PART 1: BACKGROUND

1. Purpose and Scope

The WMO Monitoring and Evaluation System calls for the biannual self-evaluation of progress on deliverables, or the extent to which the Organization is delivering what it has committed itself to deliver. Contrary to the Key Performance Indicators which measure performance at the outcome level for the whole of WMO, the progress on deliverables report is focused on the Secretariat and the outputs of its activities.

The purpose is to ensure that implementation of the Strategic Plan, as relates to activities in the WMO Operating Plan, is on track, that issues are detected early, and that corrective actions are taken. The report covers regular budget and some extra-budgetary activities.

2. Methodology

The current report measures progress on deliverables for January-June 2014 in accordance with the WMO Operating Plan 2012-2015 as relates to updated Programme Activities Planned and Funded for Implementation in the period 2014-2015. To this end, the Departments at Secretariat reported against 378 activities planned for the biennium along the following parameters:

(1) Status of activities (completed, ongoing, not started yet, recurrent, cancelled);
(2) Timeliness (on time, ahead of schedule, behind schedule, rescheduled, N/A);
(3) Cost (within budget, under budget, over budget, N/A)

Departments were also asked to indicate the type of activity in accordance with the following generic categories:

(a) Organize, prepare documents, participate in and report on meetings and workshops;
(b) Provide or support development of working papers/plans (workplans, implementation plans, etc.)/guidelines/questionnaires/surveys, etc.
(c) Maintain, develop and publish technical regulations / manuals / scientific and technical reports;
(d) Support TC, RA and EC/WGs, monitor, review and follow-up on activities and provide technical and scientific advice;
(e) Organize training, capacity building and infrastructure development activities;
(f) Internal activity in support of Secretariat functions and infrastructure.

Departments further identified constraints and risks encountered in the course of implementing activities and assigned alert status to each activity, using the traffic lights to indicate: (i) smooth activity implementation (green); (ii) a problem/hindrance in implementation, which can potentially escalate but the Department is working on resolving it (yellow); and (iii) a problem/hindrance in implementation, which requires the intervention of the Executive Management (red).
PART 2: Overall Performance

The following are only highlights of the Secretariat's overall performance in implementation of the activities in the Operating Plan 2014-2015 for the period January-June 2014. A summary of progress and issues concerning the status, timeliness and costs related to implementation of activities associated with specific Expected Results (ERs), as listed in Annex 1, is also presented below. A detailed account of progress along the three categories for each ER is contained in Section 3, which also features highlights of deliverables/outputs achieved in the reporting period.

1. Status of Implementation

Figure 1 presents the status of implementation of all activities listed in the Operating Plan 2014-2015 as of June 2014. Almost 80% were either ongoing or of recurrent nature (e.g. support to the presidents of technical commissions, operating expenses, etc.). The implementation of 10% of activities was been completed, whereas action remained to be undertaken on 11%. It should be noted that many activities contain multiple components planned for each year of the financial period. For this reason, the majority of activities appear as “in progress” and fewer are indicated as “completed.” One percent of the planned activities were cancelled for reasons discussed in Part 3.

![Figure 1: Status of Activities (as of June 2014)](image)

![Figure 2: Status of activity implementation (by ER) as of June 2014](image)
2. Timeliness of Implementation

As evident from Figure 3, most activities were implemented on schedule. All ER 8 activities were on time, and for ER 1, ER 2, ER 6 and ER 7, 80-96% of activities were executed on schedule. This proportion was lower for ER 3, ER 4 and ER 5 where three-quarters of activities were reported to be on time. Almost 20% of ER 4 activities were running behind schedule. So were 12% of ER 3 and 9% of ER 6 activities. More details on the reasons and constraints encountered are available in Section 3.

![Figure 3: Timeliness of implementation by ER (as of June 2014)](image)

Only 5% of ER 1 and ER 7 activities were behind schedule. None were lagging behind for ER 2, ER 5 and ER 8. Four percent of ER 2 activities and 1% of ER 4 ones were implemented ahead of schedule. The highest portion of rescheduled activities was in ER 3 (9%), followed by ER 7 (5%). On Figure 3, ‘not applicable’ refers to recurrent activities and activities that have not yet been started.

3. Cost of Implementation

On average, over three-quarters of the overall planned activities were implemented within the allotted budget. This number was highest for ER 3 (85%), ER 2 (80%) and ER 4 (80%), as presented on Figure 4.

![Figure 4: Cost of implementation (by ER) as of June 2014](image)
For the rest of the ERs (except ER 7), the share of activities that were implemented within budget ranged between 70% and 77%. Only 57% of the ER 7 activities were implemented in accordance with the planned costs; 14% exceeded their budget allocation and the same proportion spent less than envisioned. Twelve percent of ER 2 activities as well as 10% of ER 8 and 8% of ER 6 also overspent. Savings ranging from 3% to 8% were reported (except for ER 5) but were related, in the majority of cases, to activities which were running behind schedule and had therefore spent less as of June 2014.

4. Alert Status

The large majority of WMO activities did not encounter any constraints or faced risks, as demonstrated by the green status assigned by activity managers. Only 15% of activities experienced some hindrances, which could potentially escalate, but Departments were working towards their resolution and estimated that they could be overcome in due course (marked with yellow alert status). These were primarily related to budget constraints, insufficient staff or coordination issues involving multiple partners or technical commissions. Three activities, accounting for 1% of the total, received a red alert status due to delays in implementation.

![Table 1: Alert Status of Activities (Jan-Jun 2014)](image)

For each ER, more details are provided on activities with a yellow and red alert status under Constraints/Risks in Section 3 below.

5. Type of Activities Implemented

Figure 5 presents the type of activities implemented by the WMO Secretariat in January-June 2014 along the six generic categories listed in Part 1, Section 2 (Methodology).

![Figure 5: Type of activities performed by Secretariat (Jan-Jun 2014)](image)

The largest percentage of WMO activities (23%) represented activities of or support to technical commissions, regional associations and working groups of the WMO Executive Council. A fifth involved the organization of or participation in meetings and workshops, including preparation of relevant documents, and the development of technical regulations and manuals. A roughly similar proportion (18%) were related to the development of technical regulations and manuals. Fifteen percent were linked to training, capacity building and infrastructure development. Fewer activities
fell within the remaining two categories. Specifically, 14% were related to internal activities in support of Secretariat functions and infrastructure and 10% provided or supported the development of working papers, plans, guidelines, questionnaires, etc.

Table 2 presents the percentage of activities which fell within these six categories per ER.

Table 2: Type of Activities Implemented (by ER) in %

<table>
<thead>
<tr>
<th>Type of activity (%)</th>
<th>ER 1</th>
<th>ER 2</th>
<th>ER 3</th>
<th>ER 4</th>
<th>ER 5</th>
<th>ER 6</th>
<th>ER 7</th>
<th>ER 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organize, prepare documents, participate in and report on meetings and workshops</td>
<td>50%</td>
<td>48%</td>
<td>9%</td>
<td>17%</td>
<td>11%</td>
<td>12%</td>
<td>43%</td>
<td>0%</td>
</tr>
<tr>
<td>2. Provide or support development of working papers / plans / guidelines / surveys, etc.</td>
<td>15%</td>
<td>14%</td>
<td>26%</td>
<td>9%</td>
<td>0%</td>
<td>6%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>3. Maintain, develop and publish technical regulations / manuals / scientific and technical reports</td>
<td>0%</td>
<td>10%</td>
<td>26%</td>
<td>25%</td>
<td>68%</td>
<td>6%</td>
<td>24%</td>
<td>5%</td>
</tr>
<tr>
<td>4. Support TC, RA and EC/WGs, monitor, review and follow up on activities and provide technical and scientific advice</td>
<td>25%</td>
<td>5%</td>
<td>24%</td>
<td>34%</td>
<td>14%</td>
<td>15%</td>
<td>5%</td>
<td>33%</td>
</tr>
<tr>
<td>5. Organize training, capacity building and infrastructure development activities</td>
<td>3%</td>
<td>19%</td>
<td>3%</td>
<td>8%</td>
<td>4%</td>
<td>50%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>6. Internal activity in support of Secretariat functions and infrastructure</td>
<td>8%</td>
<td>5%</td>
<td>12%</td>
<td>7%</td>
<td>4%</td>
<td>11%</td>
<td>24%</td>
<td>54%</td>
</tr>
</tbody>
</table>

PART 3: Performance by Expected Results

EXPECTED RESULT 1

a. Status of Activities, Timeliness and Cost

As presented on Figure 6, 13% percent of the activities planned for the year were completed in the period January-June 2014, 56% were ongoing, 21% were recurrent and 10% remained to be implemented. Recurrent activities involve activities of continuous, periodic nature, such as support to the presidents of technical commissions, operating expenses, etc.

As evident from Figures 7 and 8, the majority of activities were implemented on time (80%) and within the budget (70%). The “Advisory services on emerging issues of Emergency Response Activities” was both lagging behind in terms of implementation and overspending (see Constraints below). Whereas most of the JCOMM Expert Team meetings on emerging issues took place as planned, they absorbed more funds than envisioned. The activities of the CAgM OPAG 2 were slightly behind schedule but within the planned budget as of June 2014. The meetings on Air Transport Modelling had been rescheduled. On Figures 7 and 8, N/A refers to forthcoming or recurrent activities for which measuring timeliness is not relevant.
b. **Constraints**

All three GFCS activities received a yellow alert status due to the following risks and constraints identified:
- Low level of contributions to the GFCS Trust Fund, which is considered to put at risk the organization of meetings of the Intergovernmental Board on Climate Services;
- More staff is needed to be able to respond to the increasing needs for support from Members and partners. Given that only two posts are covered by the Regular Budget, additional staff can only be hired subject to the availability of extra-budgetary funds.
- In Senegal, additional resources will be required to support implementation of the action plans developed on the basis of identified gaps and priorities.

