

Reusing the GEOSS Portal: the GOS⁴M example

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GEO WEEK 2017, October 23-27

Global Observation System for Mercury (GOS⁴M)

Aim

Why was launched this Flagship?

It is aimed to support the UN Global Partnership on Mercury Fate and Transport Research (UN F&T) of the UN environment in the **implementation of the Minamata Convention** by **providing globally distributed mercury monitoring data** for air, marine and terrestrial ecosystems and validated regional and global scale models. It will support UN environment and Nations to assess the effectiveness of measures that will be undertaken.



www.gos4m.org

UN
environment



MINAMATA
CONVENTION
ON MERCURY



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Background

Focus on mercury

Why mercury?

Mercury is one of the **4 top priority pollutants** of big concern selected for action.

The Minamata Convention on Mercury was **adopted on 10 October 2013** at a Diplomatic Conference (Conference of Plenipotentiaries), held in Kumamoto, Japan.

The Convention aims to protect human health and the environment from the adverse effects of mercury.



Background

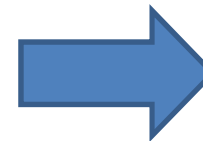
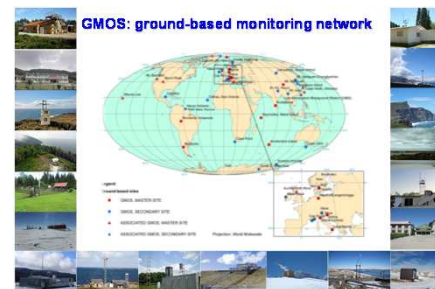
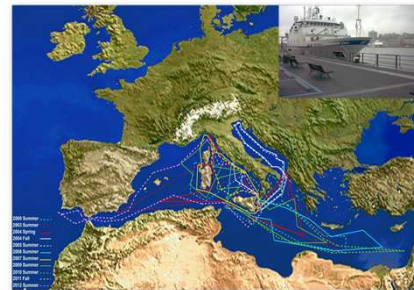
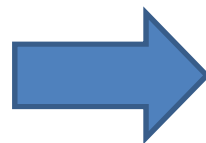
Mercury Observation around the Globe

Is coordinated? Data are catalogued?

The long story of mercury monitoring was stretched to a breaking point in **2010** when **EC funded GMOS** (Global Mercury Observation System) project



