# 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 transparence and publicity, optimize resources and keep a statistic control of the use of public data.

## DETALJI

### PODRIJETLO DRVA

Šuma

### VRSTA DRVA

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### ODGOVARAJUĆA VRSTA DRVA

Mediterranean forests in Spain and Portugal

### UTJECAJ NA OKOLIŠ I BIORAZNOLIKOST

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

### UČINAK NA PRIHOD

No data

### POTENCIJAL ISKORISTIVOSTI

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 open, public and quality information infrastructure available to the sector. The

### POTENCIJAL ZA POVEĆANJE UPORABE DRVA

Medium, this tool provides the best information for an appropiate managemnt to avoid forest fires and also for the best mangament, therfore, it will improve the mobilization potential when CrossForest is used for this purpose

### POTENCIJAL ODRŽIVOSTI - VRIJEDNOST

Vrlo pozitivno

### JEDNOSTAVNOST PROVEDBE

"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.

### JEDNOSTAVNOST PROVEDBE - EVALUACIJA

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### KLJUČNI PREDUVJETI

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

### VRSTA DOGAđAJA NA KOJEM JE PRIKAZAN OVAJ BPI

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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.

SREDIŠTE

Jugozapadno čvorište

UČINAK NA ZAPOŠLJIVOST

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.

GOSPODARSKI UČINAK

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

TROŠKOVI PROVEDBE (EURO - €)

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POTREBNA POSEBNA ZNANJA

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

## VIŠE DETALJA

IZAZOV

1. Poboljšanje otpornosti šuma i prilagodbe klimatskim promjenama

DOMENA

Popis, procjena, praćenje

Upravljanje šumama, uzgoj šuma, usluge ekosustava, otpornost

Nepovoljni prirodni uvjeti, rizici, odgovor na katastrofe

VRSTA RJEŠENJA

Podatkovne platforme, centri podataka, javno dostupni podaci Podatkovne platforme, centri podataka, javno dostupni podaci Podatkovne platforme, centri podataka, javno dostupni podaci"

KLJUČNE RIJEČI

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

DIGITALNO RJEŠENJE

Da

INOVACIJA

Da

ZEMLJA PODRIJETLA

Portugal

PODRUČJE PRIMJENE

Prekogranična / multilateralna

POČETAK I KRAJ GODINE

2018 - 2021

## KONTAKT PODATCI


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IZVJESTITELJ

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## REFERENCES AND RESOURCES

GLAVNA WEB STRANICA

https://crossforest.eu/

WEB STRANICA PROJEKTA

https://crossforest.eu/

REFERENCA PROJEKTA

IZVORI

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## LOGO PRIMJERA DOBRE PRAKSE

## LOGO GLAVNE ORGANIZACIJE

### PROJEKT U OKVIRU KOJEG JE INFORMATIVNI LIST KREIRAN

Rosewood 4.0

### DATUM UNOSA

7 lip 2021

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### A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY