Report of Online Survey of WMO Stakeholders, April/May 2016

8 JULY, 2016

TABLE OF CONTENTS

Report of Online Survey of WMO Stakeholders, April/May 2016

Introduction

At the initiative of the WMO Secretary-General, an online survey of the organization's stakeholders was conducted in April/May 2016. The objective was to make an assessment of the strengths and weaknesses of the Organization at this time, and to identify the opportunities and threats facing the Organization. The intention is to use the information gathered through the Survey to formulate actions that will enable WMO to provide a better service to its Member States and Territories, with consequent benefit to their citizens, and to be a more effective partner with its collaborating agencies.

While the Survey was aimed primarily at WMO Member States and Territories through their Permanent Representatives, it was also intended to reach out to organizations and agencies with whom WMO is in partnership in some activity or whose objectives are shared by WMO in some aspect of its mandate. However, as it was necessary to have some findings to present to the WMO Executive Council session in June, 2016, pressure of time dictated that the Survey be initially confined to the Member State and Territories.

In communicating with the Permanent Representatives, notice was give that it was also intended to involve Hydrological Advisers in the Survey

The Survey covered all aspects of WMO's role in the areas of weather, climate and water. It was devised, insofar as possible, to make all questions relevant to all respondents**,** including the other organizations.

It is worthwhile to consider what is meant by the term "WMO" in the Survey and how it might be interpreted by respondents. The intention was for the term to encompass all activity carried out under the banner of WMO. That includes the Secretariat based in Geneva and in the Regional Offices, the WMO Constituent Bodies (and their subgroups) involving representation from the Members, and the WMO Programmes and other activities. Essentially it embraces all activity where the existence of the organization known as WMO aims to makes a difference.

Most questions in the Survey make it clear what is meant by the term "WMO" for that particular question but there may be a few for which the meaning is less clear and are, consequently, open to different interpretations.

Part 1 General Summary of the Survey Findings and Conclusions

1.1 Nature of the Survey

1.1.1 Survey Methodology

The Survey was conducted using the WMO account on the SurveyMonkey survey development system. It was compiled following consultations with the Secretary-General, the acting Deputy Secretary-General, WMO departments, and some external reviewers.

Most of the questions were in the form of a rating scale wherein respondents were asked to rate WMO performance in some activity or other on a ten point scale, usually using terminology such as a range from "Very Unsatisfactory" to "Extremely Satisfactory". In the extraction of Survey responses, these descriptive ratings were converted into numerical values from 1 to 10.

Most questions also offered respondents the opportunity of making additional comments to support their ratings or to provide pertinent comments on the activity under consideration. Some questions did not involve a rating scale and were framed to elicit comments on a particular topic.

The first communication related to the Survey was a Circular letter from the Secretary-General emailed to all Permanent Representatives, announcing the survey and informing them that an online link would follow in a separate email. Most Permanent Representatives were able to access the link without difficulty but in some cases the link had to be re-sent. Where necessary, a PDF version of the Survey was also provided to facilitate internal circulation and information gathering within the NMHS. Some requests for an editable Word version were made but for technical reasons it was not possible to facilitate this request with a suitable document.

Requests for clarification or for a link to be re-sent were monitored carefully and responses made. The Regional Offices, and WMO Offices in the regions, played a very valuable role in encouraging responses and in dealing with issues raised.

Following the receipt of responses, some further consultations by telephone took place in a few cases to obtain clarification and further input.

In the analysis of the responses the tools provided by SurveyMonkey were used to export all data to Excel spreadsheets. For the questions with rating scales, frequency charts were then compiled in the form of histograms. The comments were extracted separately and scrutinised.

1.1.2 Survey Timeline

The Survey was launched in the English version on 21 April, followed at stages over the following week by the French, Spanish and Russian versions. After an interval of a few days the Survey was also sent to the list of Hydrological Advisers. In the period 18-20 May a reminder was sent to all Permanent Representatives and Hydrological Advisers to encourage them to engage with the Survey or to complete responses that were in preparation.

An initial deadline of 13 May was set but that was later extended to 22 May. It proved to be possible to include in the analysis a few responses that were received a little later than the final deadline.

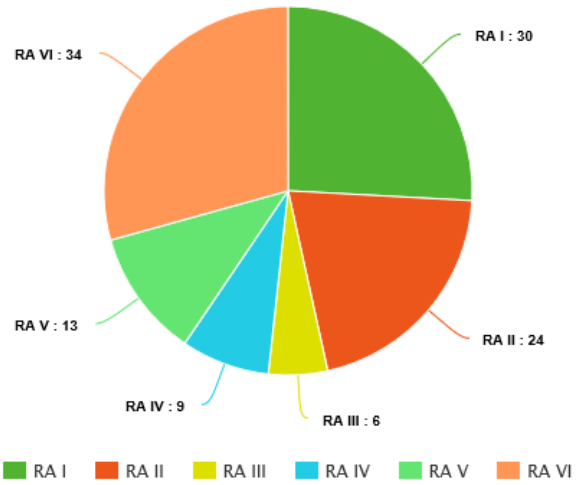
1.1.3 Level of Response to the Survey

The analysis of the Survey results was based on the following level of response:

Permanent Representatives:	Complete Responses - 81 Partial Responses - 35
Hydrological Advisers:	Complete Responses - 13 Partial Responses – 10

This means that a total of 116 Permanent Representatives engaged to a full or partial extent with the Survey, representing 61% of the total number of WMO Member States and Territories.

The distribution by Regional Association is shown here:



The level of response from the Hydrological Advisers was lower, even allowing for the fact that not all Member States have a designated Hydrological Adviser.

The SurveyMonkey software enables partial responses to be included in the analysis in relation to the parts of the Survey that were covered in those responses.

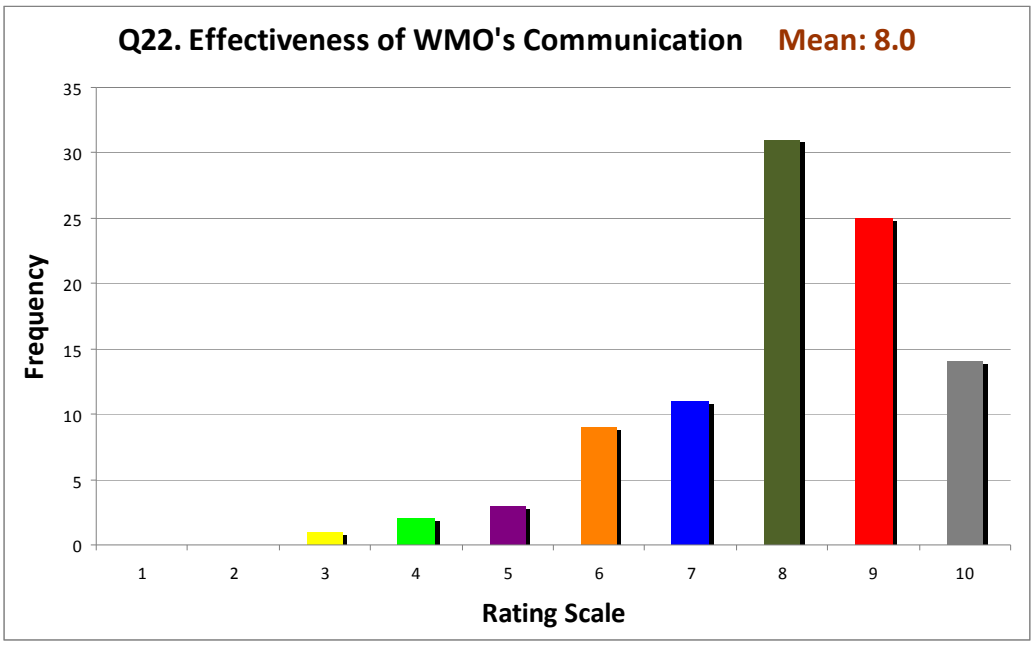
1.2 Analysis of the Survey Responses

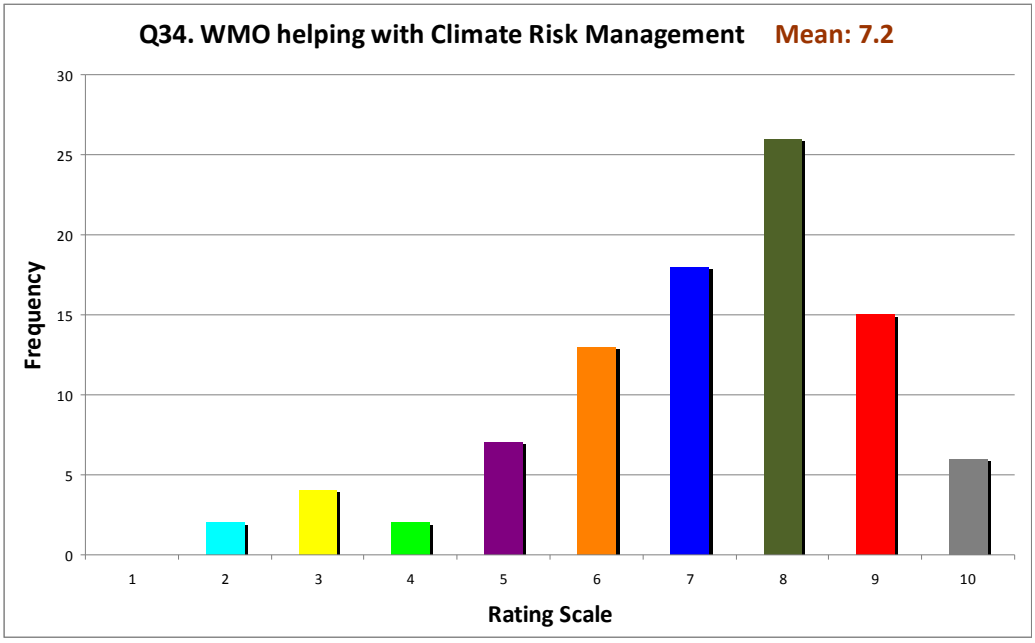
1.2.1 General Summary of Ratings

A detailed analysis of the ratings and of the comments associated with responses to every question is given in Part II.

The main analysis was conducted on the responses from the Permanent Representatives as they constitute the vast majority of Survey results. In addition, an analysis of regional variations of these responses was made. A separate study was also made of the Hydrological Adviser responses. Both of these additional analyses are discussed in later sections. Here a summary of the responses from the Permanent Representatives is presented.

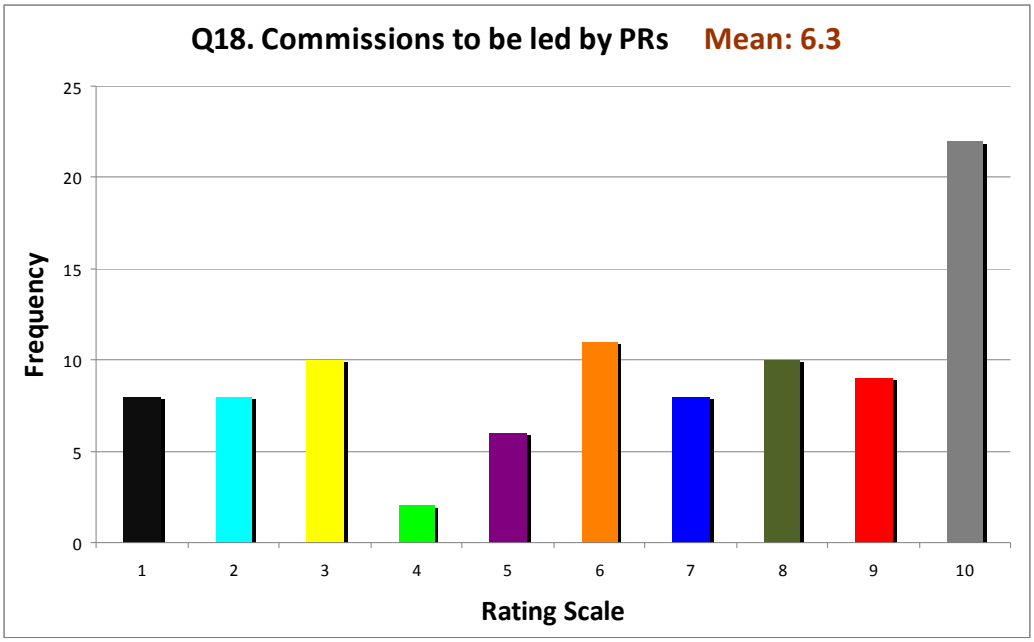
In reviewing the ratings across the full set of questions, it is evident immediately that the ratings are heavily skewed to the higher end of the scale indicating a high level of satisfaction with WMO's performance. Typical examples of the ratings are shown here.





The mean value of the ratings awarded was greater than 7 in the great majority of cases.

There were, of course, some questions which drew a more mixed response, as shown in this example:



1.2.2 General Summary of Comments

In analysing the comments that were associated with questions it should be borne in mind that such comments were an optional part of the process – indeed, many respondents chose not to make such additional comments or did so only for a few questions. It is common in surveys to find that comments are more likely to come from respondents who show some degree of dissatisfaction. The same pattern was exhibited to some extent in this Survey but, in general, the comments were even-handed and often testified to the value of WMO activity and attributed any negative views to resource constraints within WMO or in the Member State. In addition, a sizeable number of respondents took the opportunity in comments to present pertinent and constructive suggestions based on a thoughtful and carefully worked-out analysis.

Some questions invited comments only (rather than ratings) and some of those were mandatory questions (such as Questions 45 and 46 which asked explicitly for lists of Strengths, Weaknesses, Opportunities and Threats).

The total collection of comments gathered in the Survey represents a valuable pool of information that the organization can study carefully. Here some attempt will be made to pull together some of the common themes that emerged from the comments.

- One issue that surfaced very frequently was the plight of the Least Developed Countries (LDCs) and of the Small Island Developing States (SIDS) who face huge challenges in trying to bring the benefits of meteorological, climate and hydrological science to their citizens while suffering severe resource constraints. These Member States and Territories are often among the most vulnerable to natural hazards and are most in need of effective services. A frequent comment from these WMO members was that the lack of opportunity to engage in the work of the Constituent Bodies (Congress, RA sessions, Technical Commissions) impaired their ability to benefit from activities of WMO. Many used the opportunity of survey comments to highlight again their difficulties and appealed for more support. In some cases, low ratings were applied to WMO performance as a way of drawing attention to their problems.

- The relatively poor visibility of WMO at all geographical levels (global, regional and national) was mentioned many times. While some improvement in the recognition accorded to WMO in major issues of interest to it (Climate Change, Disaster Risk Reduction, Sustainable Development Goals) was noted, it was still considered to be less than satisfactory. It was pointed out that the vital roles played by WMO in the IPCC and UNFCCC (both with very high profiles) were not well recognised. At national level it was reported in many comments that governments had little knowledge or awareness of WMO and this in turn affected the status of NMHSs.

- The organizational structure of WMO's Constituent Bodies was seen by very many to be overly complex and in need of reform (although some caution was recommended so as not to lose some key functionality).

- A common theme running through the comments was that many official documents prepared for the Constituent Bodies, and publications such as Technical Regulations, were written in a style that was difficult to read (language was "dense", "convoluted") and that in general there were too many documents and they were too long.

1.2.3 Specific Issues of Interest in the Survey.

While all parts of the Survey were relevant and yielded valuable information and opinions, there were a number of issues that were deliberately included in the Survey either because they corresponded to issues that had a high recognition as being topics that might be targeted for reform or because the Secretary-General saw them as being highly relevant to his ambition to make improvements.

One such issue concerned the WMO Technical Commissions. In Section 3 of the Survey all Constituent Body sessions (including those of the Technical Commissions) were the subject of questions, usually along the lines of rating the Usefulness, Length, Quality of Documentation, and Language Services. The ratings for the Technical Commission sessions were broadly similar to those of the other bodies.

Another question regarding the Technical Commissions was designed to elicit the level of agreement with the following four statements concerning them (on a scale of "Disagree Strongly" up to "Agree Strongly"):

1. *The current composition of Technical Commissions needs to be revised to meet the needs of Members in a better way;*

2. *The commission structure should be revised at each Congress to meet the priorities set by the Members;*

3. *The commissions should be led by chairs at the level of WMO Permanent Representatives and members should be both experts and NMHS directors;*

4. *It would be beneficial to invite stakeholders such as development partners and scientific and technical experts to the work of the commissions.*

In response to the last statement, involving external stakeholders and experts attracted a high level of support in the ratings and comments although some cautioned against partners having different objectives.

For the other three statements the ratings showed a wider distribution of scores than for most other questions although high ratings were still the most numerous.

The first statement about the current composition of Technical Commissions did not draw many comments.

For the second statement concerning the revision of the Technical Commission structure each Congress, while the "Agree Strongly" had the highest rating, there was

a spread of ratings and the comments tended to disagree with the statement, with some suggesting "reviewing" rather than "revising".

Again, in relation to the third statement about the Commissions being chaired by Permanent Representatives, while "Agree Strongly" was the highest single rating, those who took the opportunity to comment took a different view, with remarks to the effect that "they would not have the time", "the presidency of a TC is a fulltime job" and "Technical Commissions should be led by people who have knowledge in the area".

A final question on the Technical Commissions asked for comments on the number of Commissions and their mandates as well as any additional comments. The responses revealed that there were some advocates for reducing the number of Technical Commissions, while others recommended no change or urged caution so as not to lose some functionality. Many comments referred to the complex structures of Technical Commissions, with many subgroups, and recommended simplification and well-defined mandates to reduce duplication. Some went further and proposed more radical change such as a reclassification of Technical Commissions along functional rather than themed lines or beginning again with a blank sheet of paper.

A question in Section 2 of the Survey invited opinions on whether in some cases WMO might enter into direct discussions with national governments.

