

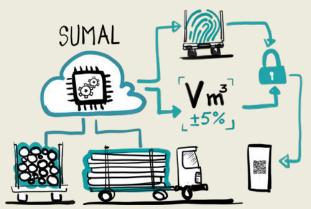
Monitoring report

Desktop monitoring of the level of implementation of the rules on the movement of timber materials, using public information from the SUMAL 2.0 "Forest Inspector" platform

May 2023

There is an absolutely significant level of shipments **recorded in SUMAL** that clearly **do not comply** with the requirements for **electronic tracking of shipments** and **declaration of quantities** of timber material.

In order to streamline and strengthen the preventive role of the control system, simplified control procedures and new modern tools must be put in place to allow automated measurement and verification of data and images recorded in SUMAL. The solution to all these challenges is the implementation of the digital transport fingerprint.





Study objectives

THE RESULTS OF THIS APPLIED RESEARCH ARE INTENDED TO:



Identify the modus operandi of violations of the rules on the origin, movement and marketing of timber materials, using public information from the Forest Inspector platform;



Raising awareness among decision-makers on the appropriateness/necessity of using existing new technologies (Al/IT) to create modern tools that provide an adequate response to current challenges in the forest sector;



Develop practical solutions aimed at simplifying and streamlining control procedures that take into account the continuous evolution of the way of operating.



Impact assessment on the effectiveness of the current system to combat illegal harvesting, resulting from the fact that SUMAL 2.0 is not designed to do a preliminary and automated check of the data entered:



Determination of objective and transparent parameters/criteria for performing risk analyses by querying SUMAL 2.0 and based on specific statistical information;



Determination of objective and transparent parameters/criteria for setting and assessing the performance indicators of the controlling authorities.





Methodology used

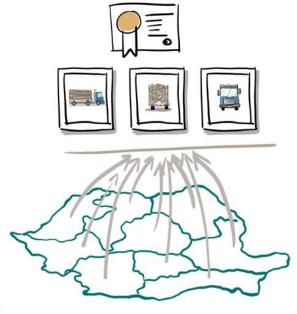
The aim was to carry out an analysis, based on public information, of the compliance with specific legislation on data and information recorded by operators in the SUMAL programme.

The working procedure consisted of selecting the notices, downloading and checking them by an independent expert, in terms of the conformity of the pictures, assessing the declared volumes, species and assortments. Only overflows exceeding 30% of the declared volume were taken into account when assessing volumes. Each consignment was re-interrogated to check whether re-used photographs were used.

SAMPLE SIZE

- 1. A nationwide sample of 3,047 primary notices was selected¹, only professional transporters who, according to the rules in force, are obliged to register in SUMAL 2.0 also the photographs covering the entire load of timber materials.
- 2. This sample was further distributed by counties according to the share of wooded area of the respective county in relation to the total area of national forest land.
- 3. This way of sampling allows the stratification of information at the level of Forest Guards, the institutions responsible for coordinating control activities at regional level.

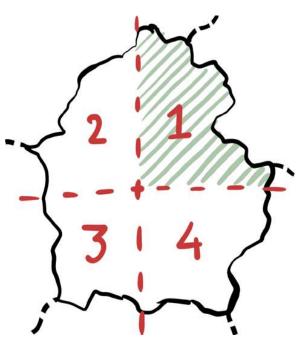
3047 PRIMARY OPINIONS



SAMPLING MODE

Random sampling and a single national procedure was applied for each county:

- within the sample size determined for each county, ALL primary opinions were included in the study and systematically checked, starting (as the first option) from the NE corner of the county (applied only to the wooded area);
- if there was no forest in the area, or not enough primary opinions in relation to the county sample size, areas in the NW, SW or SE corner were included in the study (in a trigonometric sense);
- the same sampling rule was followed, including by systematically including and checking all primary notices -all notices issued within the last 5 days publicly available at the time/date when sampling was applied;
- identification of the regions of analysis and sample location was done using the SUMAL 2.0 platform "Forest Inspector" desktop version;
- the monitoring period was from 20 February to 29 March, and the day/time when the notices for each county were downloaded is also available.



¹ The sample size was conditioned by the available resources as at this stage we only aimed to calibrate/verify the potential of this methodology.