Other ER 1 activities assigned a yellow alert status include:
- The “Advisory services on emerging issues of Emergency Response Activities” involves experts from different technical commissions which makes coordination difficult and requires more funds;
- Two CBS Expert Team on Nuclear power plant sitting and Operations (unspecific reasons).

c. **Highlights of Outputs/Deliverables**

**Global Framework for Climate Services (GFCS)**
- National Consultations held in Malawi, Senegal and Tanzania;
- Regional consultation conducted for the Pacific Island Developing States;
- A Climate and Health Office established to enable more support to implementation of the health component of the GFCS;
- A meeting of the Management Committee of GFCS held.

**Public Weather Services**
- Members of the CBS OPAG on PWS Coordination Team (ICT) met in Melbourne, Australia (2-6 June 2014). The ICT transformed the three PWS expert teams into new ones with new Terms of Reference to better facilitate the implementation of the WMO Strategy for Service Delivery.
- The CBS OPAG on Public Weather Services Expert Team on Services and Products Innovation and Improvement (CBS/OPAG-PWS ET/PIII) met in Hong Kong, China (19-23 May 2014). They made important decisions in the improvement by NMHSs in the areas of (1) nowcasting; (2) communicating uncertainty; (3) the “big data” problem – making the best use of data for forecasters; (4) the use of new technologies, especially mobile apps, in service delivery; and (5) spatial data and Geographical Information Systems (GIS)-based services.
They also discussed the role of the Team in the Implementation of “The WMO Strategy for Service Delivery.”

Agricultural Meteorology

- Draft version of brochures on roving seminars and rain gauges completed;
- CAgM Management Group established and 2014-2018 workplan approved;
- CAgM report published.

Emergency Response

- A second draft of revised WMO Technical Note 170 being prepared.

Aeronautical Meteorology

- Meetings of all eight CAeM expert teams on emerging issues of aeronautical meteorology held and reports available on the website;
- Meeting of the CAeM Management Group held in June 2014.

EXPECTED RESULT 2

a. Status of Activities, Timeliness and Cost

With 92% of activities in progress and 4% completed, work on ER 2 activities was well on track. Only 4% of activities had not started yet as of June 2014. These involved survey and symposia related to disaster risk reduction.

Regarding timeliness, all ER 2 activities took place as scheduled, as evident from Figure 10. None were rescheduled or lagging behind. The meeting of the Steering Group of the Severe Weather Forecasting Demonstration Project (SWFDP) took place ahead of schedule. In terms of expenditure, the sessions of the RA I Tropical Cyclone Committee, the RA IV Hurricane Committee and the workshops on RA IV Hurricane Forecasting were more costly than planned, accounting for the 12% ‘over budget’ on Figure 11. Expenditure for the four regional SWFDP projects and the meeting of the Steering Group was less than anticipated but their status was still ‘in progress’ as of June 2014 so spending might change.
b. Constraints

A yellow alert status was marked for the following three ER 2 activities due to inadequate funds available:

- RA I Tropical Cyclone Committee Sessions;
- RA IV Hurricane Committee Sessions;
- Workshops on RA IV Hurricane Forecasting.

The budget available for covering the operating costs of the Tropical Cycle Programme was also reported insufficient.

b. Highlights of Outputs/Deliverables

Severe Weather Forecasting

- Draft new Manual on Global Data-Processing and Forecasting System (GDPFS) near completion;
- 30 forecasters trained on severe weather forecasting and warning services;
- Implementation Plans for the SWFDP-Southern Africa, SWFDP-South Pacific, SWFDP-Eastern Africa, SWFDP-Southeast Asia, and SWFDP-Bay of Bengal developed;
- 23 forecasters in RA IV and 15 in the Southern hemisphere trained on hurricane forecasting;
- Two regions implemented Storm Surge Watch Scheme;
- Regional Operational Plans developed for RA I and RA V Tropical Cyclone Committees, the RA IV Hurricane Committee, and the Panel on Tropical Cyclones;
- Regional Typhoon Operational Manual developed;
- Areas for improvement in tropical cyclone forecasting and warning identified at the meeting of the Regional Specialized Meteorological Centers (RSMO) - Tropical Cyclone Warning Centers (TCWC).

Disaster Risk Reduction


Agricultural Meteorology

a. Status of Activities, Timeliness and Cost

As evident from Figure 12, the majority of ER 3 activities were either in progress (59%) or were related to recurrent functions of the Secretariat (26%), such as coordination support to expert teams and panels. Twelve percent of activities were completed, mostly involving the organization of meetings and the provision of technical guidance. Only 3% of activities remained to be undertaken as of June 2014.

Close to two-thirds of activities were implemented on time, as shown on Figure 13. Nine percent had been rescheduled, including the development of Climate Information and Prediction Services (CLIPS) toolkit and showcase projects as well as the translation and publication of the Guide to Climatological Practices in French and Russian. The implementation of several activities (12%) was behind schedule. These included the development of guidance material on best practices on the use of climate information for agricultural risk management, the development of Global Seasonal Climate Update, the update of the Hydrology and Water Resources (HWR) and Commission on Hydrology (CHy) websites, support to INFOHYDRO, and development of High Quality Climate Data Set and joint climate activities with WIGOS. Recurrent activities are marked with N/A on Figure 13.

In terms of expenditure, most activities (85%) were implemented within their allotted budget. The growing number of RCOFs resulted in more costs than initially foreseen, accounting for the 3% indicated in Figure 14 as ‘over budget.’ Nevertheless, 6% of ER 3 activities absorbed less than estimated. These involve support to the coordination of the CCI Open Panel on Climate Analysis and the development of High Quality Climate Data Set and joint climate activities with WIGOS. The latter activity was behind schedule, as indicated above, and would most likely increase spending as implementation progresses.

b. Constraints

- As many as 14 activities (or 41% of all ER 3 activities) were assigned a yellow alert status:
  - Members having difficulties sharing data (in relation to the development of High Quality Climate Data Set);
  - The Task Team of the CCI Open Panel on Climate Analysis, Assessment and Monitoring encountered difficulties in achieving consensus on scientific issues.
- Other activities with a yellow alert status included: (1) Development of guidance and best practices on use of global/regional climate products; (2) Development of Climate Information and Prediction Services (CLIPS) toolkit; (3) CLIPS showcase projects to demonstrate the benefits of climate services; (4) Development of Global Seasonal Climate Update; (5) Support to users of climate services through regional workshops and national and Regional Climate Outlook Forums; (6) Publication of manuals and technical documents related to climate information products; (7) Support for World Climate Applications and Services Division participation in UN agency activities; (8) Support to President of CCl; (9) Support to joint CCI-WCRP activities on regional climate predictions and projections; (10) Publication of guidance on climate information for climate risk management and adaptation; (11) Meetings of CCI-Management Group; (12) Updating of HWR and CHy websites and support to INFOHYDRO. In its report, CLW did not specify the reason for assigning this alert status.

c. Highlights of Outputs/Deliverables

Climate Monitoring and Watch Systems

- A document on the definition of extremes drafted as a result of the meeting of the Task Team on the Definition of Extreme Weather and Climate events in February 2014;
- Provision of the WMO Annual Statement on the Status of Global Climate in 2013 published in March 2014;
- A new workplan on climate change indices developed for the period 2014-2018 at the meeting of the Expert Team on Climate Change Detection and Indices (ETCCDI) in March 2014;
- Publication of modern climate data management specifications being developed, as a new WMO standard for climate data management;
- The International Climate Assessment and Data Sets (ICA&D) is progressing with stronger support from WMO, KNMI and some RCC (ACMAD, CIIFEN).

Climate Prediction and Risk Management

- Several RCOF sessions were held around the world;
- Draft version of a brochure on the use of climate information for agricultural risk management developed;
- Global Seasonal Climate Update trial phase underway;
- Guide to Climatological Practices (WMO No 100) posted in Arabic, Chinese and Spanish on the web;
- ENSO Update, GSCU trials and RCC implementation strategy for Central Africa;
- All OPACEs (4) of CCI completed their tasks before CCl-16.

Hydrology and Water

- Technical Guidance on application of climate information for water managers published;
- A number of manuals on QMF-Hydrology in the process of translation.

**EXPECTED RESULT 4**

a. Status of Activities, Timeliness and Cost

As evident from Figure 15, work was in progress or involved activities of recurrent nature for about three-quarters of the ER 4 activities. While 12% had been completed, work remained to be undertaken on 14% as of June 2014. Most involved activities of the Instruments and Methods of Observation Programme (IMOP), of which five were lagging behind schedule and stand for a quarter of the late activities presented on Figure 16. These include implementation of WIGOS instrument standards in the regions, consultancy in support of CIMO standardization activities, meetings of the CIMO Task Team (ISO Standard) and the CIMO Intercomparison Project Team, and the secondment of experts for intercomparison. Several consultancies for IMOP were initiated.
but were lagging behind schedule. These involve work on the development of IMOP standards in the context of WIGOS (e.g. CIMO Guide and Manual) and a consultancy on intercomparisons.

Whereas 75% of ER 4 activities were implemented on time, it should be noted that a fifth were lagging behind their planned timeline as of June 2014. Apart from the IMOP activities listed above, other activities experiencing delays were linked to advisory services and staff missions related to WIGOS implementation, the establishment of a Global Cryosphere Watch (GCW) Project Office, meetings of the Expert Team on Satellite Systems (ET-SAT), enhancement of the space-based observing systems within WIGOS, satellite observation integration, and work of the Expert Team on Marine Climatology, the ICG-WIGOS Task Team on Metadata (TT-WMD), and the Implementation Coordination Team (ICT) on Information Systems and Services (ISS). The meeting of the RA II Technical Workshop on Aircraft Meteorological Data Relay (AMDAR) was postponed to 2015.

Only one activity – meetings of the IPET-WIFI Task Team on Information Resource – amounting to 1% on Figure 15 was cancelled. Another one, the Port Meteorological Officers Workshop, was rescheduled.

The vast majority of ER 4 activities were implemented within budget, as shown on Figure 17. The 5% which spent less than originally planned were related to some of the late activities listed above. Only 3% exceeded their allocated budget. These activities were related to the meetings of the International Organizing Committees (IOCs) for intercomparisons and the meeting of the expert teams on training needs. The Task Team on Aviation XML also overspent due to the complexity of the work and timeline pressures from ICAO. N/A on Figure 17 stands for activities that have not started yet and cancelled/rescheduled activities.

b. Constraints/Risks

- The establishment of GCW Project Office was marked with a red alert status due to delays in implementation.
- 16 more ER 4 activities received a yellow alert status:
  - The Port Meteorological Officers Workshop experienced timing issues due to the late reply from Chile.
  - The removal of MS Access from work PCs had a detrimental effect on the OBS work flow, especially for WIS and OIS departments that work extensively with Access. The interim solution proved frustrating.
- No host and venue were determined yet for the RA I Technical Workshop on AMDAR.
- The RA II Technical Workshop on AMDAR experienced delays and was postponed to 2015 due to initial difficulty in obtaining a decision to proceed.
- The meeting of CIMO Expert Team on Aircraft-based Observations was considered at risk due to regular budget constraints.
- The lack of available experts prevented the timely organization of the Expert Team Meetings on Satellite Systems (ET-SAT).
- Insufficient staff resources for IT support of implementation of the Rolling Requirements Review process.
- Insufficient staff resources for project support of satellite observation integration.
- Lack of availability to participate in coordination mechanisms of UN agencies on satellite matters.
- The Space Architecture for Climate Monitoring experienced issues related to the strategic positioning of WMO with CEOS and CGMS, its partnership with space agencies, and the lack of direct leadership by WMO.
- Lack of SAT staff for enhancement of the Space based observing systems within WIGOS.
- ICG-WIGOS Task Team on Metadata (TT-WMD) – unspecified reasons.
- The lack of staff resources and funding might inhibit a meeting of training experts to be held before CBS Ext 2014.
- Lack of adequate staff resources for GCOS.

**c. Highlights of Outputs/Deliverables**

**Instruments and Methods of Observation**

- Improved relationship with manufacturers in implementation of the Instruments and Methods of Observation Programme, information on products available on the market, and activities coordinated with other programmes/agencies;
- Preparation for CIMO-16 session and following inter-sessional period finalized;
- Preliminary programme of CIMO TECO conference finalized;
- Plans for SPICE data evaluation completed following two meetings of the International Organizing Committees (IOCs) for intercomparisons.

**Availability and Use of Satellite Data and Products**

- Input to ICAO on future space weather services;
- Review of satellite potential to support GFCS;
- Increasing audience of Observing Systems Capability Analysis and Review Tool (OSCAR/Space);
- Active scientific progress on satellite calibration methods;
- Outline of new Integrated Global Data Dissemination Service (IGDDS) strategy and expansion of Regional Atovs Retransmission Service (RARS);
- Progress on the development of SCOPE-Nowcasting concept;

**Global Observing System (GOS) and WMO Integrated Global Observing System (WIGOS)**

- Draft revision of the Manual on GOS, draft of WIGOS Manual;
- Evaluation of the Centre for Marine Meteorological and Oceanographic Climate Data - China (CMOC/China) progressing and recommendations made by the fourth JCOMM Workshop on Advances of Marine Climatology (CLIMAR-4);
- GOS/WIGOS Regulatory Material prepared as a result of expert meetings, and will be included in Manual and Guides to WIGOS.
- JCOMM Data Management plan and implementation details updated;
- JCOMM observation metrics and JCOMMOPS budget reporting progressing;
- Specifications for OSCAR developed, project team established, and MoU with MeteoSuisse concluded in relation to the development of the WIGOS Operational Information Resource.
- Working structure of Global Cryosphere Watch in place, the establishment of CryoNet started, and website and portal set up.
- Updated requirements for the respective application areas, updated statements of guidance, and finalized observing design principles by CBS Expert Team on the Evolution of the Global Observing Systems (ET-EGOS) and the OPAG-IOS Inter Programme Expert Team on the Observing System Design and Evolution (IPET-OSDE).
- Development of GCW, GIPPS, AntON, Services White Paper.
- Final report available describing the developments in polar observations, research and services, notably, AntON, GCW, GIPPS, IPPI.

Global Climate Observing System (GCOS)

- GCOS is serving all activity types 1-6; some were completed, others are still in progress;
- All panels are assessing the status of the implementation of the global observing system for climate and reviewing the Essential Climate Variables templates;
- A work plan was approved which will submit to sponsors and UNFCCC a status report in 2015 and a new implementation plan for 2016.

