SUMMARY OF WMO QUESTIONNAIRE ON STATUS OF PUBLIC-PRIVATE ENGAGEMENT IN WMO MEMBER (2018)
Survey Response Rate:
Overall 58% including complete 55% and incomplete 3%.

Legend
- Complete
- In-process
- Not started

NOTE:
All content included on this map is for informative purposes only.
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Last updated on 5 July 2018
Q 4:

For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

- Private sector is strongly engaged in many areas of M/C/H activities: 12% (RA (All)), 3% (RA I)
- Private sector is moderately active in some areas of M/C/H activities: 41% (RA (All)), 37% (RA I)
- Private sector activities are marginal: 37% (RA (All)), 40% (RA I)
- Private sector is not active at all: 10% (RA (All)), 20% (RA I)
For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

- Private sector is strongly engaged in many areas of M/C/H activities: 12%
- Private sector is moderately active in some areas of M/C/H activities: 41%
- Private sector activities are marginal: 37%
- Private sector is not active at all: 10%
For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

Q 4:

- Private sector is strongly engaged in many areas of M/C/H activities
- Private sector is moderately active in some areas of M/C/H activities
- Private sector activities are marginal
- Private sector is not active at all
Q 5: Which describes best the type of private sector companies active in your country?

- Private sector is represented mostly by local/national companies: 33% (RA (All)), 49% (RA I)
- Private sector is represented mostly by international/foreign companies: 20% (RA (All)), 29% (RA I)
- Private sector is represented equally by local/national and international/foreign companies: 37% (RA (All)), 14% (RA I)
- Not applicable: 9% (RA (All)), 9% (RA I)
- Don't know: 1% (RA (All)), 0% (RA I)
Q 5: Which describes best the type of private sector companies active in your country?

- Private sector is represented mostly by local/national companies: 33%
- Private sector is represented mostly by international/foreign companies: 20%
- Private sector is represented equally by local/national and international/foreign companies: 38%
- Not applicable: 8%
- Don't know: 1%
Q 5: Which describes best the type of private sector companies active in your country?

- Private sector is represented mostly by local/national companies
  - RA (All): 33%, RA VI: 29%, RA V: 25%, RA IV: 27%, RA III: 50%, RA II: 50%, RA I: 0%

- Private sector is represented mostly by international/foreign companies
  - RA (All): 20%, RA VI: 13%, RA V: 33%, RA IV: 33%, RA III: 31%, RA II: 42%, RA I: 0%

- Private sector is represented equally by local/national and international/foreign companies
  - RA (All): 8%, RA VI: 17%, RA V: 13%, RA IV: 13%, RA III: 38%, RA II: 38%, RA I: 0%

- Not applicable
  - RA (All): 3%, RA VI: 8%, RA V: 8%, RA IV: 8%, RA III: 8%, RA II: 27%, RA I: 0%

- Don't know
  - RA (All): 1%, RA VI: 8%, RA V: 8%, RA IV: 8%, RA III: 8%, RA II: 8%, RA I: 8%
Which are the main areas of activities of the private sector?
Which are the main areas of activities of the private sector?

Media (TV, newspapers, web, mobile apps, etc)
Observations
Forecasting
Warnings
Consultancy
IT support
Other

RA II

- High activity
- Medium activity
- Low activity
- No activity
- Not applicable
Q 6: Which are the main areas of activities of the private sector?

RA III

- Media (TV, newspapers, web, mobile apps, etc)
- Observations
- Forecasting
- Warnings
- Consultancy
- IT support
- Other

Categories:
- High activity
- Medium activity
- Low activity
- No activity
- Not applicable
Q 6:

Which are the main areas of activities of the private sector?

RA IV

- High activity
- Medium activity
- Low activity
- No activity
- Not applicable
Q 6:

Which are the main areas of activities of the private sector?

RA V

- Media (TV, newspapers, web, mobile apps, etc)
- Observations
- Forecasting
- Warnings
- Consultancy
- IT support
- Other

Colors:
- High activity
- Medium activity
- Low activity
- No activity
- Not applicable
Q 6:

Which are the main areas of activities of the private sector?

RA VI

- Media (TV, newspapers, web, mobile apps, etc)
- Observations
- Forecasting
- Warnings
- Consultancy
- IT support
- Other

Legend:
- High activity
- Medium activity
- Low activity
- No activity
- Not applicable
Q 6: Which are the main areas of activities of the private sector?
Q 6: Which are the main areas of activities of the private sector?

<table>
<thead>
<tr>
<th>Activity</th>
<th>High Activity</th>
<th>Medium Activity</th>
<th>Low Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media (TV, newspapers, web, mobile apps, etc)</td>
<td>40</td>
<td>48</td>
<td>58</td>
</tr>
<tr>
<td>Observations</td>
<td>17</td>
<td>25</td>
<td>18</td>
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<td>Forecasting</td>
<td>11</td>
<td>14</td>
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</tr>
<tr>
<td>Warnings</td>
<td>3</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Consultancy</td>
<td>15</td>
<td>37</td>
<td>35</td>
</tr>
<tr>
<td>IT support</td>
<td>11</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
Q 7: Describe the level of contacts and engagement with private sector companies during the last 3 years

- the NMHS has been contacted by private companies with offers for cooperation
- the NMHS has been contacted by private companies with requests for getting data
- the NMHS has contacted private companies with offers for cooperation
- the NMHS holds meetings with private sector
- the NMHS has established cooperation agreements with private sector
- the NMHS has declined proposals by private sector
- the NMHS has filed complaints with regard to private sector activities
- the NMHS has organized events to encourage private sector engagement

RA I

- Frequently
- Occasionally
- Never
- Not applicable
Q 7: Describe the level of contacts and engagement with private sector companies during the last 3 years

- the NMHS has been contacted by private companies with offers for cooperation
- the NMHS has been contacted by private companies with requests for getting data
- the NMHS has contacted private companies with offers for cooperation
- the NMHS holds meetings with private sector
- the NMHS has established cooperation agreements with private sector
- the NMHS has declined proposals by private sector
- the NMHS has filed complaints with regard to private sector activities
- the NMHS has organized events to encourage private sector engagement