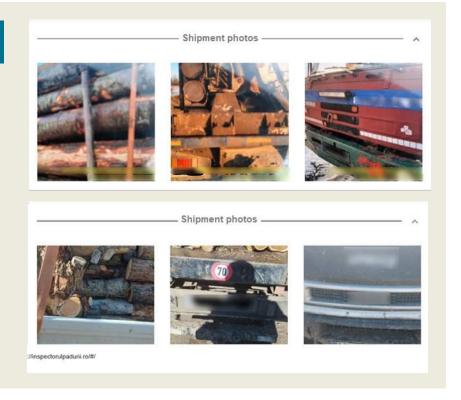


MONITORING RESULTS

The monitoring revealed the following situations concerning violations of the rules on the origin, movement and marketing of timber materials:

1

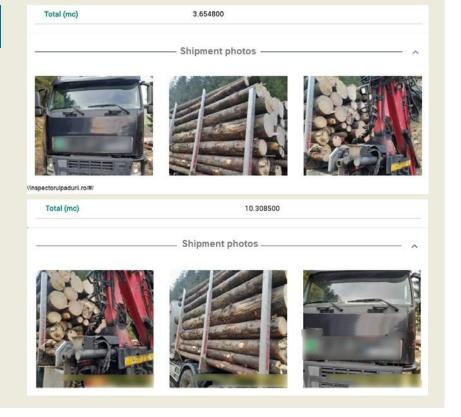
Incorrect photos from which the load in the means of transport cannot be distinguished/focused according to the interpretation of Law no. 171/2010 art.19



7

Identical photos

(same load) used for endorsements with different volumes and origins;

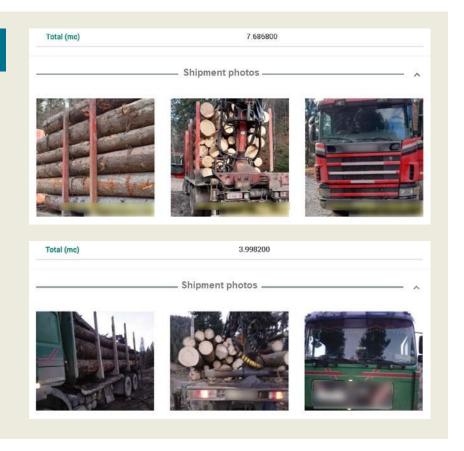






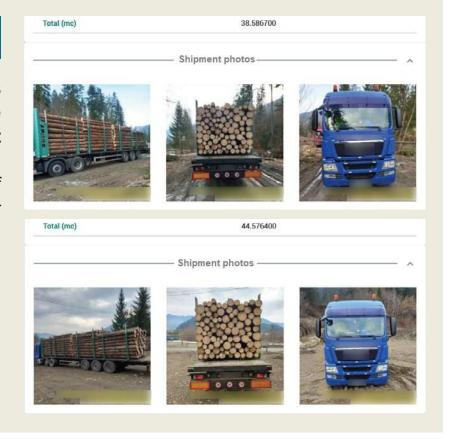
3

Obvious overloads, the estimated volume of which exceeds 30% of the volume declared in the notice:



4

Consignments for which it is found that **2 notices** have been issued, **with different volumes**, for the same load, one from the place of harvesting (AP), the other from the warehouse (DA)







5

Picture-in-picture notices with photographs taken on electronic devices





ORIGINAL PHOTO





PICTURE IN PICTURE

THE FOLLOWING NON-CONFORMITIES WERE ALSO IDENTIFIED

- Subloads identified by duplicating notices on the same transport;
- Misdeclared wood material: assortments or species;
- Harvesting site permits with the assortment declared "Certifiable Biomass";



Analysis of the monitoring data showed an average of

consignments

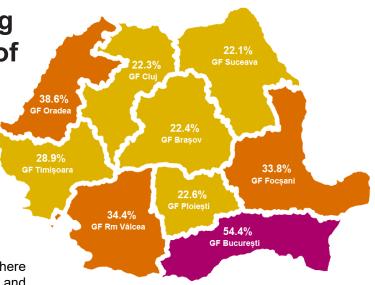
DISCLAIMER

The analysis only covers consignments recorded in SUMAL that were monitored and does not reflect the full situation on the ground (no undocumented consignments were captured).



28.1% non-compliant

Non-compliant shipments means all shipments where violations of the rules on the origin, movement and marketing of timber materials ("modus operandi") have been identified.



Data analysis and interpretation

1 There is an absolutely significant level of non-compliant practices, of which the following stand out:

DISCLAIMER

The results of the current monitoring are not statistically relevant to reflect the overall picture of non-compliant consignments at national/regional level, but capture the situation encountered during the analysis period in relation to the sample monitored.

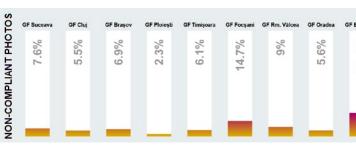


REGISTRATION OF NON-COMPLIANT PHOTOS



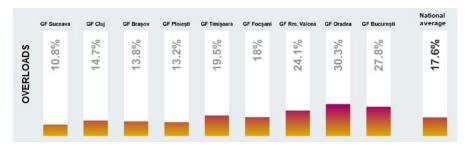














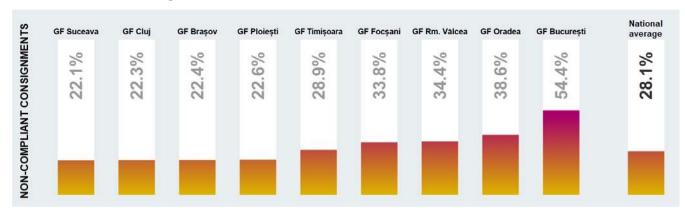
- I. SUMAL 2.0 app does not support an authoritative and expeditious verification of recorded data/positions,
- II. SUMAL cannot prevent fraudulent registration of declared quantities/quantities (i.e. "overloading" as the main modus operandi in connection with the placing on the market of timber harvested in violation of applicable legislation)
- III. It is not sized to automatically generate alerts that are then followed up with priority in a control planning that follows a transparent risk approach.



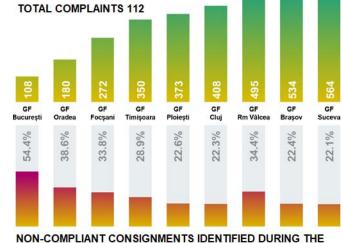
7.6%



There are significant differences between the areas allocated to different Forest Guards:



There is a direct, inversely proportional correlation between the number of calls made by citizens to 112 to report irregularities in the transport of timber and the proportion of non-compliances identified in the areas covered by the various forest guards.



Involving citizens in monitoring therefore makes a vital contribution to preventing illegal timber shipments.

MONITORING PERIOD (%)

4 We assess that the application of GEO134 /2022 (capping the price of firewood to the population) has acted as an incentive for illegal firewood shipments by truck; the assessment is supported by the high frequency of non-compliance in forest deficit areas.



5 There has been a reduction in the proportion of non-compliances with the establishment of the National Forestry Guard and the intensification of controls carried out by the authorities (including compared to assessments carried out in previous years).



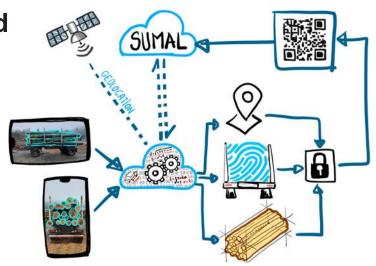


Proposals to simplify and streamline control procedures



INTRODUCTION OF FINGERPRINTING OF TIMBER SHIPMENTS

Introduction of fingerprinting of timber shipments which essentially strengthens the preventive role of the control system.





EXPEDITIOUS VERIFICATION OF VOLUMES TRANSPORTED

Allows automated measurement and expeditious verification of transported timber quantities.



CLEARLY INDICATES NON-COMPLIANT SHIPMENTS

Simplifies verification procedures with the same resources, generates clear indications in case of multiple shipments or overload.



TRANSPARENCY

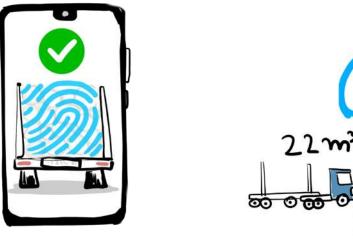
It provides more transparency and removes the subjectivity of the human factor.

Authorisation of the specialisation responsible for measuring, sorting and carrying out registration procedures in SUMAL;





Registration in SUMAL of the authorised transport capacity of the means of transport including the standardised dimensions of the means of transport according to the technical book of the means of transport (if applicable).







Standardisation of how photographs are taken and recorded (the alternative until the development of the "fingerprinting of timber shipments");





Sanctions must target those responsible for implementing legal procedures. Currently, sanctioning the "Issuer" for any non-compliant photographs taken by the "Carrier" practically undermines compliance with the correct application of procedures.



It is necessary to highlight completed shipments in SUMAL 2.0.



The methodology could be applied successfully:



In the process of planning controls at national level following a risk-based approach (of course in conjunction with the alerts generated by SUMAL and the evolution on the ground of the modus operandi);



In setting and assessing performance indicators for the authorities with control functions.

Combating illegal logging requires an integrated approach involving a reform of the entire system for tackling illegal harvesting.

