

## GEO Data Technology Workshop: the Era of Big EO Data

23-25 April 2019 / Vienna, Austria / UNOOSA

#GEOdatatech

### Draft Agenda

Version 7: 1 March 2019

#### Day 1: Tuesday 23 April

Time	Session	Moderator
10.30 -11.00	<b>1. Welcome and Introduction</b> UNOOSA GEO Secretariat	GEOSEC
11:00 – 12:00	<b>2. Vision of a Results-oriented GEO and GEOSS</b> Gilberto Camara, GEO Secretariat Director	GEOSEC
12:00-13.00	<b>3. GEOSS Platform: State of the Art and Perspectives</b> Joost van Bemmelen, ESA	ESA
13.00-14.00	Lunch (No-host)	
14.00-16.00	<b>4. Data and Information Needs and Challenges for GEO Engagement Priorities</b> What can Earth Observations contribute to the global agenda? This panel session will discuss the real and potential contributions of EO data and information for key global policy frameworks.  <b>Sendai Framework for Disaster Risk Reduction:</b> <b>UNISDR Global Risk Assessment Framework</b> Adam Fysh, UNISDR  <b>United Nations 2030 Agenda for Sustainable Development:</b> <b>New technologies for the Sustainable Development Goals</b> Bob Chen, SDSN TreNDs  <b>Paris Climate Agreement:</b> <b>Earth observations for improving Greenhouse gases reporting</b> Jean Ometto, INPE Brazil  <b>The New Urban Agenda:</b> <b>Earth observations for sustainable cities</b> Robert Ndugwa, UN Habitat	GEOSEC/ Steven Ramage
16.00-16.30	Coffee Break (No-host)	

16.30-18.30	<p><b>5. Data and Information Needs and Challenges for GEO Work Programme Activities</b></p> <p>What are the data and information needs and challenges facing GEO Work Programme Activities and Initiatives?</p> <p><b>Biodiversity:</b>  <b>GEO Biodiversity Observation Network (GEOBON)</b>  Letitia Navarro, iDiv</p> <p><b>Land Degradation:</b>  <b>GEO Land Degradation Neutrality Initiative (GEO LDN)</b>  Antje Hecheltjen &amp; Fabian Loew, GEO LDN Co-Chairs, GIZ</p> <p><b>Streamflow Forecasting:</b>  <b>GEO Global Water Sustainability Initiative (GEOGLOWS)</b>  Julia Wagemann, ECMWF</p> <p><b>Mercury Monitoring:</b>  <b>GEO Global Observation System for Mercury (GOS4M)</b>  Nicola Pirrone, CNR</p> <p><b>Water Quality:</b>  <b>AQUAWATCH</b>  Steven Greb, University of Wisconsin–Madison</p>	GEOSEC/ Craig Larlee
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## Day 2: Wednesday 24 April

Time	Session	Focal Point
9.00- 10.30	<p><b>6. In-situ Earth observations</b></p> <p><b>Improvements on Data Providers Metadata for Search Engines</b>  Mikko Strahlendorff, Finnish Meteorological Institute</p> <p><b>In-situ data workflow using OGC Sensor Web Enablement (SWE)</b>  Bartolomeo Ventura, Eurac Research</p> <p><b>Water Quality In-situ Database,</b>  Andrew Tyler, Peter Hunter, University of Stirling</p>	GEOSEC/ Douglas Cripe
10.30-11.00	Coffee Break (No-host)	

