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English only

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Item 6 of the provisional agenda
Space technology for socioeconomic development in the context of the United Nations Conference on Sustainable Development and the post-2015 development agenda

Second Meeting of the Expert Group on Space and Global Health, 18-19 February 2016

Progress report on the activities of the expert group and future considerations

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Executive Summary

1. The second meeting of the focused expert group on Space and Global Health was held on the margins of the 53rd session of the Scientific and Technical Subcommittee (STSC, or the Subcommittee) of the Committee on the Peaceful Uses of Outer Space (COPUOS, or the Committee) on 18-19 February 2016. This meeting enabled members of the Committee and their experts to exchange views and progress on the workplan that was adopted at the 52nd session of the Subcommittee (A/AC.105/C.1/2015/CRP.29). A total of 16 experts participated over the two sessions.

2. The expert group reviewed and discussed various key activities held during the last year with relevance to the application of space science and technology to global health objectives and discussed approaches to strengthen the efforts of the space community to bring tangible supports to the United Nations Sustainable Development Goals as per the Agenda 2030.

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3. The scope of work of the expert group on Global Health, as initially proposed last year (A/AC.105/C.1/2015/CRP.29), was further discussed to enhance clarity and common understanding.

4. The expert group documented important activities relevant to space and global health planned for the next year and discussed participation and engagement to these events and with a broader set of stakeholders. It took note of efforts to find innovative ways to promote the development and application of space technologies in a perspective to support global health as a public good.

5. In conclusion, the expert group is pleased with the advancement of its workplan and will continue its efforts to promote active engagement of the United Nations Committee on the Peaceful Uses of Outer Space and of other relevant national and international entities towards tangible actions in this domain.

I. Meeting Outcomes

6. In the context of its workplan and to continue developing active collaborations with the World Health Organization (WHO), as well as other Geneva-based international entities engaged in promoting global health, the expert group considered a proposal by Canada to elect a co-chair with a specific mandate to actively pursue these collaborations. On this question, the expert group reached a consensus and is pleased to report the nomination of Dr Antoine Geissbühler from Switzerland as co-chair of the expert group on Space and Global Health. Dr Geissbühler, who is a recognized expert in tele-medicine affiliated with the Geneva University Hospitals, Director of the WHO collaborating centre on cyber-health and WHO Liaison Officer of the International Medical Informatics Association, has kindly accepted to carry this function.

7. The working group also considered the benefits of keeping an active community of practice interested to pursue capacity building activities and enabling a growing network of experts engaged in applying space sciences and technologies for socio-economic benefits. On this topic, the working group reached a consensus and is pleased to report the nomination of Dr Engelbert Niehaus from the University of Landau, Germany, as the leader of the community of practice for the working group on Space and Global Health. Dr Niehaus has kindly accepted to continue developing approaches and activities to engage the community of experts on practical outcomes.

8. The working group reported on key activities held during the last years and with direct relevance to its mandate. In this context, Werner Balogh, from the United Nations Office for Outer Space Affairs presented the outcomes of the Meeting on the applications of space science and technology for public health organized by the World Health Organization and the Office for Outer Space Affairs (Geneva, 15 and 16 June 2015).

9. Jason Hatton, from the European Space Agency (ESA) presented an update on ESA Human Spaceflight Programme activities in support of the United Nations sustainable global goals and WHO leadership priorities; Pascal Michel from Canada presented the outcomes of the preparatory meeting for the High Level Forum: “Space as a Driver for Socioeconomic Sustainable Development” organized by the

Office for Outer Space Affairs and co-sponsored by the Secure World Foundation (Vienna, 19 November 2015); Dr Engelbert Niehaus presented on the outcomes of the year activities of the Community of Practice on Space and Global Health; and Cécile Vignolles from the French Space Agency presented on the contribution of tele-epidemiology to fighting vector-borne diseases such as the Zika virus.

10. M. Ramesh Krishnamurthy of the World Health Organisation (WHO) joined the meeting by phone to express his continued interest to enable collaborative actions in support of the objectives of the expert group. M. Krishnamurthy is the current WHO focal point for collaborative projects between WHO and the United Nations Office for Outer Space Affairs (OOSA). The WHO is pursuing a project on Global Health Facility locator which arose from the meeting co-organised by WHO and OOSA in Geneva, 15-16 June 2015 (A/AC.105/1099). M. Krishnamurthy commented on the possibility of a side event on space science and geospatial data for global health and health services delivery to be held in the margin of the World Health Assembly scheduled for May 2016.

11. As reported, the WHO/OOSA Meeting on the Applications of Space Science and Technology for Public Health which took place in Geneva in June 2015 led to several collaborative projects. One of these projects relates to the consideration of drafting a resolution for the consideration of the World Health Assembly, on collaboration between member States, space agencies and other relevant entities for advancing universal health coverage and raising awareness about the role of space science, technology and applications for public health. The expert group is receptive to support the progress of such resolution.

12. During its deliberation relating to the scoping of Global Health, the expert group noted the need to engage other international actors that would provide a broad perspective on One-health in the context of space application for global health. Such actors could include intergovernmental entities such as the World Organization for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO), the intergovernmental Group on Earth Observations (GEO) and others, as well as nongovernmental organizations (NGO's) working in relevant areas.

13. The expert group noted with satisfaction the significant effort of the European Space Agency to align its programs with the Sustainable Development Goals and with the World Health Organization leadership priorities.

II. Scoping Global Health in the Context of Space Activities

14. From a conceptual view, global health places a priority on improving health outcomes and achieving equity in health for all people worldwide. Problems that transcend national borders or have a global socio-economic impact are often emphasized. From a space perspective, the expert group on Space and Global Health includes a broad array of activities to be directly relevant to global health, such as: telemedicine, tele-health, space life sciences, space technologies, tele-epidemiology, and disaster management (including response to epidemics). From a health perspective, the expert group recognizes the contribution of the space community to the prevention and control of diseases, to promote health and welfare, to addressing global health security issues, to the advancement of medical research, health

practices and the provision of healthcare services to individuals and communities and also through a One-health lens.

15. It is also understood that various global determinants and social trends (ex: climate change, global migration, population growth, ageing, citizen science, crowd sourcing, big data, digital medicine) are driving the health outcomes and the evolution of various technology development. Although these drivers are significant for their general impact on society, they are not directly scoped in the notion of Global Health in the context of the activities of the expert group.

III. Events relevant to Space and Global Health in 2016

16. The expert group discussed of meetings or events, planned or confirmed, for the coming year. This would allow to target events for which member of the working group would like to engage and foster a broader discussion between the space and the global health communities.

17. The following list represents a preliminary, non-comprehensive collection of relevant events:

(a) Geneva Health Forum (Geneva, Switzerland, 19-21 April 2016);

(b) 6th Annual ARTES Applications Workshop (Brussels, Belgium, 28-29 April 2016);

(c) Living Planet Symposium 2016 (Prague, Czech Republic, 9-13 May 2016);

(d) World Humanitarian Summit (Istanbul, Turkey, 23-24 May 2016);

(e) Sixty-ninth World Health Assembly — side event (Geneva, Switzerland, 23-28 May 2016);

(f) European Space Solutions (The Hague, the Netherlands, 30 May-3 June 2016);

(g) Global conference on space and the information society (GLIS 2016), International Astronautical Federation (IAF) and International Telecommunication Union (ITU) (Geneva, Switzerland, 6-7 June 2016);

(h) ESPI Space in SDG cooperation (September, Vienna);

(i) International Astronautical Federation (Guadalajara, Mexico, 26-30 September 2016);

(j) High Level Forum “Space as a Driver for Socioeconomic Sustainable Development” (Dubai, United Arab Emirates, 20-24 November 2016).

IV. Next Steps

18. The workplan was reviewed to assess progress. The second work item relates to the need to compile practices and initiatives, current or planned (concepts, science, capacity building, and operations) according to the proposed scope of the expert group. The expert group noted with satisfaction the leadership of

Dr. Antoine Geissbühler of Switzerland who accepted to lead the development of this work item in 2016.

19. The expert group concluded to meet in person at the 54th session of the Scientific and Technical Subcommittee of COPUOS in 2017. The expert group agreed to consider organizing a one hour side event in the margins of the subcommittee 54th session to foster interest, enhance awareness and promote the planning of tangible actions relevant to space applications for Global Health.