There were many positive answers to the question, mainly (but not exclusively) from developing countries. A comment that summed up many of the points was: *"possibly on a case by case basis, in consultation with the PR"*. This recognises that it does not apply in all cases, implicitly acknowledges resource limitations in trying to carry it out and highlights the key role of the PR. Many comments especially favoured a role for WMO in demonstrating the value of NMHS services.

1.2.4 Regional Variations in Responses

The ratings and comments were scrutinised to see if any significant variation across the WMO regions was evident. This is an exercise that has to be undertaken with great care so as not to exaggerate or misinterpret apparent variations. Some regions have a relatively small number of responses (e.g. RA III with 6 and RA IV with 9) and a tendency for low rating by two or three respondents could create what appears to be a regional bias.

In general, no very strong signal of variation by region was apparent across the whole gamut of responses but there were some interesting differences on particular topics.

- While the length of Constituent Body sessions was a topic that attracted some low scores across regions, this was more consistently the case with RA VI (in responses to questions about Congress and Technical Commissions in particular).

- As noted above, the quality of documentation for various purposes was the subject of some adverse comment. The ratings for RA II showed the strongest

evidence of this, as, for example, in responses to questions relating to Congress and Regional Association sessions and to WMO publications.

- A question on how the decisions of Congress and of the Regional Association sessions reflected the views and needs of the Member States and Territories drew more negative scores from RA I and from RA II than from other regions.

- Difficulty in complying with WMO Technical Regulations was significantly more evident in the responses from RA I where 50% of responses showed a rating of 6 or less.

- One question posed some statements about possible changes affecting Technical Commissions; a statement that drew significant negative ratings and comments was to the effect that Permanent Representatives should chair Technical Commissions. RA IV and RA VI were especially vehement in the comments and ratings.

It is likely that the major differentiation in responses may be that between developed and developing countries but it would require some more in-depth analysis to determine if that is the case. Another aspect that might be worthy of exploration is the variation within regions. One might expect, for example, that RA IV and RA VI might show some interesting variation.

1.2.5 Responses from Hydrological Advisers

The responses from Hydrological Advisers are treated separately in this report from those of the Permanent Representatives for two reasons. One is that they represent a smaller range of WMO activity (albeit a strategically important part and one that is becoming more critical to society, particularly in view of efforts in relation to Disaster Risk Reduction). The second reason is that some Permanent Representatives cover hydrology in addition to meteorology; taking into account in the main analysis two responses from those members with Hydrological Advisers may result in attaching more weight to those countries than is appropriate.

The number of responses from Hydrological Advisers is, of course, much smaller than that for the Permanent Representatives. As quite a few Hydrological Advisers selected the “Not Applicable” option in response to some questions, the result was that there were a very small numbers of responses in most cases (typically 10 responses for a ratings question). Extracting statistics from these small samples is less satisfactory than for larger samples. In general it may be said that the ratings tended to be lower than for the Permanent Representatives for most questions and significantly lower for some. This was particularly noticeable in questions that related more directly to hydrology.

1.2.6 Strengths, Weaknesses, Opportunities, Threats.

Questions 45 and 46 explicitly requested from respondents opinions on the Strengths and Weaknesses of WMO and on the Opportunities and Threats presented to the organization.

A very large number of detailed comments were received in response. The Table below captures, under the four headings, the points that were repeated most frequently; in some cases similar points were merged to form the lists.

Strengths	Weaknesses
1. WMO is an organization with a Global reach and a very large membership. 2. It has staff with considerable expertise and experience. 3. Throughout the membership of the organization there is an excellent spirit of cooperation. 4. It enjoys huge success in arranging the exchange of large quantities of data across the globe, much of it in real time. 5. It coordinates a very large number of valuable activities that yield enormous benefits. 6. It devises and promulgates Standards that ensure high quality and consistent practices in its Member States and Territories. 7. Through its Capacity Development activities it supports and enhances weather, climate and hydrological services all over the world.	1. WMO Organisational structures are complex and unwieldy. 2. Financial and human resources are very stretched in view of the large amount of activities. 3. The organization is too bureaucratic, resulting in inefficiency. 4. The recognition accorded to WMO in major global initiatives is low, as is the awareness of the organization at national level outside of the NMHSs. 5. There is slow implementation of key activities (e.g. GFCS, WIGOS). 6. The organization's ability to adapt to new challenges is inadequate. 7. There is an unequal state of development within the membership and inadequate mechanisms to reduce gaps. 8. The value of WMO activities to operational hydrology is less than desirable in the eyes of the hydrological community. 9. LDCs and SIDS are not supported to the level that they require.
Opportunities	**Threats**
1. The challenge of Climate Change presents opportunities for the science-based expertise of WMO and its members 2. Advances in Science and Technology can improve services and societal benefits 3. New demands for services in Weather, Climate and Hydrology can help demonstrate the value of WMO and the NMHSs. 4. Further implementation of the GFCS can enhance the benefits it brings. 5. The global profile of Disaster Risk Reduction and the development of the WMO role present opportunities. 6. Efficiencies can be created through organizational reform 7. Strengthening and widening of partnerships of all kinds can benefit WMO.	1. There is a proliferation of private sector weather providers, some with low quality products, threatening the authority and visibility of NMHSs. 2. There is continued pressure on WMO and Member State budgets and human resources. 3. Political and economic instability in some Member States and Territories could be a major problem. 4. Competition from other global or regional organizations with overlapping mandates could pose a possible threat. 5. Pressure on NMHS role in aviation could arise because of external developments. 6. WMO and the NMHSs could struggle to adapt to changing technology. 7. Trying to respond to too many initiatives could lead to a loss of focus on core WMO activity.

1.3 Conclusions

The Survey is considered to be a very useful exercise in compiling the views of the wider WMO membership. The level of engagement of Permanent Representatives is testament to the interest taken by them and to the value they attached to the opportunity to present their views.

Standing back from the volume of information gathered through the Survey, the followings points seem to be clear from the overall results:

- The Member States (or more accurately, their Permanent Representatives with WMO) considered that the activities of WMO are of real value to its members.

- There was no call for a major change of direction or for activities to be discontinued; the requests were for more activity in the areas already being tackled and some new activity.

- The general feeling appears to be that more could be achieved through more efficient governance structures and better processes.

- A high opinion was evident of the WMO staff, although some frustration with delayed responses to queries was expressed.

- The gap in capability between the developed Member States and the least developed ones came through as a well-recognised problem for the organization and there is a strong desire on the part of the entire membership to reduce the gap.

- The resource constraints of WMO (both financial and human) were recognised widely as a main factor in inhibiting achievement of the organization's objectives, while on the other hand, lack of resources and capacity at national level was seen as the major handicap in attaining full benefit from WMO's activities.

- The level of frustration at lack of ability to engage effectively with WMO programmes and meetings and to realize benefit at national level was particularly evident among the LDCs and SIDS. Among the suggestions made to help in this regard was more use of pairing arrangements between more developed countries and LDC/SIDS.

- Complexity in the structure (and substructure) of the Constituent Bodies, and in the style of documentation, was seen as a barrier to greater effectiveness and to more successful engagement of the Member State personnel in the sessions and programmes. It would seem that there is an appetite for change in this area with an expectation of greater efficiency and effectiveness.

- The insufficient level of recognition of the huge contribution that WMO provides to global strategic programmes is acknowledged, as is the poor level of awareness of WMO at national level (outside of the NMHSs and relevant experts). Enhancement of recognition of WMO could benefit the NMHSs.

Full and careful consideration of the survey responses would be a rewarding experience for WMO. Any actions considered as a result of the findings would, of course, require very detailed discussion and consideration by the appropriate bodies.

Part 2 - Detailed Analysis of the Survey Responses

The Survey responses are analysed below, section by section. For the responses from the Permanent Representatives, frequency profiles of the ratings for every question which invited a rating are presented, together with the mean value of the ratings for each question. Generally, the information to be gleaned from the frequency profiles is evident from inspection and from the mean values. In some cases the analysis below contains some remarks on the ratings or means.

Most questions provided an opportunity for respondents to supply additional comments while some other questions invited comments only. All comments were subject to an in-depth examination and a summary of the main points emerging for each question is presented in the analysis. It is interesting to note some apparent inconsistencies between ratings and accompanying comments. In some cases high ratings were accompanied by some critical comment, while in others relatively low ratings were not supported by explanatory remarks. It may be that the approach taken to selecting a rating differs from one respondent to another and it is in the entire set of responses (ratings plus comments) that the value of the Survey is contained.

In addition to an analysis of the entire set of Permanent Representative responses from all regions, some regional breakdown is also shown and regional variations are drawn out, sometimes accompanied by a frequency chart for a particular region to illustrate a point. A difficulty arises with the analysis of the regional responses in that some of the regions have quite a small number of responses; RA III, for example, has just 6 responses, RA IV 9 and RA V 13. These are small samples and the mean values that have been calculated for each question for them are not statistically meaningful. However, they are used here to illustrate some differences across the regions.

Similarly, the responses from the Hydrological Advisers have been analysed but this sample is also small – just 13 complete responses and 10 partial responses with in many cases the option of "Not Applicable" being chosen for questions. This resulted in many questions having no more than 10 responses. Therefore, the cautionary remarks that apply to the regional analysis also apply to the Hydrological Advisers.

Section 1: Respondent Information

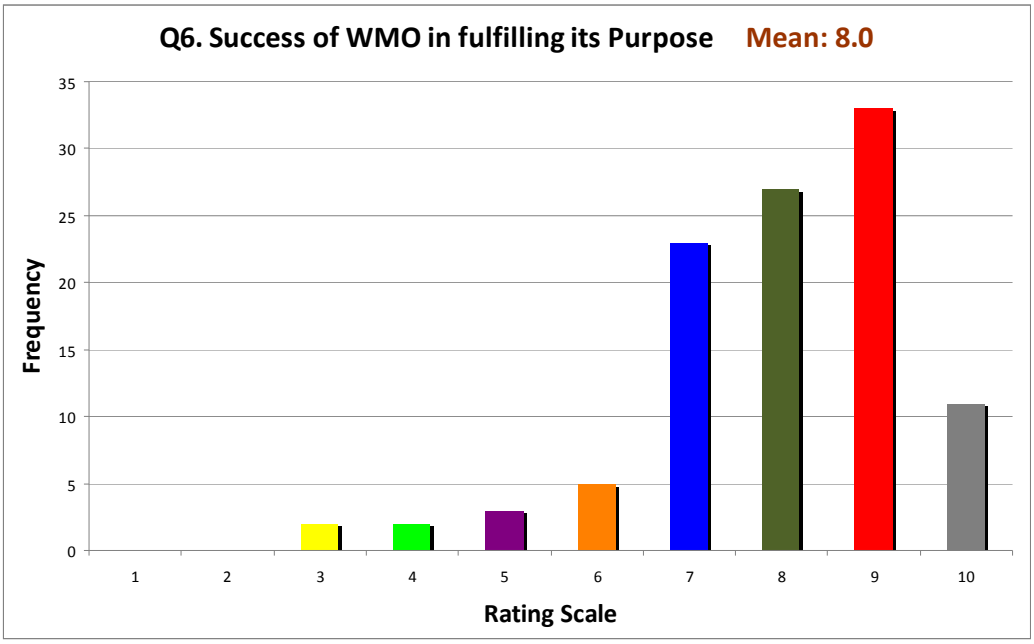
The purpose of this first section was to compile information on the respondents, their organizational affiliation, Member State or Territory, and contact details.

Question 3 attempted to establish which of the three main areas of WMO responsibility were of interest to the respondent – Weather, Climate, Water. The intention was that respondents could select more than one option but the survey as set up did not allow this. The responses to this question must therefore be ignored.

Section 2: Overall Perception of WMO

The questions in this section of the Survey were aimed at eliciting the views of the Permanent Representatives on the success of WMO in fulfilling its mission and on the perception of the organisation in the eyes of governments, relevant organisations and the general public. The success of WMO in attaining due recognition of its role in major international initiatives was also the subject of a question, as was the Permanent Representatives' views of the transparency of WMO's accountability for its resources. Finally, comments were invited on whether WMO might play a role in discussions NMHSs have with Governments.

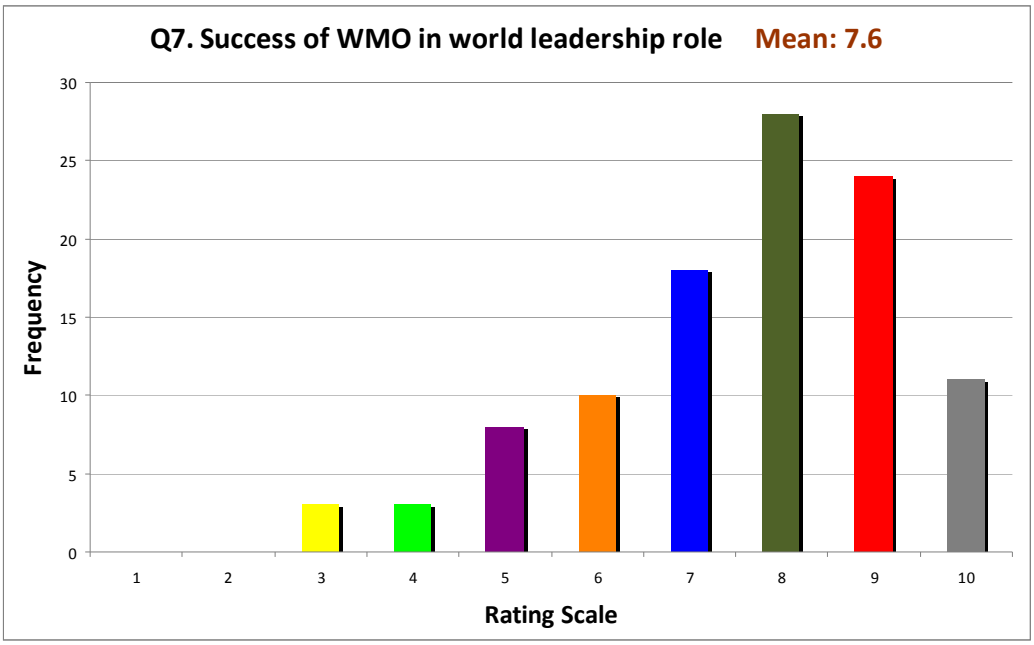
Question 6: In general, how do you rate the success of WMO in fulfilling its purpose from your perspective?



Analysis:
Comments generally were positive, as can be expected from the high scores. The lowest scores tended to come from some LDC and SIDS Member States who voiced some disappointment at level of practical support – *"lot of room for improvement"*. Among other comments were "*more strategic guidance expected"*.

Question 7: Under its collaborative framework WMO provides world leadership and expertise in international cooperation in the delivery and use of high-quality, authoritative weather, climate, hydrological and related environmental services by its Members, for the improvement of the well-being of societies of all nations.

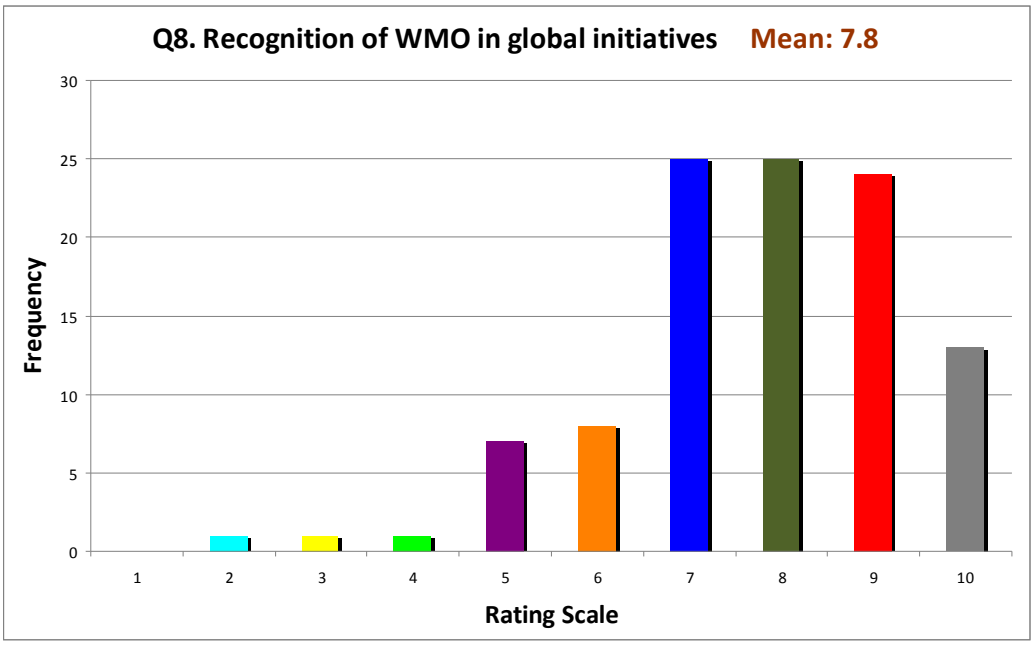
How would you rate the success of WMO in achieving this objective in the eyes of Governments, relevant international organizations and citizens?



Analysis:
While the ratings were very positive, some comments noted that WMO was not really visible to governments and citizens because of its "background" role. The large gaps in capacity across the WMO membership were also mentioned and it was suggested that WMO needed to improve efforts to address this.

