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.

Two six-month reports on progress on achieved deliverables were released in 2012. The current report provides more details, including timeliness, cost of activities compared to the budget, status of implementation, and grouping of activities into categories to increase the report’s utility to departments, programme managers and senior management. The purpose is to ensure that implementation of the Strategic Plan and Operating Plan is on track, that issues are detected early on, and that corrective action is taken. The report covers regular budget and some extra-budgetary activities.

2. Methodology

The current report measures progress on deliverables for January-June 2013 in accordance with the WMO Operating Plan 2012-2015. To this end, the Secretariat’s Departments reported against 444 activities planned for 2013 along the following parameters:

(1) Status of activities (completed, ongoing, forthcoming, cancelled, continuous);
(2) Timeliness (on time, ahead of schedule, behind schedule, rescheduled, N/A);
(3) Cost (within budget, under budget, over budget, N/A)

Given the large number of activities in the Operating Plan, Departments were asked to group activities by (i) programme objective and (ii) type of activity. The former refers to programme objectives as defined by Congress or other relevant bodies/basic documents. The latter links activities to the following generic categories capturing the common activities of the WMO Secretariat:

(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

The intention was to highlight notable progress in implementation of activities as well as encourage a results-oriented account of implemented activities. Departments further identified constraints and risks encountered in the course of activity implementation. Such information on progress, problems and performance is central to the successful implementation of the WMO Strategic Plan and indispensable for effectively achieving results through the efficient use of scarce resources.
PART 2: Overall Performance

The following are only highlights of the Secretariat’s overall performance in implementation of the activities in the Operating Plan 2012-2015 for the period January-June 2013. A summary of progress and issues concerning the status, timeliness and costs related to implementation of activities associated with specific Expected Results (ERs), 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 all activities listed in the Operating Plan 2012-2015 for the year 2013. As of June, almost two-thirds are ongoing or are of continuous nature (e.g. support to the presidents of technical commissions, operating expenses, etc.). The implementation of 12% of activities has been completed, whereas action remains to be undertaken on 25%. Only 2% of the planned activities have been cancelled for reasons discussed in Part 3.

Figure 2 presents the status of activities by ERs. Completed activities range from 0-19% across the ERs, with the highest percentage of completion reported under ER 4 and ER 5 (19%). ER 2 is the only ER with no activities completed in the reporting period. For ER 1 and ER 3, the completion rate is 9% and 7%, respectively, whereas it is 11% and 12% for ER 6 and 7, respectively. Only 5% of ER 8 activities are reported as completed but many of the activities under this ER are of recurring character, and hence will remain as ‘ongoing’ or ‘continuous’ for the rest of the financial period. To avoid any confusion, consideration will be given on merging these two categories in the next reporting period or providing more precise definitions.

ER 5 is the only ER where work has started on all planned activities and none have been cancelled. The great majority of ER 7 and 8 activities (70-80%) are also in progress, whereas the proportion of ongoing activities ranges from 46% to 59% for the rest of the ERs.

* Reasons for delays and/or deviations are reported in Part III
The greatest portion of remaining work is under ER 1 and 2 where 38% and 35% of activities, respectively, are yet to be initiated. Work on a third of the ER 3 and 4 activities and a quarter of the ER 6 ones is also expected to start in the second half of the year, as evident from Figure 2. Few activities are forthcoming under ER 7 and 8 (8% and 11%, respectively).

2. **Timeliness of Implementation**

As evident from Figure 3, most activities that are implemented are according to schedule. All ER 5 activities are on time, and 84-88% of activities are executed on schedule for ER 1, ER 2, ER 7 and ER 8. This proportion is lower for ER 3, ER 4 and ER 6 where roughly two-thirds of activities are reported to be on time. Quite a few ER 3 and ER 6 activities (13-15%) have been rescheduled and 14% of the ER 4 activities are running behind schedule. More details on the reasons and constraints encountered are available in Section 3, but it should be mentioned here that activities related to the WMO Integrated Global Observing System (WIGOS) account for the greatest portion of activities behind schedule.

![Figure 3: Timeliness of implementation (by ER), Jan-Jun 2013](image)

For the rest of the ERs, the share of activities behind schedule is relatively low: 2-4% for ER 1, ER 7 and ER 8; 6-8% for ER 2, ER 3 and ER 6. No activity has been implemented ahead of schedule under any of the ERs. On Figure 3, 'not applicable' refers to forthcoming or continuous activities for which measuring timeliness is irrelevant.

3. **Cost of Implementation**

On average, over three-quarters of the overall planned activities have been implemented within the allotted budget. This number is highest for ER 5 (89%), ER 2 (88%) and ER 8 (86%), as presented on Figure 4.

