MEETING OF THE PANDEMIC INFLUENZA PREPAREDNESS FRAMEWORK ADVISORY GROUP

19-22 April 2016, GENEVA, SWITZERLAND

Report to the Director-General

Organization and process of the meeting

1. The Advisory Group (AG) met at WHO headquarters in Geneva, 19-22 April 2016. The meeting was preceded by a briefing for new AG members on the content and implementation of the Pandemic Influenza Preparedness (PIP) Framework.

2. Of the 18 members of the AG, 17 were present. The list of participants is available at Annex 1.

3. After an informal consultation, the AG reached consensus that Dr Jarbas Barbosa da Silva (Brazil) and Professor John Watson (UK) would be its new Chair and Vice-Chair, respectively.

4. The AG held a minute’s silence in memory of Dr Oleg Kiselev, a former AG member.

5. The agenda of the AG meeting was adopted and is available at Annex 2, with the Nagoya Protocol added for discussion.

6. Declarations of Interest were reviewed by the Secretariat and relevant interests were disclosed. The Statement of Declarations of Interests is available at Annex 3.

7. There was an interaction with the PIP Framework Review Group on 20 April 2016.

8. Industry and other stakeholders joined the AG for the morning of 21 April 2016 for discussions and to receive updates from the Secretariat on the work that has taken place since the last meeting in October 2015. Some of the points from those discussions are reflected throughout this report.

9. The AG meeting was followed on 22 April 2016 by two Information Sessions to inform Permanent Missions other stakeholder groups of the outcomes of the AG meeting. These sessions were chaired by the Chair.

Discussion on PIVI

10. The AG reviewed a proposal submitted by the Partnership for Influenza Vaccine Introduction (PIVI), related to seasonal influenza vaccine, for consideration in the context of the sunset of the Global Action Plan for Influenza Vaccines (GAP) and ongoing work to strengthen pandemic preparedness. The AG discussed the proposal and had several questions to seek clarifications from PIVI. Once clarifications are received, the AG will review the proposal once again with a view to providing a recommendation to the Director-General. The matter should be placed on the agenda for the October 2016 AG meeting.
Update on Global Action Plan for Influenza Vaccines (GAP)

11. The Secretariat updated participants on preparations for the GAP III consultation in November 2016 and summarized the initial results of a survey to assess stakeholder views on GAP’s progress in its 10 years. Noting that the GAP will end this year, the AG welcomed its achievements and recognised the role that GAP has played in pandemic preparedness. The AG discussed the possibility of the PIP Framework undertaking some of the ongoing GAP tasks in priority areas to work toward achieving the GAP objectives. It was suggested that an invitation could be extended to the GAP AG Chair to attend the next PIP AG meeting in October 2016 so that some concrete proposal could be developed.

**Recommendations to the Director-General on the GAP**

12. *The AG recommends that the Chair of the GAP AG be invited to participate in a session on the GAP during the next PIP AG meeting in October 2016 in order to assist the PIP AG to understand better the GAP areas of work and explore how the PIP Framework might support activities that are relevant to the PIP Framework.*

Update on Communications and Outreach

13. The Secretariat updated the AG on the PIP Framework’s Communication Strategy and its outreach work with industry and civil society. The AG recognized the recent progress on the communication of the PIP Framework to stakeholders.

14. The AG noted that there is little knowledge of the PIP Framework at the country level, although there has been marked improvement at the WHO and regional level. The AG suggested that the Secretariat should work with the WHO Country Offices to improve knowledge of the PIP Framework at the country level.

**Recommendations to the Director-General on Communications and Outreach**

15. *The AG recommended that the Secretariat strengthen communications through the WHO country office level with Ministries of Health, other relevant Ministries, and scientific communities.*

16. *The AG recommended that the Secretariat explore the idea of using Regional Committee meetings as opportunities to hold PIP outreach sessions or roundtable events to engage Member States.*

17. *The AG also recommended the Secretariat try to reach a broader audience, including governments and policy makers, with its future communication plans.*

Update on Standard Material Transfer Agreements 2 (SMTA2s)

18. The Secretariat provided an update on the number, geographical location and type of entities that have already signed SMTA2 agreements. It explained its strategy for concluding agreements with companies that already have a prequalified vaccine and the importance of developing mechanisms to speed up the process of prequalification. Additionally, the Secretariat presented the status of current negotiations with vaccine
manufacturers, diagnostics manufacturers and research/academic institutions. The AG welcomed the progress that had been achieved towards signing more SMTA2 agreements.

19. It was agreed that manufacturers signing SMTA2 agreements should be encouraged to obtain prequalification for an existing product if this did not already exist.

20. The Secretariat presented to the AG benefit sharing proposals received from three vaccine manufacturers. The proposals were considered, including the benefit of signing SMTA2 agreements.

21. The Secretariat informed the AG of its difficulties with several manufacturers that have been in receipt of PIP biological materials but whose engagement with SMTA2 negotiations has been very slow and unconstructive. The Secretariat reviewed some of the challenges that delay negotiations, notably with small/medium sized companies, such as unfamiliarity with the PIP Framework and the UN procurement system. Many such companies do not export and require extensive information on prequalification and other technical requirements before they will advance negotiations. There are also instances where companies do not offer reasonable benefit sharing commitments.

22. The Secretariat also informed the AG that 37 SMTA2s have been signed with academic and research institutions and that 12 of these institutions have offered to contribute a benefit. Many of these contributions related to laboratory capacity building and are being reviewed by the GISRS team. The Secretariat will publish details about the types of offers received from these institutions, as soon possible, and report thereon at the next AG meeting. The AG expressed appreciation for the work achieved by the Secretariat on SMTA2 agreements.

Recommendations to the Director-General on concluding SMTA2s

23. The AG recommended that WHO proceed to conclude agreements as outlined by the Secretariat.

24. The AG recommended to the Secretariat that it start the stepwise approach, agreed in its October 2015 meeting, with one of the companies identified to the AG that is maintaining a manifestly unreasonable position regarding signing an SMTA2.

25. The AG recommended that the Secretariat start the stepwise approach with the other identified companies should negotiations fail to progress. The AG stressed that the stepwise approach should be implemented by the Secretariat in a timely manner.

26. The AG recommended that the Secretariat work together with the WHO prequalification team to share information about the prequalification process, including its benefits and requirements, with all influenza vaccine manufacturers not yet engaged in this process.

27. The AG recommended that WHO explore ways to expedite the prequalification process, working together with national regulatory authorities.
28. The Secretariat briefed the AG on the initial work of the PIP Framework 2016 Review Group and the themes that Member States and stakeholders had encouraged the Review Group to address as part of the Review. This included the possibility of expanding the Framework to include seasonal influenza viruses. It provided copies of reports of the Review Group’s three meetings to date. The Review Group will provide its final Report to the Director-General by 31 October 2016, so that it may be considered by the Executive Board in January 2017 and the World Health Assembly in May 2017.

29. The Secretariat also presented the work that will be undertaken to respond to the request from Member States at the 138th Executive Board in January 2016 that the WHO Secretariat analyse how the implementation of the Nagoya Protocol might affect the sharing of pathogens and the potential public health implications. The Secretariat explained that the WHO Secretariat study will analyse the potential public health implications of implementation and possible options for advancing public health, supporting the objective of a fair and equitable sharing of benefits arising from the use of human pathogens.

30. The Secretariat noted that the Review Group is separately tasked with reviewing the linkages between the PIP Framework and other instruments, notably the Nagoya Protocol. The Secretariat reported that the Review Group decided, in the interest of coherence, to encourage the WHO Secretariat study to address, as part of its mandate, the implications of Nagoya Protocol implementation for the PIP Framework, and for GISRS. Possible options for improved harmonization between the Nagoya Protocol and the PIP Framework, will be explored in the context of the ongoing PIP Framework 2016 Review.

31. The WHO Secretariat written report on the Nagoya Protocol is due by the end of October 2016. The work will involve engagement with Member States and stakeholders. The work will be conducted in a transparent, independent and impartial manner and should include: a review of relevant documentation, including existing domestic implementing legislation of the Nagoya Protocol to the Convention on Biological Diversity; and interviews with key informants.

32. The AG asked to be kept informed by the WHO of developments in this area.

**Update on Partnership Contribution Collection**

33. The Secretariat updated the AG on the process and collection of the Partnership Contribution (PC), including the number of entities contacted, the number of contributors and the funds received in the period 2013-2016. Some significant contributions remain outstanding for 2015 and the AG noted the importance of the industry-agreed formula being faithfully honoured, especially by industry leaders.

34. The Secretariat raised the issue of the cash flow problems that arise annually because the timing of receipt of the Partnership Contribution funds from manufacturers is not well-aligned with WHO’s timetable for formulating and funding the Partnership Contribution work plans. Any delay in receiving funds hinders Partnership Contribution work plan development and implementation. The Secretariat also relayed some of the challenges faced by industry with respect to the payment of their annual contributions, notably
invoices arriving late in the fiscal year, the unpredictability of the amount of the invoices, the inclusion of 2009 as a base year in the annual calculation, local tax barriers, and inability to pay in one instalment.

35. The AG discussed ideas for the simplification of the Partnership Contribution collection mechanisms and said it would welcome the industry’s perceptions of the process and their suggestions regarding the collection system. This discussion will continue at the next AG meeting.

**Recommendations to the Director-General on Partnership Contribution collection**

36. The AG recommends that the Director-General explore mechanisms to permit an advance of funds by WHO to the PIP Secretariat for implementation of preparedness projects based on projected Partnership Contribution funds.

37. The AG recommends that the Secretariat continue to explore, in consultation with industry, modification and simplification of the Partnership Contribution collection process.

**Update on Partnership Contribution Implementation**

38. The Secretariat provided a comprehensive presentation on the implementation of projects based on Partnership Contribution funds in 2015. The presentation explained that the focus was shifting from financial metrics to measuring progress towards achieving strategic objectives. The presentation showed the performance across the five areas of work (Laboratory & Surveillance, Burden of Disease, Regulatory Capacity Building, Risk Communications and Planning for Deployment) which are being carried out in order to improve pandemic preparedness and the indicators used to measure performance.

39. The AG noted the progress on implementation and welcomed the results-based approach that is in line with the intentions of the Partnership Contribution Implementation Plan 2013-16. There was general consensus among the AG that the Secretariat should also highlight the ‘collateral benefits’ of Partnership Implementation, similarly to the approach that the Review Group is taking.

40. The AG underscored the importance of ensuring that activities in countries receiving Partnership Contribution funds are synergistic, and do not compete with the efforts to address public health emergencies. The AG observed that there is capacity building ongoing in three related contexts: the PIP Framework, the International Health Regulations (IHR) and the Global Health Security Agenda (GHSA). The AG underlined the importance of collaboration among these three processes. The AG also stressed the need to collaborate closely with IHR and GHSA activities, in order to ensure alignment and synergy.

**Recommendations to the Director-General on Partnership Contribution Implementation**

41. The AG recommended that synergistic work should be promoted across relevant departments and units across all three levels of the Organization and with entities implementing IHR core capacities, including GHSA.
Partnership Contribution Next Steps

42. The Secretariat reviewed the relevant PIP Framework provisions on processes, roles and responsibilities with respect to the allocation and use of PC funds. Several decisions are time bound and expire at the end of 2016, notably the EB decision on the division between preparedness and response (6.14.5) and the Director-General’s decision on use of the PC (6.14.4 and 6.14.6).

43. The Secretariat presented a proposal to extend all decisions related to use or allocation of the PC funds, including the division between preparedness and response, to 31 December 2017. The rationale was that having the benefit of the Review Group report and the findings and recommendations of the 2017 World Health Assembly (WHA) will provide the Director-General with a more comprehensive base of information on which to develop a new multi-year PC implementation plan and a proposal on the proportional distribution of PC funds.

44. The AG welcomed the Secretariat’s proposal and agreed that the extension would bridge the period of the Review process and the development of improved approaches to PIP based on the 2017 WHA discussion and recommendations. Participants asked if there was a schedule for the development of the new Partnership Contribution Implementation Plan. The Secretariat responded that the first task was to update the 2013 Gap Analyses.

Recommendations to the Director-General on Partnership Contribution Next Steps

45. The AG recommended that all decisions relating to the implementation of Partnership Contributions be extended to 31 December 2017. These include:
   a. Executive Board decision 131/4 on the proportional allocation of PC resources between preparedness and response (Section 6.14.5)
   b. the Director-General’s high level “Partnership Contribution Implementation Plan 2013-2016” (Section 6.14.6)

46. The AG recommended that the Director-General, based on advice from the AG, start the process to develop a new implementation plan by updating the Gap Analyses from 2013.

Interaction with PIP Framework Review Group

47. AG members took part (by teleconference) in a rich discussion with members of the PIP Framework Review Group and responded to several of the questions that the Review will address. This dialogue will continue over coming months, including with written input from the AG, if appropriate.