RA II

- Frequently
- Occasionally
- Never
- Not applicable
Describe the level of contacts and engagement with private sector companies during the last 3 years

Q 7:

- the NMHS has been contacted by private companies with offers for cooperation
- the NMHS has been contacted by private companies with requests for getting data
- the NMHS has contacted private companies with offers for cooperation
- the NMHS holds meetings with private sector
- the NMHS has established cooperation agreements with private sector
- the NMHS has declined proposals by private sector
- the NMHS has filed complaints with regard to private sector activities
- the NMHS has organized events to encourage private sector engagement

RA III

- Frequently
- Occasionally
- Never
- Not applicable
Describe the level of contacts and engagement with private sector companies during the last 3 years

Q 7:

- the NMHS has been contacted by private companies with offers for cooperation
- the NMHS has been contacted by private companies with requests for getting data
- the NMHS has contacted private companies with offers for cooperation
- the NMHS holds meetings with private sector
- the NMHS has established cooperation agreements with private sector
- the NMHS has declined proposals by private sector
- the NMHS has filed complaints with regard to private sector activities
- the NMHS has organized events to encourage private sector engagement

RA IV

- Frequently
- Occasionally
- Never
- Not applicable
Describe the level of contacts and engagement with private sector companies during the last 3 years

Q 7:

- the NMHS has been contacted by private companies with offers for cooperation
- the NMHS has been contacted by private companies with requests for getting data
- the NMHS has contacted private companies with offers for cooperation
- the NMHS holds meetings with private sector
- the NMHS has established cooperation agreements with private sector
- the NMHS has declined proposals by private sector
- the NMHS has filed complaints with regard to private sector activities
- the NMHS has organized events to encourage private sector engagement

RA V

- Frequently
- Occasionally
- Never
- Not applicable
Describe the level of contacts and engagement with private sector companies during the last 3 years

Q 7: the NMHS has been contacted by private companies with offers for cooperation
the NMHS has been contacted by private companies with requests for getting data
the NMHS holds meetings with private sector
the NMHS has established cooperation agreements with private sector
the NMHS has established cooperation agreements with private sector
the NMHS has filed complaints with regard to private sector activities
the NMHS has organized events to encourage private sector engagement

RA VI
- Frequently
- Occasionally
- Never
- Not applicable
Describe the level of contacts and engagement with private sector companies during the last 3 years

Q 7:
the NMHS has been contacted by private companies with offers for cooperation
the NMHS has been contacted by private companies with requests for getting data
the NMHS has contacted private companies with offers for cooperation
the NMHS holds meetings with private sector
the NMHS has established cooperation agreements with private sector
the NMHS has declined proposals by private sector
the NMHS has filed complaints with regard to private sector activities
the NMHS has organized events to encourage private sector engagement

All RAs

- Frequently
- Occasionally
- Never
- Not applicable
Q 8: Has your NMHS established internal structure to deal with private sector?

- Yes
- No
Q 8: Has your NMHS established internal structure to deal with private sector?

RA I

Yes

No

All RAs

Yes

No
Q8: Has your NMHS established internal structure to deal with private sector?

RA VI: Yes

RA V: Yes

RA IV: Yes

RA III: Yes

RA II: Yes

RA I: Yes

All: Yes
Private-sector participation in M/C/H has been growing on a global scale; how would you characterize this growth in your country during the last 3 years?

- Significant growth: 14%
- Some growth: 64%
- No growth: 20%
- Don’t know: 2%
Q 9: Private-sector participation in M/C/H has been growing on a global scale; how would you characterize this growth in your country during the last 3 years?

- **Significant growth**: 13% for RA I, 14% for RA (All)
- **Some growth**: 49% for RA I, 64% for RA (All)
- **No growth**: 36% for RA I, 20% for RA (All)
- **Don’t know**: 3% for RA I, 2% for RA (All)
Private-sector participation in M/C/H has been growing on a global scale; how would you characterize this growth in your country during the last 3 years?

Q 9:

- **Significant growth**: 38% (RA (All)), 38% (RA VI), 38% (RA V), 38% (RA IV), 38% (RA III), 38% (RA II), 38% (RA I)
- **Some growth**: 64% (RA (All)), 64% (RA VI), 64% (RA V), 64% (RA IV), 64% (RA III), 64% (RA II), 64% (RA I)
- **No growth**: 20% (RA (All)), 20% (RA VI), 20% (RA V), 20% (RA IV), 20% (RA III), 20% (RA II), 20% (RA I)
- **Don’t know**: 8% (RA (All)), 8% (RA VI), 8% (RA V), 8% (RA IV), 8% (RA III), 8% (RA II), 8% (RA I)
In summary, how would you evaluate the significance of the current level of engagement and activities of the private sector in your country and their impact on NMHS activities?
In summary, how would you evaluate the significance of the current level of engagement and activities of the private sector in your country and their impact on NMHS activities?
In summary, how would you evaluate the significance of the current level of engagement and activities of the private sector in your country and their impact on NMHS activities?
Q 11: In your country, is there legislation and/or regulations that determines the roles and relationships of public and private sectors with regard to the provision of M/C/H information services?

- **Yes, there is a law (e.g., Meteorological Act or similar) that covers all aspects of activities and services:** 33% (RA I) / 26% (RA II)
- **Yes, there is a law that covers some aspects of activities and services (e.g., services for aviation):** 20% (RA I) / 21% (RA II)
- **There is no specific law but regulations exist at the level of ministry or similar:** 20% (RA I) / 24% (RA II)
- **There is neither law nor regulations dealing with the subject:** 25% (RA I) / 29% (RA II)
- **Don't know:** 2% (RA I) / 0% (RA II)
In your country, is there legislation and/or regulations that determines the roles and relationships of public and private sectors with regard to the provision of M/C/H information services?