For the rest of the ERs, the share of activities that are implemented within budget ranges between 72% and 75%. ER 2 is the only ER for which costs have been less than budgeted for 12% of activities and no activity has taken up more funds than initially allotted. Savings ranging from 1% to 8% are also reported for the rest of the ERs (except ER 5). However, these spare funds will most likely be offset by a similar portion of activities that have taken up more money than expected. Eleven percent of ER 1 and ER 5 activities are reported to be over budget and are unlikely to be balanced out, given that only 2% of ER 1 activities and none of the ER 5 activities have spent less than originally budgeted. The same situation is valid for ER 4 where 13% of activities have absorbed more funds than expected.
4. **Expenditure by Expected Result**

Table 1 presents expenditure across all the ERs for the period January 2012 – June 2013 against the biennial budget. As illustrated, the level of expenditure excluding requisitions ranges from 67% to 96%, with the proportion of the total expenditure across the ERs being 87%.

**Table 1: Expenditure by ER (January 2012 – June 2013)**

<table>
<thead>
<tr>
<th>ER</th>
<th>Budget 2012-2013</th>
<th>Expenditure Jan 2012 – Jun 2013 (excl. requisitions)</th>
<th>Expenditure (excl. requisitions) / Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>29,199,700</td>
<td>27,152,336</td>
<td>93%</td>
</tr>
<tr>
<td>1</td>
<td>9,829,700</td>
<td>9,468,973</td>
<td>96%</td>
</tr>
<tr>
<td>2</td>
<td>4,443,000</td>
<td>2,997,702</td>
<td>67%</td>
</tr>
<tr>
<td>3</td>
<td>8,956,000</td>
<td>6,825,180</td>
<td>76%</td>
</tr>
<tr>
<td>4</td>
<td>14,455,700</td>
<td>12,229,522</td>
<td>85%</td>
</tr>
<tr>
<td>5</td>
<td>9,374,000</td>
<td>8,647,179</td>
<td>92%</td>
</tr>
<tr>
<td>6</td>
<td>23,097,700</td>
<td>16,745,355</td>
<td>72%</td>
</tr>
<tr>
<td>7</td>
<td>8,344,300</td>
<td>7,557,040</td>
<td>91%</td>
</tr>
<tr>
<td>8</td>
<td>30,299,900</td>
<td>28,390,610</td>
<td>94%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>138,000,000</strong></td>
<td><strong>120,013,897</strong></td>
<td><strong>87%</strong></td>
</tr>
</tbody>
</table>

5. **Type of Activities Implemented**

Figure 5 presents the type of activities implemented by the WMO Secretariat in January-June 2013 along the six generic categories listed in Part 1, Section 2 (Methodology).

Close to a third of activities are related to the organization of or participation in meetings and workshops, including preparation of relevant documents. Over a quarter represent activities of or support to technical commissions, regional associations and working groups of the WMO Executive Council. About a fifth of activities involve training, capacity building and infrastructure development. Fewer activities fall within the remaining three categories. Specifically, 10% provide or support the development of working papers, plans, guidelines, questionnaires, etc.; 9% are related to internal activities in support of Secretariat functions and infrastructure; and 7% are targeted at the development, publication and maintenance of technical regulations and manuals.

*ER 0 stands for apportioned costs*
Table 2 presents the percentage of activities which falls 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</td>
<td>38</td>
<td>63</td>
<td>26</td>
<td>26</td>
<td>61</td>
<td>21</td>
<td>64</td>
<td>0</td>
</tr>
<tr>
<td>and report on meetings and workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Provide or support development of working papers</td>
<td>10</td>
<td>25</td>
<td>22</td>
<td>15</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>plans / guidelines / surveys, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Maintain, develop and publish technical regulations</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>21</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>manuals / scientific and technical reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Support TC, RA and EC/WGs, monitor,</td>
<td>36</td>
<td>0</td>
<td>26</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>review and follow up on activities and provide technical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and scientific advice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Organize training, capacity building and</td>
<td>10</td>
<td>6</td>
<td>4</td>
<td>9</td>
<td>4</td>
<td>43</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>infrastructure development activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Internal activity in support of Secretariat</td>
<td>7</td>
<td>6</td>
<td>11</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>18</td>
<td>43</td>
</tr>
<tr>
<td>functions and infrastructure</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

PART 3: Performance by Expected Results

CROSS-CUTTING ACTIVITIES

a. Highlights of Outputs/Deliverables

Global Framework for Climate Services

- First session of the Intergovernmental Board on Climate Services (IBCS) held;
- A workshop on “Operational Climate Services: A Dialogue on Practical Action” organized as part of the IBCS session;
- A regional workshop on Climate Services at the National Level for the Caribbean organized in May 2013, in Port of Spain, Trinidad and Tobago. The workshop identified critical needs and priorities for the implementation of the GFCS in the region.
- A pilot project was conducted in Chad, complementing the initial pilots implemented in Burkina Faso, Mali and Niger. Specific outputs include (1) a National Consultation that developed a roadmap for the implementation of climate services in the country and (2) the recruitment of a consultant to develop an action plan for effective climate services.
b. **Constraints**

- Insufficient staff and lack of resources for the functioning of the GFCS governance structure.