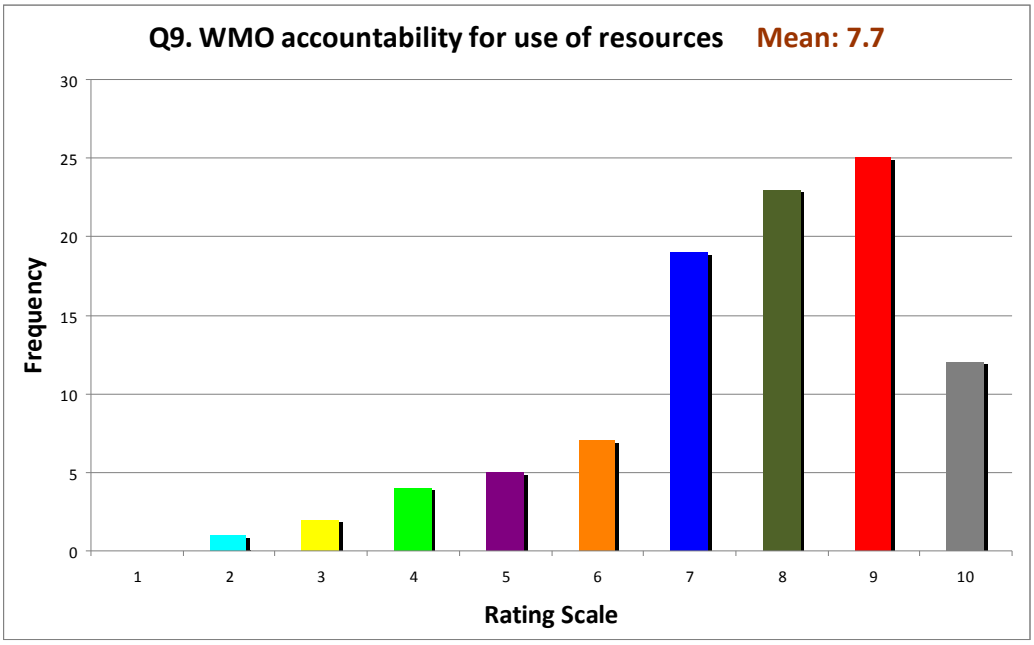
Question 8: In making the contributions required by its mandate, WMO needs to be recognized as a major player in high level international debate on issues concerning weather, climate and water and related issues such as climate change and disaster risk reduction. Initiatives such as Conference of Parties (COP) events, the Sendai Framework on Disaster Risk Reduction (DRR), GEO, and the Sustainable Development Goals (SDG) are among those that touch upon these issues.

How do you rate the success of WMO in achieving this recognition?



Analysis:
Many comments noted an improvement in recent times in the recognition accorded to WMO but it still fell short of the level WMO deserved – *"WMO more recognised by experts than by the public"*. Some considered that the benefits to NMHSs from WMO recognition were not evident.

Question 9: In relation to WMO's accountability for the use of its resources, please indicate your level of satisfaction with the transparency of this accounting:



Analysis:
Among comments made were some positive views on the Organization's financial management and improvements in transparency in recent years. Some concerns were expressed about the Results-based Budget not showing information on cost of activities and about the dearth of information available to non-EC members.

Question 10: Do you have an opinion as to whether it might be beneficial for National Agencies to occasionally bring WMO into direct discussions with Governments? Examples might include WMO support in budget submissions, and WMO assistance in demonstrating the value of Weather, Climate, Hydrological, marine and other environmental services.

Only comments rather than ratings were requested with this question.

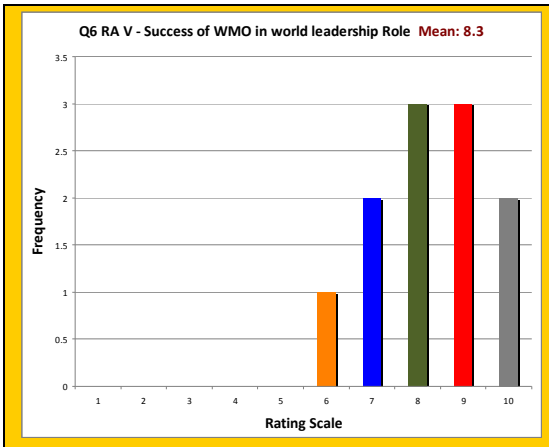
Analysis:
There were many positive answers to the question on a possible role for WMO in discussions with governments, mainly (but not exclusively) from developing countries. A comment that summed up many of the points was: *"possibly on a case by case basis, in consultation with the PR"*. This recognises that it does not apply in all cases, implicitly acknowledges resource limitations in trying to carry it out and highlights the key role of the PR. Other comments particularly favoured a role for WMO in demonstrating the value of NMHS services.

Regional Analysis – Section 2

Regional Associations **V** and **VI** scored particularly highly for WMO fulfilling its purpose. On the other hand, RA **IV** had a relatively low rating for WMO recognition in major initiatives. While the ratings for the standing of WMO at national level were good, comments from RAs **I**, **III**, **V** and **VI** mentioned a low visibility in the eyes of governments and citizens, although some improvement was noted.

For Question 9 on the transparency of WMO's accounting for use of its resources, the ratings were again generally high but RA **II** and RA **VI** had lower ratings (mean 7.4); while accompanying comments mention the unsatisfactory linkage of expenditure to programmes, a point mentioned by other regions also.

For Question 10 on the involvement of WMO in discussions with governments, the main regional variation was that there is somewhat less support for the idea in RA **VI** although it was acknowledged that it may apply to developing countries.



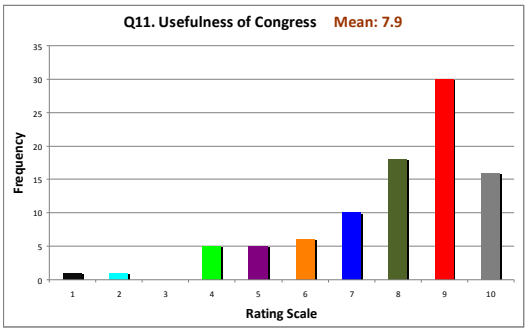
Hydrological Advisers' Responses – Section 2

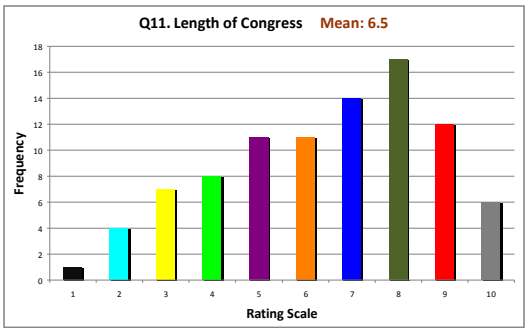
As was the case with almost all sections of the Survey, the responses from the Hydrological Advisers showed lower ratings for all questions, e.g. means of 7.1 for both Questions 6 (WMO fulfilling its purpose) and 7 (WMO's visibility for its leadership role in the eyes of governments, etc.). Some comments were similar to those of the Permanent Representatives, as in the support for a role for WMO in discussions with governments; the need for greater attention to hydrology and for stronger links with meteorological activity was highlighted by the Hydrological Advisers.

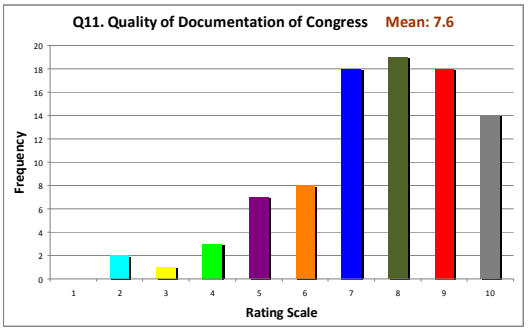
Section 3: WMO Structures for interacting with its Member States and Territories

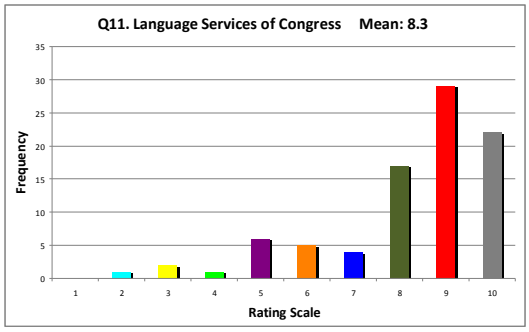
The purpose of this section was to obtain views on the structure, effectiveness and mode of operation of the Constituent Bodies of WMO. The opportunity was also taken to obtain opinions on WMO's communications with Members and difficulties associated with compliance with Technical Regulations.

Question 11: Please rate the effectiveness of Congress under the headings Usefulness, Length, Quality of Documentation, and Language Services:









Analysis:
It is evident that the ratings for the Length of Congress sessions were lower than for the other aspects. This was a pattern repeated for all Constituent Body Sessions.

Some comments advocated a firmer chairing of sessions to maintain focus on key issues and that sessions should be more focussed on succinct decision-making rather than information sharing.

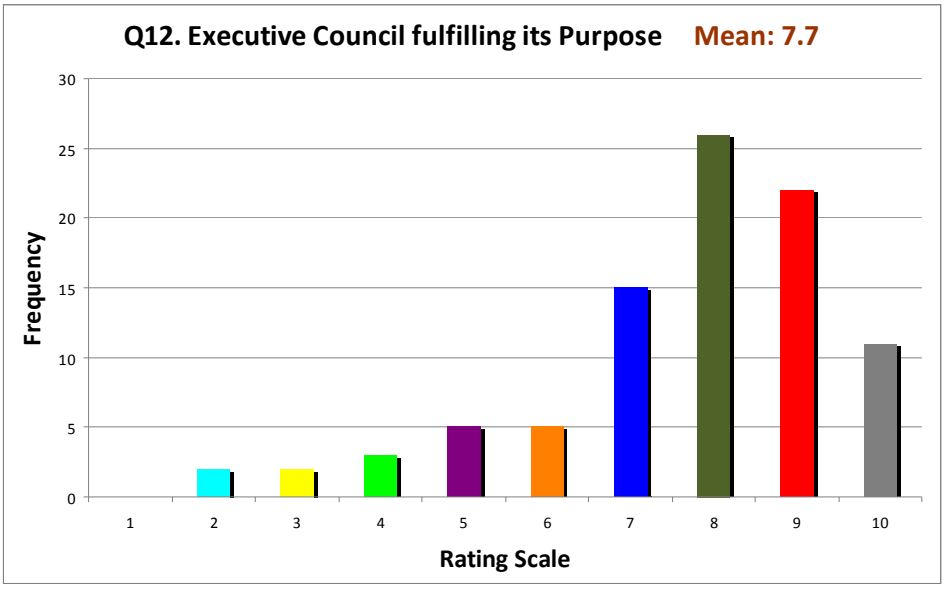
There were a number of suggestions in the comments for a shorter Congress every two or three years.

Despite the relatively high ratings for the documentation, there were quite a few critical comments to the effect that the documents were too long, were not written in the most readable manner and had duplication across the suite of documents.

There some very complimentary comments about the excellent language services. In fact, Language Services scored highly for all Constituent Bodies, although ratings from RA II tended to be somewhat lower on average

---

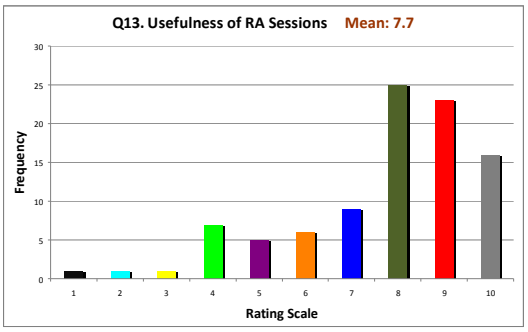
Question 12: How well do you consider the Executive Council fulfils it purpose?

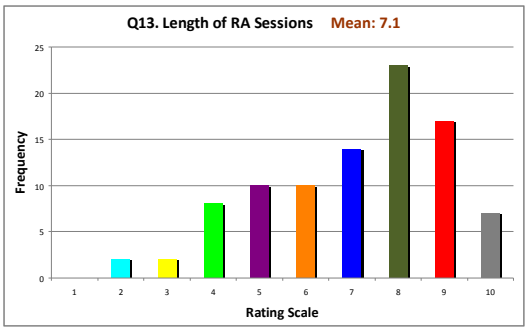


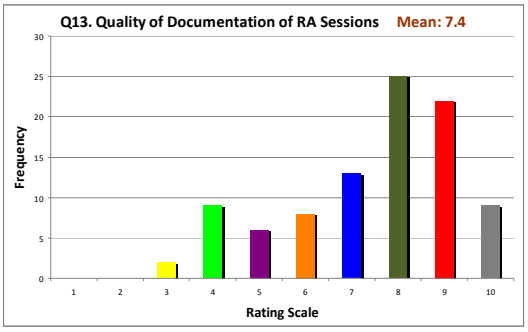
The question was framed to enable all Permanent Representatives, not just EC members, to answer.

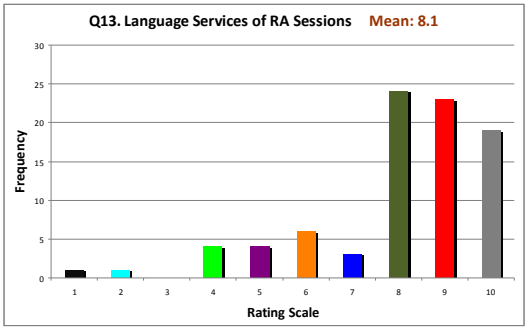
Analysis:
The most frequent comments were that the EC is too large, thereby resulting in some inefficiency, and that non-EC members would like more information (implicitly in an easily digestible form) about the outcome of EC discussions.

Question 13: Please rate the effectiveness of Regional Association (RA) sessions under the headings of Usefulness, Length, Quality of Documentation, and Language Services:



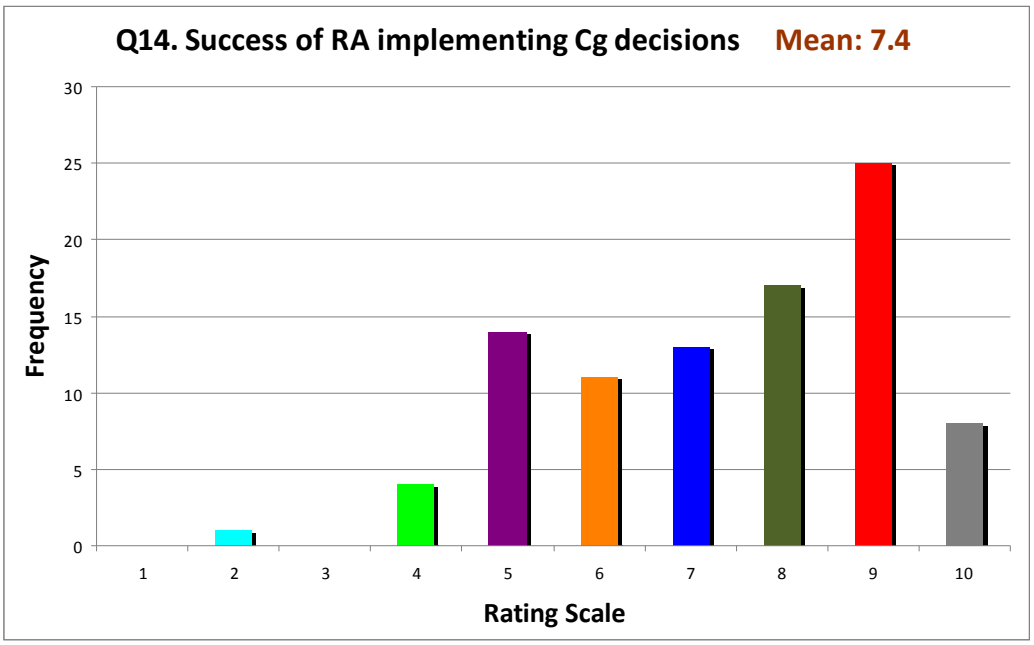






Analysis:
Similar to Question 11 (Congress) – documents are too long, the sessions are too long and should focus on key decisions.

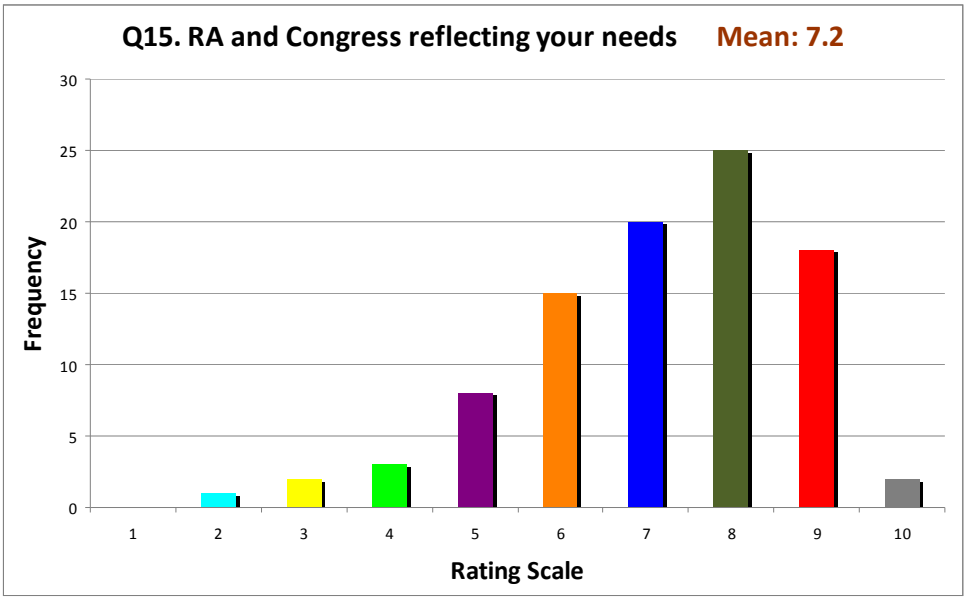
Question 14: How well do you consider your Regional Association (RA) is successful in implementing Congress decisions?



Analysis:
While there were many high ratings, this question produced a wider range of ratings than most others.