WMO Information System (WIS)

- Contributing Expert Teams of the Implementation/Coordination Team on Information Systems and Services (ICT-ISS) met and are in the process of preparing reports for consideration of ICT-ISS in July.
- A WIS monitoring workshop in January 2014 prepared standards and practices for consideration of OPAG-ISS expert teams and ICT-ISS, to be considered by CBS Ext 2014.
- WIS competencies and training needs were developed by operations experts. There is a need to hold a meeting of training experts to review the recommended output of the workshop from a trainer perspective.
- Regulatory material from previous years’ work was published (e.g. Review of WMO Technical Regulations No. 49, update of the WIS related manuals and guides).
- Good progress achieved on support of IOC Tsunami services.
- Material for consideration of CBS Ext 2014 prepared. There is a need to meet and review WMO position paper on WRC-15 Agenda after it is published in August.
- Meteorological requirements identified for metadata support of WIGOS implementation.

**EXPECTED RESULT 5**

**a. Status of Activities, Timeliness and Cost**

As of June 2014, work had started on 71% of ER 5 activities, as demonstrated by Figure 18, while a quarter of activities remained to be initiated. One activity – “Nowcasting research working group, project and other technical meetings with JONAS, PWS and related publications” was cancelled, accounting for the 4% indicated on Figure 18.
Figures 19 and 20 illustrate the timeliness of activity implementation and the cost of implementation relative to the planned budget. All ongoing activities related to ER 5 were executed on time and within the assigned budget. N/A stands for the quarter of activities that have not been started yet.

### b. Constraints

- All ER 5 activities were assigned a green alert status indicating that no risks or constraints were identified in the current reporting period.

### c. Highlights of Outputs/Deliverables

**Weather Research**

- Publication of Sand and Dust Storm Activity Report for 2010-2012;
- Implementation Plan developed for Southern China Monsoon Experiment by the Working Group on Tropical Meteorology Research (WGTMR);
- Action Plan for 2014-2015 developed by:
  - WGTMR;
  - Joint Working Group on Forecast Verification Research (JWGFVR);
  - Expert Team on GAW World Data Centres.
- Observation Plan for Lake Victoria Project developed by the Working Group on Nowcasting Research.

**Atmospheric Chemistry Observations**

- The participation of scientists to two GAWTEC training courses supported as well as that of experts to the European Research Course on Atmospheres;
- Strategic and Implementation plans for 2014-2015 developed by the Scientific Advisory Group GURME;
- Action Plan for 2014-2015 developed by:
  - Task Force on Measurement and Modelling;
  - Scientific Advisory Group on Precipitation Chemistry.
- Preparation of a publication on aerosol research ongoing.

**Commission for Atmospheric Sciences**

CAS-16 Report published and CAS Scientific Guidance and Action Plan developed.
a. Status of Activities, Timeliness and Cost

As indicated on Figure 21, work was completed on 12% of the activities planned under ER 6. Over thirty percent were underway, while 12% remained to be initiated. Activities of recurring nature, such as assistance to the presidents of RAs, regular training activities, and various operating expenses accounted for 38% of the reported work. Cancelled activities amounted to 4% of total activities, and included two trainings on the new Terminal Aerodrome Forecast system, a training seminar on instruments, a symposium on seasonal climate outlooks, and the development of WMO certification procedures for climate specialists. Regarding the latter, competency-based approaches were explored instead of certification; the symposium was integrated with the RCOF sessions.

As presented on Figures 22, 82% of ER 6 activities were implemented on time. Nine percent were lagging behind but their expenditure was accordingly less than planned or remained within their budget. Late activities included a survey on Member’s training needs, a training seminar on curriculum development, regional training seminars on capacity development, the development of climate curriculum modules for use in RTCs and national training programmes, and four training seminars on industry requirements. The provision of guidance on climate monitoring and watch systems to support GFCS implementation was also lagging behind schedule but spent less than envisioned as a result. The same applied to the regional workshops on climate monitoring and climate watch systems. Only one activity – a training course on aeronautical meteorology – was rescheduled due to the outbreak of Ebola in Western Africa.

Spending was also on track, with three-quarters of activities implemented within their planned budget, as evident from Figure 23. About 8% of activities absorbed more resources than planned but were delivered on time. Two of the overspending activities were related to coordination work with other UN and international organizations, as related to the Education and Training Programme and the Fellowships Programme. The following capacity building events also cost more than initially budgeted: RA-I training courses on tropical cyclone forecasting, workshops on climate forecasting, specialized training in applications, and the promotion and support of distance learning and e-learning.

A slightly lower portion of activities (5%) exceeded the expected expenditure as of June 2014 (e.g. training course on hurricane forecasting, the production and exchange of training materials, and the two climate monitoring activities mentioned above).
N/A in Figures 22 and 23 stands for forthcoming and cancelled activities for which timeliness and cost are not relevant.

**b. Constraints/Risks**

- A yellow alert code was assigned to several ER 6 activities due to the following risks and constraints encountered:
  - Insufficient resources for the RA-I training on tropical cyclone forecasting.
  - Follow-up workshops needed to boost the implementation of climate watch systems at the national level as Members were not making substantial progress.
  - Workload could cause deferment of the Training Seminar on Curriculum Development to 2015.
  - The final draft of training publications to Members and RTCs could run into delay.
  - The Training Course on Oceanographic Observations and Networks and the Training Course on Climate Monitoring and Watch Systems were awaiting request from OBS for funds.
  - In relation to the workshops and meetings of the Regional Meteorological Data Communication Network, GISC Teheran was blocked by the UN and EU Sanctions.

