

**Workshop of the GEO Initiative on Earth Observation for
Ecosystem Accounting (EO4EA)**

27 - 29 March 2017 at the European Environment Agency (EEA)
Kongens Nytorv 6, 1050 Copenhagen, Denmark

Final draft agenda

Organised by US-GEO & EEA on behalf of the GEO program

Day 1 – Setting the scene: Understanding the nature of earth observation data and the requirements of ecosystem accounting – Chair: Daniel Juhn, Conservation International

12.00 – 13.00 Possibility for lunch at EEA premises (own cost)

13.00 – 14.00 **Welcome Session**

Welcome by EEA (Hans Bruyninckx, EEA Executive Director)

Opening update on the European Union approach towards GEOSS (Gilles Ollier, Head of Sector Earth Observation, DG RTD, European Commission)

Opening overview presentation on the EO4EA initiative (John Matuszak, US State Department)

Tour de table of participants & logistical announcements

14.00 – 15.45 **Thematic presentations (15 mins each plus questions):**

a) The evolving capacity of earth observation programmes

Stephen Coulson, European Space Agency: Earth Observation environmental information in the context of Ecosystem Services

Keith Gaddis, NASA: Advancing our understanding of earth systems through satellite observation programmes

Hans Dufourmont, EEA: The Copernicus activities at EEA

b) The UN System of Environmental- Economic Accounting and the UN SEEA Experimental Ecosystem Accounts: methodology and implementation

Nancy Steinbach, Statistics Sweden: The UN System of Environmental Economic Accounting – an overview

J-E Petersen, EEA: Implementing ecosystem accounting - the EU KIP INCA project

15.45 – 16.15 Coffee Break

16.15 – 17.15 **Thematic presentations ctd. (15 mins each plus questions):**

c) *Using earth observation data for ecosystem accounting – case studies*

Marjolein Lof, SarVision/Wageningen University: using radar techniques for identifying ecosystem extent – an application in the Philippines

Francois Soulard, Statistics Canada: Using earth observation to develop ecosystem accounts in Canada

Nancy Steinbach, Statistics Sweden: Lessons learned from combining earth observation with other data for environmental accounting in Sweden

17.15 – 18.15 **Interactive session to identify key opportunities for marrying EO with EA**

World Café table rounds combining EO with EA – present your ideas in 3 quick sessions; introduction by Daniel Juhn, moderated by experienced members of EO4EA initiative:

- Measuring ecosystem extent and ecosystem condition – what are the key variables?
- Tracking the flow of services from ecosystems to society – how to do it?
- Harnessing innovation in earth observation techniques – what's top of the wish list?

18.15 – 18.30 **Rounding off day 1 and introducing day 2**

19.30 Evening Dinner (own cost)

Day 2 – Reviewing and refining the work streams of the EO4EA initiative - chair: Stephen Coulson, European Space Agency

09.00 – 09.20 Introductory presentation on scope of work streams and objectives of the day – John Matuszak, US State Department

09.20 – 10.30 **Plenary session (work streams) (PPTs 10-15 mins each plus questions):**

WS 1: Compilation and assessment of Ecosystem Accounts and their use of Earth Observation – reviewing experiences. Lead – John Matuszak

- WAVES in Rwanda & South America, Ken Bagstad
- Peru - Daniel Juhn, CI
- Netherlands, Marjolein Lof
- Discussion - 25 min

10.30 – 10.45 Coffee Break

- 10.45 – 12.30 **Plenary session ctd. (PPTs 10-15 mins each plus questions):**
- WS 2: Information needs to define ecosystem extent and condition – Biophysical (e.g. climate, hydrology, soils, topography, land cover, biodiversity); Classification of ecosystem types; sampling needs and gaps (including periodicity and scale of measurements needed).
Facilitators: Doug Muchoney, FAO / Jan-Erik Petersen, EEA
- Using earth observation for describing and measuring ecosystems – experience in Europe, Markus Erhard & Eva Ivits, EEA
 - GEO GLOWS Water data presentation – Monica Grasso NOAA
 - GEO BON use of EO data, Henrike Schulte to Buhne, Zoological Society of London
 - Discussion – 15 mins
- WS 3: Ecosystem Services Classification Identification of EO measurements to track ecosystem services (e.g. carbon storage, water provisioning).
Lead – Charles Rhodes, ORISE Fellow / Joachim Maes, JRC
- Sara Vallecillo, JRC – Current work on mapping ecosystem services in the EU
 - Ferdinando Villa, Basque Research Centre: Beneficiary mapping with GIS and remotely sensed data
 - Discussion – 15 mins
- 12.30 – 13.30 Lunch break in EEA canteen (own cost)
- 13.30 – 15.00 **Break-out sessions for work streams 2 and 3**
- Defining objectives, deliverables and timelines.
- 15.00 – 15.30 Coffee Break
- 15.30 – 16.30 **Plenary session ctd. (PPTs 10-15 mins each plus questions):**
- WS 4: Pilots at varying continental, regional, national, watershed, or local scales, Daniel Juhn, CI
- TEEB – NORAD activities – Salman Hussain, UNEP
 - US - Ken Bagstad
 - The SWOS project – tracking wetlands via EO data; Dania Abdul Malak, University of Malaga
- 16.30 – 17.45 **Reporting back from break-out groups & review in plenary**
- Brief reports from WS 2 and WS 3 break-out groups – 2 x 10 + 5 min
 - Reflections on WS 1 and WS 4 - 2x 5 min
 - Discussion in plenary - 35 min
- 19.30 Joint dinner (own cost)

Day 3 – Building on existing work as starting point for Ecosystem Accounts –

Chair: John Matuszak

Plenary session ctd. (PPTs 15 mins each plus questions):

09.30 – 11.00 Artur Łączyński, Central Statistical Office, Poland: Using earth observation data to augment agricultural statistics in Poland

Daniel Desautly, European Environment Agency: Using Satellite data for land accounts – moving from a central framework approach to ecosystem accounts

Kremena Gocheva PhD researcher, Institute of Biodiversity and Ecosystem Research at the Bulgarian Academy of Sciences: Combining earth observation and other data sets for different analytical uses

Paul Robinson, JNCC, UK: Experience with using earth observation data for building natural capital accounts in the UK

11.00 – 11.15 Coffee Break

11.15 – 12.30 **Completing the picture: What have we learnt? What is our plan for the EO4EA Initiative, and what are the next steps for participants?**

Reporting back by work stream facilitators & review in plenary of key objectives and milestones for the different work streams

Summing up and moving forward:

- On what points are we agreed?
- What do we agree are outstanding issues?
- How has our vision for what EO4EA can achieve been shaped by this Workshop?
- What specific actions have we committed to, and in what order?
- What messages will we take back into our respective communities?

12.30 End of workshop – save travels home!