- Yes, there is a law (e.g., Meteorological Act or similar) that covers all aspects of activities and services: 33%
- Yes, there is a law that covers some aspects of activities and services (e.g., services for aviation): 20%
- There is no specific law but regulations exist at the level of ministry or similar: 20%
- There is neither law nor regulations dealing with the subject: 25%
- Don't know: 2%
In your country, is there legislation and/or regulations that determines the roles and relationships of public and private sectors with regard to the provision of M/C/H information services?

Q 11:

- Yes, there is a law (e.g., Meteorological Act or similar) that covers all aspects of activities and services: 67%
  - RA (All): 33%
  - RA VI: 34%
- Yes, there is a law that covers some aspects of activities and services (e.g., services for aviation): 53%
  - RA V: 34%
- There is no specific law but regulations exist at the level of ministry or similar: 40%
  - RA IV: 40%
- There is neither law nor regulations dealing with the subject: 42%
  - RA III: 20%
- Don't know: 10%
  - RA I: 10%
Q 12: How will you describe the character of the legislation/regulation with regard to opportunities for private sector engagement?

- The legislation prohibits the conduct of M/C/H/O Observations and/or forecasts by non-NMHS entities: 12%
- The legislation allows full freedom in the conduct of M/C/H/O observations and/or forecasts by non-NMHS entities under no conditions: 20%
- The legislation allows the conduct of some M/C/H/O observations and/or forecasts by non-NMHS entities under certain conditions (e.g., under licensing regime): 33%
- None of the above: 34%
Q 12: How will you describe the character of the legislation/regulation with regard to opportunities for private sector engagement?

- The legislation prohibits the conduct of M/C/H/O Observations and/or forecasts by non-NMHS entities: 12% (RA All), 3% (RA I)
- The legislation allows full freedom in the conduct of M/C/H/O observations and/or forecasts by non-NMHS entities under no conditions: 20% (RA All), 27% (RA I)
- The legislation allows the conduct of some M/C/H/O observations and/or forecasts by non-NMHS entities under certain conditions (e.g., under licensing regime): 33% (RA All), 30% (RA I)
- None of the above: 34% (RA All), 39% (RA I)
Q 12: How will you describe the character of the legislation/regulation with regard to opportunities for private sector engagement?

- The legislation prohibits the conduct of M/C/H/O Observations and/or forecasts by non-NMHS entities: 12%
- The legislation allows full freedom in the conduct of M/C/H/O observations and/or forecasts by non-NMHS entities under no conditions: 20%
- The legislation allows the conduct of some M/C/H/O observations and/or forecasts by non-NMHS entities under certain conditions (e.g., under licensing regime): 34%
- None of the above: 67%
Does the national legislation establish a role of the NMHS, or another government body, in providing authorization or licensing of non-NMHS service providers?

Q 13:  

- Yes
- No
- Don't know

All RAs

- Yes: 0%
- No: 100%
- Don't know: 0%
Does the national legislation establish a role of the NMHS, or another government body, in providing authorization or licensing of non-NMHS service providers?

Q 13: Yes

RA I

All RAs
Q 13: Does the national legislation establish a role of the NMHS, or another government body, in providing authorization or licensing of non-NMHS service providers?
Does the national legislation/regulation establish a role of the NMHS with regard to the provision of early warnings to relevant government disaster risk management entities?

Q 14:

- Yes, as exclusive official source of warning information for all hydrometeorological hazards (single authoritative voice): 32% (RA I), 35% (RA All)
- Yes, as official source of warning information but other agencies are also responsible for some hazards (e.g., flood): 12% (RA I), 18% (RA All)
- The role of NMHS with regard to warnings is not established by national law, but agreements are in place with relevant disaster management agency(ies) for the provision of warning information: 9% (RA I), 9% (RA All)
- The role of NMHS is not defined: 5% (RA I), 5% (RA All)
- Don't know: 0% (RA I), 0% (RA All)
Does the national legislation/regulation establish a role of the NMHS with regard to the provision of early warnings to relevant government disaster risk management entities?

- **Yes, as exclusive official source of warning information for all hydrometeorological hazards (single authoritative voice)**: 35%
- **Yes, as official source of warning information but other agencies are also responsible for some hazards (e.g., flood)**: 41%
- **The role of NMHS with regard to warnings is not established by national law, but agreements are in place with relevant disaster management agency(ies) for the provision of warning information**: 18%
- **The role of NMHS is not defined**: 5%
- **Don't know**: 1%
Does the national legislation/regulation establish a role of the NMHS with regard to the provision of early warnings to relevant government disaster risk management entities?

- Yes, as exclusive official source of warning information for all hydrometeorological hazards (single authoritative voice)
  - RA I: 0%
  - RA II: 0%
  - RA III: 0%
  - RA IV: 0%
  - RA V: 0%
  - RA VI: 0%
- Yes, as official source of warning information but other agencies are also responsible for some hazards (e.g., flood)
  - RA I: 0%
  - RA II: 0%
  - RA III: 0%
  - RA IV: 0%
  - RA V: 0%
  - RA VI: 0%
- The role of NMHS with regard to warnings is not established by national law, but agreements are in place with relevant disaster management agency(ies) for the provision of warning information
  - RA I: 5%
  - RA II: 3%
  - RA III: 0%
  - RA IV: 3%
  - RA V: 0%
  - RA VI: 0%
- The role of NMHS is not defined
  - RA I: 1%
  - RA II: 3%
  - RA III: 0%
  - RA IV: 0%
  - RA V: 0%
  - RA VI: 0%
- Don't know
  - RA I: 1%
  - RA II: 3%
  - RA III: 0%
  - RA IV: 0%
  - RA V: 0%
  - RA VI: 0%
Q 15: Does your NMHS apply WMO data policy for meteorological data specified in Resolution 40 (Cg-12, 1995)

RA I

Non-applicable (N/A)

Yes, fully

Yes, partly

Not at all

All RAs

Non-applicable (N/A)

Yes, fully

Yes, partly

Not at all

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Q 15: Does your NMHS apply WMO data policy for meteorological data specified in Resolution 40 (Cg-12, 1995)
Q 15: Does your NMHS apply WMO data policy for meteorological data specified in Resolution 40 (Cg-12, 1995)

