OPTIMISATION OF OPERATIONS USING A TRANSPORTATION MODEL

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Abstract

Hrvatske šume d.o.o. (limited liability company) is a state-owned enterprise for forest and woodland management in the Republic of Croatia. The area under its governance provides for annual increment of 9.6 million m3 of gross wood mass, whereas 5.4 million m3 is on a yearly basis. This cut wood mass needs to be transported to designated destinations. Wood mass transport has continuously increased, with 4.8 million m3 transported in 2013. Out of this quantity, the company Hrvatske šume d.o.o. transported 12.8% of wood mass using its own facilities, and the rest was transported by subcontractors. For these reasons, a transportation model can be an important part of operations.

The paper aims to analyze transport-related issues in the company Hrvatske šume d.o.o. The insight into the current situation in wood mass transport will provide a basis for the proposed optimization of operations. Key factors of transport will be considered in devising an optimization proposal.