



Food and Agriculture
Organization of the
United Nations



PILLAR 5

HARMONIZATION OF METHODS, MEASUREMENTS AND INDICATOR FOR THE SUSTAINABLE MANAGEMENT AND PROTECTION OF SOIL RESOURCES

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EUROPEAN SOIL
PARTNERSHIP

Highlights ESP IPoA

- Policy processes require indicators derived from national soil data (e.g. SDG).
- Applying harmonized indicators, using agreed and harmonized evaluation methods are the fundamental basis.
- This is also needed to build a European soil monitoring system based on national systems.

	Recommendation / actions	Description of outputs	Partners	Timeline	Budget and Funding
1	Revision of the European soil mapping guideline (see also Pillar 4, action 5)	<ul style="list-style-type: none"> – Revise the ESNB Manual of Procedures – Integrate options to use remote sensing and digital soil mapping (e.g. eSOTER project) – Refine the nested system (see G5 Soil project) – Develop a European soil map legend (using the soil regions concept) based on WRB 	ESP-INSII ad-hoc WG soil mapping	end 2018	In-kind
2	Soil profile description standard	<ul style="list-style-type: none"> – will be covered by the global Pillar 5 Implementation Plan (P5IP) 	global INSII		In-kind
3	Soil classification: WRB	<ul style="list-style-type: none"> – For status as of 2012: see G5 Soil – Improve national correlation methods – Document challenges and solutions 	ESP-INSII	2017/2020	In-kind
4	Reference laboratories	<ul style="list-style-type: none"> – Establish Europe-wide network of soil laboratories building on existing initiatives (e.g. European Union Reference Laboratories EURL, EU Blossoil project) – Selection and establishing a leading laboratory, which implements the web site, produces and distributes reference material, build a data base for calibration and QA, ring tests, evaluations and reporting – see also global P5IP 	ESP-INSII/NRC Soil, WG Soil Analysis	2018-2020	Lead laboratory: € 350,000
5	Best practice soil analysis	<ul style="list-style-type: none"> – Interact with global level INSII P5 for developing best practice recommendations and procedures for soil sampling, storage, analysis – Liaise with ISO TC 190 and CEN 	ESP-INSII/NRC Soil, WG Soil Analysis, lead laboratory	2018/2019	In-kind
6	Soil information model	<ul style="list-style-type: none"> – Analyse the implementation status for interoperable soil data according to INSPIRE, and the degree of harmonization – Develop concept to address coordination needs – ESP INSII members to test the model, and to define and implement use cases – Liaising with networks according global P5IP: GODAN Soil Data WG 	ESDAC and ETC ULS ESP INSII	2018	In-kind
7	Indicators	<ul style="list-style-type: none"> – Develop a soil indicator concept about the state and response of soils under the effect of policies, management and climate change (incl. discussion and feedback with EUR-INSII) – Build on EEA and FP6-ENVASSO indicators – Identify research needs to propose to Pillar 3 	ETC ULS and EIONET NRC Soil	2017/2018	In-kind



The Pillar 5 main objective is to develop an over-arching mechanism for globally consistent and comparable harmonized monitoring for soil related policies.



PLAN OF ACTION FOR PILLAR FIVE OF THE GLOBAL SOIL PARTNERSHIP

Adopted by the  GSP Plenary Assembly

Harmonization of methods, measurements and indicators
for the sustainable management and protection
of soil resources

Providing mechanisms for the collation, analysis and exchange
of consistent and comparable global soil data and information

PILLAR FIVE WORKING GROUP:

- CHAIR: Rainer Baritz
- ASIA: Hakki Erdogan, Kazumichi Fujii and Yusuke Takata
- EUROPE: Marco Nocita, Bernd Russian and Niels Barjes
- NORTH AMERICA: Jon Hempel
- SOUTH WEST PACIFIC: Peter Wilson
- SECRETARY: Ronald Vargas



IMPLEMENTATION PLAN FOR PILLAR FIVE OF THE GLOBAL SOIL PARTNERSHIP



Harmonization of methods, measurements and indicators
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European Soil Partnership Implementation Plan 2017-2020

Note (06/06/2017) by Marc von Lüdtke, ESP Secretariat:
This text has been elaborated and agreed upon by meeting participants during the 4th ESP Plenary Meeting on 10-12 May 2017 at FAO HQ Rome.

This mechanism includes the following working areas :

- Soil profile observation and description, soil classification systems (WRB working group)
 - *The automated WRB classification on going*
 - *The FAO Guidelines for Soil Description (4th edition) is in preparation. It will be ready next year.*
 - *Universal Soil Classification (?)*
- Standardization of soil mapping and property estimation (Pilar 4)
- Soil Information Exchange + Quality of Soil Data (ISO 28258:2013, INSPIRE)
- Soil data interpretation: agreed and representative indicators set and evaluation functions to assess the impact and performance of the policies, projects and investments on soil. (?)
- Laboratory and field analytical data of soil (RESOLAN)





The below list of countries have not yet nominated their National Reference Soil Laboratory.

Albania; Andorra; Bosnia and Herzegovina; Cyprus; Denmark; France; Iceland; Ireland; Italy; Kosovo; Lithuania; Luxembourg; Malta; Montenegro; Norway; Poland; Serbia; Slovakia; Spain; Sweden; Switzerland; United Kingdom; Vatican City.



Participant of GLODOLAN meeting in 2018

Members of the GLOSOLAN Technical Working Group

Countries	Institutes	Person
Hungary	Food Chain Safety Centre Non-profit Ltd. Soil Conservatory Laboratory	Agnes Nagy
Belgium	Thuenen-Institut, Germany Aurore Degré, ULiège - Gembloux Agro-Bio Tech	Arne Heidkamp
	ISSeP	Christophe Fripiat
	VITO	Kristof Tirez
Italy	Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA)	Carlo Jacomini
France	IRD	Christian Hartmann
	French Geological Survey, Orléans (BRGM)	Baran Nicole
Czech Republic J	UKZUZ	Jiri Zbiral
Portugal	UTAD	João Coutinho Mendes
	University of Warsaw	Malgorzata Suska-Malawska
Germany	Physikalisch-Technische Bundesanstalt	Marion Stoldt
UK	British Geological Survey	Michael Watts
Spain	Sociedad Española de Ciencia del Suelo	Miguel Aran
Latvia	State Plant Protection Service	Sanita Vucane
Slovenia	Agricultural Institute of Slovenia	Špela Velikonja Bolta
Estonia	Agricultural Research Centre	Ülle Tali,
Netherlands	WUR – WEPAL	Winnie van Vark

Thank you for your attention

We need your collaboration