### EXPECTED RESULT 1

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

As presented on Figure 6, nine percent of the activities planned for the year were completed in the period January-June 2013, 47% are ongoing, 38% are forthcoming and 6% are of continuous nature. The latter involve activities of recurring character, 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 (85%) and within the budget (78%). The development of guidance material on analysis and evaluation of agrometeorological data, products and services is the only activity that is currently lagging behind. Several activities have been rescheduled, including the two planned workshops on the implementation of Quality Management Systems (QMS) for marine meteorological and oceanographic services and two trainings on the new Terminal Aerodrome Forecast. The latter have been moved forward to 2014 in preparation of the Conjoint Session CAeM-ICAO. On Figures 7, N/A refers to forthcoming or continuous activities for which measuring timeliness is not relevant. Similarly, it relates to cancelled or forthcoming activities in Figure 8.

While expenditure is on track and within budget, 11% of ER 1 activities have absorbed more resources than initially planned. These involve support to the President of CAeM and the co-Presidents of JCOMM, meetings on aviation-related QMS, meetings of the JCOMM Expert Team on emerging issues, and workshops on the implementation of the Coastal Inundation Forecasting Demonstration Project.

b. **Constraints**

- Insufficient funding for the marine meteorological activities listed above, especially lack of budget to support the activities of JCOMM.
c. **Highlights of Outputs/Deliverables**

**Emergency Response**

- Publication prepared on "Meteorological Analyses for Fukushima-Daiichi Nuclear Power Plant Accident";
- First draft developed for the revised WMO Technical Note 170 “Meteorological and Hydrological Aspects of Siting and Operation of Nuclear Power Plants.”

**Public Weather Services**

- WMO Forum on Socio-Economic Impact of Services held in April 2013, initiating the drafting process of *Methodologies on Assessment of Socio-Economic Benefits*, a joint WMO/World Bank publication;
- 73 participants trained at the Common Alerting Protocol (CAP) Jump-Start and CAP Implementation Workshops (Geneva, April 2013); and
- Over 50 persons approved as editors of the International Register of Alerting Authorities.

**Global Data Processing and Forecasting System**

- CBS Implementation Coordination Team on Data Processing and Forecasting System (DPFS) organized and DPFS work plan redeveloped.

**Aviation Meteorological Services**

- Volcanic Ash Workshop conducted in Indonesia, followed by the International Airways Volcano Watch meeting where some agreements were reached on amendments to Annex 3 of the ICAO Convention on Civil Aviation.

**Marine Meteorology**

- Two management/coordination meetings, four expert team meetings, and four capacity building events conducted.

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**EXPECTED RESULT 2**

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

While work is in progress on 59% of the activities planned for 2013 (including activities of continual nature), no activity has been entirely completed in the first half of the year and action on 35% is forthcoming, as evident from Figure 9. The majority of the activities implemented were on time (88%) and within budget (88%) as presented in Figures 10 and 11. Work is lagging behind on only one activity (namely, the development and implementation of National Pilot Projects under the WMO Flood Forecasting Initiative) which amounts to 6% of the total activities presented on Figure 10. As mentioned in the Constraints Section, the delay is due to setbacks at the regional level, which are beyond the WMO Secretariat’s control. The 6% marked as ‘not applicable’ relate to operating expenses of programmes.
No activities have been rescheduled or taken up more resources than allocated. The four regional projects on Severe Weather Forecasting Demonstration Project (SWFDP) have so far absorbed less than the envisioned but their status is still ‘ongoing’ and the level of expenditure may change in the next reporting period.

b. Constraints
- The selection of national projects under the WMO Flood Forecasting Initiative is dependent on regional activities that have been delayed;
- The loss of a major sponsor impacts extra-budgetary funds for helpdesk services and technology transfer in flood management.

c. Highlights of Outputs/Deliverables

Severe Weather Forecasting
- 17 forecasters trained on severe weather forecasting and warning services;
- Implementation Plan for the full demonstration of the SWFDP - Eastern Africa developed;
- Draft new "Manual on the Global Data Processing and Forecasting System" developed.

Disaster Risk Reduction
- Facilitated WMO's participation in the Fourth Global Platform for Disaster Risk Reduction in May 2013.

Agricultural Meteorology
- A guidance document on coping with drought and desertification.

Hydrology and Water
- Closer collaboration with UNESCO on flood matters;
- Better flood management and tidier application of the Integrated Flood Management approach as a result of helpdesk services and technology transfer in flood management.

EXPECTED RESULT 3

a. Status of Activities, Timeliness and Cost

As evident from Figure 12, close to 60% of the activities planned under ER 3 for 2013 are either ongoing or related to continuous functions of the Secretariat, such as coordination support to expert teams and panels. Seven percent of activities were completed, mostly involving the organization of meetings. The two planned meetings of the CCI-Implementation Coordination
Team were cancelled, following the Team’s merger with the CCI Management Group. Work on about a third of ER 3 activities remains to be undertaken in the second half of the year.

Close to two-thirds of activities are implemented on time, as shown on Figure 13. Thirteen percent have been rescheduled either for the second half of 2013 (e.g. evaluation of performance of hydrological instruments and techniques, support for Water Resources Assessment activities) or 2014 (CCI-XVI and preceding technical conference). The implementation of several activities (6%) is behind schedule. These include the Climate Information and Prediction Services (CLIPS) showcase projects, the publication of guidance on verification and heat-health warning systems, and the updating of HWR and CHy websites and support to INFOHYDRO. Continuous activities are marked with N/A on Figure 13.

