

## Press conference on the LANDSUPPORT H2020 project

An operational tool to challenge land take at the European scale



Wednesday , 3 July 2019 at 12:00-13:00



Franco Maria Malfatti room, Sofitel Brussel Europe, 1 Place Jourdan, 1040 Bruxelles

LANDSUPPORT. EU

### Background

Soil Sealing by urban sprawl is one of the best-known land degradation processes strongly affecting the quality of the European agricultural landscape and food security. For a long time Europe has recognised this evidence but in the last decade little has changed and land take has proceeded at a high rate decreasing our fertile agricultural land, putting biodiversity at risk, increasing the risk of flooding and water scarcity and contributing to global warming.

Therefore, action is required since "future generations will not see a healthy soil coming back within their lifetime once it has been destroyed" (SWD (2012) 101 final/2).

#### The objective of the press conference

The interdisciplinary H2020 LANDSUPPORT project – thanks to its unique combination of knowledge and technologies – is developing a free web-based decision support system to analyse, monitor and mitigate land take for the entire European territory (tool K of the project).

The tool – in its prototype version but fully functioning – is presented and launched through a press conference on 3 July 2019.

The Press Conference will demonstrate the way ahead for better planning our European rural landscape. The Press Conference will see the contributions of agriculture and soil experts (from LANDSUPPORT project), European and National Associations of Spatial planners (ECTP, INU) and National Public Authorities (ISPRA) having a specific role in land take monitoring.

# SOME INSIGHTS

The Land Take tool is a component of a more general multipurpose Geospatial Decision Support System (S-DSS) named LANDSUPPORT. The system – in its prototype version – is currently in use (landsupport.eu) and fully active within the confines of the EU administrative boundaries. LANDSUPPORT is a Geospatial Cyber-Infrastructure strongly based on the use of free open-source geospatial libraries and programs and enables users to interact directly with the geospatial data on the map via the web.

#### (DATA)

The dataset connected to the Land Take tool includes geo-referenced data and metadata from different sources. The main types of data include: (i) Copernicus HRL, (ii) thematic maps (land use, soil, etc.) with relating databases, (iii) new data produced by simulation modelling. By the end of the project EO data will be employed to produce a yearly quantification of land take.

#### (MODELS)

The models include (i) monitoring land take by the evaluation of soil loss or gain between different years, (ii) on-the-fly quantification of rural fragmentation to challenge urban sprawl that alters the integrity of the ecosystem functions of the rural landscape, (iii) effects of soil sealing on soil ecosystem services.

#### DASHBOARD

The figure opposite shows the general outline of the dashboard which is made up of five different sections (green boxes). The usefulness of this tool lies in the possibility it gives to apply several processing procedures, ranging from simple visualisation of thematic maps with the option of running zonal attribute operations to more complex elaborations by applying dynamic simulation models.

#### APPLICATIONS)

The system can address land take mitigation and spatial planning issues by a multitemporal accountability of land take and by performing onthe-fly calculation of critical indicators such as land fragmentation.

The system provides a support for the following use cases:

- ➤ National Public Authorities who require multi-temporal monitoring of land take over their territory
- > Spatial Planning at Regional and Province scale where planning guidelines/directions are to be adopted.
- > Spatial Planning at the Municipality level which it is typically the administrative level where final land take decisions are adopted



Press-conference

- 12:05-12:15 LANDSUPPORT H2020 project: challenging land take as major threat of our land and soils Fabio Terribile - project leader
- 12:15-12:30 Live demo of the land take tool at European scale Giuliano Langella - Università di Napoli Federico II
- 12:30-13:00 Q&A from the floor including three planned comments by:
  - Joris Scheers European Council of Spatial Planners
  - > Francesco Domenico Moccia Istituto Nazionale di Urbanistica
  - Michele Munafò Italian Institute for **Environmental Protection and Research**
- 13:00-15:00 Hands-on session on the web: The LANDSUPPORT Land Take tool (participants can also use their own PC & tablet)
  - Carlo De Michele Ariespace
  - Giuliano Langella Università di Napoli Federico II



#### **Contact us** for more information

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