- A red alert code was assigned to the following activity:
  - The development of climate curriculum modules for use in RTCs and national training programmes was reported to be at risk. Implementation had not started yet and was behind schedule.

Some additional risks and constraints were identified which, albeit not having prevented activity implementation, had hampered it:

- Lack of staff and budget caused the cancellation of a few activities related to the RA-II and RA-V Working Groups, the RA-V Working Group on Tropical Cyclones, and assistance to the President of RA-II.
- The budget allocation for coordination of ETR matters with other UN and international organizations was very small, and thus easy to overspend.
- The disaster caused by Typhoon Haiyan in the Philippines caused the change of venue for the RA-V session to Indonesia.
- Some issues were encountered in terms of transferring funds to Morocco for regional training seminars for national trainers.

**c. Highlights of Outputs/Deliverables**

**Training**

- Two forecasters trained on storm surge at Indian Institute of Technology;
- Fourteen forecasters trained on tropical cyclone forecasting;
- Five forecasters provided attachment training;
- Four persons from LDCs supported to attend the Open Science Conference in Canada;
- Two RTCs supported to attend e-Learning in Africa course;
- Roving seminars for farmers held in Peru and Romania;
- A series of training courses held on hydrology and water resources, including on Quality Management Framework;
- An international workshop on Data Rescue focusing on Indian Ocean rim countries and Islands held in April 2014. An implementation plan of an Indian Ocean Data Rescue Initiative (INDARE) was drafted and Steering Committee for INDARE established.
- The Regional Climate Center Climate Monitoring Node supported NMHSs in South Eastern Europe to monitor and watch extreme flooding events which occurred in early spring 2014.
- Regional Meteorological Data Communication Network (RMDCN) Next Generation operational. Some work to be done on GISCs Iran and Brasilia to complete migration project.
Fellowships
- Coordination and resource mobilization missions to Italy, Korea and France.

Regional Offices
- The Regional Seminar in RA-V streamlined the priorities and challenges identified in the Survey.
- RA-V Session identified priorities and challenges, established a new working mechanism, and provided recommendations for the 3rd SIDS Conference.

EXPECTED RESULT 7

a. Status of Activities, Timeliness and Cost

As illustrated by Figure 24, an equal portion of ER 7 activities (43%) were either in progress or were of recurrent nature linked to the execution of continuous functions of the Secretariat (e.g. representation and coordination functions, support to UN-Water activities, support to meetings of UNFCCC, contribution to IPCC and the UN system, organization of press conferences, etc.). Implementation remained to be initiated on 14% of the activities planned for the 2012-2015 financial period.

Judging from the results presented in Figure 25, there were no issues related to the timeliness of implementation of ER 7 activities. 90% were on time, and work on only one activity (the WMO/UNESCO Liaison Committee for Hydrology) was behind schedule as of June 2014. Another activity involving the development of climate-related guidance materials and publications was rescheduled. Each of these two activities individually stands behind the 5% ‘behind schedule’ and ‘rescheduled’ on Figure 25.

Regarding the cost of implementation, 57% of activities were implemented within budget, as evident from Figure 26. Expenditure exceeded the planned budget for three activities, amounting to 14% of the overall activities under ER 7. These included support to UN-Water activities, WMO contribution to the United Nations system, and the production of WMO Bulletins. An equal portion of activities (14%) consumed fewer resources than initially anticipated: the celebration of the World Meteorological Day and communication and outreach activities. N/A stands for forthcoming or rescheduled activities.
b. Constraints/Risks

A yellow alert status was assigned to five ER 7 activities due to the following risks and constraints:

- Risk of a request for higher WMO contribution to the UN System;
- Delays in the development of climate-related guidance materials and publications;
- Delays in the work of the WMO/UNESCO Liaison Committee for Hydrology;
- WMO Contribution to IPCC (unspecified reason);
- Information and communication technology charges for the CLW Department (unspecified reasons).

c. Highlights of Outputs/Deliverables

Leadership and Partnerships

- WMO was well placed in UN-Water activities and enjoyed increased exposure of its capabilities. Improved relationships with UNESCO further enabled enhanced guidance to NMHSs on water-related issues.
- In the area of climate change, the leadership position of WMO was boosted by the role of the ASG as Chair of the HLCP Working Group on Climate Change. A number of guidance materials were also produced on climate related issues.
- WMO Statement at Subsidiary Body for Scientific and Technological Advice 40 (SBSTA-40) and WMO side event with other partners.
- Other noteworthy outputs included financial and in-kind contributions to IPCC, GCOS, WCRP, UN Water, Rio+20 follow-up, post-2015 development agenda, CEB/HLCP/HLCM participation, COPs, GPDRR, etc.