In terms of expenditure, the large majority of activities (74%) are implemented within their allotted budget. The growing number of RCOFs has resulted in more costs than initially foreseen. The activities of the Commission for Hydrology (CHy) have also absorbed more than the budgeted amount. These two activities stand for the 4% indicated in Figure 14 as ‘over budget.’ The same figure shows that a similar portion of activities has cost WMO less than anticipated. These involve the CHy session and meetings of the Advisory Working Group.

b. Constraints

- Time constraints in reviewing the publication of WMO climate statements and reviews have increased with the greater contribution from Members;
- Operational arrangements following the pilot phase of the Global Seasonal Climate Update;
- Tool contributions and additional resources required for building the Climate Services Toolkit;
- Manuscripts of the guidance document and showcases on climate information for climate risk management and adaptation are still to be finalized/approved;
- Growing number of RCOFs and sustainability challenges.

c. Highlights of Outputs/Deliverables

Climate Monitoring and Watch Systems

- Publication of the WMO Statement on the Status of Global Climate in 2012 (May 2013);
- Development of a concept for an international climate assessment and data sets initiative;
- Preparation of a first draft of WMO specifications document for modern climate database management systems (CDMSs);
- Start of operational data ingestion in the MEDARE portal;
A key recommendation on the need for the establishment of a High Quality Global Climate was the main outcome of the Data Management System for Climate International Workshop on Climate Data Requirements organized in Beijing 8-12 March 2013. EC-65 requested CCI to follow on the recommendation.

Climate Prediction and Risk Management

- Support to RCOFs and Sectoral Outlook Forums, including pre-COF training, consensus outlooks, and participation of user sectors;
- Development of software, guidance and training for sector-specific climate indices;
- Guidance documents and training workshops on the standardization of Regional Climate Centre (RCC) product presentation and dissemination. RCC development and guidance have also benefited from the creation and oversight by CCI-CBS of climate components of Global Data Processing Forecasting System (GDPFS), including National Climate Centres.

Hydrology and Water

- Establishment of CHy Advisory Working Group (AWG) and preparation of 2013-2016 workplan. As a result of AWG meetings in February-March 2013, members’ workplans were agreed and their implementation is currently ongoing.
- Improved guidance material was made available on selected subjects as determined by CHy and a training session based around Water Resources Assessment guidelines made available.
- Application of Extended Hydrological Prediction capabilities in relation to regional activities in climate variability on water resources.
- Capacity building activities were conducted on climate change adaptations with the aim of improving capabilities to adapt to climate change in the water sector.
- Renewed interest in a number of HYCOS initiatives (e.g. Lake Chad, SADC and Nile).

EXPECTED RESULT 4

a. Status of Activities, Timeliness and Cost

As evident from Figure 15, work is in progress or involves activities of continual nature for almost half of the activities planned for 2013. While close to a fifth have been completed, work remains to be undertaken on 31% of activities. Many of these pertain to the Instruments and Methods of Observation (IMO) Programme and the Global Observing System (GOS) Programme. Only two activities, amounting to 2%, have been cancelled.

Even though 60% of activities are implemented on time and within budget (63%), as shown on Figures 16 and 17, work is lagging behind on 14% of ER 4 activities and a similar portion (13%) have exceeded their allocated budget. Lack of sufficient staff and funding for WIGOS are the key constraints identified in this regard. Eight out of seventeen WIGOS activities are behind schedule, including the development of regulatory material, the updating of relevant publications, and the development of databases of observing networks. These activities are also among the ten WIGOS activities that have exceeded their allocated budget.
Other ER 4 activities that have absorbed more resources than envisioned include activities for the design of observing networks as well as the ad hoc meetings of experts to consider situations of high risk or opportunities under WIS. Additional funding for the latter was provided through the use of ICG-WIS planned expenditure as these activities affect the implementation of WIS across multiple commissions. Whereas time and operational critical elements of key legacy activities and completion of initiatives from previous financial periods have progressed on schedule, many elements are slipping further behind due to other priorities. A major area falling behind is the currency of web based guidance and standards. Increased use of dynamic web pages driven by database in coordination with the Country Profile Database project has been used to lessen the impact.

b. Constraints/Risks

- Lack of funding and insufficient staff for WIGOS implementation;
- Regarding WIS, the availability of Members’ experts and their time is becoming more problematic. This, combined with the decrease in the number of Secretariat staff with the skills to do the work in WIS, has exacerbated the problem. Use of interns, JPOs and contractors has partly offset the issue but is difficult in limited budget.
- A contractor is needed to bring in the curriculum and competency development expertise to the WIS Meeting of Expert Teams on training needs and to offset the workload of WIS Branch staff.
- ICT-ISS has had to take on the high-level responsibilities of ICG-WIS and delegated some of the activities to OPAG ISS Expert Teams and Task Teams.
- There has been minimum participation of UN bodies (UNOOSA, COPUOS) on satellite matters and of research agencies in GOS.

c. Highlights of Outputs/Deliverables

Availability and Use of Satellite Data and Products

- Publication of the WMO 2012 Survey on Use of Satellites and a Strategy towards an Architecture for Climate Monitoring from Space;
- New draft CIMO Guide on Satellites submitted to CIMO;
- Updates made to the requirements database of the Observing Systems Capability Analysis and Review Tool (OSCAR);
- Training event conducted for RA-III and RA-IV;
- Regularly updated website of the WMO Satellite Programme, including news and events.

Instruments and Methods of Observation

- New Upper Air Chapters of CIMO Guide;
- A Workshop on Regional and Global Exchange of Weather Radar Data was conducted and a report and recommendations will be submitted to CBS-Ext.(2014);
- Final Reports to CIMO-XVI as a result of a series of meetings of the International Organizing Committees (IOCs) for Intercomparisons, the CIMO Expert Teams on Upper-Air/Remote-Sensing Observation Technology, and meetings on instruments and standards for WIGOS;
- Report to the Executive Council Panel of Experts on Polar Observations (EC-PORS) by the EC-PORS Sub-group on Antarctic Meteorology.

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

- WIGOS Implementation Plan;
- Regulatory material;

**Global Climate Observing System**

- Meetings of CBS Lead Centers for GCOS;
- Meetings of Implementation Coordination Team on Integrated Observing Systems (ICT-IOS)
- Annual meeting on the Implementation and Coordination of the GRUAN (GRUAN = GCOS Reference Upper Air Network, WIGOS Project);
- Annual meeting of the GCOS/WCRP Atmospheric Observation Panel for Climate (AOPC)

**WMO Information System**

- The role of the Expert Teams on GISC and DCPC Demonstration Processes (GDDP) has been changed into a Task Team within the ET-WISC by CBS XV. The Task Team on Centre Audit and Certification (TT-CAC) worked extremely hard with Members to ensure GISCs Moscow, Tehran, Jeddah, Brasilia, and Moscow along with DCPCs were audited and endorsed by CBS prior to EC-65.

Currently, there are 223 NCs approved by EC-65 and 12 of the 15 GISCs audited. Of the 122 registered DCPCs, 51 still need to submit their documents to CBS and 10 are presently under review by CBS ET-CAC.

- Work is progressing on the implementation of Aviation XML following a successful meeting in February 2013 and multiple teleconferences and international briefings (remote). Two draft specifications were issued for community consideration periods ending in January and June, and the final version is in preparation. Preparation is also under way for a workshop on WIS monitoring in November 2013 as it is now critical for Members implementing WIS to know what they need to do.

- SG-RFC met in January in Ottawa and subsequently published a preliminary WMO position paper on WRC-15. Other outputs were a strategy paper for consideration by EC-65 and the outline of a guide for NMHS on radio frequency coordination, to be completed later in 2013.

- The IPET-MDI was reformed by CBS XV to the IPET-MDRD. It has taken on some of the ET-OI activities related to WIS metadata. The group has made significant progress on metadata guidance and input into the update of the WIS Manual and Guide approved by EC-65 to be published in second half 2013. Considerable complementary web based guidance on WIS metadata is also being finalized.

- ET-OI has been merged into the ET-WISC as Task Team Operations and Monitoring, and IPET-DRMM. The Team met at a side meeting of ET-WISC in July and refined its TOR and workplans.

- The IPET-DRC was reformed by CBS XV to the IPET-DRMM. It has taken on additional duties such as management of GTS Abbreviated Headers and related operational support.

- A major activity in sponsoring WIS experts to attend other Technical Cooperation (TC) and Regional Association (RA) meetings has been the representation of the GTS in IOC Tsunami coordination activities by Mr Kenji Tsunoda (JMA). Other activities include the participation of WIS Branch in Regional Association Infrastructure groups (RA II, V and VI) to assist in the establishment of Regional WIS Implementation Plans. Future priority includes participation in RA I development of WIS Implementation Plans, then RA II and IV.
- WIS Branch staff have supported the implementation of WIS through participation in workshops for GISCs Exeter/Toulouse, Melbourne. This work has been synergetic with participation in regional infrastructure planning activities.

**EXPECTED RESULT 5**

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

In the first semester of 2013, work has started on all ER 5 activities planned for the year, as demonstrated by Figure 18. A fifth of them have already been completed, while the vast majority continue being implemented (81%). No activities are reported as forthcoming or cancelled.

![Figure 18: Status of Activities (ER 5)](chart)

Figures 19 and 20 illustrate the timeliness of activity implementation and the cost of implementation relative to the planned budget. All activities related to ER 5 are executed on time. 89% are realized within the assigned budget, while 11% have exceeded the initial projections. These include the meetings of the JSC OPAG WWRP, JSC OPAG EPAC and the mesoscale weather forecasting research working group and related activities.

![Figure 19: Timeliness of Implementation of Activities (ER 5)](chart)

![Figure 20: Cost of Implementation of Activities (ER 5)](chart)

b. **Constraints**

The surplus expenditure for the three activities mentioned above is the only constraint encountered in the course of implementation.

c. **Highlights of Outputs/Deliverables**

**Atmospheric Chemistry Observations**

- Publication of "A Global Assessment of Precipitation Chemistry and Deposition";
- 10 GAW personnel from 10 GAW global and regional stations trained;
- Members of SAG Ozone introduced a new format for ozonesonde data, adopted new absorption cross sections for ozone and discussed the status of the Brewer & Dobson network and plans of the world Ozone and UV radiation Data Centre (WOUDC).

- At the JSC OPAG EPAC meeting, new directions were discussed for atmospheric chemistry research to support climate services and assessments and to meet the needs of the NMHSs and other users of weather, climate and environmental information.

- Technical meetings and projects related to global coordination of urban to hemispherical air quality forecast systems brought together scientists, experts, practitioners and decision-makers involved in real-time data generation, modeling and short term predictions in the field of air quality and weather to share evidence-based knowledge and experiences in order to discuss the current state, challenges in air quality and weather forecasting and to set the future agenda in the field.

- Support was further provided to SAG on GHG members working on the development of global observations and analysis, WMO greenhouse gas bulletins and carbon tracking, as well as to participants from NMHSs in tropical regions in support of the programme's work on coordinating global observations for atmospheric prediction/analysis.

Weather Research

The following reports were published in January-June 2013:

- Report of the JSC OPAG WWRP Meeting, which provides overall scientific guidance for the programme, identifies priorities and makes recommendations on new projects for the WWRP, such as Forecast and Research Demonstration Projects;

- Report of the Mesoscale Weather Forecasting Research Working Group Meeting, which provides updates on projects supported by the group and future plans to advance understanding of weather processes, improve forecasting techniques and increase the utility of forecast information with an emphasis on high-impact weather.

EXCEPTED RESULT 6

a. Status of Activities, Timeliness and Cost

As indicated on Figure 21, work has been completed on 11% of the activities planned under ER 6. Half of activities are ongoing, while close to a quarter are forthcoming. Activities of recurring nature, such as assistance to the presidents of RAs or various operating expenses account for 13% of the reported work. Cancelled activities amount to 2% of the total activities, and include a survey of Member’s training needs, the provision of support to participants in World Climate Programme workshops, and the development of WMO certification procedures for climate specialists. Regarding the latter, it has been decided that a competency-based approach will be followed instead.

As presented on Figure 22, two-thirds of ER 6 activities are implemented on time. The meetings of various RA working groups and management groups as well as the Regional Seminar and Regional Technical Conference for RA IV have been rescheduled. The regional workshops for Asia, SIDS and South-West Pacific have also been pushed back, as have been the inter-regional workshop on policy aspects of climate change and the symposium on seasonal climate outlooks for adaptation to climate variability and change. Eight percent of the ER 6 activities are lagging
behind schedule. These are related to the fixed costs and operating expenses of all Regional Offices except Europe, West Asia, and the South West Pacific. Other late activities include training seminars on industry requirements related to aviation, the development and enhancement of LDC websites, and regional workshops for Africa.

Spending is on track, with three-quarters of activities implemented within their planned budget, as evident from Figure 23. Only 4% of activities have absorbed more resources than planned, including the two LDC coordination meetings, the three national workshops for the strategic plan, and the operating expenses of the Education and Training Office. It is expected that the regional workshops for Asia, SIDS and South West Pacific will also exceed their budgets. Even though expenditure has been less than expected for a similar portion of activities (3%) (e.g. RA IV and several working groups of RA I), it is not possible to estimate the extent to which these savings will make up for the excess spending mentioned earlier as no specific financial data has been collected. N/A in Figure 23 stands for the costs of forthcoming and cancelled activities.

b. Constraints/Risks

- Lack of partner involvement hampers the organization of the forthcoming Regional Workshop for Asia, whereas the one for SIDS suffers from insufficient funding.
- Meeting the growing demand from Members for training workshops on CDMS and data rescue for LDCs and SIDS is difficult due to insufficient staff. The same issue constrains the work of RA VI, and has frustrated the organization of the three national workshops on the strategic plan held for LDCs.
- The reaching of quorum for the adoption of resolutions (at least 25 Members have voting rights) and the passive participation in meetings of working groups are two other obstacles encountered by RA VI.
- The only risk identified is the potentially small number of participants in the upcoming Regional Seminar for RA VI.

c. Highlights of Outputs/Deliverables

Fellowships

- 194 requests for fellowship support have been received and more than 70 fellowships have been awarded, amounting to around CHF 1.2 million from regular budget and CHF 130,000 from extra budgetary resources. China is the largest host to WMO fellows with around 20 fellows commencing studies there in 2013 and more than 50 fellows in total studying in China. A number of fellows have had their studies interrupted or curtailed due to tuberculosis.

Training

- Training workshops in Public Weather Services, Tropical Cyclone forecasting, GAW and use of NWP in tropical meteorology, train the trainers have been supported from Regular budget with more than 100 participants. In addition the RTCs in Nairobi, Kenya and Pune, India have
run online courses for people in their regions on basic hydrology using the COMET modules demonstrating that this form of learning is becoming more feasible.

- In June 2013 EC-64 approved the draft competencies for training personnel and agreed that they be sent to members for their approval into the WMO Technical Regulations as Recommended Practices.
- The ETR Office continues to work closely with the Technical Departments upon the creation of competencies in the key technical areas. Draft competencies for personnel in WIS; Climate Services and Marine Meteorology are in preparation.
- Training material was produced in different languages for the Quality Management Framework for Hydrology.
- A regional workshop on climate monitoring and implementation of climate watch systems in the Arab countries of West Asia was held in Amman, Jordan, in May 2013, attended by 11 countries.
- A concept was developed for a workshop on data rescue for the countries in the Indian Ocean.

**Regional Offices**

- Two LDC coordination meetings were held at which it was demonstrated how NMHSs could contribute to the attainment of the Millennium Development Goals through the development of climate information and products. As a result of the national workshops held, strategic development plans were developed for two countries.
- In the course of a regional technical conference for RA VI, assistance was provided to Members for a national self-assessment of their readiness for WIGOS implementation. In accordance with the Terms of Reference, technical assistance and guidance materials were further provided to the various working groups of the association and support to the President and Management Group.

**EXPECTED RESULT 7**

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

Work has been completed on 12% of activities, as illustrated on Figure 24. The rest are ongoing (72%), and only 4% are forthcoming. Another 4% are linked to the execution of continuous functions of the Secretariat (e.g. participation in meetings for regional coordination). One activity, Support to UN Climate Knowledge-Base, has been transformed to Support of UN Working Group on Climate Change and GFCS partnership.

Judging from the results presented in Figure 25, there are no issues related to the timeliness of implementation of ER 7 activities. 88% are on time, and work on only one activity (the WMO/UNESCO Liaison Committee for Hydrology) is currently behind schedule. Regarding the cost of implementation, close to 75% of activities are within budget, as evident from Figure 26. Two activities, amounting to 8% of the overall activities under ER 7, have absorbed fewer resources than initially envisioned. These include the celebration of the World Meteorological Day and the WMO participation in UN coordination on climate change. WMO support to UN-Water activities is the only area where expenditure has exceeded the planned budget (representing the 4% ‘over budget’ in Figure 26). In both Figures 25 and 26, N/A stands for forthcoming or cancelled activities.
b. Constraints

- Lack of funding for a second workshop for IPA focal points at the national level;
- Challenges related to following all UN solicitations.

c. Highlights of Outputs/Deliverables

- With a million annual visitors to the WMO website, 25,000 annual mentions in the press and a growing presence on social media, WMO's communications activities have strengthened the organization's reputation for scientific and operational expertise in climate change, drought, disaster risk, climate services, and other high-profile subjects. During the reporting period the most successful outreach effort was for the "Decade of Extremes" report.
- WMO is well placed in UN-Water activities and enjoys increased exposure of its capabilities. Improved relationships with UNESCO have further enabled enhanced guidance to NMHSs on water-related issues.
- In the area of climate change, the leadership position of WMO has been boosted by the role of the ASG as Chair of the HLCP Working Group on Climate Change. A number of guidance materials have also been produced on climate related issues.
- Other noteworthy outputs include 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.

EXPECTED RESULT 8

a. Status of Activities, Timeliness and Cost

Given the continual nature of work implemented under ER 8, the status of almost all activities (84%) is either ongoing or continuous, as presented on Figure 27. Five percent of activities have been completed, and 14% are forthcoming, including the finalization and publication of the Strategic Plan and Operational Plan 2016-2019, upcoming sessions of constituent bodies, and the 17th WMO Congress.

As evident from Figure 28, 84% of the planned activities have been implemented or are being implemented on time. The preparation of the WMO Operating Plan is the only activity running behind schedule. As indicated, the concept of timeliness is not applied to continuous activities which are marked with 'N/A' on Figure 28.
With 86% of activities implemented within the planned budget, no spending issues are observable (see Figure 29). The budget for the attendance of the WMO President to RA meetings will be reassessed, given that current expenditure has exceeded the initially allotted amount. The Internal Oversight Office (IOO) and the Organization’s contribution to the Joint Inspection Unit (JIU) have absorbed fewer funds than allocated.

**b. Constraints**

- Late submission of inputs/contributions to draft documents, reports and data collection processes related to strategic planning, monitoring and evaluation;
- Budget limitations for implementing a Content Management System for a sustainable website;
- Difficulty to keep track of all WMO documents available online as publications are distributed both under the WMO “Library” site and at the various WMO departmental sites. In this regard, a need for the development and maintenance of an organization-wide catalogue of documents available online has been identified.