www.gmos.eu

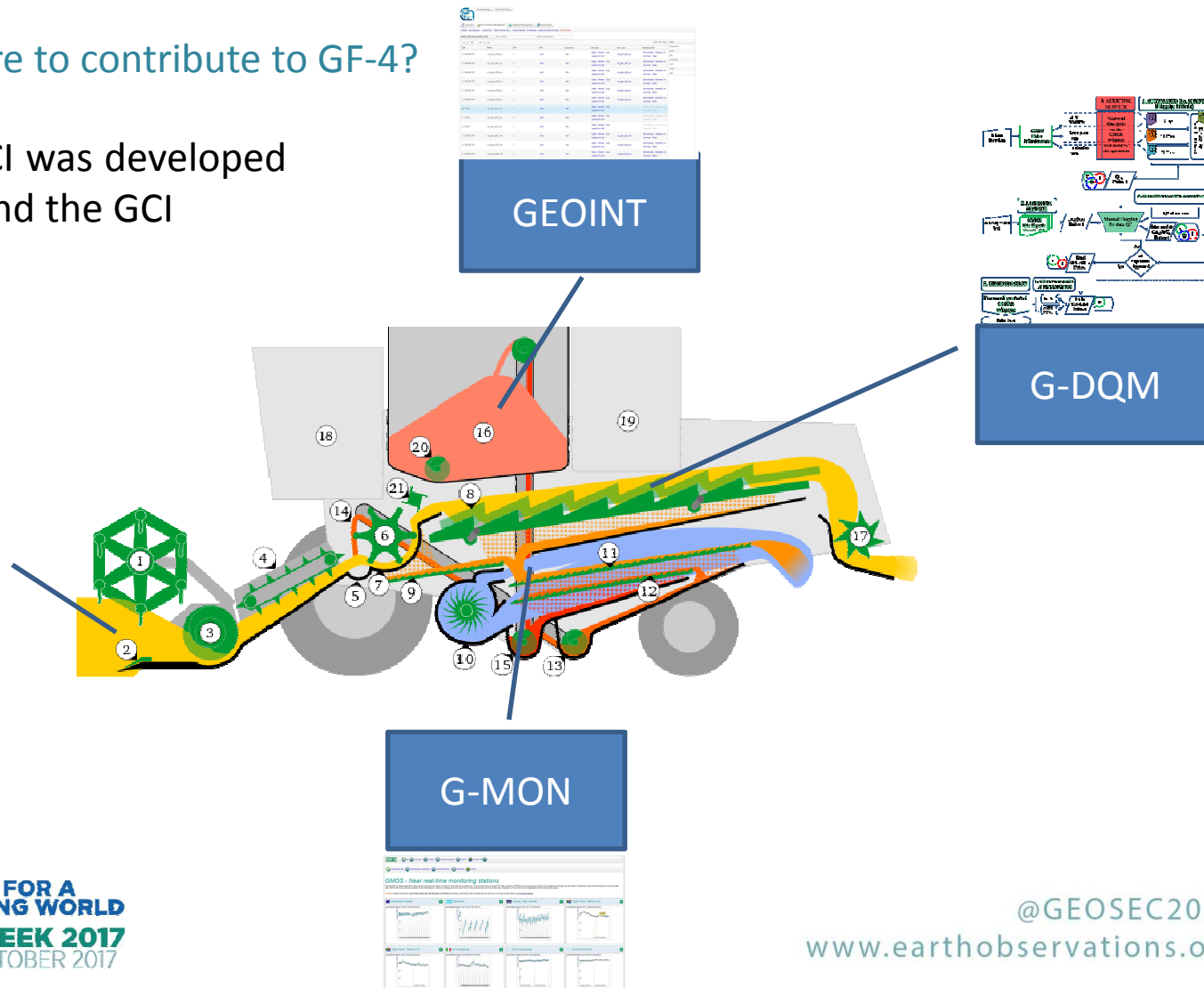


Background

GMOS cyber-infrastructure (www.gmos.eu/sdi)

Was it mature to contribute to GF-4?

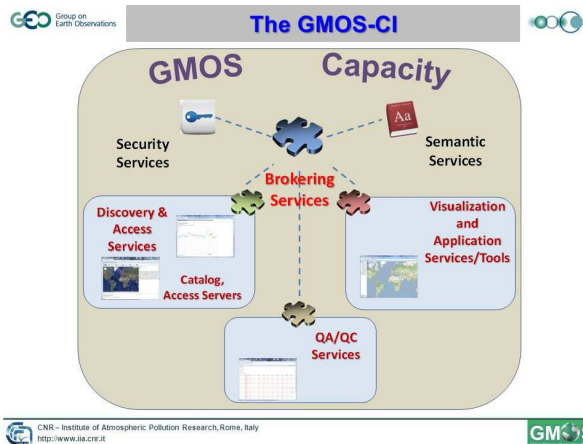
The GMOS-CI was developed having in mind the GCI



GMOS and GEO Work Plans 2009-2015

Task HE-02 Tracking Pollutants

GMOS was part of the **Task HE-02 "Tracking Pollutants"** aimed to develop a **global observation system for mercury** in addition to that for POPs.



Global Mercury Observation System

Task HE-02-C1 Tracking Pollutants

Nicola Pirrone
GMOS Coordinator & GEO Task HE-02 Leader

GEO-X and 2014 Ministerial Summit

 CNR - Institute of Atmospheric Pollution Research, Rome, Italy
<http://www.iaa.cnr.it>



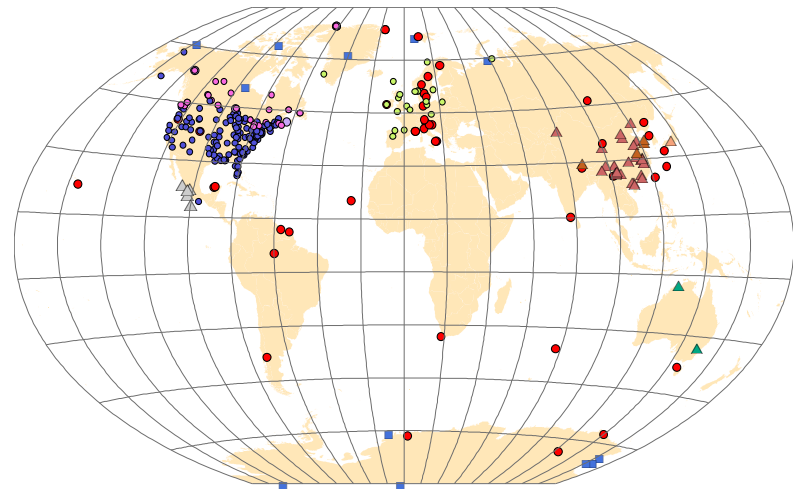
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The GOS⁴M added value

Integration of monitoring efforts

What is needed?

- To **integrate** existing mercury monitoring networks
- To **increase the availability** and quality of EO data
- To support **harmonized metadata** production
- To develop **advanced services**
- To endorse full and **open access** of EO data
- To broaden GEOSS and the Copernicus user base
- To engage relevant **user communities**
- To support **UN environment** and Nations to evaluate the effectiveness of measures undertaken



Contributing networks

Spatial coverage

Environment and Climate Change
Canada

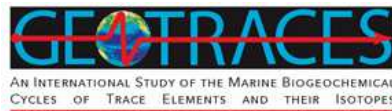
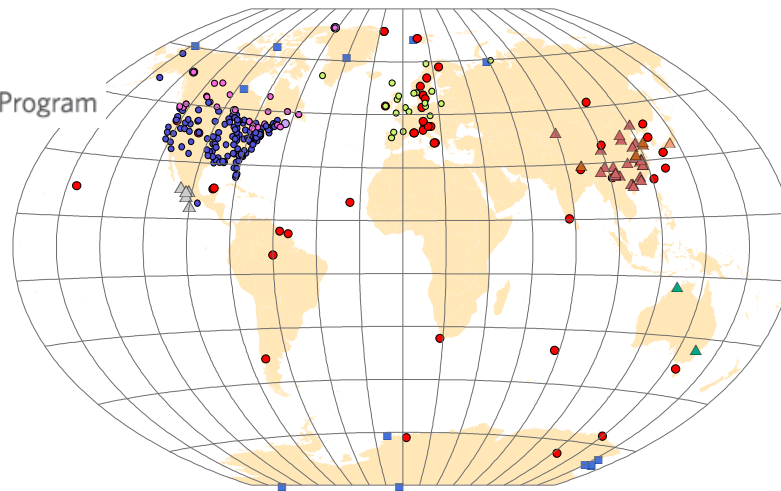


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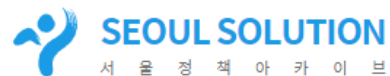
Co-operative programme for monitoring
and evaluation of the long-range
transmissions of air pollutants in Europe



National Atmospheric Deposition Program

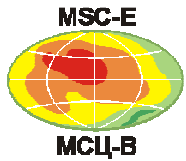


Ministry of the Environment
Government of Japan



Contributing entities

Representativeness

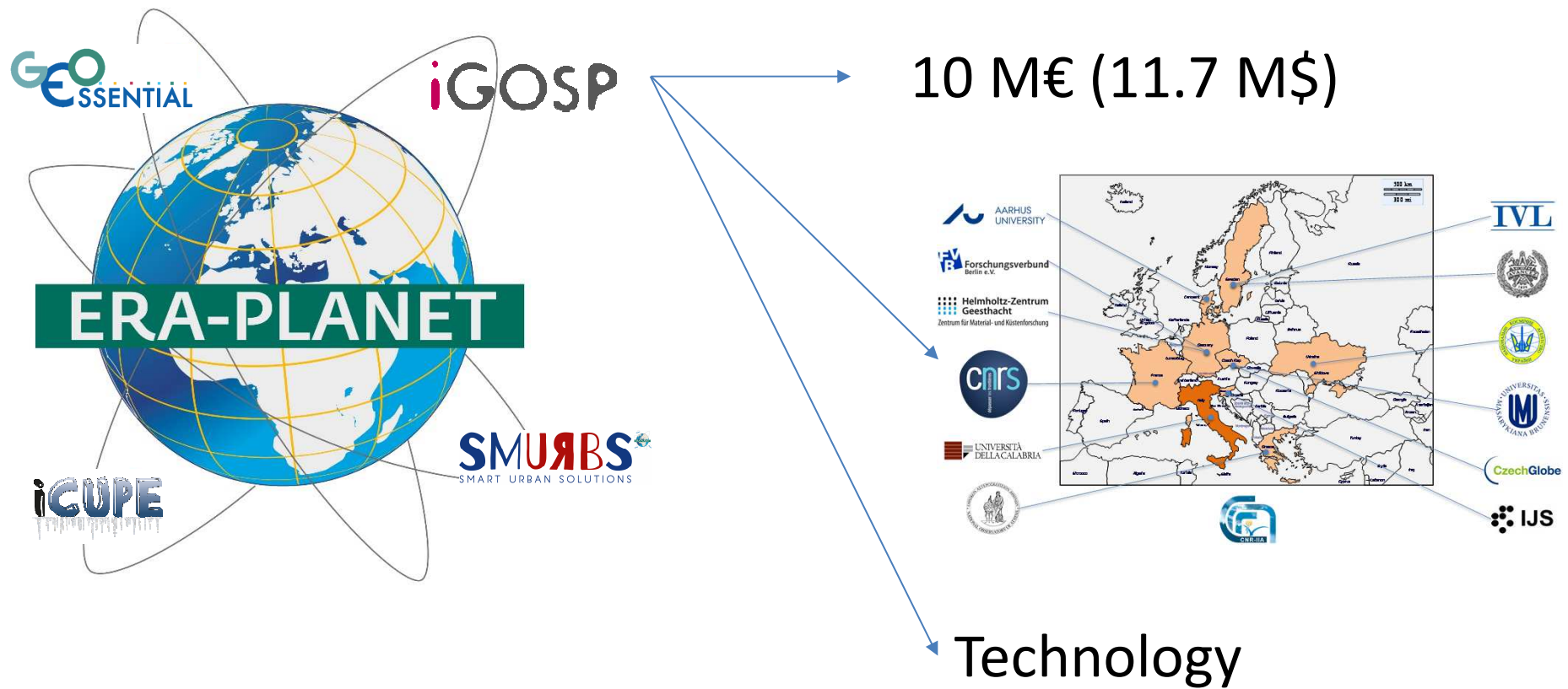


Anton de Kom
Universiteit van Suriname
a higher degree, a higher purpose



In-kind support

EU-contribution:
the Integrated Global Observing System for Persistent Pollutant
project



The GOS⁴M Portal






Advantages of mirroring the GEOSS Portal

- ✓ Reuse of GEOSS Portal functionalities for GOS⁴M Portal
- ✓ Align with GEOSS Look & Feel for a 'one portal' experience.
- ✓ Better serve the specific community
- ✓ Easy implementation



The GOS⁴M Portal

Mapped Resources

		Resources	Metadata	Map services
	In-situ	646	398	439
	LTS	314	314	300
	Marine water	140	140	140
	NRT	33	25	0
	Emissions	166	166	0



The GOS⁴M Portal

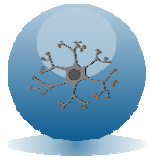
Forthcoming Resources



Marine biota



Lichens & moss



Humans



Expected impact

The GOS⁴M contribute to research and policy

Can the user community benefit of the GOS⁴M Portal?

- Better use of available EO data will be fostered
- Data, models, results, ideas and approaches will be widely available to the scientific community and to users
- Data sharing principle and open access practices ensured
- Benefit of a portal on mercury data
- Provide robust, updated and transparent information for the implementation assessment of the Minamata Convention



Thank you!

more info at

www.gos4m.org



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