Software for mobilisation and efficient use of resources involved in transportation of timber from forest to destination location

Introduction

OG has developed a software solution to streamline the logistics of timber transportation from forests to processing facilities and other destinations. The software helps forest owners estimate and map timber resources, and it supports local transport companies, which often lack sophisticated logistics systems, by offering a user-friendly tool for planning and managing timber deliveries. The system uses a centralized online database accessible via GSM, allowing all involved parties to input real-time data—from felling surveys to timber deliveries—while providing GPS tracking, resource management, and route optimization for more efficient transportation and asset management.

Short description

OG has developed software for mobilization and efficient use of resources involved in transportation of timber from forest to destination locations - processing facilities, sea port etc. Furthermore, software, when used by forest owner, can be used to estimate and map amount of timber in the forest locations and manage this asset. Transportation of timber from forest to production mostly is made by local transportation companies (logistics services). Usually they are small businesses and not able/interested to invest in developing complex logistical systems. They use "reporting approach" of what has been transported. That does not help planning of logistics. Problem that has been addressed by this software tool is complexity of logistics where task is to transport numerous different kinds of timber from different locations to multiple destinations while often one pick-up point does not contain full truck load of one type of timber. Provided solution is a database that is accessible on-line to all involved parties over GSM network. First input is made when felling survey is done, then by a harvester stating actual dimensions and amount of cut trees, next input is made by transporter who delivers cut timber from forest to a stack on road side stack. There detailed amounts of each assortment becomes known (can reach up to 16 names of assortment in Latvia). GPS location on the map can be seen for each stack (including amount of each kind of timber there) as well as for each transportation unit. Customers (owners of cut timber) input request

stating what kind of timber and what amount needs to be delivered where. Dispatcher can see available transportation resources with detailed technical capabilities that have been put into database by owners of trucks. Dispatcher then can plan most economical routs and tasks for every truck, issue documentation and electronically send it to truck drivers. Truck driver, while uploading the timber, updates status of the stack by recording quantities of each kind of timber been uploaded. Final input is made after unloading timber at final destination.

Software has been tested in Latvia and neighboring areas of Lithuania and Estonia. Proof of efficiency is sufficient decrease of no-load truck kilometers. Local adaptation of the software is linked with the need for adjustments of output document formats determined by national regulations.

Further information

Guntars Reifelds, Board chairman, SIA "SELF Loģistika", e-mail: guntars.reinfelds@selflogistic.lv ;

Normunds Krumins, Board Chairman, LLA (Latvian Logistics Association), e-mail: n.krumins@gmail.com

FOREST4EU

FOREST4EU Project

FOREST4EU Project

info@forest4eu.eu

Website