**c. Highlights of Outputs/Deliverables**

**Strategic Planning, Monitoring and Evaluation (M&E)**

- The WMO Strategic Plan 2016-2019 was drafted and reviewed by the EC Working Group on Strategic and Operational Planning and EC-65. The strategic priorities for the next financial period were defined and other areas of importance identified.
- The WMO Risk Management Framework was published in April 2013 and top high-risks for the Organization reviewed as well as mitigation actions to address them.
- In terms of M&E, the Secretariat reviewed the entire set of Key Outcomes (KOs) and Key Performance Indicators and made revisions aimed at enhancing the quality and measurability of the indicators, aligning them better to the KOs, and addressing limitations observed in the data collection process. Baselines were set using data from the 2012 Survey on Impact of Achieved Results on Members and other information available at the Secretariat. They were further used to set performance targets for 2013 and 2015.

**Internal Oversight**

- During the reporting period, the External Auditors submitted their report to the Audit Committee and the EC. IOO also submitted reports to these two bodies, including on JIU recommendations, as well as issued four engagement reports. It further completed the first follow-up of recommendations to the Opinion on statement of internal control provided to the SG and filed the Financial Disclosures of staff. IOO further provided timely response and support to JIU with regard to all its ongoing reviews (questionnaires, interviews, etc.).
Conference, Interpretation and Documentation Services

- Services were provided to many major meetings, including: FINAC, WMO Bureau, and EC-65; 129 sessions of subsidiary bodies, the Audit Committee and the Intergovernmental Panel on Climate Change (IPCC), WCRP, and GCOS; and 35 meetings of RAs, TCs, and their subsidiary bodies.

- An evaluation survey of EC-65 was conducted that addressed inter alia EC-65 documentation and EC-65 supporting services. Responses were largely very positive (documentation and conference services were rated highly); however, nearly 50% of the survey respondents suggested that the programming of EC could be improved.

- The cost of holding EC-65 amounted to CHF 525,627 which represents a 13% decrease vis-à-vis the cost of holding EC-64 (Geneva, June 2012), CHF 604,130. This decrease is largely due to the effective planning and management of EC-65 that yielded considerable savings in two key areas:
  
  (a) Interpretation – fewer interpreters were required due to improvements in scheduling of interpreters and to better adherence to the EC meeting calendar; and

  (b) Translation and revision – the in-session revision of draft documents was streamlined, contributing to the need for fewer translation resources

In addition, EC-65 was conducted in a nearly paperless fashion.

- The average direct cost per 1000 words translated (temporary and outsourced translation - Arabic, Chinese, French, Russian, Spanish) for EC-65 was CHF173. This represents a 15% decrease vis-à-vis the direct cost of CHF 203 per 1000 words translated for EC-64 (June 2012). The decrease in cost is largely due to LCP managing the flow of translations to temporary and outside translators so as to avoid ‘last-minute’ surcharges. In addition, LCP made effective use of in-session translation shifts and translated a large portion of the documents in-house.

Issuance of WMO publications and other written material

- 22 numbered publications were issued in a total of 69 language versions plus 18 flyers/brochures/folders were issued in a total of 44 language versions.

Sales and distribution of WMO published material

- Distribution free of charge: Publications are distributed free of charge online both under the WMO “Library” site and at the various WMO departmental sites. In addition, a total of 15,485 hard copies (print and CD-form) of 6 different WMO titles were distributed free of charge.

- Sales of publications: A total of 2,231 hard copies (in print- and/or CD-form) of 83 different WMO titles were sold; copies were sold in English, Chinese, Spanish and/or French and in multi-lingual versions.

Standardized WMO branding and the WMO visual identity

- To strengthen the branding of WMO and WMO-supported programmes, designs were developed for the following products/publications/programmes: World Met Day Brochure; WMO Climate Statement; WCRP Climate Statement; WWRP THORPEX Programme; WMO souvenirs; GEO Brochure; GEO web icons; IPCC umbrella; Joint WHO/WMO Atlas of Health & Climate.
PART 4: LOOKING FORWARD

Improvements to the Reporting Format and Content

Looking towards the next reporting period (July-December 2013) some improvements to the reporting format and content could be considered. Specifically, the ‘ongoing’ and ‘continuous’ categories for status of activities can be either merged or more clearly defined, as mentioned earlier in the report. To reduce the workload for Departments, reporting on outputs could further be done by type of activities implemented as opposed to reporting against each and every item of the Operating Plan. Such an approach would be less time consuming, would facilitate comparisons across the ERs or programmes, and would create a more uniform reporting structure.

Regarding the reporting substance, there is still some confusion about the distinction between activity, output and outcome. Many of the items reported as deliverables in reality represent activities identical to the ones listed in the Operating Plan or medium-term objectives (e.g. improved standardization) which do not capture the concrete outputs of the activities implemented. Generally, a results-oriented approach to reporting on deliverables is still missing. More assistance on behalf of the Secretariat M&E focal points would be required in educating their Department counterparts on the results chain and the distinction among its constituent elements as well as on how to formulate results-based outputs of activities.

The incomplete or late submission of reporting input is another major problem as data analysis is impossible until all the data has been collected. This creates multiple inefficiencies in terms of duplication of effort and numerous communications. It also poses a risk to the accuracy of the information, and delays the release of the report.
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