

Strengthening Space Cooperation for Global Health

*A joint conference of the United Nations Office of Outer Space Affairs,
World Health Organization and Government of Switzerland -
with support from the European Space Agency*

**World Health Organization Headquarters
Geneva, Switzerland**

23-25 August 2017

Provisional Agenda

About the conference

The Conference is expected to foster dialogue about better utilization of space-based data and technologies in addressing global health. It will showcase select global health initiatives and their various uses of space technologies, data access, data provision services and information sharing, with a focus on two areas, namely Resiliency (of space technologies to provide services despite breakdowns in ground-based infrastructures, notably in emergency situations and humanitarian crises) and Interoperability (challenges of coordinating services and data sources to foster synergies and strengthen global health). Interoperability and resiliency are two of five cross-cutting areas identified, together with governance, capacity building and sustainable development.

The outcomes and recommendations identified will provide inputs for the United Nations Report on this thematic priority, to be delivered in June 2018 for [UNISPACE+50](#), an event celebrating the 50th anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space, and an opportunity for the international community to gather and consider the future course of global space cooperation for the benefit of humankind.

Day 1 - Wednesday, 23 August 2017

8:30 - 9:00	Registration	
9:00 - 9:30	Opening Session Remarks by World Health Organization Edward Kelley <i>Director, Department of Service Delivery and Safety</i> Remarks by United Nations Office of Outer Space Affairs Niklas Hedman <i>Chief, Committee, Policy and Legal Affairs Section</i> Remarks by Government of Switzerland Nora Kronig <i>Deputy Head of the Multilateral Division, Permanent Mission of Switzerland to the United Nations Office and to the other international organisations in Geneva</i> Remarks by Representative of the Expert Group on Space and Global Health of the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space Antoine Geissbuhler <i>Co-chair of the Expert Group</i>	
9:30 - 10:00	Introduction to UNISPACE+50 Niklas Hedman <i>United Nations Office of Outer Space Affairs</i> Objectives and Expectations Ramesh Krishnamurthy <i>World Health Organization</i>	
10:00 - 10:30	Group Photo and Refreshment Break	
10:30 - 12:30	Thematic Session 1: Space Science and Technology for SDG 3 <ul style="list-style-type: none">- One Health One Planet update - <i>Pascal Michel</i>- Public Health and Space Science: WHO's Areas of Interest - <i>Ramesh Krishnamurthy</i>	Session Chair: Antoine Geissbuhler <i>Co-chair Expert Group on Space and Global Health of the Scientific and Technical</i>

- JAXA's Challenges for Global Health and Sustainable Development - *Yoshiaki Kinoshita*
- Improving Health Outcomes through the National Geospatial Data Infrastructure - Experience from a Summit (Nigeria) - *Ganiyu Agbaje*
- Remote Sensing Data can help early warning of outbreaks of emerging infectious diseases - *Antoine Flahault*
- Seasonal variation in geographical access to maternal health services in regions of southern Mozambique - *Prestige Makanga*

*Subcommittee of United Nations Committee on Peaceful Use of Outer Space
Professor and Chair of the Department
Department of Radiology and Medical Informatics
University of Geneva
Geneva, Switzerland*

Plenary Discussion

12:30 - 13:30 **Lunch Break**

13:30 - 15:30 **Thematic Session 2: Health Systems Resiliency**

Session Chair:

- Earth Observation data use in WASH - Water, sanitation, hygiene and health - *Rifat Hossain*
- WMO/WHO Joint office for Climate and Health: Sharing experience on the role of remote-sensed climate and environmental information to improved health case services - *Montoya, Parks*
- Efforts of the United Nations in promoting space applications for global health - *Sergey Chernikov*
- How space technologies contribute to global health and what are the gaps and opportunities that were identified - *Damien Dietrich*
- Conceptualizing the satellite technology based Emergency Medical Services for Riverine Island Villages of Krishna District in Andhra Pradesh (India)

Ramesh Krishnamurthy
*Senior Advisor,
Department of Information,
Evidence and Research, Health
Systems and Innovation Cluster,
WHO Headquarters*

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Plenary Discussion

15:30 - **Refreshment Break and Networking Opportunity**
16:00

16:00 - **Thematic Session 3: Capacity-building in using space science, technology and applications for global health: Identifying needs and best practices**
17:30