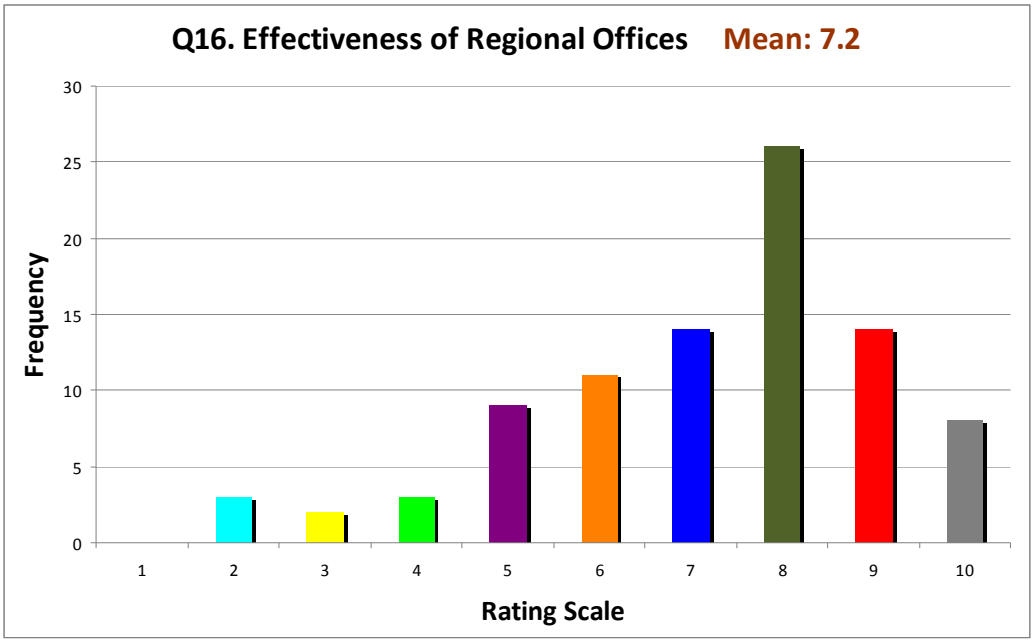
Among the comments were points to the effect that success is heavily tied to the effectiveness of the RA subsidiary bodies (Working Groups, etc.), and that these bodies are under-resourced; this may be the key to the rating pattern.

Question 15: How well do you consider the decisions of Congress and Regional Association (RA) sessions reflect your views and needs?



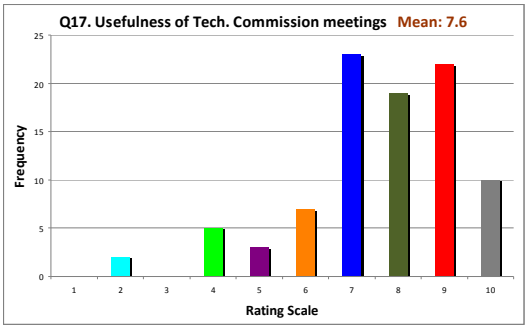
Analysis:
There was no major trend in the comments. Some LDCs and SIDS highlighted their view that their difficulties were not accorded sufficient priority. Another point related to the problem of translating broad issues into concrete plans at national level.

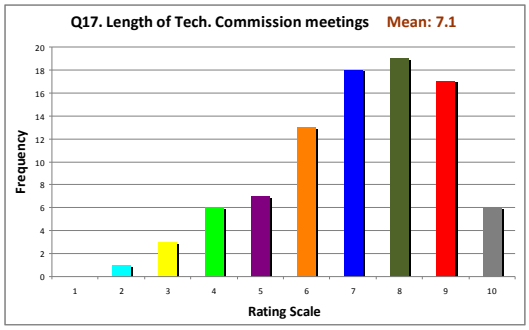
Question 16: Please rate the effectiveness of the activities of the Regional Offices and WMO Offices in the Regions:

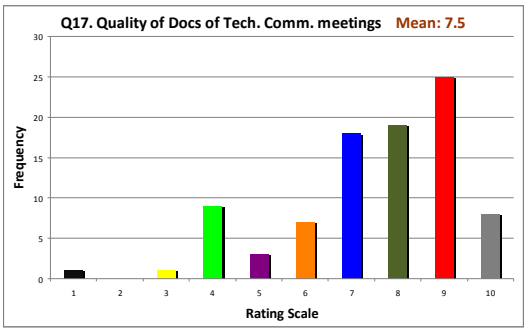


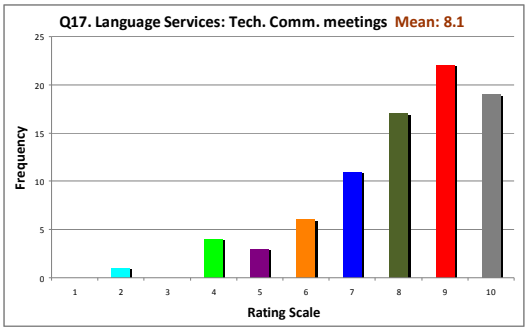
Analysis:
There were generally positive comments. The problems mentioned were related to resource issues and to some offices not being currently operational.

Question 17: Please rate the effectiveness of Technical Commission Meetings under the headings of Usefulness, Length, Quality of Documentation, and Language Services:







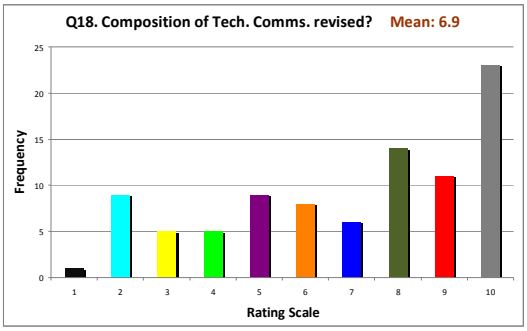


Analysis:

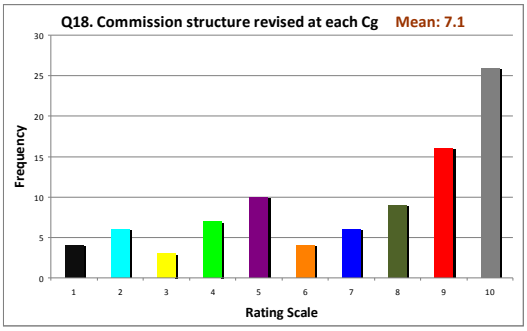
Some comments expressed frustration, with references to *"fractionalised discussion"*, *"overwhelmed by statements instead of decisions and clarifying challenges"*. Documentation was the subject of some very critical comments despite the relatively high ratings. Once again, LDCs and SIDS mentioned the difficulty of engaging with the Technical Commissions due to resource problems and this was responsible for some of the low ratings.

Question 18: Please indicate your level of agreement or disagreement with the following statements:

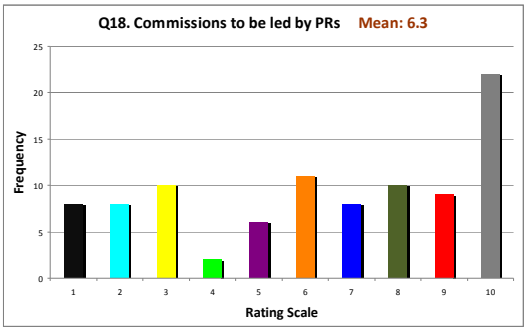
The current composition of Technical Commissions needs to be revised to meet the needs of Members in a better way:



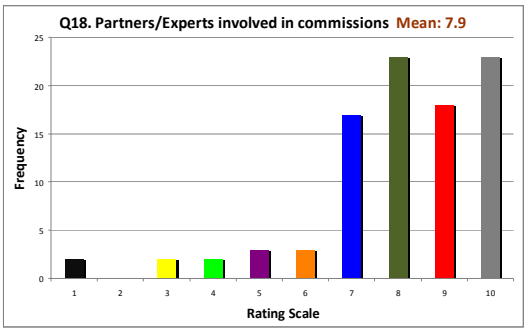
The commission structure should be revised at each Congress to meet the priorities set by the Members:



The commissions should be led by chairs at the level of WMO Permanent Representatives and members should be both experts and NMHS directors:



It would be beneficial to invite external stakeholders such as development partners and scientific and technical experts to the work of commissions:



Analysis:
The statement about the current composition of Technical Commissions did not draw many comments.

Revising the structure of Technical Commissions at each Congress - while the "Agree Strongly" had the highest rating, there is a spread of ratings and the comments tended to disagree with the statement, with some suggesting "reviewing" rather than "revising".

Again, in relation to the commissions being chaired by Permanent Representatives, while "Agree Strongly" was the highest single rating, those who took the opportunity to comment took a different view, with remarks such as *"they would not have the time", "the presidency of a TC is a fulltime job"* and *"TCs should be led by people who have knowledge in the area"*.

Involving external stakeholders attracted a high level of support although some cautioned against partners having different objectives.

Question 19: Please take the opportunity to comment on any aspect of the current Technical Commission structure and whether you consider any modifications are needed to, for example,
- The number of Commissions (currently eight)
- The mandates of the Commissions

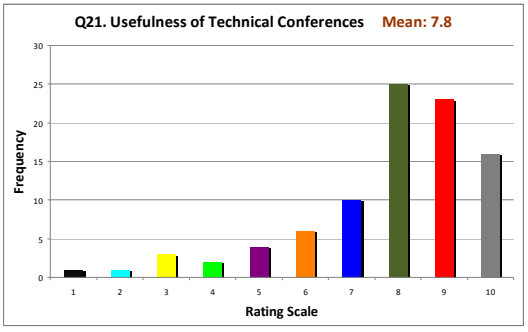
Analysis:
There were some advocates for reducing the number of Technical Commissions, while others recommended no change or urged caution so as not to lose some functionality. Many comments referred to the complex structures of Technical Commissions, with many subgroups, and recommended simplification and well-defined mandates to reduce duplication. Some went further and proposed more radical change such as a reclassification of TCs along functional rather than themed lines or a complete new beginning, starting with a "clean sheet of paper".

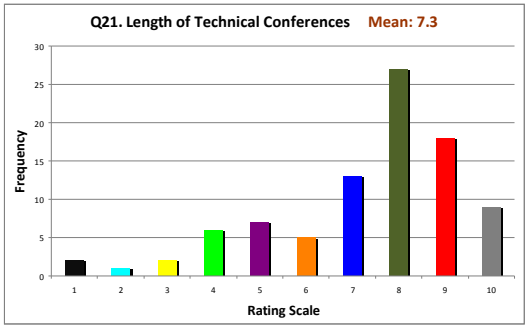
Question 20: Other Parts of the WMO Structure: under and across the Constituent Body Structure there is a very complex system of Management Groups, Working Groups, Task Teams, etc.
Please provide any views you may have that might help to reduce the complexity of these groups, and lead to more effectiveness and efficiency:

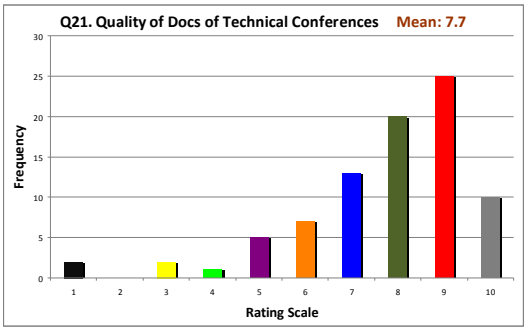
Analysis:
This question engaged the attention of very many respondents. There was general agreement that there were too many subgroups although some attributed it to the difficulty of dealing with almost 200 members. Among the suggestions for achieving a more rational substructure were:

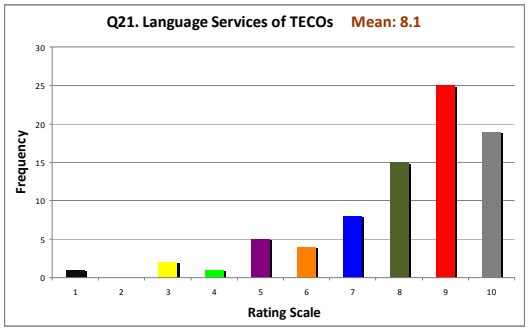
- Set a time limit on groups and do not automatically roll them over.
- For groups that are likely to remain in existence (perhaps linked to operational services) have a system of regular and rigorous review and evaluation.
- Have clear Terms of Reference for every group
- Place less emphasis on geographical representation and more on smaller groups with the relevant expertise.

Question 21: Technical Conferences are sometimes organised by WMO (for example, in conjunction with RA meetings or Technical Commission meetings). Please rate the effectiveness of the Technical Conferences under the headings of Usefulness, Length, Quality of Documentation, and Language Services:



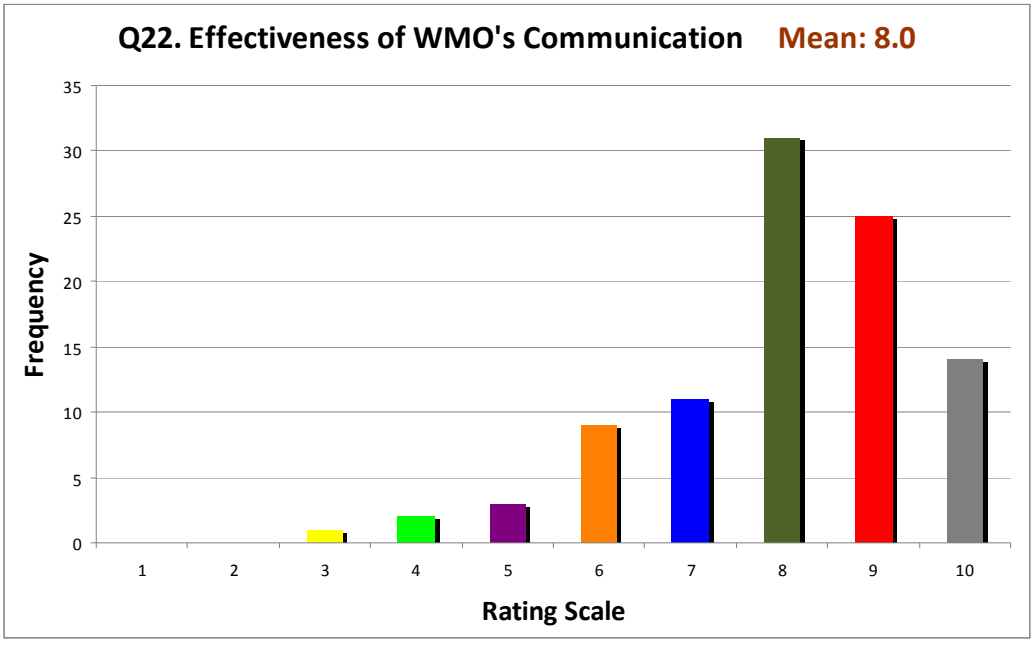






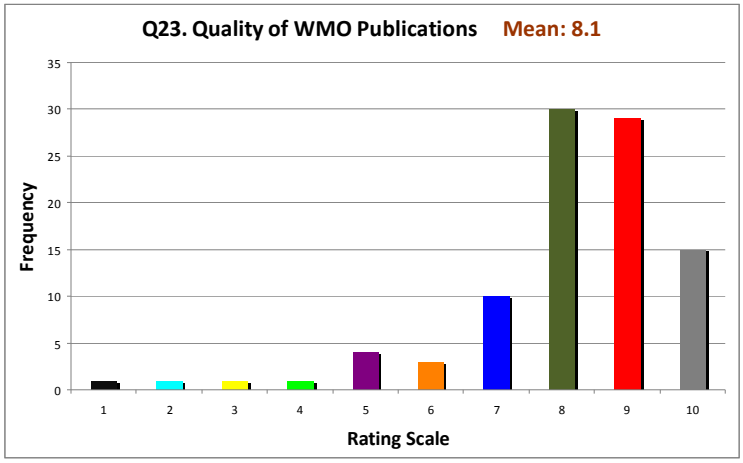
Analysis:
Generally there was good support for the Technical Conferences. The opportunity for open discussion was liked by some. Some comments favoured a clearer goal or theme for a Technical Conference, with a stronger link to the accompanying Constituent Body session.

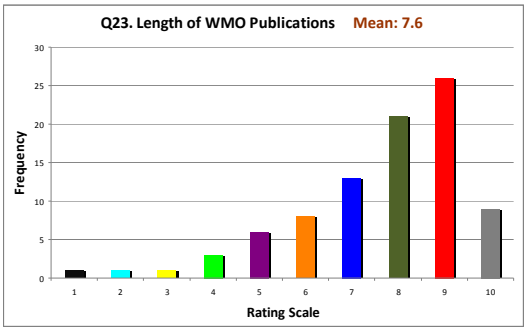
Question 22: WMO communicates with its Member States and Territories in a variety of ways including its public website.
Please rate the effectiveness of WMO's Communications activities:

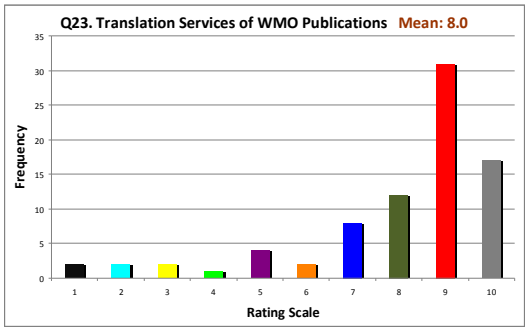


Analysis:
The high ratings indicate a generally satisfactory view of WMO communications with its members. This question did not invite comments.