<table>
<thead>
<tr>
<th>RA VI</th>
<th>Yes, fully</th>
<th>Yes, partly</th>
<th>Not at all</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>RA V</td>
<td>Yes, fully</td>
<td>Yes, partly</td>
<td>Not at all</td>
<td>N/A</td>
</tr>
<tr>
<td>RA IV</td>
<td>Yes, fully</td>
<td>Yes, partly</td>
<td>Not at all</td>
<td>N/A</td>
</tr>
<tr>
<td>RA III</td>
<td>Yes, fully</td>
<td>Yes, partly</td>
<td>Not at all</td>
<td>N/A</td>
</tr>
<tr>
<td>RA II</td>
<td>Yes, fully</td>
<td>Yes, partly</td>
<td>Not at all</td>
<td>N/A</td>
</tr>
<tr>
<td>RA I</td>
<td>Yes, fully</td>
<td>Yes, partly</td>
<td>Not at all</td>
<td>N/A</td>
</tr>
<tr>
<td>All</td>
<td>Yes, fully</td>
<td>Yes, partly</td>
<td>Not at all</td>
<td>N/A</td>
</tr>
</tbody>
</table>
If your answer to the previous question was "yes" how can you rank the success of the Resolution 40 in terms of defining a clear data policy.
If your answer to the previous question was "yes" how can you rank the success of the Resolution 40 in terms of defining a clear data policy?
If your answer to the previous question was "yes" how can you rank the success of the Resolution 40 in terms of defining a clear data policy
Q17: Does your NMHS or other relevant institution(s) apply WMO data policy for hydrological data specified in Resolution 25 (Cg-13, 1999)

- Yes, fully: 35% (31% RA I, 35% RA (All))
- Yes, partly: 32% (40% RA I, 32% RA (All))
- N/A: 18% (9% RA I, 18% RA (All))
- Not at all: 15% (20% RA I, 15% RA (All))
Q 17: Does your NMHS or other relevant institution(s) apply WMO data policy for hydrological data specified in Resolution 25 (Cg-13, 1999)

- Yes, fully: 31%
- Yes, partly: 40%
- N/A: 9%
- Not at all: 20%

RA (All)
Q 17: Does your NMHS or other relevant institution(s) apply WMO data policy for hydrological data specified in Resolution 25 (Cg-13, 1999)
If your answer to the previous question was "yes" how can you rank the success of the Resolution 25 in terms of defining a clear data policy

Q 18:

- 1 star: 14%
- 2 stars: 9%
- 3 stars: 23%
- 4 stars: 56%
- 5 stars: 64%

RA I  RA (All)
If your answer to the previous question was "yes" how can you rank the success of the **Resolution 25** in terms of defining a clear data policy

- 5 stars: 9%
- 4 stars: 23%
- 3 stars: 56%
- 2 stars: 9%
- 1 star: 3%
If your answer to the previous question was "yes" how can you rank the success of the Resolution 25 in terms of defining a clear data policy.

Q 18: If your answer to the previous question was "yes" how can you rank the success of the Resolution 25 in terms of defining a clear data policy.
If your answer to the previous question was "yes" how can you rank the success of the Resolution 25 in terms of defining a clear data policy.

Q 18:

[Bar chart showing percentage ratings for various categories related to the success of Resolution 25.]
Q 19: Does your NMHS or other relevant institutions apply WMO data policy for climate data and products specified in Resolution 60 (Cg-17, 2015)

- Yes, fully: 24% (RA I), 35% (RA All)
- Yes, partly: 59% (RA I), 52% (RA All)
- Not at all: 12% (RA I), 8% (RA All)
- N/A: 6% (RA I), 5% (RA All)
Q 19: Does your NMHS or other relevant institutions apply WMO data policy for climate data and products specified in Resolution 60 (Cg-17, 2015)

- Yes, fully: 35%
- Yes, partly: 52%
- Not at all: 8%
- N/A: 5%
Does your NMHS or other relevant institutions apply WMO data policy for climate data and products specified in Resolution 60 (Cg-17, 2015)

Q 19:

- **Yes, fully**:
  - RA (All): 35%
  - RA VI: 40%
  - RA V: 36%
  - RA IV: 11%
  - RA III: 7%
  - RA II: 7%
  - RA I: 24%
  - N/A: 52%

- **Yes, partly**:
  - RA (All): 52%
  - RA VI: 60%
  - RA V: 55%
  - RA IV: 56%
  - RA III: 59%
  - RA II: 47%
  - RA I: 45%

- **Not at all**:
  - RA (All): 0%
  - RA VI: 0%
  - RA V: 0%
  - RA IV: 3%
  - RA III: 8%
  - RA II: 12%
  - RA I: 11%

- **N/A**:
  - RA (All): 22%
If your answer to the previous question was "yes" how can you rank the success of the **Resolution 60** in terms of defining a clear data policy.
If your answer to the previous question was "yes" how can you rank the success of the **Resolution 60** in terms of defining a clear data policy.
Q 20: If your answer to the previous question was "yes" how can you rank the success of the Resolution 60 in terms of defining a clear data policy.
To what extent will you agree with the following statement: "WMO data policy resolutions (40, 25, 60) need review and update to reflect changing requirements and weather enterprise landscape"
To what extent will you agree with the following statement: "WMO data policy resolutions (40, 25, 60) need review and update to reflect changing requirements and weather enterprise landscape"?

- **Agreement** - data resolutions need an update, but the main principles of access/sharing shall be maintained: 44%
- **Partial agreement** - data resolutions are still valid, but some updates to their implementation aspects are desirable: 29%
- **Full agreement** - data resolutions are outdated including the main principles of access/sharing shall be maintained: 20%
- **Full disagreement** - WMO data resolutions shall not be discussed: 4%
- **Other, please specify your opinion**: 4%
To what extent will you agree with the following statement: "WMO data policy resolutions (40, 25, 60) need review and update to reflect changing requirements and weather enterprise landscape."