Update on progress to implement recommendations on handling of Genetic Sequence Data

48. The AG received a detailed presentation on the process to handle genetic sequence data (GSD) under the Framework so far, including: the Technical Expert Working Group on genetic sequence data; the Survey on data sharing; the Technical Working Group (TWG) on the sharing of influenza genetic sequence data; the paper on “Options to monitor the use of genetic sequence data from influenza viruses with human pandemic potential in end-products” (the ‘Options Paper’); and the collaboration with the World Data Center for Microorganisms (WDCM).
49. The AG welcomed the TWG revised draft document “Optimal Characteristics of an influenza genetic sequence data sharing system under the PIP Framework” and thanked the TWG for its work. The AG encouraged finalizing the document, taking into consideration the result of the consultation with industry and other stakeholders, and discussion within the AG.

50. The AG reiterated the importance of maintaining equal footing for the sharing of viruses and the sharing of benefits when considering handling of GSD under the Framework.

51. The AG made the following observations regarding GSD and the PIP Framework objectives:
   a) The system for handling GSD is composed of data providers, data users, and databases.
   b) Rapid access to the genetic sequence data of influenza viruses with human pandemic potential (IVPP GSD) is necessary for timely and comprehensive pandemic risk assessment and response.
   c) IVPP GSD can be considered a rendering of virus material, in electronic form.
   d) The Framework recognizes that there are different approaches to data sharing.
   e) A diversity of databases is best for optimal data sharing and resilience.
   f) Technology for traceability has evolved and continues to evolve since adoption of the Framework.

52. The AG reviewed its October 2014 recommendation to the Director-General\(^1\) and the TWG Report and the Options Paper. The AG also discussed input from consultations and previous meetings.

**Recommendations to the Director-General on handling GSD under the PIP Framework**

53. AG recommends to the Director-General that the following constitutes the initial phase of defining the optimal characteristics of a system to handle IVPP GSD under the PIP Framework:

<table>
<thead>
<tr>
<th>IVPP GSD sharing</th>
<th>Benefit Sharing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure rapid and timely sharing of IVPP GSD for pandemic risk assessment and rapid response</td>
<td></td>
</tr>
<tr>
<td>• Ensure the broad sharing of IVPP GSD with the international</td>
<td></td>
</tr>
<tr>
<td>• Allow identification of commercial end-products developed using IVPP GSD through source identification using accession numbers or self-reporting</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) In accordance with PIP Framework Section 5.2.4, the Advisory Group recommends for the Director General’s consideration the following as the best process for further discussion and resolution of the issues related to the handling of GSD under the PIP Framework:

- In 2015, the Advisory Group will identify the optimal characteristics of a system for the handling of IVPP GSD under the PIP Framework including consideration of:
  a. Data sharing systems that are best suited to meet the objectives of the Framework considering obligations and timeliness of data submission, quality assurance of data, completeness of data annotation, ease of access to data, sustainability and security of the system.
  b. Systems to monitor use of IVPP GSD in end-products.
- For the foregoing, the Advisory Group will consult with GISRS laboratories, databases, and industry and other stakeholders. The results of the above work will be available to the Secretariat for integration into the 2016 review of the Framework and its annexes as provided in Section 7.4.2.
scientific and public health community and its availability through publicly-accessible databases

- Encourage rapid publication of research relevant to pandemic influenza preparedness and response
- Ensure quality in all steps of data management so that the IVPP GSD and its metadata is complete and of high quality
- Offer a sufficient degree of redundancy, including through multiple databases, in order to secure sustainability of access to data
- Facilitate benefit-sharing through traceability and/or commercial end product identification, data access agreements or database statements about PIP Framework expectations
- Ensure appropriate acknowledgement of the contribution of data providers and originating laboratories/countries and strongly encourage their active participation in scientific publication and projects associated with research on the IVPP GSD

54. As a way forward, the AG recommends the development of Standard Operating Procedures for data providers and databases, with a view to implementing some of the optimal characteristics and best practices developed by the TWG.

55. The AG also recommends that the Secretariat continue its collaboration with the WDCM to develop a search engine identifying end-products developed using IVPP GSD and requests that the search engine be implemented on a pilot basis in order to assess its usefulness and feasibility for using data collected for benefit sharing purposes.

Update on Virus Sharing

56. Using data from the Influenza Virus Traceability Mechanism (IVTM), the Secretariat presented an overview of virus sharing in recent years. While the sharing of PIP biological materials initially increased after adoption of the PIP Framework, recent data point to a decreasing trend in IVPP virus sharing. Detailed figures for H5N1, H7N9, H10N8 and H9N2 illustrated how in some specific countries the number of viruses shared was considerably lower than the number of confirmed human cases during 2011-16.

