

## WP10 Report on state and progress (February 2018)

The following activities have been conducted in the framework of WP10 of ECO POTENTIAL project.

### Release of the ECO POTENTIAL Virtual laboratory Platform

On May 2017, WP10 released the second version of the ECO POTENTIAL Virtual Laboratory Platform (VLAB) and started the design and development activities towards the release of the third version (expected on May 2018).

The main enhancements are:

- The possibility to run pre-defined scientific business processes (Workflows in ECO POTENTIAL terminology) implementing selected Storylines. (The general objective is supporting the generation of indicators for PA managers and policy-makers.)
- The design of the ECO POTENTIAL VLAB also defines how it will be interoperable with the GEOSS Platform. The interoperability is implemented through APIs for discovery and access of resources
- Publication of the documentation for developers on how to port models on the VLAB
- Redesign of the test portal for developers
- Development of an experimental user portal using GEOSS Mirror technology and enhancements ( in collaboration with ESA)

### Porting of models on the VLAB Platform

In collaboration with WP6, a plan for porting models on the VLAB has been established and implemented:

Model	Current status (February 2018)
Despeckling module (CERTH))	Published
EODESM scenario (CNR and UNSW)	Published
Phylogenetic Diversity Estimation (CNR)	Published
MOHID Land (IST)	On-going
Metapopulation presence of a focus species (EPFL)	On-going
INSTAR (UGR)	On-going
Optimal allocation of resources for the harvesting of an invasive species (CNR-IAC)	Planned
Water quality (DELTARES)	Planned

Other models, either developed in ECO POTENTIAL or available as open source, are under discussion. A prioritization will be defined to decide which models should be available for the ECO POTENTIAL General Assembly, and which will be implemented during the last year of the project.

### Training activities

WP10 organized some training activities dedicated to ECO POTENTIAL Consortium partners:

- Dedicated audiocons with ecosystem modelling experts for porting models in the VLAB (in collaboration with WP6 on “EO-based Ecosystem Modelling”)

- Organization of a Webinar for ecosystem models porting in the VLAB held on 25<sup>th</sup> January and 2<sup>nd</sup> February 2018.
- Presentation of the VLAB at the “ECOPOTENTIAL Training Course on Remote Sensing and Modelling Applied to Natural Ecosystems” held in Pisa, Italy - 19-23 February 2018

## Dissemination activities

### Participation in the GEO Week 2017

On October 2017, CNR-IIA as coordinator of WP10, participated in the GEO Week 2017. During the GEO Week, the VLAB was presented and demonstrated:

- P. Blonda and P. Mazzetti presented *P. Blonda, P. Mazzetti , “From Data to Knowledge: Biodiversity and Ecosystem, the Ecopotential scenario”* in the “GEO in ACTION” side-event.
- G. Colangeli (ESA) gave live demonstration of the ECOPOTENTIAL use-case in the exhibition area

### Others

On September 2017, P. Mazzetti presented *S. Nativi, P. Mazzetti, M. Santoro, I. Manakos, G. Kordelas, R. Lucas, “The GEO ECOPOTENTIAL Virtual Laboratory: a virtual research environment for ecosystem open science”* at the ESA EO Open Science 2017.

On October 2017, P. Mazzetti presented ECOPOTENTIAL at the Kick-off meeting (session on “What's next for user communities”) of the H2020 EDGE (European Direction in GEOSS Common Infrastructure Enhancements) project led by ESA, as one of the activity to be considered for integration in the GEOSS Platform.