Q 21:

- **Agreement - data resolutions need an update, but the main principles of access/sharing shall be maintained**
  - Full agreement: 50%
  - Partial agreement: 44%
  - Full disagreement: 4%

- **Partial agreement - data resolutions are still valid, but some updates to their implementation aspects are desirable**
  - Full agreement: 33%
  - Partial agreement: 50%
  - Full disagreement: 7%

- **Full agreement - data resolutions are outdated including the main principles of access/sharing shall be maintained**
  - Full agreement: 25%
  - Partial agreement: 27%
  - Full disagreement: 16%

- **Other, please specify your opinion**
  - Full agreement: 11%
  - Partial agreement: 28%
  - Full disagreement: 4%

- **Full disagreement - WMO data resolutions shall not be discussed**
  - Full agreement: 0%
  - Partial agreement: 0%
  - Full disagreement: 0%
Is access to NMHS data (observations, forecasts, etc) provided free of charge to private sector

Q 22:

- Yes, to all data: 9% (RA I) 16% (RA (All))
- Yes, to essential data (as per Resolution 40, 25, 60): 38% (RA I) 50% (RA (All))
- No: 30% (RA I) 47% (RA (All))
- Not applicable: 6% (RA I) 4% (RA (All))
Q 22:

Is access to NMHS data (observations, forecasts, etc) provided free of charge to private sector

- Yes, to all data: 16%
- Yes, to essential data (as per Resolution 40, 25, 60): 50%
- No: 30%
- Not applicable: 4%
Q 22: Is access to NMHS data (observations, forecasts, etc) provided free of charge to private sector

- **Yes, to all data**
  - RA (All): 16%
  - RA VI: 22%
  - RA V: 25%
  - RA IV: 9%
  - RA III: 23%
  - RA II: 23%
  - RA I: 0%

- **Yes, to essential data (as per Resolution 40, 25, 60)**
  - RA (All): 50%
  - RA VI: 53%
  - RA V: 50%
  - RA IV: 46%
  - RA III: 67%
  - RA II: 38%
  - RA I: 30%

- **No**
  - RA (All): 22%
  - RA VI: 20%
  - RA V: 22%
  - RA IV: 25%
  - RA III: 47%
  - RA II: 23%
  - RA I: 22%

- **Not applicable**
  - RA (All): 4%
  - RA VI: 3%
  - RA V: 0%
  - RA IV: 0%
  - RA III: 8%
  - RA II: 6%
  - RA I: 0%
Q 23: Is access to NMHS data (observations, forecasts, etc) provided on commercial basis

- Yes
- No
- Other

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Q 23: Is access to NMHS data (observations, forecasts, etc) provided on commercial basis

RA I:
- Yes: 100%
- No: 0%
- Other: 0%

RA (All):
- Yes: 100%
- No: 0%
- Other: 0%
Q 23: Is access to NMHS data (observations, forecasts, etc) provided on commercial basis

RA VI: Yes, No, Other
RA V: Yes, No, Other
RA IV: Yes, No, Other
RA III: Yes, No, Other
RA II: Yes, No, Other
RA I: Yes, No, Other
All: Yes, No, Other
Q 24: If the answer of the preceding question was "yes", specify the category of clients to whom data are provided on commercial basis.

- Private companies providing meteorological/climatological/hydrological services (providers): 64% RA (All), 81% RA I
- Private companies using meteorological/climatological/hydrological information (users): 8% RA (All), 19% RA I
- Other (please specify): 29% RA (All), 19% RA I

Bar chart showing the distribution of clients across different categories.
If the answer of the preceding question was "yes", specify the category of clients to whom data are provided on commercial basis.

- Private companies providing meteorological/climatological/hydrological services (providers): 8%
- Private companies using meteorological/climatological/hydrological information (users): 64%
- Other (please specify): 29%

RA (All)
Q 24: If the answer of the preceding question was "yes", specify the category of clients to whom data are provided on commercial basis.

- Private companies providing meteorological/climatological/hydrological services (providers):
  - RA (All): 64%
  - RA VI: 46%
  - RA V: 50%
  - RA IV: 83%
  - RA III: 83%
  - RA II: 81%
  - RA I: 17%

- Private companies using meteorological/climatological/hydrological information (users):
  - RA (All): 21%
  - RA VI: 46%
  - RA V: 50%
  - RA IV: 40%
  - RA III: 83%
  - RA II: 83%
  - RA I: 29%

- Other (please specify):
  - RA (All): 19%
  - RA VI: 33%
  - RA V: 50%
  - RA IV: 50%
  - RA III: 60%
  - RA II: 17%
  - RA I: 17%
Q 25: Do you buy data (observations, forecasts, etc) from private companies

- Yes
- No

RA I

- 100% Yes

All RAs

- 100% Yes
Do you buy data (observations, forecasts, etc) from private companies

Q 25: Yes 0%  No 100%
Q 25: Do you buy data (observations, forecasts, etc) from private companies

- RA VI: Yes (30%), No (70%)
- RA V: Yes (40%), No (60%)
- RA IV: Yes (20%), No (80%)
- RA III: Yes (50%), No (50%)
- RA II: Yes (30%), No (70%)
- RA I: Yes (40%), No (60%)
- All: Yes (30%), No (70%)
If you provide data on commercial basis, what is the impact of the generated revenue on the budget of your NMHS

- **Significant impact (more than 25% of the total annual budget)**
  - RA 1: 5%
  - RA (All): 6%

- **Moderate impact (between 10 and 25% of the total annual budget)**
  - RA 1: 14%
  - RA (All): 6%

- **Low impact (less than 10% of the total annual budget)**
  - RA 1: 42%
  - RA (All): 50%

- **N/A**
  - RA 1: 39%
  - RA (All): 38%
Q 26: If you provide data on commercial basis, what is the impact of the generated revenue on the budget of your NMHS

- **Significant impact (more than 25% of the total annual budget)**: 5%
- **Moderate impact (between 10 and 25% of the total annual budget)**: 14%
- **Low impact (less than 10% of the total annual budget)**: 42%
- **N/A**: 39%
If you provide data on commercial basis, what is the impact of the generated revenue on the budget of your NMHS?