57. The Secretariat provided possible reasons for this trend. These included: 1) a lack of understanding among National Influenza Centres (NICs) that sharing IVPP GSD does not replace sharing biological material; 2) different interpretations of the phrasing of the PIP Framework that all IVPP should be shared “as feasible”; 3) export procedures that can be lengthy and involve Ministries other than Health; and 4) lack of clarity by laboratories with dual roles as both a NIC and a WHO Collaborating Centre (CC) about their international sharing responsibilities.

58. The AG questioned whether these reasons fully accounted for the recent decline in sharing and urged that WHO investigate the matter in order better to understand its causes. The AG further indicated that this decline be brought to the attention of the
Review Group, noting with concern that a decrease in virus sharing is a challenge to the PIP Framework.

59. Secretariat and the AG discussed several approaches to improving virus sharing. The AG agreed on the need for operational guidance on the PIP Framework language, additional education and communication efforts with NICs on sample collection and sharing procedures, and the engagement of WHO Country Offices and national authorities to ensure timely export of viruses.

60. The AG discussed the need for a broad look at the resources for the PIP Framework and the Global Influenza Programme.

**Recommendations to the Director-General on sharing influenza viruses with pandemic potential**

61. The AG, noting the decline in virus sharing, recommended that the Secretariat investigate the matter and prepare a more detailed update for the AG at its next meeting.

62. The AG further recommended that the Secretariat develop technical operational guidance to address all the possible reasons explained above. The guidance should, in particular, clarify the intent of the term ‘as feasible’.

63. The AG recommended that the Secretariat engage with WHO Country Offices, through Regional offices, and national Ministries of Health for assistance when inter-ministerial coordination is required to address barriers to virus sharing, including delays to the export of biological materials.

**Next steps**

64. The AG agreed that its next meeting will take place 18-21 October 2016.
Annex 1

Meeting of the Pandemic Influenza Preparedness Framework Advisory Group
19-22 April 2016

List of Advisory Group participants

Professor Chris Baggoley, Chief Medical Officer, Department of Health, Australia

Dr Jarbas Barbosa da Silva, Jr, Director-President, Brazilian Health Regulatory Agency (ANVISA), Brazil

Professor Hamad Ali Hamad El-Turabi, Associate Professor of Medicine, Faculty of Medicine, University of Khartoum, Sudan

Professor Didier Houssin, President of The French Agency for Food, Environmental and Occupational Health & Safety (ANSES), France

Dr Olav Hungnes, Division of Infectious Disease Control, Norwegian Institute of Public Health, Norway

Dr Kerri-Ann Jones, Former Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs, United States of America

Professor Raymond Lin Tzer Pin, Head and Senior Consultant, National Public Health Laboratory, Ministry of Health, Singapore

Dr Ziad A Memish, Senior Consultant Infectious Diseases & Director of Research Department, Prince Mohamed bin Abdulaziz Hospital, Ministry of Health, and Professor, College of Medicine, Alfaisal University, Riyadh, Kingdom of Saudi Arabia

Dr Janneth Maridadi Mghamba, Assistant Director – Epidemiology and Program Director of TFELTP, Ministry of Health and Social Welfare, United Republic of Tanzania

Dr Cuauhtémoc Mancha Moctezuma, Director General of Preventive Programs, National Center for Preventive Programs and Disease Control (CENAPRECE), Ministry of Health, Mexico

Dr Hama Issa Moussa, National Technical Assistant, Institutional Support Unit, Ministry of Public Health, Niger

Dr Richard Njouom, Head of the Virology Service, Centre Pasteur of Cameroon, Cameroon

Dr Paba Palihawadana, Chief Epidemiologist, Director Central Epidemiology Unit, Ministry of Health, Sri Lanka

Professor Dr Mahmudur Rahman, Director, Institute of Epidemiology, Disease Control and Research (IEDCR) & National Influenza Centre, Bangladesh

Dr Huma Qureshi, Executive Director, Pakistan Medical Research Council, Pakistan
Dr P V Venugopal, Former Director of International Operations, Medicines for Malaria Venture, Public Health Specialist, India

Professor John Watson, Deputy Chief Medical Officer for England, Department of Health, United Kingdom
Annex 2

Meeting of the Pandemic Influenza Preparedness Framework Advisory Group
19-22 April 2016

Agenda

1. Briefing for new Advisory Group members
2. Discussion on PIVI
3. Update on Global Action Plan for Influenza Vaccines (GAP)
4. Update on Communications and Outreach
5. Update on SMTA2 agreements
6. Update on the PIP Framework Review Group Process
7. Update on Partnership Contribution Collection and Implementation
8. Interaction with PIP Framework Review Group (by teleconference)
9. Update on progress to implement recommendations on handling of Genetic Sequence Data (GSD)
10. Update on Virus Sharing
11. Consultation with industry and other stakeholders (PIPF section 6.14.6)
   a. Update and discussion on Partnership Contribution
   b. Update and discussion on the handling of Genetic Sequence Data
12. Review Recommendations and Reports
13. Next steps
   a. Next meeting of the Advisory Group
14. Close of meeting
Meeting of the Pandemic Influenza Preparedness Framework Advisory Group
19-22 April 2016

Summary of Declarations of Interest by members

In accordance with WHO policy, in advance of the meeting, all PIP Framework Advisory Group members were asked to provide a duly completed Declaration of Interests form to inform WHO about real, potential or actual conflicts of interests that they might have in relation to the subject matter of the meeting. Over the course of the Advisory Group Special Session and the following Advisory Group meeting, the group will discuss, review or be provided updates on the following matters:

- 2016 PIP Framework Review
- The Partnership Contribution
  - Inflows of funds
  - Implementation of Preparedness activities
- Handling genetic sequence data in the context of the PIP Framework
- SMTA 2s
- Virus sharing
- 2016 Review of the PIP Framework

During the meeting, the Advisory Group also interacted with manufacturers and other stakeholders regarding the implementation of the Partnership Contribution and the handling of genetic sequence data.

Members, in the exercise of their functions on the Advisory Group, serve in their individual capacity acting as international experts serving WHO exclusively. The experts participating in the Advisory Group meeting were, by WHO region:

Africa:
- Dr Richard Njouom (Cameroon)
- Dr Hama Issa Moussa (Niger)
- Dr Janneth Maridadi Mghamba (United Republic of Tanzania)

Americas:
- Dr Jarbas Barbosa da Silva Jr, (Brazil)
- Dr. Kerri-Ann Jones (United States of America)
- Dr Cuauhtémoc Mancha-Moctezuma (Mexico)

Eastern Mediterranean:
- Dr Hamad El-Turabi (Sudan)
- Ziad A. Memish (Kingdom of Saudi Arabia)
- Dr Huma Qureshi (Pakistan)

Europe:
- Professor Didier Houssin (France)

---

1Professor Yu Wang (China) was unable to attend.
- Dr Olav Hungnes (Norway)
- Professor John Watson, United Kingdom

South-East Asia:
- Dr Paba Palihawadana (Sri Lanka)
- Professor Dr Mahmudur Rahman (Bangladesh)
- Dr P V Venugopal (India)

Western Pacific:
- Professor Chris Baggoley (Australia)
- Raymond Lin Tzer Pin (Singapore)

Given that discussions in the meeting were on the use or allocation of Partnership Contribution resources, and in the interest of transparency, the following interests and/or affiliations are relevant to the subject of work and are hereby disclosed:

<table>
<thead>
<tr>
<th>Name</th>
<th>Interest declared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Chris Baggoley</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Dr Jarbas Barbosa da Silva, Jr</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Dr Olav Hungnes</td>
<td>Affiliated with a GISRS laboratory</td>
</tr>
<tr>
<td>Raymond Lin Tzer Pin</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Dr Hama Issa Moussa</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Dr Cuauhtéemoc Mancha-Moctezuma</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Dr Ziad Memish</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Dr Janneth Mghamba</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Dr Richard Njouom</td>
<td>Affiliated with a GISRS laboratory</td>
</tr>
<tr>
<td>Dr Paba Palihawadana</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Dr Huma Qureshi</td>
<td>Civil Servant</td>
</tr>
<tr>
<td>Professor Mahmudur Rahman</td>
<td>Affiliated with a GISRS laboratory</td>
</tr>
<tr>
<td>Professor John Watson</td>
<td>Civil Servant</td>
</tr>
</tbody>
</table>

No comments were received as a result of the Public Notice and Comment period. No other interests declared by members of the Advisory Group were deemed relevant to the work of the group.