



**GOZDARSKI INŠTITUT SLOVENIJE**  
*SLOVENIAN FORESTRY INSTITUTE*

**SLOVENIAN FORESTRY INSTITUTE**  
**NEWFOR – PROJECT PARTNER**  
**(SFI –PP7)**  
**September 2012**

# The third Project Report

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**Report Period 3:**  
**04/2012 – 09/2012**

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Milan Kobač, Nataša Milenkovič, Nike Krajnc**

Third interim report of the project NEWFOR covers the period from April to the end of September 2012. Activities of SFI workers during this period are presented by project work packages (WP). Some activities were realized in cooperation with another Slovenian project partner Slovenia Forest Service (SFS – PP12) and Italian Project Partner Dipartimento Territorio e Sistemi Agro-Forestali – Università degli Studi di Padova (TeSAF – PP10).

# The third Project Report

Report period 3:

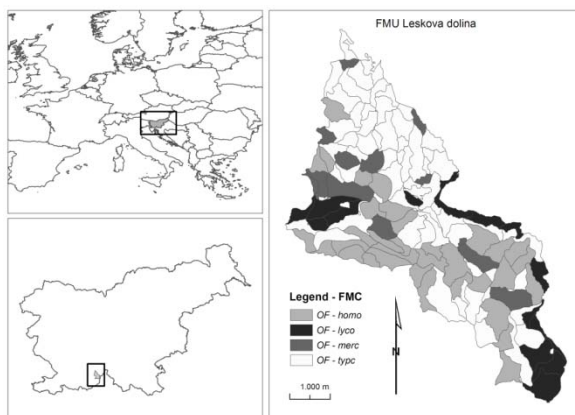
04/2012 – 09/2012

## WP 3

Within WP 3 **Information & Publicity** was provided an translation of common project information, objectives and topics into Slovenian language which are accessible at NEWFOR website.

## WP 4

Within WP 4 **Forest resources & LIDAR** we prepared review of available field and ALS data in chosen pilot area Leskova dolina. Some data processing and analysis to be performed are mentioned. English vesion of review is available at project website.



During the report period 3 Milan Kopal (SFI) arranged several meetings with Slovenian Forestry service (SFS) representatives in Leskova dolina (district forester and

manager of FMU), with district representative of Farmland and Forest Fund of the Republic of Slovenia and with representatives of forest concession company (GG Postojna) and represent them advantages and possibilities of ALS data applications and their use.

## WP 5

### Within WP 5 **Forest accessibility**

SFI is actively included into development of a Web-GIS Tool for preliminary optimization of cable logging corridors system layout used for technical and economically efficient cable crane logging. Jaka Klun and Milan Kopal (both SFI) attended at WP5&WP8 meeting in Padova/Asiago from 22–23 May 2012.

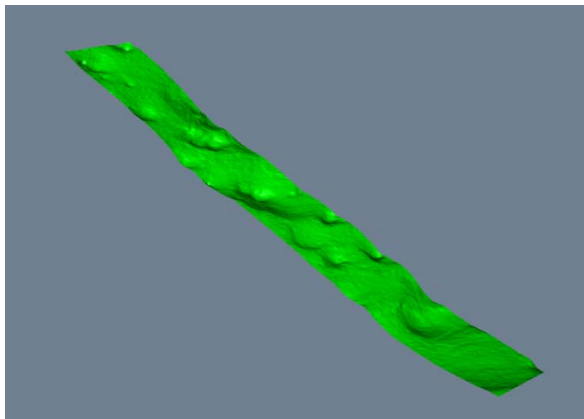


The aims of the meeting were:

1. Share the ideas regarding the objectives to be gained with the tool and the needs of the stakeholders;
2. Define the basic characteristic of the Web-GIS tool (e.g. software to be used, software program language to be used);
3. Define a first road map with the possible role for each partner.

The discussion leads the choice towards the simplicity of the tool with limited but clear outputs.

In fact the tool once shared within the WEB-GIS should be easily used from many different kind of users, even not so familiar with Information Technologies. SFI presented possible solutions to development of the cable layout libraries in R language. Those solution was chosen to next step and in cooperation with TeSAF (PP 10) they will be implemented in the basic architecture of the Web-GIS application. Development activities started in September 2012 and will be tested together with TeSAF.

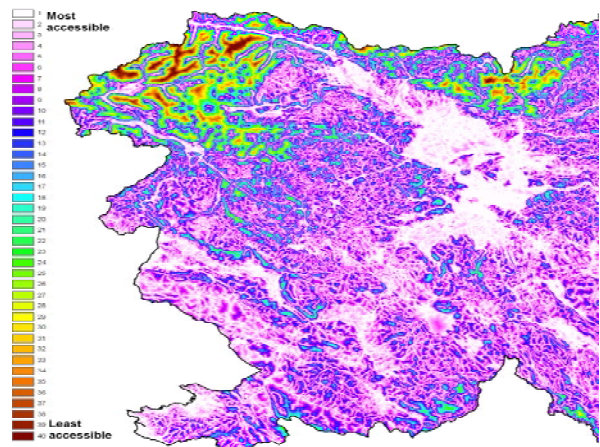


Under WP5 and some results of WP4 we (Robert Robek, SFI) study the possibility of using LIDAR data and current available tools (e.g. RoadEng) for optimal opening up of mountain forests by forest roads. There is intention to participate in education/training course for optimal use of such a tool. Some arrangements' with software producers in this direction have been done.

## WP 6

Within WP 6 **Forest & Industry Connectivity** our Slovenian partner (SFS) has a database majority of Slovenia forest roads. Our part in work package 6 is mostly in support to SFS with researching of LIDAR data. Because it would be impossible to develop our own GIS system within project time and budget are

too small, we will try to obtain a tool designed for navigation and test it in our situation with SFS database. As a member of SFI, Matevž Triplat was present at meeting in Grenoble from 12<sup>th</sup> to 13<sup>th</sup> September 2012, where state of the art of different tools was presented; most of the attention was given to NAVLOG system and TRIMBLE Blue OX. General problem of databases is different classifications of roads between European partners; as a result of the meeting we will try to unify forest road classifications. We have agreed to find out if NAVLOG system is appropriate for our database and which parameters we would need to add. If it's appropriate and the cost of installing our data is not too big, we will begin with procedures for testing on few pilot areas.



## WP 7

Within WP 7 **Costs&benefits evaluation** we reviewed our tool for cost calculation in order to determine its advantages and disadvantages. Catalogue of forest mechanization costs was updated in some chapters. We prepared a plan with our IT

officer for developing online access application for cost calculations based on inputs entered by the user directly. This web tool will be user friendly and it will be used as a support for Rural development programme. One representative of SFI (Tina Čebul) took part on Newfor Work package 7 meeting in Grenoble from 30<sup>th</sup> to 31<sup>st</sup> May 2012, where different tools were presented, and special emphasis was given on Swiss tool Hepromo. As one of the result of the meeting we prepared State of the art on the tool and methodology currently used for cost calculations of forest operations in Slovenia. We started with reviewing all potential users of Hepromo tool. Some forestry companies agreed to participate in testing Hepromo on few pilot areas.

#### WP 8

One of the objectives of WP8 **Logistical planning strategy** is to provide forest managers and decision makers with reliable information for the evaluation of technical and economical conditions for their decision-making on timber supply chain logistical planning and land use strategies.

The development of a Web-GIS tool for optimal cable layout and unified tool based on methodology currently used for cost calculations of forest operations seems to be fundamental in order to make easily accessible the results of the project.