Question 23: WMO Publications range from scientific and technical guides and manuals, to reports of conferences and meetings.
Please rate the effectiveness of WMO's Publications:



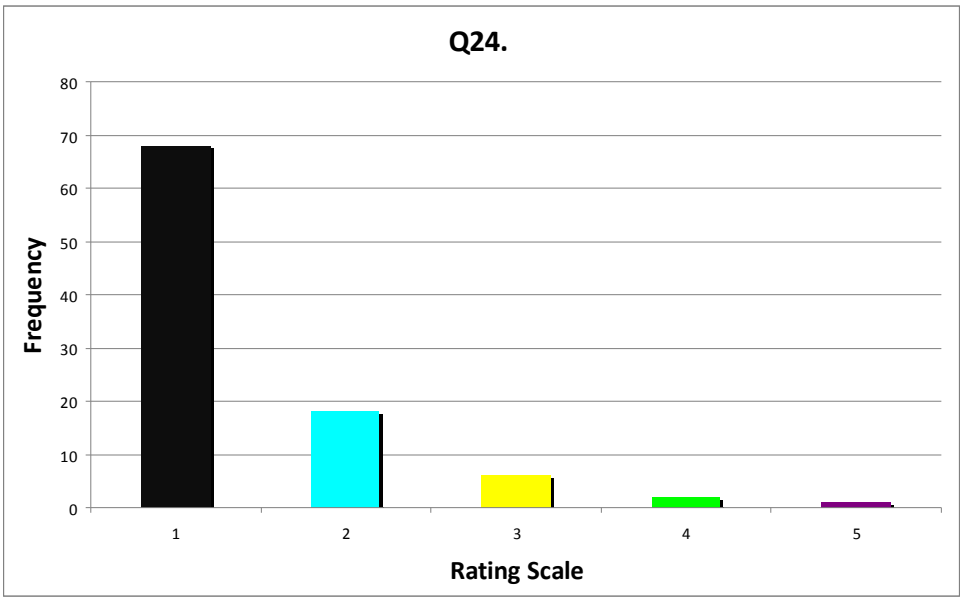




Analysis:

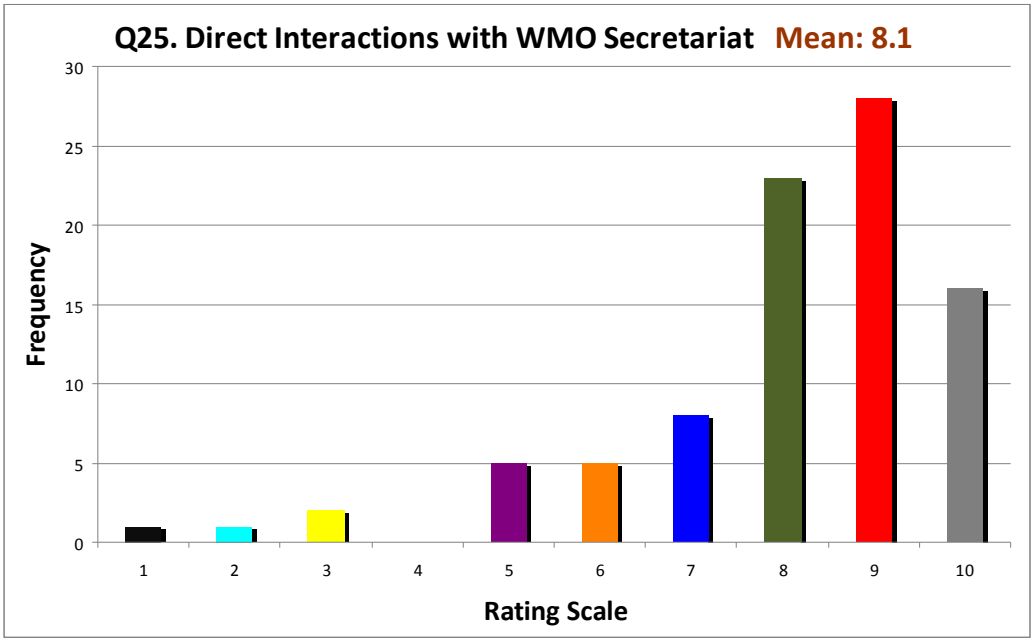
The comments reflected the positive view shown in the ratings. There was support for more use of electronic versions of publications although some considered that the current balance between hardcopy and electronic was good. Detailed scientific/technical material and policy documents were considered to be the most suitable for hardcopy dissemination.

Question 24: Approximately how often does your Member State/Territory or organisation interact with the WMO Secretariat (by telephone, email or letter)?
[Scale: 1 ≤ 1 month; 2 = every six months; 3 = annually; 4 = every 4 years; 5 = never]



Analysis:
This question did not invite comments. It is evident that once per month or more frequently is the norm.

Question 25: How satisfactory are these direct interactions with the WMO Secretariat?



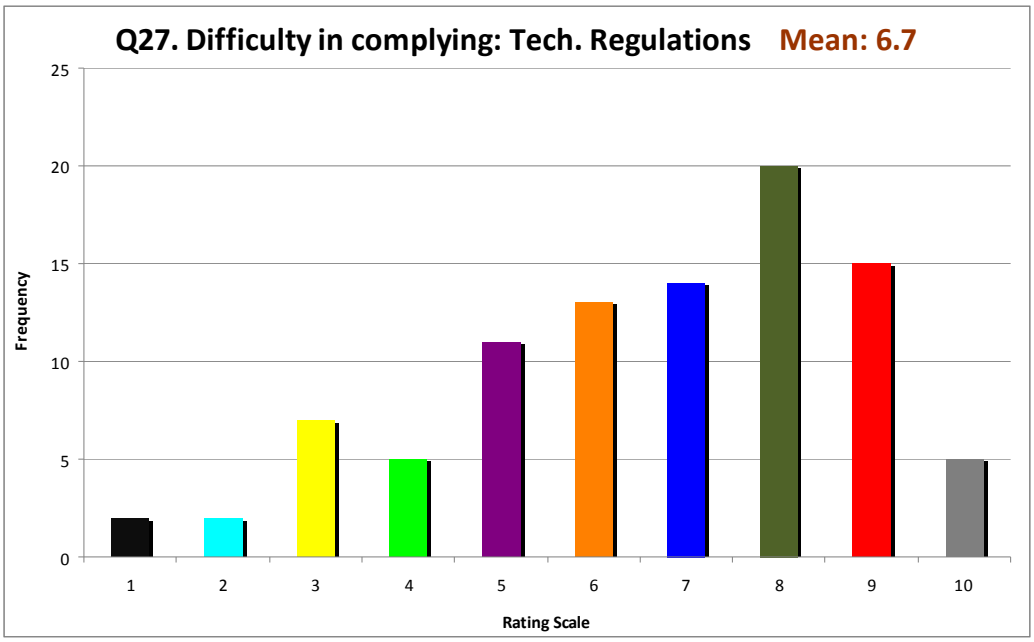
Analysis:
Most comments reported a very positive experience in dealing with WMO staff. Some comments referred to the lack of timely response to emails on occasions – *"sometimes it is good and fast and at times you do not get any feedback or answer at all"*.

There were some comments to the effect that more information would be welcome on whom to contact and the contact details.

Question 26: Looking at the level of involvement of your Member State/Territory or organisation in WMO activities, please indicate any ways in which you think WMO could increase this level of involvement:

Analysis:
The most popular comment related to the desirability of more visits by WMO personnel to the Member States and/or strengthening of the regional office structure. More regional workshops and cooperative activity were also supported.

Question 27: WMO publishes Technical Regulations which sets standards for Meteorological and Hydrological activity. How difficult does your Member State/Territory or organisation find it to comply with the Technical Regulations?



Analysis:
The ratings show a wider spread of scores than for many other questions, with a lower mean value.

There were many references to financial and human resource constraints making it difficult to achieve full compliance, with responses from RA I being particularly strong on this point. One pertinent comment was that in some cases requirements and standards are far above what many members can achieve; there should be an assessment of affordability and achievability when formulating regulations. Several comments mentioned the writing style of Technical Regulations ("dense and convoluted", "ambiguous") and advocated a more plain language approach. Delays in translation were also mentioned.

Regional Analysis – Section 3

For Constituent Body sessions the lowest ratings for all regions tended to be for the lengths of sessions, with RA **VI** showing consistently low ratings (as low as a mean of 4.9 for Congress sessions). RA **II** and RA **IV** showed relatively low ratings for documents for Congress and RA sessions, while RA **III** showed ratings above a mean of 8 for documents for all Constituent Bodies.

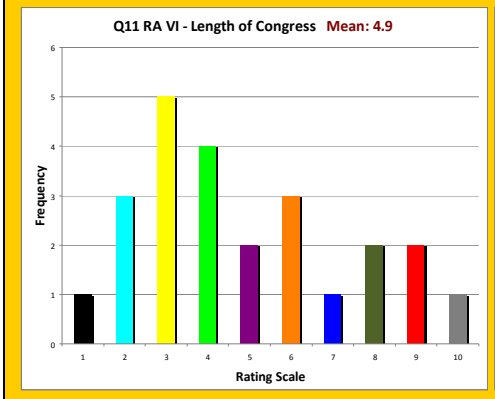
Language services showed generally high ratings for the Constituent Body sessions but RA **II** gave somewhat lower scores. While both RA **III** and RA **IV** gave high ratings (means of 8.8 and 8.2 respectively) for language services at RA sessions, both mentioned language as an issue in their comments.

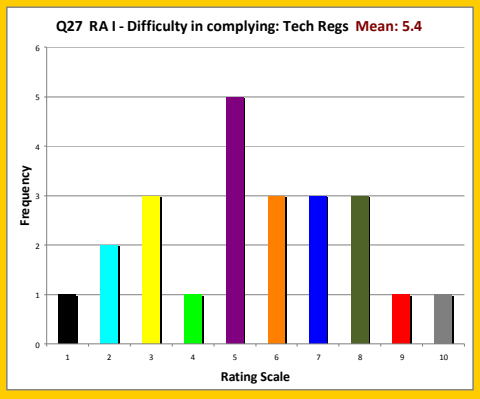
The effectiveness of the Executive Council gave rise to a variety of ratings across the regions, from a mean of 6.6 for RA **IV** to 9.0 for RA **III**. The associated comments did not explain the variation although lack of information about the EC was a relatively common comment for all regions.

In relation to the Regional Associations implementing Congress decisions, and both Constituent Bodies reflecting members' needs, RA **II**, RA **IV** and RA **V** gave lower ratings than the others.

For the four statements concerning the Technical Commissions, RA **V** showed the highest ratings in general. The statement about Permanent Representatives chairing the Technical Commissions earned low scores in general, with RA **IV** and RA **VI** showing means of 5.4.

The only other question in Section 3 which showed some regional variation was Question 27 on compliance with Technical Regulations. Whilst all ratings were relatively low, there is quite a marked variance from a low of 5.4 for RA **I** to a high of 7.7 for RA **VI**. As most regions record resource limitations as difficulty in achieving compliance, the variation is likely to be related to the degree of resource problems across the regions.

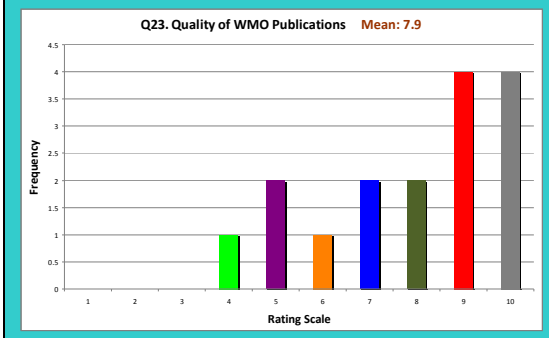




Hydrological Advisers Responses – Section 3

Once again, the ratings for all questions in this section were markedly lower than was the case for the Permanent Representatives. Some of the lowest scores were for the language services of the Constituent Body meetings, although the comments did not explain this opinion.

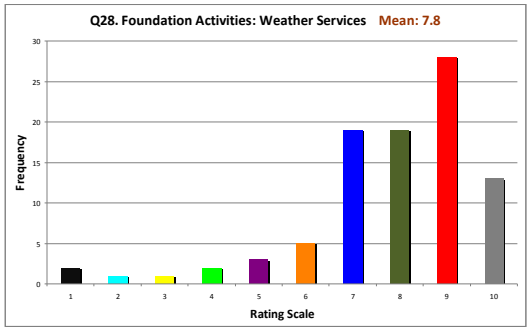
In relation to the future of the Technical Commissions, points similar to those of the Permanent Representatives were made in the main, with the addition of the importance of preserving the Commission for Hydrology.

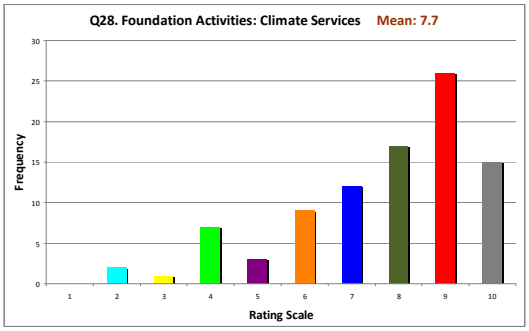


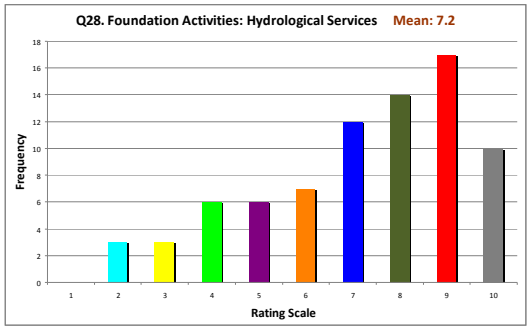
Section 4: WMO Support to Operational Weather, Climate and Hydrological services.

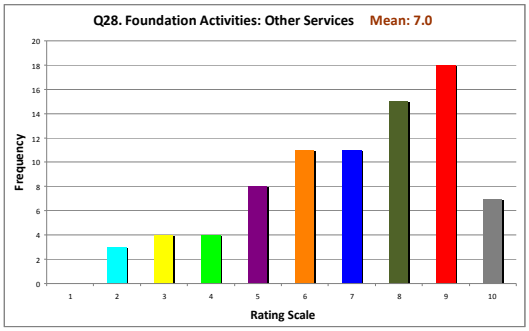
In this section the objective was to focus on the operational services provided on a regular basis by agencies at national or regional level and determine how the activities of WMO, through its programmes, brought value to these services.

Question 28: How do you rate the value of WMO to the Foundation Activities of Weather, Climate, Hydrological, marine and other environmental services?



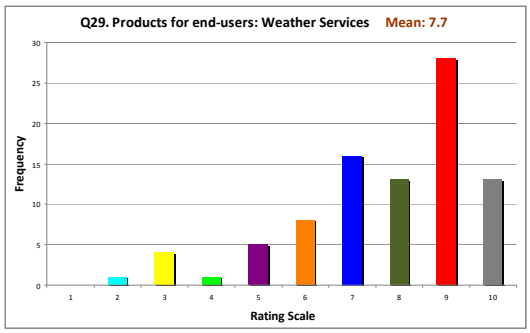


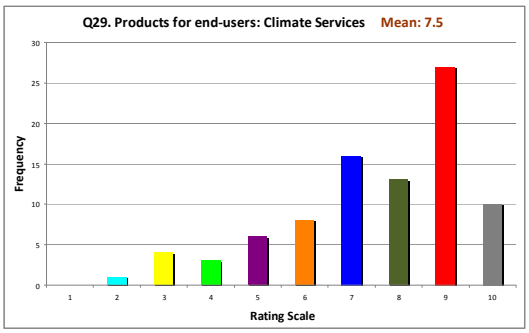


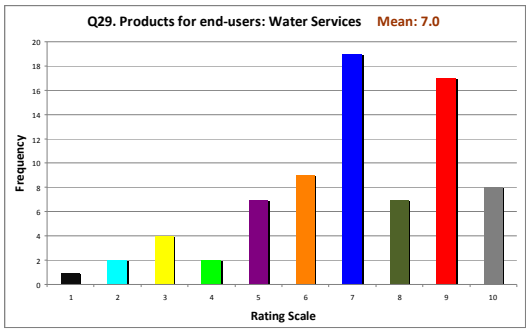


Analysis:
There were not many comments associated with this question. The most common point made was the need to strengthen hydrological networks.

Question 29: How do rate the value of WMO activity to products that are developed to meet end-user needs?



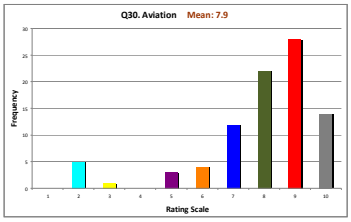


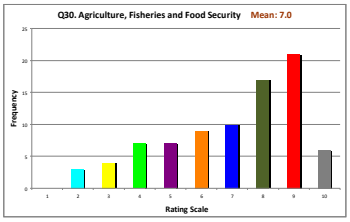


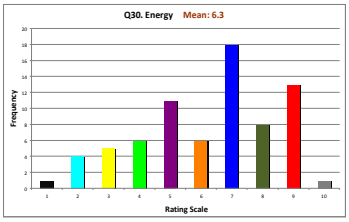
Analysis:
Ratings for "Water Services" (a more correct label would be "Hydrological Services") were somewhat lower than for the others; this reflects a trend in responses to other questions where hydrology is featured.

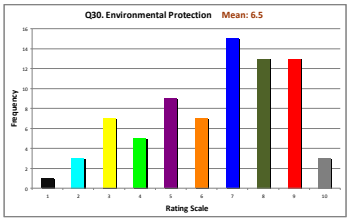
Comments included the statement that WMO's role should be to facilitate NMHSs in delivering excellent services to their customers. Some ideas about improvements needed in end-user services were mentioned.