11.00-13.00	<p><b>7. Satellite-based Earth Observations</b></p> <p>This panel session will discuss the most recent opportunities and challenges facing the data community in relation to satellite-based Earth observation data and technology.</p> <p>Chair: Rob Woodcock, CSIRO</p> <p><b>CEOS Open Data Cube: lessons learned and way forward</b> Brian Killough, NASA</p> <p><b>Land Surface Imaging: CEOS Analysis Ready Data -</b> Andreia Siqueira, Geoscience Australia</p> <p><b>Perspectives of the Copernicus Programme</b> Daniel Quintart, Copernicus</p> <p><b>User-centric Collaboration Environments and Future Data Architectures-</b> Günther Landgraf, ESA</p> <p><b>Production of Analysis-Ready Data</b> Grega Milcinski, Sinergise</p>	CEOS
13.00-14.00	Lunch (No-host)	
14.00-16.00	<p><b>8. Cloud computing for Big Earth observation data: lessons learned</b></p> <p>This panel session will explore lessons learned and next steps in cloud computing for big Earth observation data.</p> <p><b>Earth Observation Data Centre</b> Wolfgang Wagner, Vienna University of Technology</p> <p><b>ECMWF Climate Data Store: lessons learned and way forward/ Users Requirements Survey</b> Julia Wagemann, ECMWF</p> <p><b>Spatio Temporal Assets Catalogs, STAC</b> Matthias Mohr, University of Münster</p> <p><b>Challenges in interoperability and harmonization in Cloud Computing for Earth observation</b> Edzer Pebesma, University of Münster</p> <p><b>National Research and Education Networks (NRENs): Infrastructure support for global cloud computing</b> Chris Atherton and Chris Steijaert, GEANT</p>	GEOSEC/ Douglas Cripe
16.00-16.30	Coffee Break (No-host)	

16.30-18.00	<b>9.GEOSS-related technologies</b>  <b>Pilot # 1: Knowledge hub</b> Gilberto Ribeiro, INPE; Rik Baeyens & Paola De Salvo, GEO Secretariat  <b>Pilot #2: GEOSS Evolution</b> Ivan De Loatch, Max Craglia & Stefano Nativi, GEOSS Evolve  <b>Pilot #3: ESA Thematic Exploitation Platform (TEP) GEO Hazards,</b> Pedro Gonçalves, TerraDue  <b>Pilot #4: Machine learning using AWS</b> Karine Ferreira, INPE	GEOSEC/ Gilberto Camara
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### Day 3: Thursday 25 April

Time	Session	Focal Point
9.00 -10.30	<b>10. Special Session on Copernicus DIAS</b>  <b>OndaDIAS</b>  <b>Sobloo</b>  <b>CREODIAS</b>  <b>MundiWeb</b>  <b>Wekeo</b>	GEOSEC/ European Commission
10.30 - 11.00	Coffee Break (No-host)	
11.00-12.30	<b>11. Innovative approaches and societal impact</b>  <b>AWS: lessons learned and way forward</b> Jed Sundwall, AWS  <b>ESRI cloud technologies for big Earth observation data analytics</b> TBC, ESRI  <b>Digital Earth Africa</b> Trent Kershaw, Geoscience Australia  <b>Japan DIAS</b> Mamoru Miyamoto	GEOSEC/ Steven Ramage
12.30-13.30	Lunch (No-host)	

13.30-15.30	<p><b>12. Innovation from SMMEs</b></p> <p><b>European Earth Observation online services (eoMALL)</b> Emmanuel Pajot (EARSC)</p> <p><b>Geosystems Hellas</b> Chara Lampopoulou</p> <p><b>EO in Africa: the view from Ethiopia</b> Dr Tesfaye Korme (GEO SAS)</p> <p><b>EO in Africa: the view from Ghana</b> Steven Adusah, Farmerline</p> <p><b>EO in Africa: the view from South Africa</b> Lee Annamalai, CSIR/GEO Intelligence</p>	GEO SEC/ Steven Ramage
15.30 -16.00	Coffee Break	
16.00-17.50	<p><b>13. Ethical Issues Panel</b></p> <p><b>Foteini Zampati,</b> Global Open Data for Agriculture and Nutrition (GODAN)</p> <p><b>Robert Chen,</b> CIESIN</p> <p><b>Tom Orrell,</b> DataReady / GPSDD</p> <p><b>Imraan Saloojee,</b> South African Space Agency (SANSA)</p> <p><b>Kevin Pomfret,</b> UN-GGIM Legal and Policy Framework Committee</p> <p><b>Jan Dusart,</b> European Commission</p>	GEO SEC/ Doug Cripe
17.50-18.00	<p><b>14. Closing remarks</b></p> <p>Gilberto Camara, GEO Secretariat Director</p>	GEO Secretariat Director