

# CROSS Harmonization & HPC modelization of FOREST Datasets



## CROSS-FOREST

*The aim of Cross-Forest is to publish Forest Inventory Datasets and Forestry maps from Portugal and Spain in Linked Open Data (LOD) format, and to combine them to create and integrate models supporting forest management and forest protection.*

Cross-Forest is developing a common platform for open forest data, and a cross-border data model (ontology) shared between Portugal and Spain, for the publication of forest inventories, maps and other forest databases in Linked Open Data format (LOD). Cross-Forest will provide a public endpoint exposing Forest Data, according to the produced model. The main goal is focused on keeping forest information always available and updated, to make exploitation easier for all stakeholders involved in forest management and research.

Two use cases are being developed:

CAMBRIC - to estimate the evolution of forests and wood quality, under different management scenarios

FRAME - to predict forest fires behavior and spreading through precise information on combustible materials, forestry maps and propagation models.

High Performance Computing (HPC) resources are employed due to the amount of data generated and managed, and to the complexity of the models.

Results so far show the usefulness and versatility provided by LOD technology, as It allows users to freely access and manage updated data to develop tools adapted to their needs and purposes. Publishing data as LOD allows Public Administrations to easily fulfil their requirements of transparency and publicity, optimize resources and keep a statistic control of the use of public data.

## PODROBNOSTI

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### IZVOR LESA

Gozd

### TIP LESA

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### VRSTA OBRAVNAVANEGA LESA

Mediterranean forests in Spain and Portugal

### VPLIV NA OKOLJE IN BIODIVERZITETO

Very high as it will help to protect forests from fires for its best management.

### VPLIV NA PRIHODKE

No data

### POTENCIAL IZKORIŠČANJA

The results obtained so far demonstrate the usefulness and versatility provided by LOD technology, as it allows users to freely access and manage up-to-date data to develop tools adapted to their needs and purposes.

LOD technology allows for the modular and interconnected construction of an

### POTENCIAL ZA MOBILIZACIJO

Medium, this tool provides the best information for an appropriate management to avoid forest fires and also for the best management, therefore, it will improve the mobilization potential when CrossForest is used for this purpose

### TRAJNOST - VREDNOST

Zelo pozitivno

### ENOSTAVNOST IZVEDBE

"Consuming open data" is not easy, so it is necessary to create intermediate links and multidisciplinary teams to bring new technologies closer to users, in order to design adapted solutions.

### ENOSTAVNOST IZVEDBE - OCENJEVANJE

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### KLJUČNI PREDPOGOJI

The technology is already developed, the requirements are similar to those necessary for the use of any other similar software.

### VRSTA DOGODKA, NA KATEREM JE BIL PREDSTAVLJEN TA BPI

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open, public and quality information infrastructure available to the sector. The continuity of this type of publication allows public administrations to meet their transparency obligations, optimise resources and keep statistical control of the use made of the information.

#### **VOZLIŠČE**

Jugozahodno vozlišče

#### **GOSPODARSKI VPLIV**

High, as the information facilitates the management and forecasting of forestry work to be carried out.

#### **POTREBNO SPECIFIČNO ZNANJE**

Medium, some knowledge of mapping and forestry tools is necessary.

#### **VPLIV NA DELOVNA MESTA**

The project does not have a direct effect on employment, but it opens up opportunities for entrepreneurs and companies, as the information published allows any user with the appropriate profile to launch queries and develop adapted tools.

#### **STROŠKI IZVEDBE (EURO - €)**

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## VEČ PODROBNOSTI

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### IZZIV

1. Izboljšava odpornosti gozdov in prilagoditev na klimatske spremembe

### DOMENA

Inventura, ocena, monitoring  
Gojenje gozdov, gospodarjenje z gozdovi, odpornost, podatki  
ekosistemske storitve  
Motnje, tveganja, odziv na naravne nesreče

### TIP REŠITVE

Podatkovna platforma, vozlišča podatkov, odprti

### KLJUČNE BESEDE

forest models; High Performance Computing (HPC); Da  
Linked Open Data (LOD); ontology

### DIGITALNE REŠITVE

### INOVACIJA

Da

### IZVORNA DRŽAVA

Portugalska

### OBSEG UPORABE

Čezmejni / Transnacionalni

### ZAČETNO IN KONČNO LETO

2018 - 2021

## KONTAKTN PODATKI

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### LASTNIK OZ. AVTOR

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### POROČEVALEC

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## REFERENCES AND RESOURCES

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### SPLETNA STRAN

<https://crossforest.eu/>

### VIRI

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### SPLETNA STRAN PROJEKTA

<https://crossforest.eu/>

### REFERENCA PROJEKTA

Cross-Forest is co-financed by the European Union's Innovation and Networks

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GrupoTragsa  
Garantía Profesional. Servicio Público

PROJEKT, V OKVIRU KATEREGA SO BILI ZBRANI OSNOVNI PODATKI

DATUM OBJAVE

Rosewood 4.0

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A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY