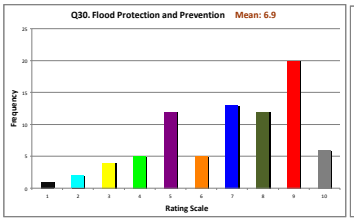
Question 30: For each of the listed user sectors, give your rating for the WMO contribution to your involvement in this area:

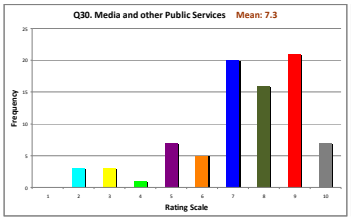


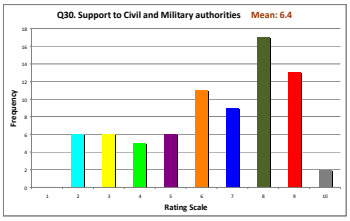


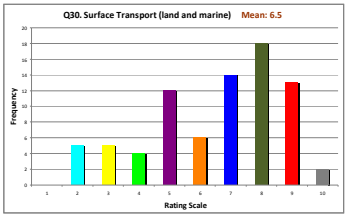


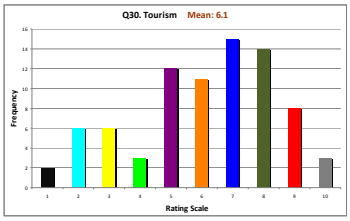


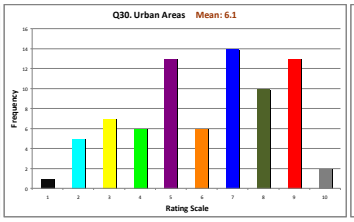


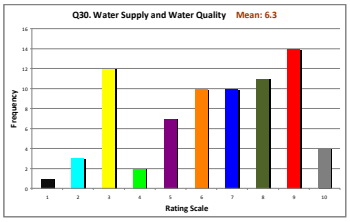


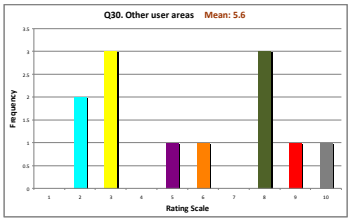












Analysis:

Ratings mostly are similar to the usual pattern of being skewed to the higher scores. However, lower ratings are more frequent than normal for some user areas. The category "Other" can be ignored as very few respondents chose this category.

Not many comments were received and some of them indicated that their low ratings signified that WMO input was not relevant to their involvement in those user areas.

Regional Analysis – Section 4

RA V recorded particularly high ratings of 8.8 and 8.9 for the value of WMO to Foundation Activities of Weather Services and Climate Services respectively. While the ratings for the value to Hydrological Services were lower across all regions, RA **II** showed the lowest mean (6.5). The low ratings from RA **II** were also reflected in the low mean of 6.4 for the value to products developed to meet needs of hydrological end-users. Comments from RA **V** and RA **VI** also mentioned hydrology as requiring more support.

The ratings for WMO contribution to various user areas show some regional variations but they seem to be related to the relevance of the particular user area in the region rather than any other factor.

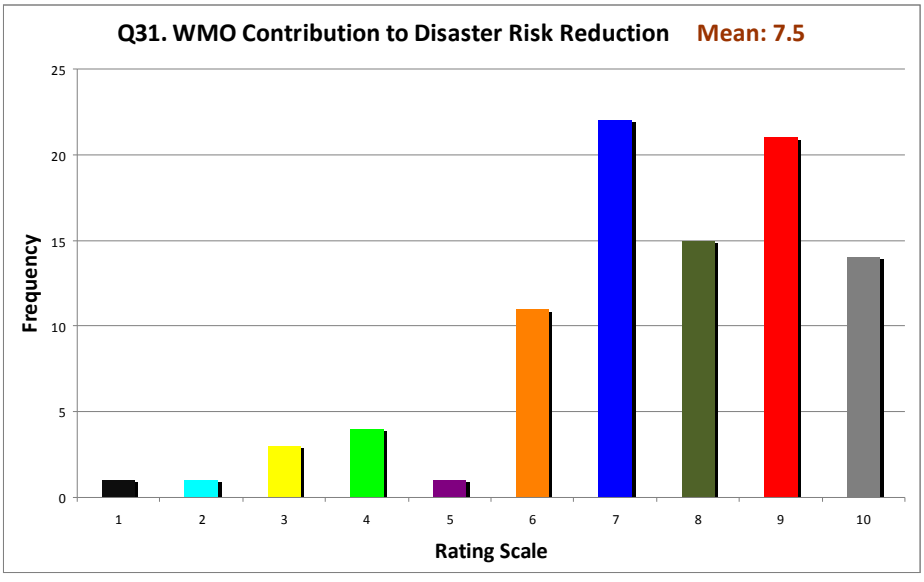
Hydrological Advisers' Responses – Section 4

The ratings from the Hydrological Advisers for questions in this section were more in line with those of the Permanent Representatives than was the case for other sections. Nevertheless, the lowest ratings tended to be in response to questions with a hydrological flavour, e.g. a mean of 6.5 for the value of WMO to the Foundation Activities of Hydrological Services.

Section 5: Disaster Risk Reduction (DRR)

Disaster Risk Reduction is a priority area for WMO and this section sought views on how effective the WMO contribution is and how it might be made stronger.

Question 31: How do you rate the effectiveness of WMO's contribution to Disaster Risk Reduction?



Analysis:
There were some very positive comments (*"WMO contribution is immense"*) although it was acknowledged that more could be done. Some comments adverted to the fact that there were very many DRR projects but there was insufficient cohesion in the range of WMO activity in this area. Some particular DRR initiatives were mentioned very favourably.

Question 32: Please mention ways in which WMO can make a stronger contribution to DRR in its three areas of responsibility (up to three points for each topic – Weather, Climate, Water):

Analysis:
For all topics there was an emphasis in the comments on Capacity Development, training and access to information.
Weather: the main points were improved local forecasts, promotion and availability of Early Warning Systems, and impact-based forecasts.
Climate: implementation of the GFCS and access to the outputs of climate prediction models were the main points mentioned.
Water: the main points were development of Flood Forecasting Services and support for hydrological monitoring networks.

Regional Analysis – Section 5

RA **II** and RA **III** give the lowest ratings.

Comments generally supported more attention for Early Warning Systems. A comment from RA **IV** stressed the role of the NMHSs and supported efforts aimed at having them fit well into national DRR activity.

Hydrological Advisers' Responses – Section 5

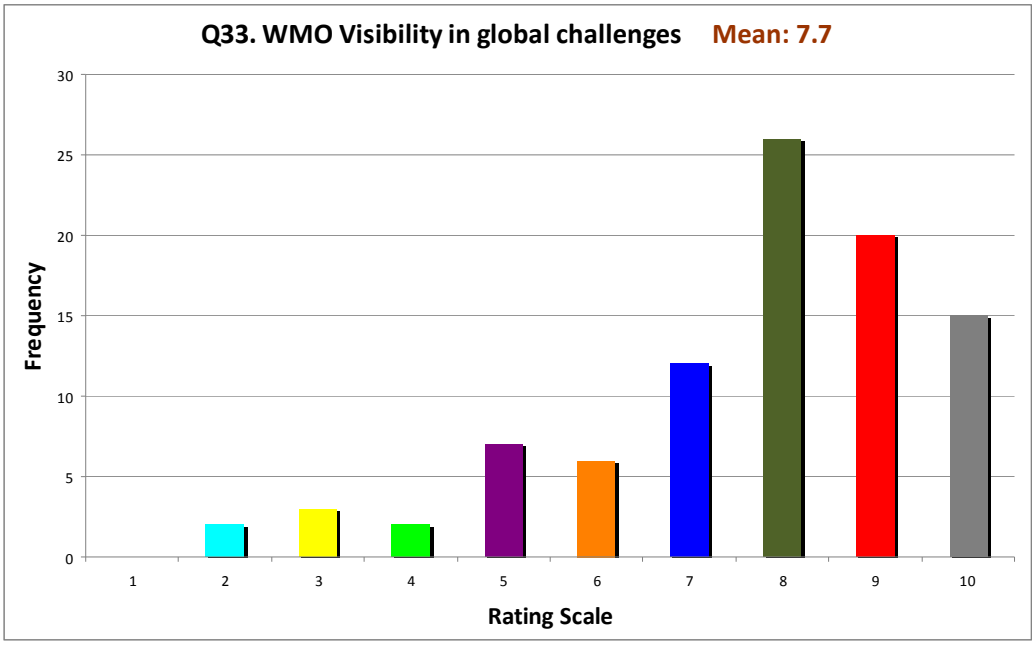
The ratings from the Hydrological Advisers were very much in line with those of the Permanent Representatives for this section. Among the comments the most popular point made was that for more support for Flood Monitoring and Forecasting.

Section 6: Climate Variability and Climate Change

Climate Change is one of the major challenges facing the planet. WMO has a part to play in helping governments and citizens to understand the challenge and to formulate strategies to try to mitigate the dangers and to adapt to a changing climate. WMO's co-sponsorship with the United Nations Environment Programme of the Intergovernmental Panel on Climate Change (IPCC) is part of its response to the challenge.

Natural variations in Climate also present significant challenges to communities across the world. WMO's active role in the Global Framework for Climate Service (GFCS) is part of its recognition of this challenge.

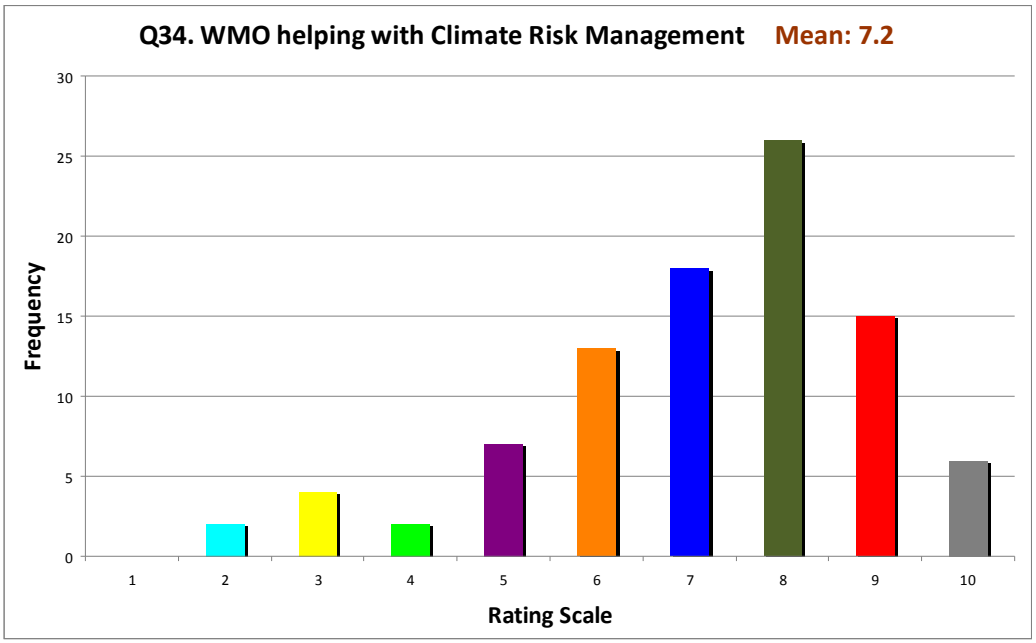
Question 33: Do you think that the visibility of WMO in relation to these global challenges is satisfactory?



Analysis:
WMO's role in the IPCC is very important but not well-known and needs to be publicised more. The GFCS has the potential to help raise the visibility of WMO but it needs to be carried forward and promoted more.

Question 34: WMO has a general objective of helping its Member States and Territories to achieve better management of the risks posed by climate variability and climate change.

How do rate the success of WMO in achieving this objective?



Analysis:
Support is needed for regional climate modelling. The GFCS has so far not delivered on expectations.

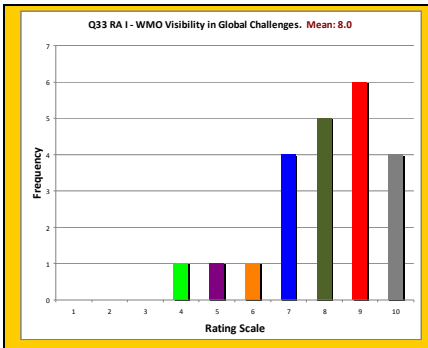
Question 35: Please mention up to three ways in which WMO could improve its effectiveness in the area of Climate Variability and Climate Change.

Analysis:
There were very many comments made in response to this question even though it was not mandatory to answer it. The points that were repeated most often were the need for training and education in the topics; improved access for Member State to the outputs of climate models on all scales; strengthen GFCS activity and make it less resource-intensive for the developing Member States and Territories; clearly written information on Climate Change and Climate Variability made available to all sectors of society.

Regional Analysis – Section 6

The ratings for the visibility of WMO in these global challenges showed no major regional variation, while for the success of WMO in helping its members to manage the risks associated with Climate Variability and Climate Change showed somewhat lower ratings with RA **IV** the lowest with a mean of 6.7.

Comments included ones from RA **II** and RA **VI** to the effect that WMO's role in the IPCC was not well recognised. Support for further developing the GFCS was expressed by RA **II**, RA **IV** and RA **V**.



Hydrological Advisers' Responses – Section 6

The ratings submitted by the Hydrological Advisers for this section tended to be somewhat lower than from the Permanent Representatives; for Question 33 on the visibility of WMO in the global challenges posed by Climate Variability and Climate Change, for example, the mean rating was 6.9.

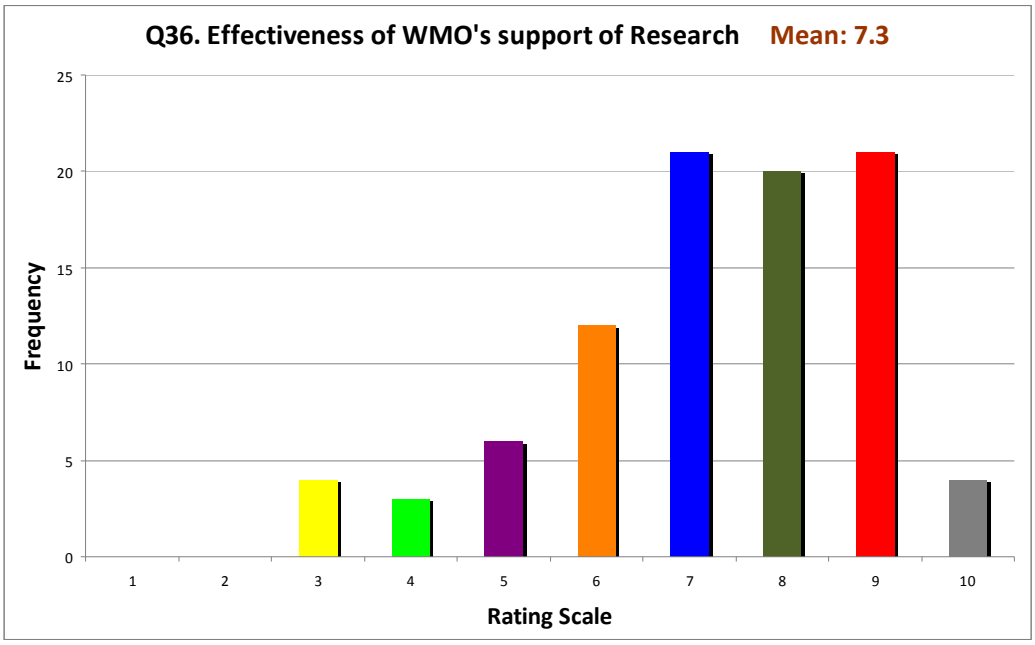
Comments tended to focus on the importance of Early Warning Systems and on Capacity Development.

Section 7: WMO Activities in Research

The research activities of WMO, in terms of its role in encouraging, coordinating and facilitating relevant research and in monitoring atmospheric composition, were the focus of the questions in this section.

The mission of WMO, as described in its Convention, tasks the organization to encourage research in meteorology, hydrology and, as appropriate, in related fields and to assist in coordinating international efforts in research.

Question 36: How do you rate the effectiveness of WMO activities in support of research?

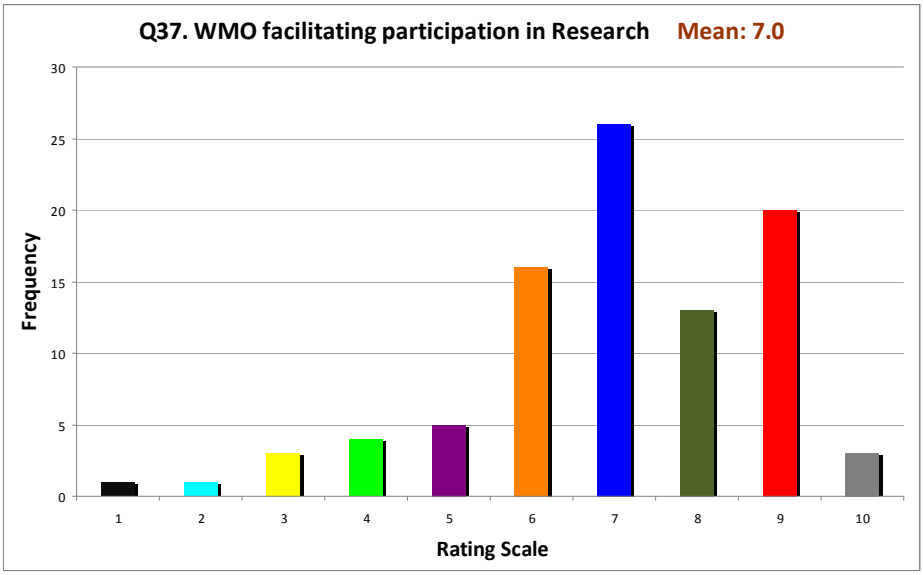


Analysis

There was a positive view of WMO efforts to support research and some particular examples were quoted. Gathering regular information on Member State research requirements was advocated. For the LDCs and SIDS, however, the awareness of WMO research-related activity was not high and there were calls for more fellowships and other support.

Question 37: WMO has a role in facilitating the participation of organizations in appropriate research activity, access to research results and the application of research to operational systems so that societal benefit is achieved.

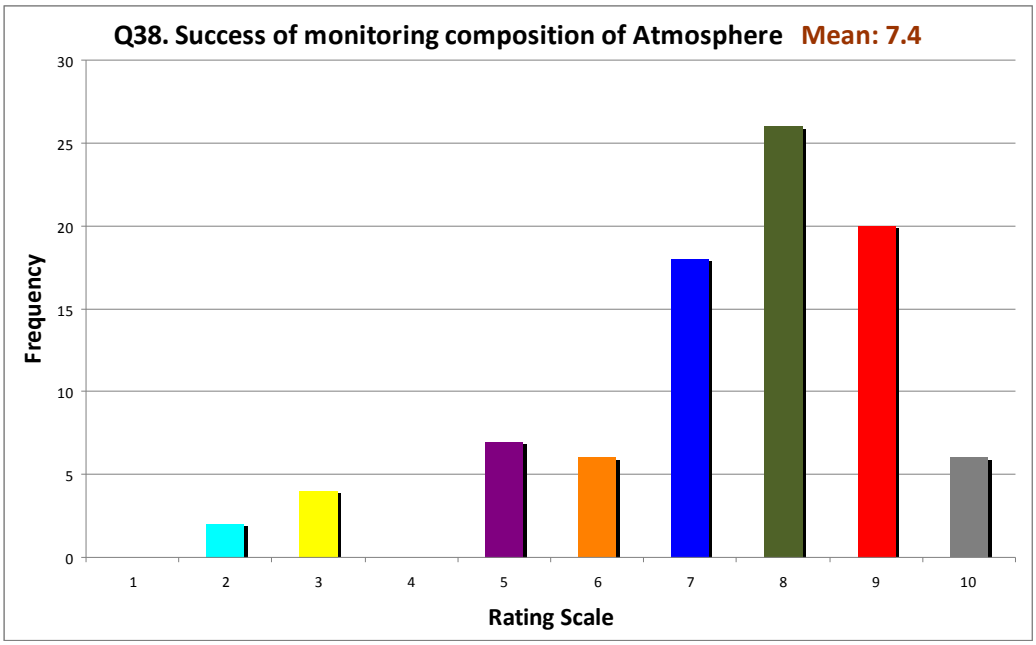
Please indicate how successful you consider WMO to be in achieving these goals:



Analysis:
More training is needed to achieve benefits of research. The application of research results to operational services can be unsatisfactory.

Question 38: In response to the need to understand how global, regional and local perturbations of atmospheric composition affect weather, climate, state of ecosystem and human health, monitoring the composition of the atmosphere (through, for example, the Global Atmosphere Watch Programme) is part of WMO's activity.

Please indicate the extent to which you consider WMO is successful in this activity:



Analysis:
There were some comments advocating more GAW stations in developing countries.

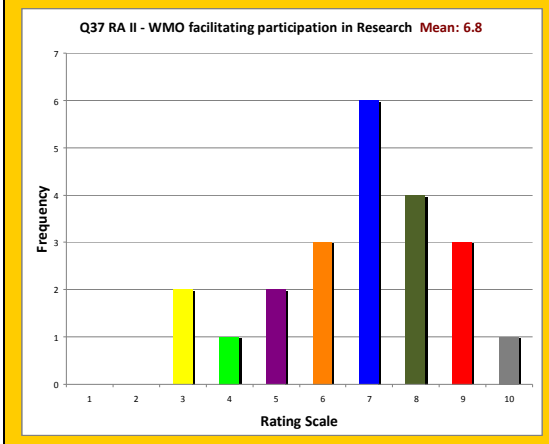
Question 39: Please enter in the comment box any views you may have on how WMO can improve its contribution to research:

Analysis:
A suggestion made by several respondents was to encourage more involvement of LDCs and SIDS in research by a pairing arrangement with developed countries. Another comment urged the promotion of greater links with local universities. A further point was to relate research effort more closely to the requirements of operational services and of WMO programmes.

Regional Analysis – Section 7

Some regional variation was evident in the ratings accorded to Questions 36 (effectiveness of WMO activity in support of research) and 37 (success of WMO in facilitating participation in research and benefit to operational systems); RA **VI** shows the lowest ratings, followed by RA **II**. The higher relevance of national or regional research activity may have affected these ratings.

In comments RA **I** was among several regions that drew attention to the need for more GAW stations, particularly in developing countries and it also urged twinning arrangements in research between LDCs and developed countries.

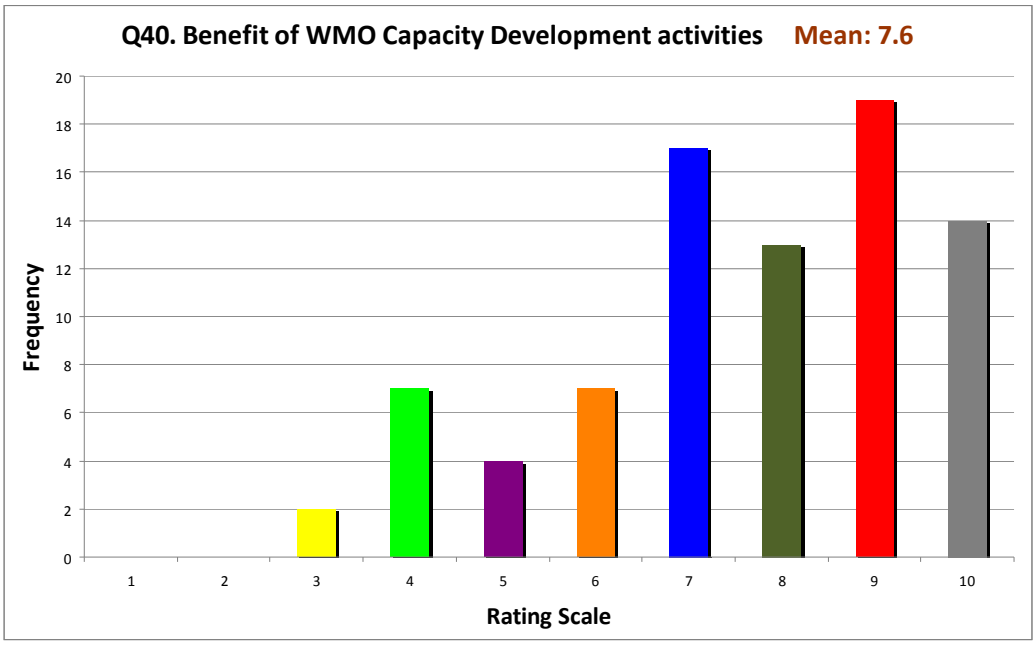


Hydrological Advisers' Responses – Section 7

The ratings from the Hydrological Advisers for this section were markedly lower than those from the Permanent Representatives for two questions, Question 36 on the effectiveness of WMO activities in Research and Question 37 on the success of WMO in facilitating the participation of other organisations in research activity.

Section 8: Capacity Development

Question 40: Please indicate the level overall benefit you derive from WMO Capacity Development activities:



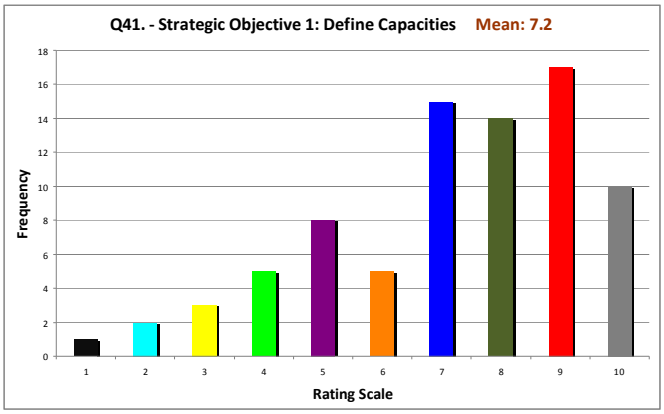
Analysis:
The ratings for this question reflect a lower number of respondents as some countries do not derive direct benefit and selected "Not Applicable".

It was acknowledged that the LDCs receive substantial benefits although more help is needed. There was acknowledgement also from some developed countries that they also benefitted indirectly through improvements in observational networks elsewhere.

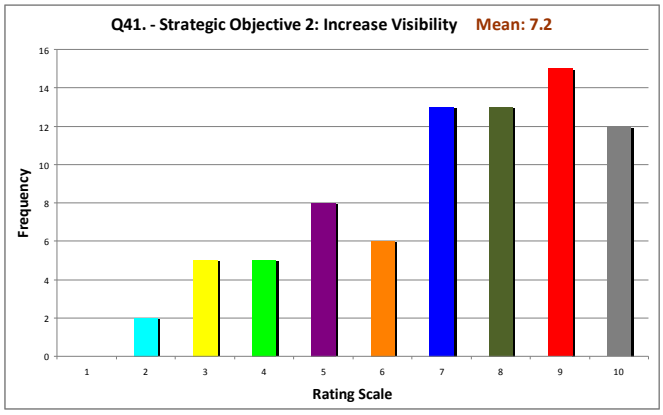
Question 41: WMO has listed six Strategic Objectives in its current Capacity Development Strategy.

Please indicate the extent to which you benefit from each of these strategic areas of Capacity Development:

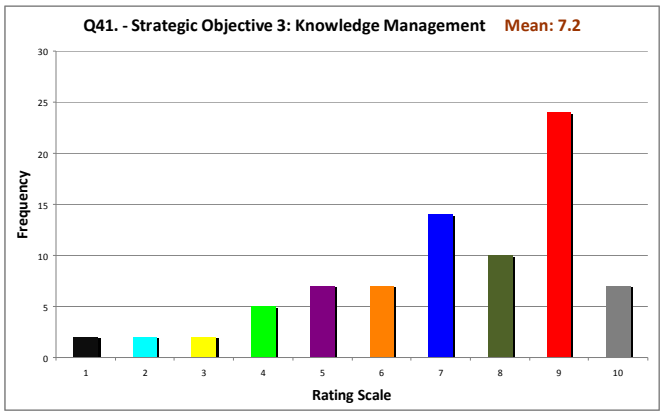
Strategic Objective 1: Define required capacities and identify deficiencies



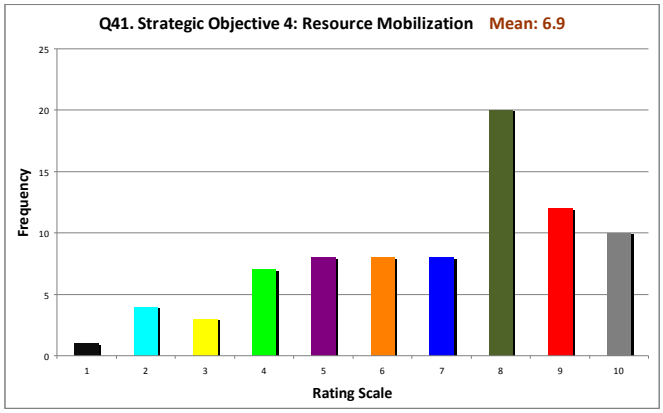
Strategic Objective 2:
Increase visibility and national ownership



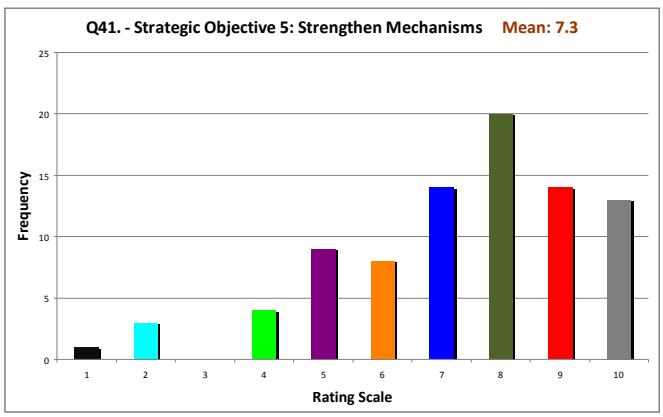
Strategic Objective 3:
Optimize knowledge Management



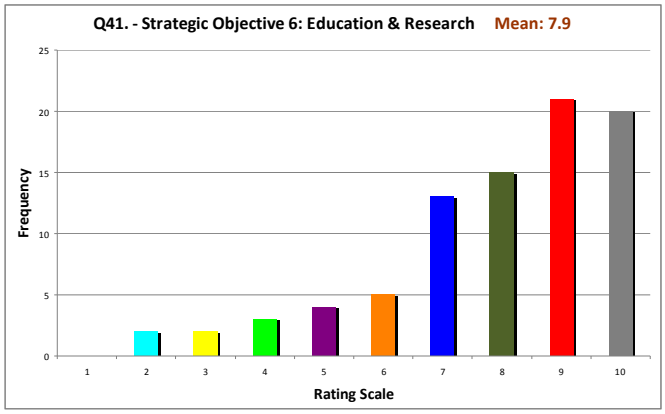
Strategic Objective 4:
Reinforce resource mobilization and project management



Strategic Objective 5:
Strengthen global, regional and subregional mechanisms



Strategic Objective 6:
Increase education and research opportunities



Analysis:

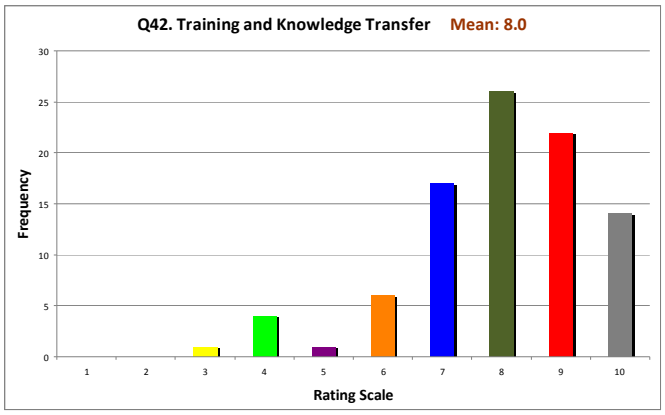
The ratings reveal that the benefits from Strategic Objective 4 were less than those from the other Strategic Objectives in the perception of many respondents.

There were some positive comments but no significant observations.

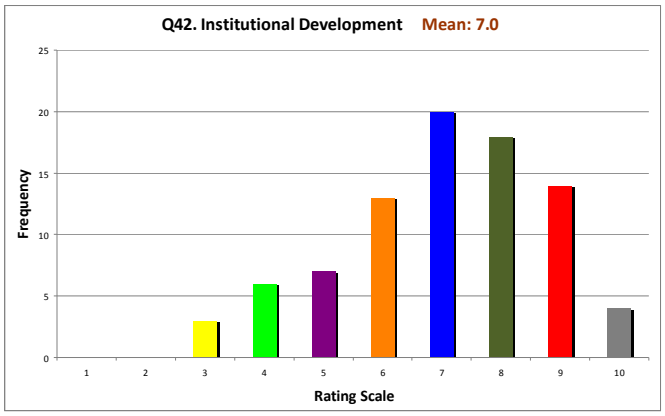
Question 42: The main activities of WMO in Capacity Development are listed below.

Please indicate the effectiveness of WMO in these areas.

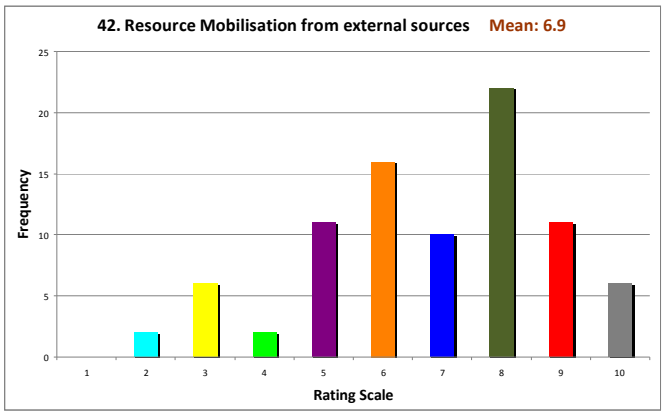
Training & Knowledge Transfer, including Workshops and Fellowships



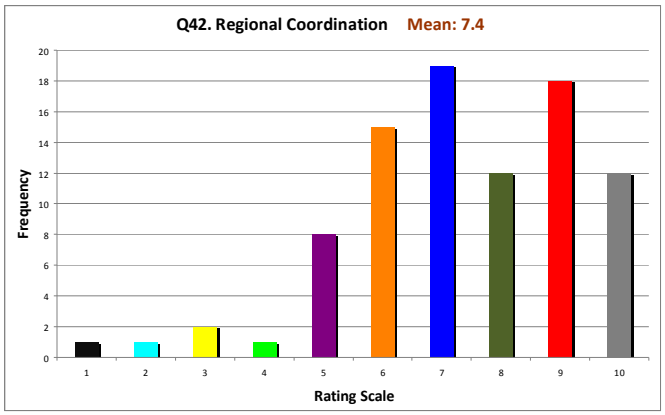
Institutional Development (including the development of capacity in topics such as strategic planning and project management)



Resource Mobilisation from external sources



Regional Coordination

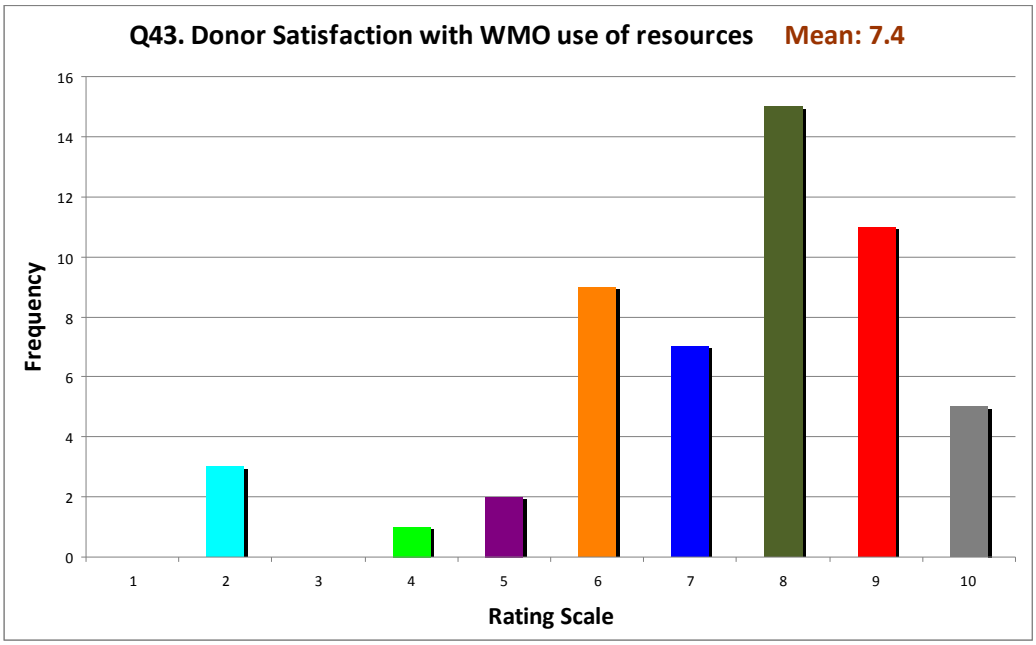


Analysis:

The lower ratings for Resource Mobilization from external sources may be influenced by some respondents giving low scores because of lack of relevance to them rather than from dissatisfaction.

Generally positive comments. A point made by some was that it is not always possible to drive full benefit from training due to financial and other constraints.

Question 43: If your Member State/Territory or organisation is a donor of money or expertise (or facilitates such donations) to WMO Capacity Development activities, please indicate your level of satisfaction with how WMO utilises these resources:



Analysis:
More reports on how funds are used would be welcomed. Some Member States work through national aid agencies rather than WMO because of the better alignment with national objectives and smaller overheads.

Question 44: Please provide additional comment or give your views on any other aspect of WMO involvement in Capacity Development.

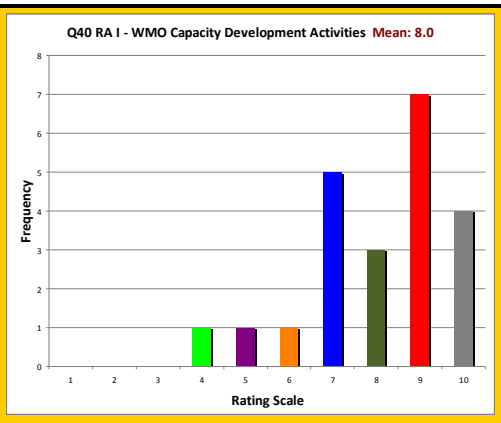
Analysis:
The most common comment was that WMO resources devoted to Capacity Development need to be increased, possibly through stronger partnerships with development agencies.

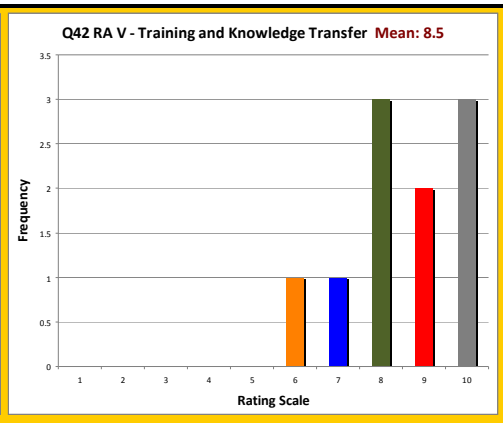
Regional Analysis – Section 8

Question 40 on the benefits of Capacity Development showed high ratings but they were lower for RA **VI** (mean 6.8); this may be related to the benefits being mainly obtained by developing countries.

Question 41 on the six Strategic Objectives of CD also shows lower ratings for RA **VI**, and to a lesser extent, RA **II**.

The question on the satisfaction of donors on the utilisation of resources shows surprising variation with RA **III** giving a mean of 9.0 as compared to 6.5 from RA **IV**. The desire for more informative feedback to donors was mentioned in comments by RA **VI**. Comments from RA **V** included the point that capacity development benefits were difficult to sustain, in SIDS, for example.

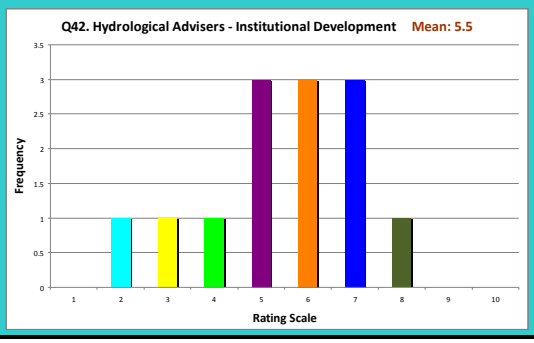




Hydrological Advisers Responses – Section 8

In general, the ratings from the Hydrological Advisers for the questions on Capacity Development tended to be lower than those of the Permanent Representatives. As an example, the question on the effectiveness of WMO's activities in Institutional Development as part of Capacity Development drew a mean rating of 5.5.

There were no comments of significance over and above those made by Permanent Representatives.



Section 9: Final Comments

While the previous sections of the survey posed questions whose answers built up a pool of information from which strengths and weaknesses could be inferred, this final section explicitly asked the survey respondents to list the Strengths and Weaknesses of WMO. It went on to ask for lists of Opportunities and threats facing the organization.

Question 45: One of the purposes of this survey is to identify the current strengths and weaknesses of WMO. Whilst much of that information may be inferred from your answers to previous questions, it would be useful if you could explicitly identify what you consider to be the main strengths and weaknesses of the Organization. Please enter up to five points in each of the following boxes:

Question 46: Various external challenges present both Opportunities and Threats to WMO. Please take the opportunity to identify what you consider to be the main Opportunities and Threats facing WMO (up to five points in each box):

Analysis:
A very large number of items were included in the replies.

The most commonly cited Strengths, Weaknesses, Opportunities and Threats are shown in the Table.

Strengths	Weaknesses
1. WMO is an organization with a Global reach and a very large membership. 2. It has staff with considerable expertise and experience. 3. Throughout the membership of the organization there is an excellent spirit of cooperation. 4. It enjoys huge success in arranging the exchange of large quantities of data across the globe, much of it in real time. 5. It coordinates a very large number of valuable activities that yield enormous benefits. 6. It devises and promulgates Standards that ensure high quality and consistent practices in its Member States and Territories. 7. Through its Capacity Development activities it supports and enhances weather, climate and hydrological services all over the world.	1. WMO organisational structures are complex and unwieldy. 2. Financial and human resources are very stretched in view of the large amount of activities. 3. The organization is too bureaucratic, resulting in inefficiency. 4. The recognition accorded to WMO in major global initiatives is low, as is the awareness of the organization at national level outside of the NMHSs. 5. There is slow implementation of key activities (e.g. GFCS, WIGOS). 6. The organization's ability to adapt to new challenges is inadequate. 7. There is an unequal state of development within the membership and inadequate mechanisms to reduce gaps. 8. The value of WMO activities to operational hydrology is less than desirable in the eyes of the hydrological community. 9. LDCs and SIDS are not supported to the level that they require.
Opportunities	**Threats**
1. The challenge of Climate Change presents opportunities for the science-based expertise of WMO and its members 2. Advances in Science and Technology can improve services and societal benefits 3. New demands for services in Weather, Climate and Hydrology can help demonstrate the value of WMO and the NMHSs. 4. Further implementation of the GFCS can enhance the benefits it brings. 5. The global profile of Disaster Risk Reduction and the development of the WMO role present opportunities. 6. Efficiencies can be created through organizational reform 7. Strengthening and widening of partnerships of all kinds can benefit WMO.	1. There is a proliferation of private sector weather providers, some with low quality products, threatening the authority and visibility of NMHSs. 2. There is continued pressure on WMO and Member State budgets and human resources. 3. Political and economic instability in some Member States and Territories could be a major problem. 4. Competition from other global or regional organizations with overlapping mandates could pose a possible threat. 5. Pressure on NMHS role in aviation could arise because of external developments. 6. WMO and the NMHSs could struggle to adapt to changing technology. 7. Trying to respond to too many initiatives could lead to a loss of focus on core WMO activity.

Question 47: Finally, please take the opportunity to provide any further comment you consider would be useful to WMO in assessing how it might serve its Member States and Territories better:

Analysis:
Many respondents took the opportunity at this point to reinforce comments made in association with earlier questions (e.g. more visits to Member States and Territories by the SG or other WMO staff). New points included a proposal for an immersion programme for new Permanent Representatives to acquaint themselves with the working of WMO, the greater use of web conferencing for Working Groups and Task teams, and the conducting of surveys at regular intervals.

Regional Analysis – Section 9

The lists of Strengths, Weaknesses, Opportunities and Threats supplied by all regions had very much in common. The points shown below represent some that were unique to the region(s) or the subject of special emphasis.

Strengths:
Whilst there were many common points among the strengths listed, RA **IV** pointed to the importance of GFCS in focussing on the value of climate services.

Weaknesses:
Again, there were many common points; RA **I**, RA **IV** and RA **V** all commented on the low level of involvement of smaller countries in WMO activities, attributed (in part, at least) to resource constraints.

Opportunities:
Among the opportunities mentioned by RA **II** and RA **VI** was that related to "Big Data".

Threats:
Both RA **I** and RA **II** listed developments in aviation as possible threats, affecting the role of NMHSs. RA **IV** mentioned the larger NMHSs dominating WMO as a possible threat.

Hydrological Advisers' Responses – Section 9

Again, many of the points made by the Hydrological Advisers under the headings of Strengths, Weaknesses, Threats and Opportunities were similar to those made by the Permanent Representatives. The points listed below represent points that were highlighted by the Hydrological Advisers.

Strengths:
The strong operational focus of WMO was mentioned as a strength.

Weaknesses:
The weaker added value to Hydrology from WMO activities was stressed.

Opportunities:
There was an emphasis on organisational reform as an opportunity to be pursued.

Threats:
No significant additional comment.

Appendix: Table of Mean Values of Ratings

Note: Some of the mean values were calculated from small samples and should be treated with caution. This applies to the columns for RA III, RA IV and RA V, and for the Hydrological Advisers (HA).

Question	TOTAL	RA I	RA II	RA III	RA IV	RA V	RA VI	HA
6	8.0	7.7	7.8	7.6	7.5	8.3	8.3	7.1
7	7.6	7.8	7.7	7.3	7.7	8.0	7.3	7.1
8	7.8	7.8	7.9	7.7	7.0	8.3	8.0	7.3
9	7.7	7.8	7.4	8.6	8.0	8.0	7.4	7.2
11A	7.9	8.4	7.7	8.6	7.5	8.3	7.6	7.2
11B	6.5	7.7	6.7	7.0	7.2	6.0	4.9	5.8
11C	7.6	8.6	7.0	8.2	7.0	7.4	7.5	6.6
11D	8.3	8.4	7.5	9.0	8.4	8.4	8.7	6.5
12	7.7	8.2	7.5	9.0	6.6	7.3	7.8	6.6
13A	7.7	8.3	7.3	8.6	7.5	8.0	7.3	7.6
13B	7.1	7.5	7.0	7.8	7.3	7.7	6.4	6.3
13C	7.4	8.0	6.9	8.4	6.8	8.4	7.3	6.9
13D	8.1	7.8	7.5	8.8	8.2	9.3	8.4	6.3
14	7.4	7.3	7.0	8.4	6.9	7.1	8.0	6.5
15	7.2	7.3	7.0	7.8	7.0	7.2	7.1	6.4
16	7.2	7.4	6.8	7.2	7.5	7.3	7.2	5.8
17A	7.6	7.7	7.7	7.6	7.3	7.7	7.6	6.9
17B	7.1	7.4	7.4	7.2	7.4	7.4	6.5	6.4
17C	7.5	7.9	7.5	8.2	7.4	7.3	7.2	6.8
17D	8.1	7.8	7.7	8.5	8.5	8.1	8.5	6.2
18A	6.9	7.7	6.5	6.6	6.4	8.0	6.5	7.0
18B	7.1	7.6	6.8	7.0	6.5	8.1	6.7	6.9
18C	6.3	6.8	6.9	6.0	5.4	7.2	5.4	5.9
18D	7.9	8.4	7.5	9.3	7.5	8.1	7.8	7.9
21A	7.8	8.1	7.7	7.8	7.7	7.8	7.8	7.0
21B	7.3	6.5	7.5	8.0	7.8	6.8	7.8	6.1
21C	7.7	8.2	7.0	8.5	7.5	7.9	7.7	6.5
21D	8.1	8.0	7.6	8.5	9.1	8.6	8.1	5.8
22	8.0	8.3	8	8.0	7.9	8.3	7.5	6.1
23A	8.1	8.4	7.7	8.6	7.5	8.6	8.1	7.9
23B	7.6	7.9	7.5	8.4	7.1	8.4	7.2	7.6
23C	8.0	8.2	7.5	8.8	8.2	9.1	7.7	7.8
25	8.1	8.3	7.4	8.0	8.7	8.1	8.3	6.9
27	6.7	5.4	6.8	7.2	6.5	6.3	7.7	6.4
28A	7.8	7.6	7.5	8.2	8.3	8.8	7.7	7.1
28B	7.7	7.5	7.5	8.2	8.1	8.9	7.3	7.3
28C	7.2	7.1	6.5	8.0	7.7	7.7	7.2	6.5
28D	7.0	6.6	6.7	6.3	7.5	7.9	7.1	5.3
29A	7.7	7.8	7.5	8.0	8.2	8.5	7.3	6.5
29B	7.5	7.9	7.1	8.0	7.5	8.0	7.3	6.6

Question	TOTAL	RA I	RA II	RA III	RA IV	RA V	RA VI	HA
29C	7.0	7.1	6.4	7.3	7.4	7.6	7.0	6.5
30A	7.9	7.5	7.6	8.7	8.1	8.5	7.8	7.8
30B	7.0	7.8	5.9	8.2	7.6	6.6	6.9	6.6
30C	6.3	6.5	5.7	6.7	6.3	6.0	6.6	5.4
30D	6.5	6.4	5.8	7.0	6.9	6.7	6.9	5.6
30E	6.9	6.7	6.4	7.0	7.9	6.7	7.3	6.5
30F	6.4	6.5	6.2	6.7	6.6	5.8	6.6	6.4
30G	7.3	7.4	7.1	7.0	8.1	7.9	7.0	6.5
30H	6.4	6.6	6.1	5.7	6.8	4.8	7.1	5.5
30I	6.5	6.3	6.2	6.0	7.0	6.9	6.6	5.4
30J	6.1	5.6	6.2	7.2	6.2	5.7	6.4	6.0
30K	6.1	5.4	6.4	7.0	7.0	5.6	6.3	5.8
30L	6.3	5.5	6.1	6.8	7.2	6.1	7.1	5.5
31	7.5	7.6	6.9	7.0	7.7	8.0	7.9	7.5
33	7.7	8.0	7.5	7.7	7.3	7.8	7.6	6.9
34	7.2	7.2	7.0	7.8	6.7	7.3	7.4	7.1
36	7.3	7.3	7.2	8.2	7.4	8.3	6.9	6.0
37	7.0	7.2	6.8	7.5	7.0	7.8	6.7	6.0
38	7.4	7.3	7.4	8.0	7.4	7.6	7.3	7.1
40	7.6	8.0	7.8	7.8	7.3	7.7	6.8	6.4
41A	7.2	7.3	6.7	8.0	8.0	7.7	7.0	7.0
41B	7.2	7.2	6.8	8.5	8.0	7.3	6.9	6.1
41C	7.2	7.3	6.9	8.3	7.9	7.3	6.8	6.3
41D	6.9	7.2	6.7	8.3	7.3	7.0	6.4	6.9
41E	7.3	7.5	7.4	8.3	7.4	7.7	6.8	6.9
41F	7.9	8.5	7.4	9.0	7.8	8.4	7.3	6.7
42A	8.0	8.2	7.8	8.2	8.2	8.5	7.7	6.8
42B	7.0	7.4	7.0	6.8	7.4	7.0	6.8	5.5
42C	6.9	6.8	6.9	7.0	7.5	7.1	6.5	5.8
42D	7.4	7.5	7.0	7.2	7.6	7.9	7.3	6.2
43	7.4	7.7	7.0	9.0	6.5	7.6	7.6	7.0

Acknowledgements

The present survey was prepared and processed with the kind assistance of Mr Declan Murphy.

The inputs of the Secretary-General and acting Deputy Secretary-General of WMO and of all WMO departments were invaluable in the devising of the Survey. John Hirst and Detlev Frömming also made significant contributions to various aspects of the Survey.

The Regional Offices made a huge contribution to the success of the Survey by liaising with Permanent Representatives, by facilitating access to the online links and by helping to resolve difficulties that arose.

The staff of the Resource Management Department of WMO were always helpful and supportive.

Special thanks is due to Timo Pröscholt of the Observing and Information Systems / Development and Regional Activities Departments of WMO who not only provided essential technical expertise in launching and managing the online Survey but also supplied high quality advice and insight in all aspects of the project.

Finally, the Survey would not have succeeded without the enthusiastic engagement of the Permanent Representatives, Hydrological Advisers and the staff of the NMHSs.

****