- **Significant impact (more than 25% of the total annual budget)**
  - RA (All): 5%
  - RA VI: 3%
  - RA V: 33%
  - RA IV: 0%
  - RA III: 6%
  - RA II: 6%
  - RA I: 0%

- **Moderate impact (between 10 and 25% of the total annual budget)**
  - RA (All): 14%
  - RA VI: 9%
  - RA V: 31%
  - RA IV: 7%
  - RA III: 10%
  - RA II: 6%
  - RA I: 0%

- **Low impact (less than 10% of the total annual budget)**
  - RA (All): 42%
  - RA VI: 17%
  - RA V: 38%
  - RA IV: 9%
  - RA III: 31%
  - RA II: 3%
  - RA I: 4%

- **N/A**
  - RA (All): 28%
  - RA VI: 30%
  - RA V: 28%
  - RA IV: 36%
  - RA III: 38%
  - RA II: 38%
  - RA I: 38%
Q 27: Do you provide information to be used by private companies in their internet or mobiles services (e.g., official warnings displayed on private company mobile app)

- RA I
  - Yes
  - No

- All RAs
  - Yes
  - No
Q 27: Do you provide information to be used by private companies in their internet or mobile services (e.g., official warnings displayed on private company mobile app)

- Yes
- No

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Q 27: Do you provide information to be used by private companies in their internet or mobile services (e.g., official warnings displayed on private company mobile app)
Q 28: Have you worked with private companies in the framework of development/modernization projects

- Yes, as a donor organization:
  - RA 1: 9%
  - RA (All): 16%

- Yes, as a beneficiary organization:
  - RA 1: 41%
  - RA (All): 30%

- No:
  - RA 1: 50%
  - RA (All): 55%
Q 28: Have you worked with private companies in the framework of development/modernization projects

- No: 55%
- Yes, as a beneficiary organization: 30%
- Yes, as a donor organization: 16%
Q 28:

Have you worked with private companies in the framework of development/modernization projects

Yes, as a donor organization
- 0%: 16%
- 11%: 17%
- 9%: 13%
- 16%: 30%
- 25%: 33%
- 33%: 56%

Yes, as a beneficiary organization
- 0%: 16%
- 11%: 25%
- 9%: 33%
- 20%: 41%
- 20%: 55%
- 28%: 56%

No
- 0%: 33%
- 11%: 50%
- 9%: 58%
- 16%: 67%
- 16%: 67%
- 0%: 67%
Have you worked with the private sector in any other form: cloud computing, data storage, observations, etc.

Q 29:

- Yes: 9%
- No: 66%
- If "yes" please provide more information: 25%
Q 29: Have you worked with the private sector in any other form: cloud computing, data storage, observations, etc.

If "yes" please provide more information

Yes:
- RA (All): 3%
- RA VI: 21%
- RA V: 50%
- RA IV: 58%
- RA III: 59%
- RA II: 76%
- RA I: 90%

No:
- RA (All): 66%
- RA VI: 50%
- RA V: 53%
- RA IV: 58%
- RA III: 59%
- RA II: 76%
- RA I: 90%

If "yes" please provide more information

Yes:
- RA (All): 8%
- RA VI: 0%
- RA V: 21%
- RA IV: 27%
- RA III: 28%
- RA II: 33%
- RA I: 33%

No:
- RA (All): 92%
- RA VI: 100%
- RA V: 100%
- RA IV: 100%
- RA III: 100%
- RA II: 100%
- RA I: 100%
WMO has organized and participated in several dialogues between public, private and academic sectors as main stakeholders of the international weather enterprise. How will you rank the importance of the following key issues identified through the dialogue?

<table>
<thead>
<tr>
<th>All RAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 - highest priority</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>1 - lowest priority</td>
</tr>
</tbody>
</table>

- Need to define clear roles and responsibilities through relevant legal and regulatory frameworks
- Need to establish "authoritative voice" or official source of information
- Sustain the role of NMHS as "authoritative voice" in the provision of services related to safety of life and property
- Establish high-level policy comprising principles of cooperation, collaboration, complementarity and professionalism
- Establish a code of ethics for all stakeholders in the weather enterprise
- Need for analyzing all risks from a rapid growth of private sector, in particular, how to sustain the basic systems and infrastructure of WMO/NMHSs as critical to the...
- WMO regulations and standards need to be enforced and accepted by all stakeholders in the enterprise
- NMHSs shall focus on essential safety related functions, while leaving "business-to-business" tailored services to private sector
- Public sector should cooperate with private sector and academia to accelerate uptake of modern technology
- Bridging the capacity gap of developing countries should be pursued through public-private partnership solutions
- Cost-effectiveness of M/C/H services need to be improved through public-private partnership solutions
- Need to establish mechanisms for verification, validation and certification of products and services due to multiple sources of same or similar information; WMO...
WMO has organized and participated in several dialogues between public, private and academic sectors as main stakeholders of the international weather enterprise. How will you rank the importance of the following key issues identified through the dialogue?

RA I

<table>
<thead>
<tr>
<th>Issue</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need to define clear roles and responsibilities</td>
<td>5</td>
</tr>
<tr>
<td>Need to establish &quot;authoritative voice&quot; or official status</td>
<td>4</td>
</tr>
<tr>
<td>Sustain the role of NMHS as &quot;authoritative&quot;</td>
<td>3</td>
</tr>
<tr>
<td>Establish high-level policy comprising stakeholders in the region</td>
<td>2</td>
</tr>
<tr>
<td>Establish a code of ethics for all stakeholders in the region</td>
<td></td>
</tr>
<tr>
<td>Need for analyzing all risks from a rapid standpoint</td>
<td></td>
</tr>
<tr>
<td>WMO regulations and standards need to be established for NMHSs</td>
<td></td>
</tr>
<tr>
<td>NMHSs shall focus on essential (safety related) services with private</td>
<td></td>
</tr>
<tr>
<td>Public sector should cooperate with private sector to bridge</td>
<td></td>
</tr>
<tr>
<td>Bridging the capacity gap of M/C/H services need to be</td>
<td></td>
</tr>
<tr>
<td>Cost-effectiveness of M/C/H services need to be established for</td>
<td></td>
</tr>
<tr>
<td>Need to establish mechanisms for verification</td>
<td></td>
</tr>
</tbody>
</table>
WMO has organized and participated in several dialogues between public, private and academic sectors as main stakeholders of the international weather enterprise. How will you rank the importance of the following key issues identified through the dialogue?

RA II

1. Need to define clear roles and responsibilities...
2. Need to establish "authoritative voice" or official...
3. Sustain the role of NMHS as "authoritative...
4. Establish high-level policy comprising...
5. Establish a code of ethics for all stakeholders in...
6. Need for analyzing all risks from a rapid...
7. WMO regulations and standards need to be...
8. NMHSs shall focus on essential (safety related)...
9. Public sector should cooperate with private...
10. Bridging the capacity gap of developing...
11. Cost-effectiveness of M/C/H services need to be...
12. Need to establish mechanisms for verification...

Q 30:
WMO has organized and participated in several dialogues between public, private and academic sectors as main stakeholders of the international weather enterprise. How will you rank the importance of the following key issues identified through the dialogue?

RA III

- Need to define clear roles and responsibilities...
- Need to establish "authoritative voice" or official...
- Sustain the role of NMHS as "authoritative..."
- Establish high-level policy comprising...
- Establish a code of ethics for all stakeholders in...
- Need for analyzing all risks from a rapid...
- WMO regulations and standards need to be...
- NMHSs shall focus on essential (safety related)...
- Public sector should cooperate with private...
- Bridging the capacity gap of developing...
- Cost-effectiveness of M/C/H services need to be...
- Need to establish mechanisms for verification...

RA III

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>highest priority</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>lowest priority</td>
</tr>
</tbody>
</table>
WMO has organized and participated in several dialogues between public, private and academic sectors as main stakeholders of the international weather enterprise. How will you rank the importance of the following key issues identified through the dialogue?

**Q 30:**

**RA IV**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need to define clear roles and responsibilities</td>
<td>5</td>
</tr>
<tr>
<td>Need to establish &quot;authoritative voice&quot; or official...</td>
<td>4</td>
</tr>
<tr>
<td>Sustain the role of NMHS as &quot;authoritative...</td>
<td>3</td>
</tr>
<tr>
<td>Establish high-level policy comprising...</td>
<td>2</td>
</tr>
<tr>
<td>Establish a code of ethics for all stakeholders in...</td>
<td>1</td>
</tr>
<tr>
<td>Need for analyzing all risks from a rapid...</td>
<td></td>
</tr>
<tr>
<td>WMO regulations and standards need to be...</td>
<td></td>
</tr>
<tr>
<td>NMHSs shall focus on essential (safety related) aspects...</td>
<td></td>
</tr>
<tr>
<td>Public sector should cooperate with private...</td>
<td></td>
</tr>
<tr>
<td>Bridging the capacity gap of developing...</td>
<td></td>
</tr>
<tr>
<td>Cost-effectiveness of M/C/H services need to be...</td>
<td></td>
</tr>
<tr>
<td>Need to establish mechanisms for verification...</td>
<td></td>
</tr>
</tbody>
</table>
WMO has organized and participated in several dialogues between public, private and academic sectors as main stakeholders of the international weather enterprise. How will you rank the importance of the following key issues identified through the dialogue?

RA V

- Need to define clear roles and responsibilities...
- Need to establish "authoritative voice" or official...
- Sustain the role of NMHS as "authoritative...
- Establish high-level policy comprising...
- Establish a code of ethics for all stakeholders in...
- Need for analyzing all risks from a rapid...
- WMO regulations and standards need to be...
- NMHSs shall focus on essential (safety related)...
- Public sector should cooperate with private...
- Bridging the capacity gap of developing...
- Cost-effectiveness of M/C/H services need to be...
- Need to establish mechanisms for verification...

RA V:
- 5 - highest priority
- 4
- 3
- 2
- 1 - lowest priority
WMO has organized and participated in several dialogues between public, private and academic sectors as main stakeholders of the international weather enterprise. How will you rank the importance of the following key issues identified through the dialogue?

**Q 30:**

RA VI

- Need to define clear roles and responsibilities...
- Need to establish "authoritative voice" or official...
- Sustain the role of NMHS as "authoritative..." or official...
- Establish high-level policy comprising...
- Establish a code of ethics for all stakeholders in...
- Need for analyzing all risks from a rapid...
- WMO regulations and standards need to be...
- NMHSs shall focus on essential (safety related)...
- Public sector should cooperate with private...
- Bridging the capacity gap of developing...
- Cost-effectiveness of M/C/H services need to be...
- Need to establish mechanisms for verification...

RA VI:

- 5 - highest priority
- 4
- 3
- 2
- 1 - lowest priority
WMO has organized and participated in several dialogues between public, private and academic sectors as main stakeholders of the international weather enterprise. How will you rank the importance of the following key issues identified through the dialogue?

<table>
<thead>
<tr>
<th>Issue</th>
<th>All</th>
<th>RA I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustain the role of NMHS as &quot;authoritative voice&quot; in the provision of services related to safety of life and property</td>
<td>477</td>
<td>155(1)</td>
</tr>
<tr>
<td>Need to define clear roles and responsibilities through relevant legal and regulatory frameworks</td>
<td>431</td>
<td>152(2)</td>
</tr>
<tr>
<td>Need to establish &quot;authoritative voice&quot; or official source of information</td>
<td>421</td>
<td>0</td>
</tr>
<tr>
<td>Need to establish mechanisms for verification, validation and certification of products and services due to multiple sources of same or similar information; WMO and NMHSs to play primary role in this regard</td>
<td>404</td>
<td>149(3)</td>
</tr>
<tr>
<td>WMO regulations and standards need to be enforced and accepted by all stakeholders in the enterprise</td>
<td>388</td>
<td>143(4)</td>
</tr>
<tr>
<td>Need for analyzing all risks from a rapid growth of private sector, in particular, how to sustain the basic systems and infrastructure of WMO/NMHSs as critical to the global, regional and national weather enterprise</td>
<td>370</td>
<td>139(6)</td>
</tr>
<tr>
<td>Establish high-level policy comprising principles of cooperation, collaboration, complementarity and professionalism</td>
<td>364</td>
<td>0</td>
</tr>
<tr>
<td>Establish a code of ethics for all stakeholders in the weather enterprise</td>
<td>360</td>
<td>141(5)</td>
</tr>
<tr>
<td>Public sector should cooperate with private sector and academia to accelerate uptake of modern technology</td>
<td>358</td>
<td>116(9)</td>
</tr>
<tr>
<td>Cost-effectiveness of M/C/H services need to be improved through public-private partnership solutions</td>
<td>347</td>
<td>131(7)</td>
</tr>
<tr>
<td>Bridging the capacity gap of developing countries should be pursued through public-private partnership solutions</td>
<td>328</td>
<td>125(8)</td>
</tr>
<tr>
<td>NMHSs shall focus on essential (safety related) public interest functions, while leaving &quot;business-to-business&quot; tailored services to private sector</td>
<td>267</td>
<td>83(10)</td>
</tr>
</tbody>
</table>
Q 31:
For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

