impact at Project, Department and Organization level have been adopted for use to assess the overall severity of risks as presented in Table 1.

18. The WMO Secretariat is currently using a 3x3 (Likelihood x Impact) matrix, but intends to adapt to a 5x5 matrix as the level of maturity in risk management improves. Comparison between 3x3 and 5x5 matrices indicates that 1 (for low in 3x3) corresponds to 1-2 (for very low and low) in a 5x5 matrix, 2 (for medium in 3x3) corresponds to 3 for medium in 5x5 matrix and 3 for high in 3x3 matrix corresponds to 4-5 (for high and very high) in a 5x5 matrix.

Table 1. Risk analysis based on likelihood and impact (Likelihood x impacts)

		IMPACT					
		Very low	Low	Medium	High	Very High	
		1	2	3	4	5	
LIKELIHOOD	Very Low	1	1	2	3	4	5
	Low	2	2	4	6	8	10
	Medium	3	3	6	9	12	15
	High	4	4	8	12	16	20
	Very High	5	5	10	15	20	25
		1	2	3	4	5	
		Very Low	Low	Medium	High	Very High	

Risk Evaluation

19. Once the risks are identified and analysed the next step is to evaluate them by comparing the estimated level of risks (based on Table 1) to the risk criteria presented in Table 2 to determine their acceptance, appropriate actions and assign responsibility. The decision on actions on risks shall take into consideration the existing controls, and the cost and benefits of treating the risks. The levels of risks are ranked as Very High, High, Medium, Low, and Very Low on the basis of likelihood and impact (Table 2).

20. The corresponding levels for risk evaluation based on the product of the likelihood and Impact in 3x3 and 5x5 matrices are Low (1-2) in 3x3 (which corresponds to very low to low (1-5) in 5x5), medium (3-4) in 3x3 (corresponds to medium (6-9) in 5x5) and high 6-9 (corresponds to high to very high, (10-25), in 5x5).

Table 2. Risk Evaluation based on likelihood and impact

Level of Risk	Ranking	Criteria for managing the risk	Responsibility
15-25	Very High	Appropriate action to manage the risk is required.	The risk is unacceptable and is referred to the responsible Department
10-14	High	Appropriate action to manage the risk is required.	The risk is undesirable. The Risk Management Committee would advise on acceptance and appropriate action.
6-9	Medium	The responsible Department may accept the risk provided	The responsible Department can accept the risk and inform

		the impacts are not very high.	the RMC. If the impacts are high the RMC would decide on acceptance and appropriate action.
4-5	Low	The risk is acceptable and can be managed through the available controls provided the impacts are not high.	The responsible Department shall keep the RMC informed of the risk provided the impacts are not high.
1-3	Very Low	The risk is acceptable and can be managed through the available controls provided the impacts are not high.	The responsible Department shall keep the RMC informed of the risk provided the impacts are not high.

Treating Risks

21. After the risks have been identified, analysed and evaluated, and appropriate decisions made to accept them or not, the next step is to decide on actions to address the risks that have unacceptable levels but cannot be avoided. The actions include identifying various options to reduce the impacts and/or likelihood of the risks, or improve the controls, evaluate the options, prepare treatment plans, and implement them. The results of risk evaluation shall enable the Organization to decide on the level of acceptable risk to achieve its expected results, whilst continuing to provide the required level of assurance to stakeholders. For each unacceptable risk the treatment options, including tangible resources (people, finance, infrastructure, raw materials or time) or intangible (goodwill, knowledge, intellectual property, and authority) are identified. The owner of the risks may:

- (a) Accept the risk if the opportunities outweigh the risk and the existing controls meet the risk criteria presented in Table 2. The owner should, however, continue to monitor the risk;
- (b) Avoid the risk by not undertaking the programme activity(ies) associated with the risk or changing the scope, procurement process, supplier or sequence of activities, among others depending on the type of risk;
- (c) Treat the risk to reduce the impact, likelihood or both and/or improve the existing controls or develop new controls to reduce the risk to acceptable levels;
- (d) Transfer the risk so that a third party takes on the responsibility for an aspect of the threat. Examples include transferring financial risk through Insurance Companies or other contractual agreements, and disease outbreaks through medical insurance;
- (e) Share the risk. The approach is similar to transferring risks but in this case the risk is shared by transferring some portion of risk.

Risk Treatment Plan

22. The primary goal of the Risk Treatment Plan is to prepare and document specific management responses (actions), timelines, indicators to monitor the risks and assign owners to the risks, which have thus far been identified, analysed, evaluated and considered to be of unacceptable levels.

23. The risk owner is responsible for the management of all activities associated with the efforts to reduce the risks to acceptable levels, keeping the RMC informed of the progress.

24. Within the WMO (Table 3) there are 3 levels of risk management:

- Top-high risks are identified and managed by the Risk Management Committee in conjunction with the responsible Departments;
- Departmental risks are managed by the respective Departments that report to RMC the progress on actions to address the risks. The risks that escalate beyond acceptable limits

- despite the actions of the responsible Departments are included in the register for top-high risks for continuous monitoring by the RMC;
- The risks associated with the development and implementation of 'large projects' are managed by the Project Coordination Unit (PCU) in conjunction with the Project Oversight Board. The risks associated with small projects implemented by a Department shall be managed by the responsible Department. The PCU and responsible Departments shall report to RMC the progress on actions to address the risks.

Table 3. Risk ownership and management

	Top-high Risks	Departmental Risks	Project Risks
Owned by:	Risk Management Committee and the responsible Departments	Head of Department	Project Coordination Unit together with Project Oversight Board (Large cross-cutting projects) and Responsible Departments (Department specific projects)
Managed by:	Head of responsible Department	Head of Department	Project Coordination Unit
Reviewed by:	Risk Management Committee	Risk Management Committee	Project Oversight Board and Risk Management Committee
Affects:	Material impact on more than one Corporate Objective	Material impact on Departmental objective	Material impact on project

Implementing the plan

25. Once risks have been identified, analysed, evaluated and a treatment plan developed, the next stage is implement the response, which shall be managed and reviewed to ensure it is effective.

26. At this stage, the information gathered is included in the risk register. A standard risk register, which shall be used for managing the top-high, departmental and project risks to ensure consistency of reporting and assessing the risks in the Organization, is presented in Annex 2.

Monitor and Review

27. The levels of identified risks are prone to changes depending on the associated factors and actions implemented to address unacceptable risks. The risk monitoring and review shall focus on the following elements:

- (a) Progress in the implementation of risk management;
- (b) Overall performance/effectiveness of risk management;
- (c) Compliance with risk management policy and framework;
- (d) Monitoring and reporting risk management across the Organization;
- (e) The status of top-high risks for the Organization, emerging risks and risks presented in the business continuity plan together with actions to reduce them;

- (f) Periodic review and update of the risk management policy and framework;
- (g) Internal and external reporting mechanisms.

28. The heads of Departments shall monitor, review and report to the RMC the status of risks under their responsibility. The RMC shall review reports from Departments and decide on the risks based on the status provided by the Departments. The Chair of the RMC shall keep the Secretary-General informed of the status of risks and proposals for improvement. The Secretary-General shall inform the constituent bodies of the progress in the implementation of risk management. The WMO Executive Council will consider the progress in the implementation of risk management and propose actions for improvement.

Information and Communication

29. The process to manage risks shall include identifying, capturing and communicating relevant information in a form and timeframe that enables responsible Secretariat staff and constituent bodies to carry out their responsibilities. Communication among staff shall be aimed at ensuring that:

- The key components of the framework and any future modifications are communicated effectively;
- The internal reports on effectiveness and outcomes of the framework are adequate;
- The information captured is available at various levels and time; and
- There is consultation among staff.

30. Communication with constituent bodies is aimed at:

- Involving them in the risk management process;
- Reporting on risks for the Organization and actions taken to reduce their levels;
- Approving any changes on the risk management policy and process.

31. WMO shall promote effective communication across the Organization as a crucial element for effective risk management process. Risk owners are responsible for ensuring that risks are identified, captured and communicated to the appropriate staff and constituent bodies, and the RMC.

32. The Risk Management Officer, in conjunction with the Chair of the Risk Management Committee, is responsible for facilitating communication among the staff and with constituent bodies. The Departments shall submit reports to the Risk Management Officer every six months (in January and July) that shall be considered by the RMC. The Secretariat shall report progress on actions to reduce risks to sessions of the WMO Audit Committee and Executive Council. The External and Internal Auditors shall include in their respective audit reports the status of risk management, including suggestions for improvement. The Risk Management Officer shall engage the Departmental focal points regularly.

Risk Awareness and Training

33. The WMO recognizes that risk awareness and training are vital elements for successful implementation of risk management. Risk awareness and training activities shall focus on:

- (a) Enhancing the capacity of staff to interpret and implement the risk management framework and policy, and effectively contribute to risk management processes;
- (b) Enhancing the capacity of staff to be aware of the consequences of risks within their responsibility; and
- (c) Equipping staff with skills needed to manage risks involving the Organization.

34. Workshops, seminars, online discussions and other knowledge sharing platforms shall be used to conduct risk awareness and training activities.

Risk Maturity

35. To help enable continuous improvement of the Risk Management Framework it is important to understand how mature the organizations risk management framework is and what ambitions are held for the future. The approach often used to assess the maturity of risk management is provided in Table 4.

36. The approach has a scale of 1–5, with 1 indicating that the organization has no formal processes in place to 5 where risk management is fully integrated into all aspects of the organization.

Table 4. The approach to assess the maturity of risk management

Criteria	Level 1	Level 2	Level 3	Level 4	Level 5
	Initial	Repeatable	Defined	Managed	Optimising
1. Context of Organization	Context of the organization is not reflected in risk identification	Examination of the context is built into the risk process	Context is rigorously examined to explore both threats and opportunities	Managers proactively inform the central risk function of major changes in the context	The context is used to inform the risk management process, objective setting and opportunity management
2. Involve all Major Stakeholders	Not all stakeholders are consulted	Stakeholders are identified and engaged	Communication strategy is developed Stakeholder objectives are identified, captured, aired, aligned, agreed and signed off	Fully documented processes Clear process map of activities	Advance lobbying of stakeholders to encourage support and engagement very early in the investment cycle
3. Clear Objectives	Activity objectives are not always made explicit prior to risk management process	Threats are identified against explicit objectives	Objectives include stakeholder requirements	Risk management is used to redefine objectives where appropriate as part of risk response planning	Risk management is used to identify opportunities and influence objective setting
4. Policies, Processes, Strategies and Plans	Undocumented or vague No operating limits defined No review of emerging risks or opportunities	Policies and processes are defined Risk tolerance levels are established Timing of risk management activities is agreed	Policies are further developed, refined and disseminated Central risk function is established	Risk management is routinely used to support decision making Improved qualitative analysis.	Enterprise wide strategies Focus is in continual improvement

Criteria	Level 1	Level 2	Level 3	Level 4	Level 5
	Initial	Repeatable	Defined	Managed	Optimising
5. Risk Management Reports	No formal periodic reporting.	Basic management reports are issued in a consistent and timely manner	Senior management reports in a consistent format Audit reports Prioritized actions	Threshold limit violations are reported Risk measurement linked to Early Warnings (EWs) based on indicators for each risk	Option analysis Sensitivity analysis Scenario modelling
6. Roles and Responsibilities	Staff act on their own initiative in silos No coordinated approach	Risk owners, managers and actionist are identified and risk actions assigned	Integrated teams across the organization	Requisite knowledge, expertise and experience are in place	Organization processes, and individual performance measures are fully aligned
7. Central Risk Function	No central point of contact for guidance or direction	Roles and responsibilities of central risk function are established	Relationship with the internal audit committee, the board and divisions is developed	Embedding risk management, 'selling' the benefits and refining the process	Driving improvements, integrating across divisions and aiding opportunity management
8. Early Warnings (EWs)	EWs are not established	EWs are identified and monitored	EWs are refined and trends included in risk management reports	EWs are used to inform risk management and decision making	EWs are used for proactive management and opportunity seeking
9. Review the Effectiveness of the Process	No formal processes Reactionary ad hoc responses Compliance focused	Process gaps are recognized and corrected	Uniform processes are adopted across the organization	Risk management is fully integrated with line management	Continual benchmarking Best practices are identified and shared across the organization
10. Barriers to Implementation	Barriers not recognized	Common barriers are recognized and addressed	Roles and responsibilities are refined across the organization	Risk management is championed by Chief Executive	Risk embedded in the organization in terms of job descriptions, inductions, appraisals and performance targets

Criteria	Level 1	Level 2	Level 3	Level 4	Level 5
	Initial	Repeatable	Defined	Managed	Optimising
11. Risk Culture	No defined policy, profile, process or vocabulary. No risk appetite	Risk appetite, profile and process defined	EWs established	Risk appetite regularly reviewed and communicated Process updated as the result of feedback	Refined risk appetite Strident initiatives to establish and maintain best practice
12. Strategies for improving risk management	No risk management training Lack of awareness of the majority of risk management techniques	People are trained in the process Awareness of the most commonly used techniques	Different training levels are established Consistent measures of likelihood and impact Expanded risk coverage	Sophisticated robust tools and models in use Experienced personnel applying judgement to quantified results	Knowledge and skills are updated constantly Effective use of formal risk management techniques Risk quantification is fully integrated into business decisions

Annex 1

A sample template for developing WMO Risk Appetite Map based on WMO Strategic Plan 2012-2015

Strategic Thrust	Expected Results	Risk Appetite Categories				
		Strategic	Operational	Compliance	Reputational	Financial
Improving Service Quality and Delivery	1. Enhance 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 relevant societal sectors	H	L	L	L	H
	2. Enhanced capabilities of Members to reduce risks and potential impacts of hazards caused by weather, climate, water and related environmental elements.	H	L	L	L	H

Annex 2

A sample of WMO Risk Register for top-high Risks for the Organization

Risk Category	Cause	Effect	Outcome	Likelihood	Impact	Product Score	Total Score	Ranking	indicator	Mitigation	mitigation impact	Trend	Responsibility	Status
Theme	because of.....	there is a risk that.....	resulting in.....			0	+							
Strategic Risk (1)	Escalating new priorities not captured in the strategic planning process (planning documents, planning meetings etc)	May affect implementation of some planned activities due to diversion of resources from approved activities	Resulting in reduced performance on planned priorities leading to the dissatisfaction of Members	M	H	12	7	H	- Increase in Members' complains - Trends in unbudgeted proposals received from Members	- Introduce flexibility in planning process within the approved priorities - Consistency with approved priorities and budget allocations	M	↓	ASG	As of March 2012 - Strategic priorities remained as approved by Congress
Compliance (1)	Other entities engaging in WMO central mandate without coordination and compliance to WMO Standards	May reduce the quality of weather, water, climate and related environmental services	Compromising the core mandate of the Organization in the UN system	M	H	12	7	H	- Increase in reports by heads of NMHSs of concerns in the quality of services delivered by other entities - Scientific quality of reports provided by other entities	- Maintain close contact with decision-makers and clearly communicate counter strategy - Clarify WMO mandate and use partnerships with other	H	→	ASG	As of March 2012 - Promoting uniform understanding of WMO's role in development - Advocacy through LDC-IV, UNFCCC, ISDR COPs, CEM, UN system. - Climate forecasts and disaster warnings appearing on the Websites of some institutions that do not

Risk Category	Cause	Effect	Outcome	Likelihood	Impact	Product Score	Total Score	Ranking	indicator	Mitigation	mitigation impact	Trend	Responsibility	Status
Theme	because of.....	there is a risk that.....	resulting in.....			0	+							
										entities to avoid their duplication of our mandate				indicate the source

APPENDIX

The Governance Structure of WMO and the Roles of Internal Oversight Office, External Auditor and JIU

Background

1. The Executive Council invited the Secretary-General to provide information on the entire governance design of WMO so that the members of the AC and EC, when discussing the ToR and the membership of AC, are well informed of the roles to be played by various governance entities, the role of the External Auditor, the Internal Oversight Office (IOO), the UN Joint Inspection Unit (JIU), the UN Office of Internal Oversight Services (OIOS), as well as the contribution of activities and processes such as Risk Management, Monitoring and Evaluation, and their linkages.

The Composition of WMO

2. The composition of WMO, as defined in the Convention⁵ comprises the World Meteorological Congress, the Executive Council, Regional Associations, Technical Commissions, and the Secretariat (Annex 1).

The World Meteorological Congress (Cg)

3. 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).

Executive Council (EC)

4. 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 (e.g. Audit Committee) to assist it achieve its mandate. The EC meets once every year. It consists of the President and 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 list of members elected at Cg-XVI is presented in paragraph 12.2 of Cg-XVI, Abridged final report with resolutions WMO-No. 1077.

⁵ Basic Documents No. 1 (WMO-No.15), 2007 Edition, Convention of the World Meteorological Organization, PARTS VI – X

Regional Association

5. The six regional associations (RAs) {Region I (Africa), Regional 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.

Technical Commissions

6. 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.

Secretariat

7. 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. The organization structure of the Secretariat is provided in **Table 1**. The total number of staff of the Secretariat is about 280 with most of them at the Headquarters in Geneva and a few in the sub-regional offices.

Financial Advisory Committee

8. 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 function, composition and working arrangements are spelled out in the attached resolution (**Annex 2**).

The Role of Internal Oversight Office

9. The responsibilities of the Internal Oversight Office (IOO) are defined in Article 13 of Financial Regulations of the World Meteorological Organization (**Annex 3**). The IOO is established by the Secretary-General to provide for 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 D/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 Role of Joint Inspection Unit

10. The Joint Inspection Unit (JIU) was created under General Assembly resolution 2150 (XXI) of 4 November 1966 and extended thereafter under Assembly resolutions 2735 A (XXV) of 17 December 1970 and 2924 B (XXVII) of 24 November 1972. By its resolution 31/192 of 22 December 1976, the Assembly decided to establish the Joint Inspection Unit as a standing subsidiary organ and approved the statute of the Unit, with effect from 1 January 1978. Under Article 1, paragraph 2 of the statute, the Unit is responsible to the General Assembly of the United Nations and similarly to the competent legislative organs of those specialized agencies and other international organizations within the United Nations system which have accepted its statute (participating organizations)⁶. WMO joined JIU in 1979.

11. The Unit is composed of not more than eleven Inspectors appointed by the General Assembly on the basis of their special experience in national or international administrative and financial matters, including management questions, and 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.

12. The JIU conducts investigations, inspections, 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 the Executive Management.

The role of External Auditor

13. Article 15 of Financial Regulations of the World Meteorological Organization (**Annex 4**) defines the procedure of appointing an External Auditor, tenure of office, and scope of audit. The article also indicates that the External Auditor shall issue reports on the audit of the financial statements and relevant schedules, which shall include such information as he or she 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 to the EC annually and to Congress.

Management Tools

Risk Management, Monitoring and Evaluation

14. Risk Management (RM), and Monitoring and Evaluation (M&E) are important, distinct and complementary tools in results-based management that help improve performance and achievement of results.

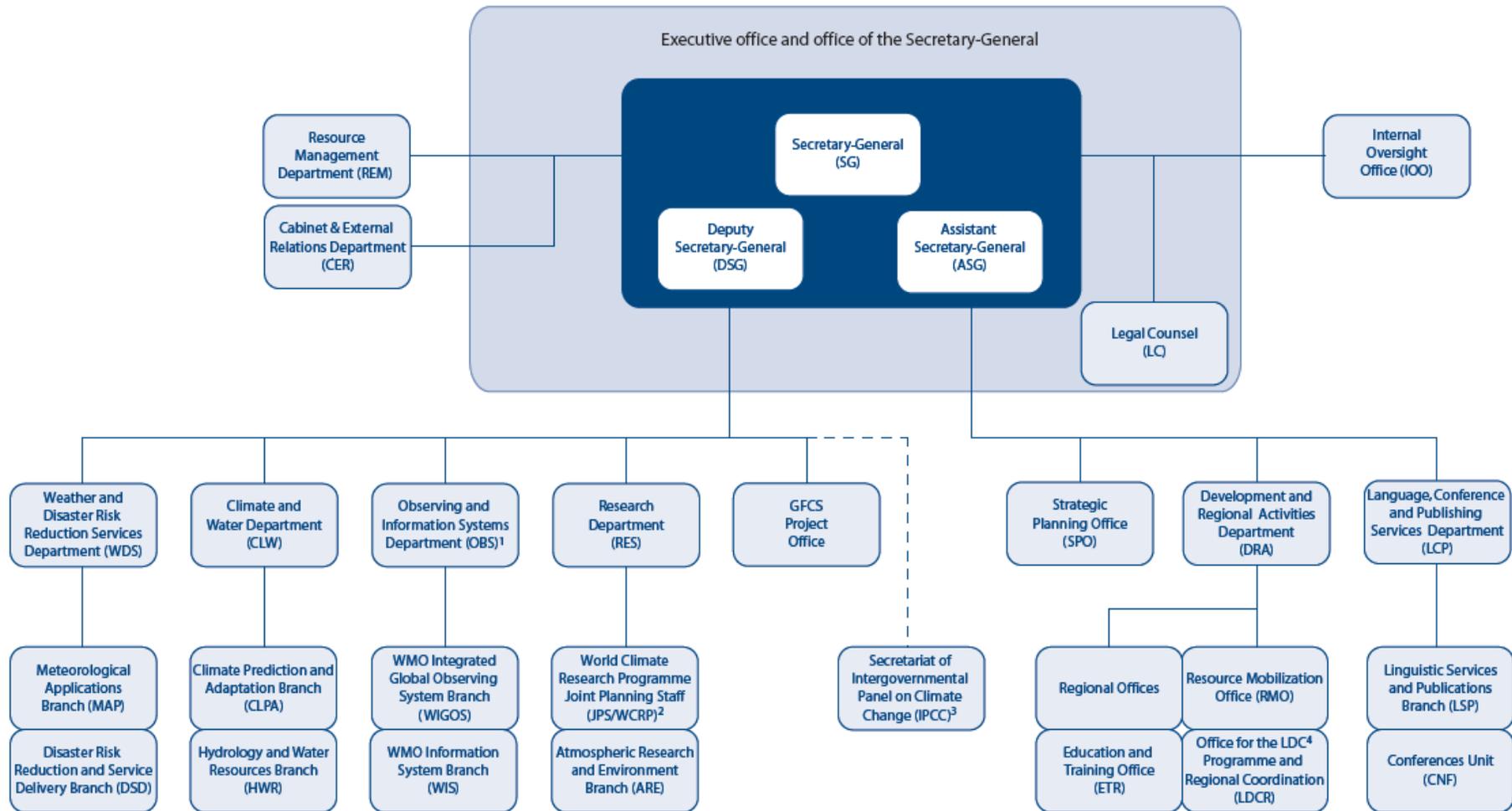
15. Monitoring the implementation of programme activities is a continuous process that provides information on the progress in the achievement of Expected Results, for which the individual programme managers and WMO Departments bear responsibility. The monitoring process tracks performance against what was planned through regular collection and analysis of data on the progress in the implementation of activities against Key Performance Indicators. Monitoring looks at both programme processes (transformation of inputs to 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.

16. Evaluation provides information on why the results are or are not being achieved through a periodic, in-depth analysis of programme performance. It relies on the data generated during monitoring as well as information obtained from other sources (e.g., surveys, interviews, EC Working Groups, regional associations, technical commissions, etc.).

⁶ <http://www.unjiu.org/en/about.htm>

17. Risk management addresses the uncertainties, and the associated risks and opportunities that may influence the ability of the Organization to achieve its set objectives. Like monitoring and evaluation, it requires the definition of achievable objectives that form the basis for identifying and assessing the risks together with deciding on response and reporting systems. WMO Strategic Plan (SP), Operating Plan (OP), Results-based Budget (RBB) and M&E are the four major building blocks for WMO Results-based Management (RBM) Framework (**Annex 5**). The SP informs risk management processes. Both the External and Internal Auditors use risk based approach in auditing.

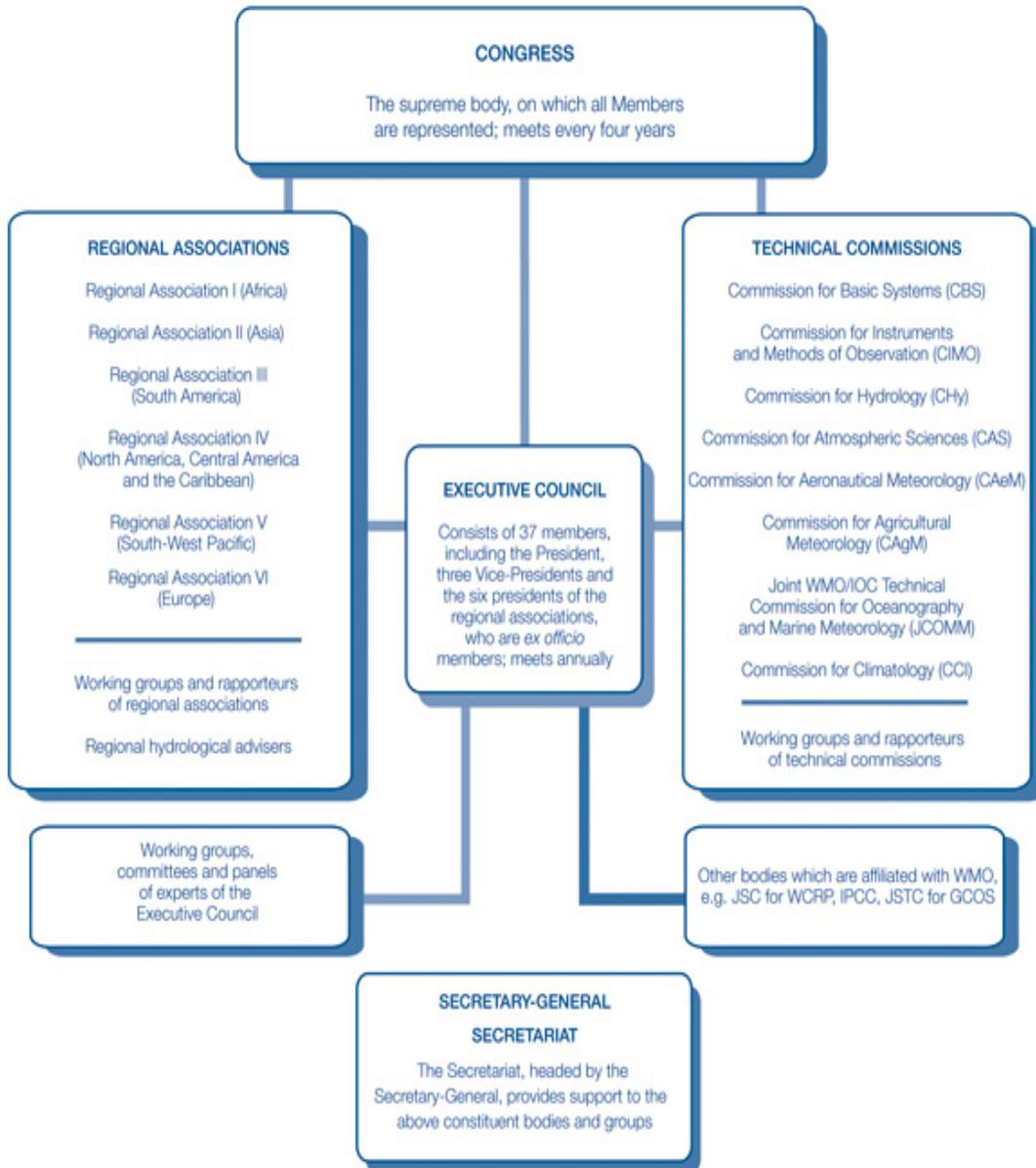
Table 1. WMO organization chart



1. The Department also houses the Secretariat of the Global Climate Observing System
 2. WCRP joint programme of WMO, ICSU and UNESCO/IOC
 3. IPCC co-sponsored by WMO and UNEP
 4. Least Developed Countries

APPENDIX, ANNEX 1

The Composition of WMO



APPENDIX, ANNEX 2
Resolution 39 (Cg-XV)
FINANCIAL ADVISORY COMMITTEE

THE CONGRESS,

Recalling Resolution 29 (Cg-X) - Financial Advisory Committee,

Considering the report of the fifty-eighth session of the Executive Council and the report of the twenty-sixth meeting of the Financial Advisory Committee,

Decides to maintain the Financial Advisory Committee with the following terms of reference:

1. PURPOSE

To provide advice from WMO Members to Congress and the Executive Council in a transparent fashion on:

- (a) The affordability, sustainability and implementation of the results-based budget;
- (b) Financial matters of the Organization;

2. FUNCTIONS

- (a) To advise on the adequacy of the linkage between results-based budget and the WMO Strategic Plan;
- (b) To advise on the adequacy of regular and extrabudgetary resource allocations against expected results;
- (c) To advise on financial matters, such as proportional contributions and Financial Regulations and any surplus;
- (d) To advise on the overall budget level, taking into account issues of affordability and sustainability;
- (e) To consider the reports of the External Auditor, the Audit Committee and other relevant bodies as necessary in the deliberation of these functions;

3. COMPOSITION

- (a) President of WMO serves as chairperson;
- (b) Core membership comprising the President of WMO and the presidents of the WMO regional associations;
- (c) Open to all WMO Members;

4. WORKING ARRANGEMENTS

- (a) The President should convene the meeting in time, and for a long enough period, to prepare a report prior to the commencement of Congress and the Executive Council;
- (b) Relevant documents should be made available to the Members at least three weeks before the Financial Advisory Committee meeting;
- (c) The Committee should follow the traditional procedures of such WMO bodies, seeking to formulate its recommendations through consensus views;
- (d) The Committee should make its reports available to all WMO Members.

APPENDIX, ANNEX 3
The role of Internal Oversight Office

**ARTICLE 13 OF FINANCIAL REGULATIONS OF THE WORLD METEOROLOGICAL
ORGANIZATION AS REVISED BY EC-LXI, JUNE, 2009**
Internal Control

Paragraphs 13.7-13.10

Internal oversight

13.7 Under the broader scheme of internal oversight, the Secretary-General shall establish an office to provide for an independent verification of financial, administrative and operational activities of WMO, including programme evaluation, monitoring mechanisms and consulting services. The office shall be called the Internal Oversight Office and shall ensure:

- (a) The regularity of the receipt, custody and disposal of all funds and other financial resources of the Organization;
- (b) 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;
- (c) The compliance of all financial and other management activities with the established legislation;
- (d) The timeliness, completeness and accuracy of financial and other administrative data;
- (e) The effective, efficient and economical use of all resources of the Organization.

13.8 The Internal Oversight Office shall also be responsible for investigating all allegations or presumptions of fraud, waste, mismanagement or misconduct and for conducting inspections of services and organizational units.

13.9 The Secretary-General shall appoint a technically qualified head of Internal Oversight Office after consulting with, and obtaining the approval of, the President of WMO acting on behalf of the Executive Council. Notwithstanding Articles 9, 10 and 11 of the Staff Regulations dealing with separation from service, disciplinary measures and appeals, respectively, the Secretary-General shall likewise consult the President of WMO acting on behalf of the Executive Council and obtain his approval before separation of the head of the Office. These actions by the President in accordance with General Regulation 146 shall be reported to the following regular session of the Executive Council.

13.10 The Internal Oversight Office shall function in accordance with the following provisions:

- (a) The head of the Office shall report directly to the Secretary-General;
- (b) The Office shall have full, free and prompt access to all records, property, personnel, operations and functions within the Organization that, in its opinion, are relevant to the subject matter under review;
- (c) It shall be available to receive directly from individual staff members' complaints or information concerning the possible existence of fraud, waste, mismanagement or misconduct. No reprisals shall be taken against staff members providing such information unless this was wilfully provided with the knowledge that it was false or with intent to misinform;

- (d) It shall report the results of its work and make recommendations to the Secretary-General with a copy to responsible managers for action and the External Auditor. At the request of the head of the Office, any such report shall be submitted to the Executive Council together with the Secretary-General's comments thereon;
- (e) The Office shall submit a summary report annually to the Secretary-General with a copy to the External Auditor on its activities, including the orientation and scope of such activities. This report shall be submitted to the Executive Council by the Secretary-General together with any comments he wishes to make;
- (f) It shall monitor the implementation of recommendations duly noted by the Executive Council.

APPENDIX, ANNEX 4
The role of External Audit

ARTICLE 15 OF FINANCIAL REGULATIONS OF THE WORLD METEOROLOGICAL
ORGANIZATION AS REVISED BY EC-LXI, JUNE, 2009
External audit

Appointment

15.1 An External Auditor, who shall be the Auditor-General (or officer holding the equivalent title) of a Member State, shall be appointed in the manner and for the period decided by the Executive Council.

Tenure of office

15.2 If the External Auditor ceases to hold that office in his or her own country, his or her tenure of office as External Auditor shall thereupon be terminated and he or she shall be succeeded as External Auditor by his or her successor as Auditor-General. The External Auditor may not otherwise be removed during his or her tenure of office except by the Executive Council.

Scope of audit

15.3 The audit shall be conducted in conformity with generally accepted common auditing standards, and, subject to any special directions of the Executive Council, in accordance with the additional terms of reference set out in the annex to these Regulations.

15.4 The External Auditor may make 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.

15.5 The External Auditor shall be completely independent and solely responsible for the conduct of the audit.

15.6 The Executive Council may request the External Auditor to perform certain specific examinations and issue separate reports on the results.

Facilities

15.7 The Secretary-General shall provide the External Auditor with the facilities he or she may require in the performance of the audit.

15.8 For the purpose of making a local or special examination or of effecting economies of audit cost, the External Auditor may engage the services of any national Auditor-General (or equivalent title) or commercial public auditors of known repute or any other person or firm who, in the opinion of the External Auditor, is technically qualified.

Reporting

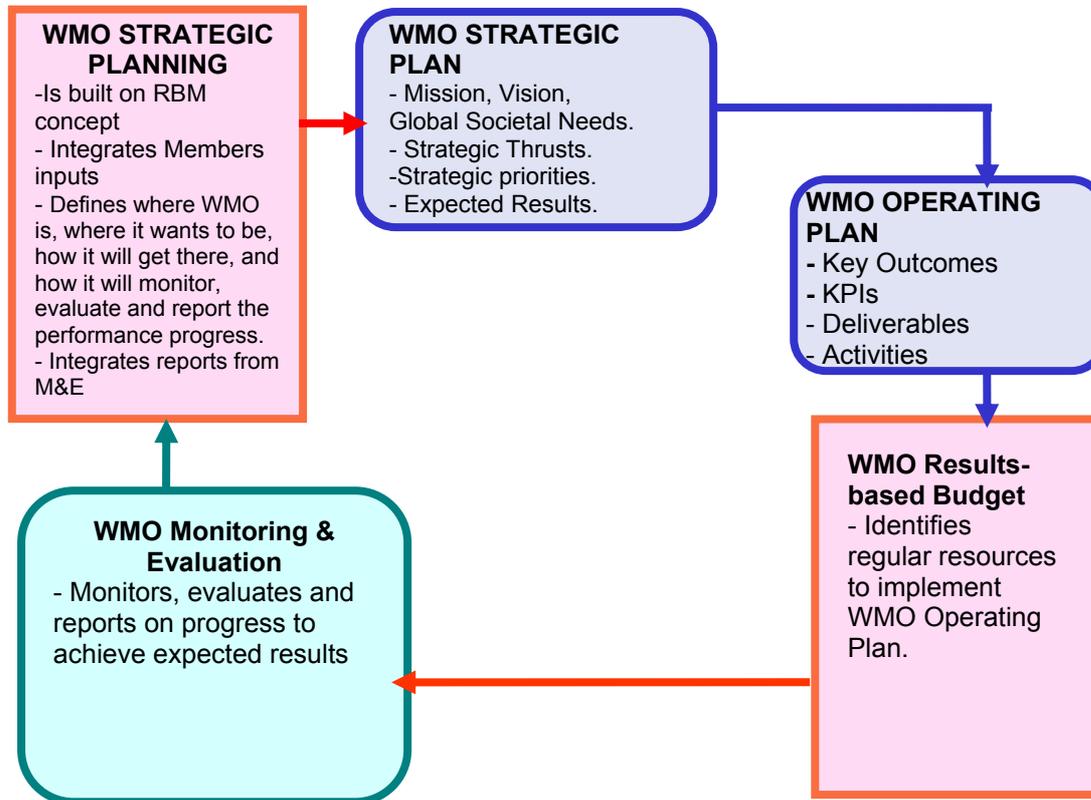
15.9 The External Auditor shall issue reports on the audit of the financial statements and relevant schedules, which shall include such information as he or she deems necessary in regard to matters referred to in Regulation 15.4 and in the additional terms of reference.

15.10 The External Auditor's reports shall be transmitted, together with the relevant audited financial statements, to the Executive Council, which shall examine them in accordance with any directions given by Congress.

15.11 The financial statements, together with the External Auditor's certificates, shall be transmitted to the Members of the Organization by the Secretary-General.

APPENDIX, ANNEX 5

WMO Results-based Management (RBM) Framework
indicating the four major building blocks (Strategic Plan, Operating Plan, Results-based Budget and Monitoring & Evaluation) and the associated processes.



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