Communications and Outreach

- Celebration of World Meteorological Day 2014;
- “WMO for Youth” website launched (http://www.wmo.int/youth);
- “A Career in Meteorology” (WMO No-1126) published;
- Successful launch of the WMO Statement on the Status of Climate 2013;
- A draft version of Brochure on Climate and Biodiversity developed.

EXPECTED RESULT 8

a. Status of Activities, Timeliness and Cost

Given the continual nature of work implemented under ER 8, the status of almost two-thirds of activities (62%) was recurrent, as presented on Figure 27. Ten percent of activities were completed, about a quarter was in progress, and only 5% remained to be initiated, including the Seventeenth WMO Congress and EC-67.

As evident from Figure 28, all planned activities were implemented or were being implemented on time. Figure 29 further indicates that three-quarters of activities were implemented within the planned budget. Ten percent of activities absorbed more funds than initially allocated. These included assistance to the President of WMO, communication and
information technology expenses of the Internal Oversight Office (IOO), and language and conference services related to the Intergovernmental Board on Climate Services. Several activities (external audit fees, WMO contribution to the Joint Inspection Unit (JIU), and operating expenses of IOO), accounting for 8% of ER 8 activities, effectuated savings as of June 2014. N/A stands for activities which have not started yet.

b. Constraints

- The following activity was assigned a red alert status:
  - Election of Officers by correspondence + IMO prize: future service (e.g. for Congress) not guaranteed;

- Three more activities were marked with a yellow alert status indicating issues in implementation which the respective Department was in the course of resolving:
  - Uncertainty of EC-66 budget allocation;
  - Need to improve budget management in relation to assistance to the President of WMO;
  - Low level of contributions to GFCS Fund (see Cross-Cutting Activities).

c. Highlights of Outputs/Deliverables

Strategic Planning, Monitoring and Evaluation (M&E)

- The WMO Strategic Plan 2016-2019 was in its final stages of preparation as of June 2014. The draft SP was reviewed by the EC WG/SOP, which recommended it to EC-66. The latter decided to revise the SP to enhance the focus of priorities.
- The draft WMO Operating Plan 2016-2019 was prepared and presented to EC-66. It will be revised to align it with any proposed changes in the SP.
- The three meetings of Working Group on Strategic and Operational Planning (WG/SOP) were held as planned and prepared the draft SP 2016-19 for consideration by EC-66. The Task Team on Monitoring and Evaluation (M&E) established by WG/SOP-3 made recommendations on further improvements to the WMO M&E system, including the Key Performance Indicators (KPIs) and data collection and analysis.
- The WMO Operating Plan was reviewed to present activities for the period 2014-2015 and reflect changes to the KPIs.
- A Mid-Term Monitoring and Performance and Evaluation Report for the period 2012-2013 was prepared and presented to EC-66.
- The WMO Risk Management Policy was revised and approved by EC-66 to include consideration of opportunities when managing risks. Staff were informed of WMO Risk Management Policy and Framework through Service Note No. 4/2014. Two meetings were held to review the risk involving WMO.
- The Strategic Planning and Risk Management Officer attended a meeting of the African Centre of Meteorological Applications for Development (ACMAD) which was focused on
formulating a communication strategy for the institution. He used his presence to guide the participants in compiling information for the strategy. It should be noted that the majority of Members of ACMAD are least developed countries.

Internal Oversight

- The external auditor provided unqualified opinion on the financial statements for 2013. The report was submitted to FINAC and EC.
- The report on JIU activities and the Annual Accountability Report of the IOO were submitted to EC-66.

Conference, Interpretation and Documentation Services

- Conference and interpretation services were provided to 59 major meetings of EC, subsidiary bodies, IPCC, WCRP and GCOS, including: six sessions of FINAC, WMO Bureau and EC, and meetings of presidents of RAs and TCs; 30 sessions of subsidiary bodies of EC, the Audit Committee, IPCC, WCRP, and GCOS (list available upon request); and 23 sessions of Regional Associations, Technical Commissions and their subsidiary bodies.
- Documentation and translation services were provided to three sessions of RAs, TCs and EC as well as to the Hurricane Committee and FINAC.

Issuance of WMO publications and other written material

- 25 numbered publications were issued in a total of 198 language versions plus 19 flyers/brochures/folders were issued in a total of 18 language versions.

Sales and distribution of WMO published material

- 248 printed copies of 39 different titles sold. In addition, subscriptions to the Bulletin, which are composed for each issue of 130 copies in English, 24 copies in French and 3 copies in Spanish, and 9 CD copies of WMO-9, Weather Reportings, were sold.
ANNEX 1:

LIST OF EXPECTED RESULTS

ER 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 relevant societal sectors

ER 2: Enhanced capabilities of Members to reduce risks and potential impacts of hazards caused by weather, climate, water and related environmental elements

ER 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

ER 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

ER 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

ER 6: Enhanced capabilities of NMHSs, in particular in developing and least developed countries, to fulfill their mandates

ER 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 strategic issues

ER 8: An effective and efficient Organization