- Develop specific guidance for Members on engagement with the private sector
- Identify and analyze trends and emerging issues
- Provide global and regional opportunities for regular dialogue with private sector and academia
- Institute additional review and quality-assessment practices for private-sector products
- Facilitate identification and exchange of good practices among Members
- Develop training opportunities for NMHS's management personnel on "weather economics and market"
- Develop and adopt (through Congress) high-level policy on public-private partnership in the context of international weather enterprise

ALL RAs

- 5 - highest priority
- 4
- 3
- 2
- 1 - lowest priority
Q 31:
For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

RA I

- Develop specific guidance for Members on engagement with the private sector
- Identify and analyze trends and emerging issues
- Provide global and regional opportunities for regular dialogue with private sector and academia
- Institute additional review and quality-assessment practices for private-sector products
- Facilitate identification and exchange of good practices among Members
- Develop training opportunities for NMHS’ management personnel on “weather economics and market”
- Develop and adopt (through Congress) high-level policy on public-private partnership in the context of international weather enterprise

Priority Levels:
- 5 - highest priority
- 4
- 3
- 2
- 1 - lowest priority
For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

Q 31:

Develop specific guidance for Members on engagement with the private sector
Identify and analyze trends and emerging issues
Provide global and regional opportunities for regular dialogue with private sector and academia
Institute additional review and quality-assessment practices for private-sector products
Facilitate identification and exchange of good practices among Members
Develop training opportunities for NMHS' management personnel on "weather economics and market"
Develop and adopt (through Congress) high-level policy on public-private partnership in the context of international weather enterprise

RA II

- 5 - highest priority
- 4
- 3
- 2
- 1 - lowest priority
For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

RA III

- Develop specific guidance for Members on engagement with the private sector
- Identify and analyze trends and emerging issues
- Provide global and regional opportunities for regular dialogue with private sector and academia
- Institute additional review and quality-assessment practices for private-sector products
- Facilitate identification and exchange of good practices among Members
- Develop training opportunities for NMHS' management personnel on "weather economics and market"
- Develop and adopt (through Congress) high-level policy on public-private partnership in the context of international weather enterprise

Priority:
- 5 - highest priority
- 4
- 3
- 2
- 1 - lowest priority
Q 31: For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

RA IV

- Develop specific guidance for Members on engagement with the private sector
- Identify and analyze trends and emerging issues
- Provide global and regional opportunities for regular dialogue with private sector and academia
- Institute additional review and quality-assessment practices for private-sector products
- Facilitate identification and exchange of good practices among Members
- Develop training opportunities for NMHS' management personnel on "weather economics and market"
- Develop and adopt (through Congress) high-level policy on public-private partnership in the context of international weather enterprise

Priority levels: 5 - highest priority, 4, 3, 2, 1 - lowest priority
For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

Q 31:

Develop specific guidance for Members on engagement with the private sector
Identify and analyze trends and emerging issues
Provide global and regional opportunities for regular dialogue with private sector and academia
Institute additional review and quality-assessment practices for private-sector products
Facilitate identification and exchange of good practices among Members
Develop training opportunities for NMHS' management personnel on "weather economics and market"
Develop and adopt (through Congress) high-level policy on public-private partnership in the context of international weather enterprise

RA V

5 - highest priority
4
3
2
1 - lowest priority
For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

- Develop specific guidance for Members on engagement with the private sector
- Identify and analyze trends and emerging issues
- Provide global and regional opportunities for regular dialogue with private sector and academia
- Institute additional review and quality-assessment practices for private-sector products
- Facilitate identification and exchange of good practices among Members
- Develop training opportunities for NMHS' management personnel on "weather economics and market"
- Develop and adopt (through Congress) high-level policy on public-private partnership in the context of international weather enterprise

RA VI

5 - highest priority
4
3
2
1 - lowest priority
Q 31: For your NMHS, what are the most useful additional activities that WMO could undertake on public-private engagement?

<table>
<thead>
<tr>
<th>Activity</th>
<th>All</th>
<th>RA I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop training opportunities for NMHSs' management personnel on &quot;weather economics and market&quot;</td>
<td>472</td>
<td>165(1)</td>
</tr>
<tr>
<td>Facilitate identification and exchange of good practices among Members</td>
<td>467</td>
<td>155(4)</td>
</tr>
<tr>
<td>Develop specific guidance for Members on engagement with the private sector</td>
<td>454</td>
<td>163(2)</td>
</tr>
<tr>
<td>Develop and adopt (through Congress) high-level policy on public-private partnership in the context of international weather enterprise</td>
<td>447</td>
<td>158(3)</td>
</tr>
<tr>
<td>Identify and analyze trends and emerging issues</td>
<td>439</td>
<td>150(6)</td>
</tr>
<tr>
<td>Provide global and regional opportunities for regular dialogue with private sector and academia</td>
<td>419</td>
<td>151(5)</td>
</tr>
<tr>
<td>Institute additional review and quality-assessment practices for private-sector products</td>
<td>408</td>
<td>139(7)</td>
</tr>
</tbody>
</table>