- Issues on Capacity building in Space and Geospatial Sciences in East Africa; the case of Uganda - *Oluseyi Fabiyi*
- Human Capacity Development in Space Science and Technologies for Global Health. Ghana as a case study - *Yao Kiatchey*
- ISEPEI: Role of Universities in ICTs Capacity Building - *V. Lagutov*
- AccessMod 5: a tool to supporting Universal Health Coverage by modelling physical accessibility to healthcare - *Nicolas Ray*
- Building a global commons of health facility information with OpenStreetMap - *Rene Saameli, ICRC / Mark Herringer*

Session Chair:

Lorant Czarán
*Programme Officer
United Nations Office of Outer
Space Affairs,
UN Office in Vienna
Vienna, Austria*

Plenary Discussion

19:00 **Conference Reception at Campus Biotech (hosted by the Government of Switzerland)**

Location: 9, chemin des Mines, 1202 Geneva

Natália Archinard
*Deputy Head of Education,
Science and Space Section,
Federal Department of Foreign
Affairs, Switzerland*

Day 2 - Thursday, 24 August 2017

9:00 - 10:30	Thematic Session 4: Systems and Organizational Interoperability, Technical Cooperation <ul style="list-style-type: none">- GEO Presentation - Health SBA - <i>Bill Sonntag</i>- Satellite imagery in support of WHO field deployments - <i>Einar Bjorgo</i>- Increased transparency of international space cooperation for global health initiatives through the cascading impacts by students and young professionals from academia to industry - <i>Linda Dao</i> <p style="text-align: center;"><i>Plenary Discussion</i></p>	Session Chair: Pascal Michel <i>Co-chair of the Expert Group on Space and Global Health of the Scientific and Technical Subcommittee of United Nations Committee on Peaceful Use of Outer Space Chief Science Officer/ Office of the Chief Science Officer; Public Health Agency of Canada, Government of Canada</i>
10:30 - 11:00	Refreshment Break and Networking Opportunity	
11:00 - 12:30	Thematic Session 5: Looking Forward <ul style="list-style-type: none">- Digital Health Technologies to Support Manned Missions to Mars - <i>Dr. Bertalan Mesko, Medical Futurist</i>- Science, technology and applications for global health. - <i>Ferretti/ESPI</i>- The Global Surface Water Explorer; high resolution mapping 32 years of change to surface water location and duration - <i>Alan Belward, EC/JRC</i>- European Space Agency Health related activities and the sustainable development goals - <i>Jason Hatton, ESA</i> <p style="text-align: center;"><i>Plenary Discussion</i></p>	Session Chair: Natália Archinard <i>Deputy Head of Education, Science and Space Section, Federal Department of Foreign Affairs, Switzerland</i>
12:30 - 13:30	Lunch Break	
13:30 - 15:30	UN-Space Open Session <p>Please refer to final agenda and information on</p>	Session Chair: Representative, OOSA

<http://www.unoosa.org/oosa/en/ourwork/un-space/iam/37th-session.html>

15:30 - **Refreshment Break and Networking Opportunity**

16:00

16.00 - **Paper presentations session**

Session Chair:

18.00

Representative, WHO

- Geo-enabling the in country Health Information System in South East Asia - *Steve Ebener*
- The importance of geospatial data in public health management - *Tony Mathew*
- Vulnerability Assessment of Puerto Galera Bay As Affected By Its Biophysical Characteristics and Urbanization - *F. Ocones*
- Preliminary Analysis for the Prevention of Hfq-sRNA Binding To Reduce Virulence Effect of Bacterias and Gamification Applications for Human Spaceflight - *Ozan Kara*
- Emerging drug resistant pathogens due to poor sanitation and septic tanks - *Ghouse Shaikh*
- Vulnerability Profiling of Urban Built Environments and People by applying accurate 3D City Modeling and Disease Surveillance - *TBD*
- The Leopard Project - Radiation Hardness Assurance (RHA) using Giant Petawatt Lasers for testing space components - *Marius Eugen Opran*

(CLOSED MEETING)

Parallel session: *Meeting of the Expert Group*

Day 3 - Friday, 25 August 2017

09:30 - 11.00	High Level Segment Representative of the Director-General, WHO Simonetta Di Pippo - Director, OOSA Barbara Ryan - Director, GEO Secretariat Panel Discussion: Advancing the Space Cooperation for Global Health at National Level	Session Chair: Simonetta Di Pippo <i>Director, United Nations Office of Outer Space Affairs UN Office in Vienna Vienna, Austria</i>
11:00 - 11:15	Refreshment Break and Networking Opportunity	
11:15 - 13.00	Closing Session Proposed recommendations and discussions Presentation of draft report Conclusion	Session Chair: Niklas Hedman <i>United Nations Office of Outer Space Affairs, UN Office in Vienna Vienna, Austria</i>
