Inventory and characterization of forest roads

Public administrations directly manage a road network on forest land that in many cases is longer than the general road network itself.
Wood transport is a key factor in the value chain of wood mobilization.
There is therefore a need for reliable knowledge of this network, so that resources can be optimised and rationalised in terms of maintenance and improvement, that is to say, the rationalisation of the processes of inventory, planning, programming and control of the work on these tracks must be emphasised.

The lack of digital cartography with sufficient quality in rural areas is a constant in most territories. Together with a certain delay in the application of technologies in the sectors that operate in this area, they make these areas a priority objective on which to concentrate this type of effort.
This cartography allows to plan more effectively the operations related to the harvesting and transport of wood, from the forest to the industry.

Since 2009, Cesefor has directed and developed the project co-financed by the Regional Government of Castilla y León and the Ministry of Industry and Trade.
Within the framework of this project, more than 50,000 km of rural roads have been inventoried and more than 33,000 equipments have been collected, forming a continuous network connected to the road network with extensive qualitative information on forest areas.
The information has been collected by GPS, attaching the necessary qualitative information in each case.
Specific cartography has been distributed to environmental agents, fire extinguishing media dependent on the Junta de Castilla y León and the digital information is available at the Junta de Castilla y León.
A specific navigator has also been developed for rural roads, since due to the special characteristics of this network it is necessary to know the existing restrictions, either by type of vehicle or state of the tracks.

DETALLES

ORIGEN DE LA MADERA

Bosque

TIPO DE MADERA

Madera en rollo

TIPO DE MADERA AFECTADA

Any wood from forests

IMPACTO EN EL MEDIO AMBIENTE Y LA BIODIVERSIDAD

Positive: reduction on fuel consumption

EFECTO SOBRE LOS INGRESOS

Reduction on transportation costs

POTENCIAL DE EXPLOTACIóN

--

HUB

--

IMPACTO ECONóMICO

Reduction on transportation costs

CONOCIMIENTOS ESPECíFICOS NECESARIOS

GIS and database management

POTENCIAL DE MOVILIZACIóN

-

POTENCIAL DE SOSTENIBILIDAD - VALOR

--

FACILIDAD DE APLICACIóN

Medium

FACILIDAD DE IMPLEMENTACIóN - EVALUACIóN

--

PREREQUISITOS CLAVE

Good work planning and suitable personal needed

TIPO DE EVENTO EN EL QUE SE HA PRESENTADO ESTA IFS

--

EFECTO SOBRE EL EMPLEO

None

COSTES DE IMPLEMENTACIóN (EURO - €)

--

MáS DETALLES

RETO ABORDADO

--

DOMINIO

Aprovechamiento, infraestructura, logística

TIPO DE SOLUCIóN

Modelización, DSS, simulación, optimización

PALABRAS CLAVE

--

SOLUCIóN DIGITAL

Sí

INNOVACIóN

No

PAíS DE ORIGEN

España

ESCALA DE APLICACIóN

Regional/sub-nacional

AñO DE INICIO Y FIN

--

DATOS DE CONTACTO

PROPIETARIO O AUTOR

Francisco.gallego@cesefor.com

REPORTADOR

REFERENCES AND RESOURCES

SITIO WEB PRINCIPAL

http://www.cesefor.com

RECURSOS

--

SITIO WEB DEL PROYECTO

--

REFERENCIA DEL PROYECTO

--

PROYECTO BAJO EL QUE SE HA CREADO ESTA FICHA

Rosewood

FECHA DE MENSAJE

12 Sep 2019

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862681

Link to Rosewood 4.0

A TOOL FROM ROSEWOOD 4.0, DESIGNED AND DEVELOPED BY