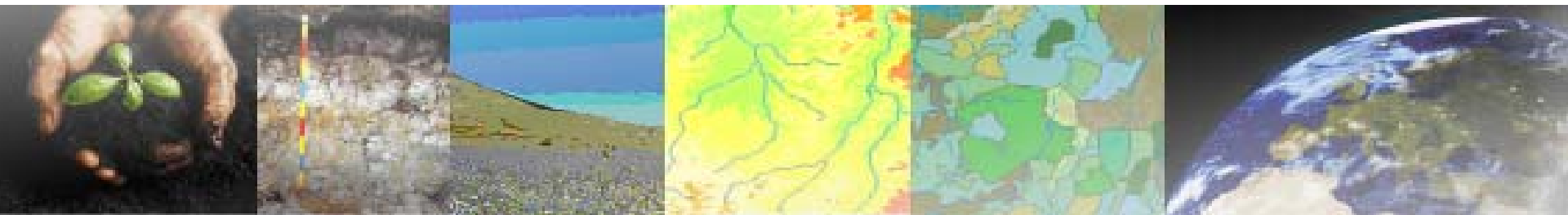




Towards harmonized soil data for Europe/World

# The *e-SOTER* and *GlobalSoilMap.net* approaches





## *e-SOTER* (FP7 Collaborative Research Project):

- Works on the development of improved methodologies to create a global Soil and Terrain database at scale 1:1 million and at scale 1:250 000: soil-class maps and their databases.
- Coordinated by ISRIC.
- 3.5 years duration.
- Executed by a consortium with partners from Europe, China and Morocco.
- Although it will create products in restricted areas (4 windows and 4 pilots) it is essentially a research project.
- *e-SOTER* contributes to the SOTER program that will create a global coverage at scale 1:1 million.



	<i>e-SOTER</i>	<i>GlobalSoilMap.net</i>
<b>Objectives</b>	1: To improve existing SOTER methodologies for a 1:1 M soil and terrain database 2: To develop new technologies for the creation of 1:250 000 soil and terrain database	1: To compile the digital soil properties map 2: To provide a soil information system to the global scientific community that can be used for modeling and evaluation studies and that will aid in improved policy making at all levels of governance.
<b>Activities (ISRIC)</b>	Coordination of consortium partner activities, meetings, reporting and advocacy. RTD work in parent material classification, landform analysis and web services.	Briefly: Establish and support consortium, coordinate science, agree on specs, task groups, meetings, work on methodology and delivery, raise funds, compile soil legacy data, give training, advocacy and media.
<b>Outputs</b>	1. SOTER at scale 1:1 M for 4 windows (W and C Europe, Morocco and S China) (1.5 yrs) 2. SOTER at scale 1:250 000 for 4 pilots (UK, D/CS, H and Morocco) (3.5 yrs) 3. Validation and accuracy assessment (3.5 yrs) 4. Applications (major soil threats) (3.5 yrs) 5. Web service (3.5 yrs)	Phase 1: 90 m map, 6 properties, 6 depths, uncertainties (< 5 yrs) Phase 2: additional properties, interpretation and functionality (3-8 yrs), Phase 3: crowd sourcing, class maps , 3D, new fieldwork, etc (> 5 yrs)
<b>Funds available</b>	M€ 2.6 (of which M€ 0.4 for ISRIC) M€ 0.8 counter financing by project partners.	US\$M18.3 (of which US\$M1.3 for ISRIC) US\$M3.5 in-kind contributions in all nodes Total cost estimated for first 5 yrs: U\$M300



These are only partly parallel efforts that will mutually benefit from each other:

- *e-SOTER* and in particular the existing SOTER products will be and are being used in producing the soil property maps.
- Likewise, when *e-SOTER* will produce global products, the *GlobalSoilMap.net* products may be used.
- Soil legacy data that are being collected will be of use for both projects.
- With time, these two projects should merge.



*e-SOTER and GlobalSoilMap.net will contribute to Global Earth Observation System of Systems (GEOSS) of the Group on Earth Observations (GEO)*



From the *GEOSS* Work Plan 2009-2011:

## 1 Building an integrated *GEOSS*

- Architecture
- Data Management
  - *GEOSS* Data Sharing Principles
  - Data Management
  - Data Integration and Analysis
  - Global Data Sets

Global Land Cover

Global Meteorological and Environmental Data

Digital Geological Map Data

Global DEM

Global Soil Data

- Capacity Building
- Science and Technology
- User Engagement

## 2 The 9 Societal Benefit Areas





## *GEOSS* Global Soil Data task (DA-09-03e)

- Support the development of a global soil information system building upon the work of ongoing and completed projects.
- The system will incorporate data from global, regional and national soil data projects into a coherent system using a common dictionary – to support implementation of major multilateral environmental agreements (e.g. UNFCCC, UNCCD and CBD) and provide harmonized & policy-relevant information to users at the global, regional and national level.



## GEOSS Global Soil Data task

### Outputs:

- (i) Soil-class products. Global methodology development and application in four *e-SOTER* window areas
- (ii) Soil property data and information. Methodology development and proof-of-concept studies

<http://www.grouponearthobservations.org/cdb/ts.php?id=99>