## **TIS Group**

The TIS Group is an association which brings together forest companies, research institution and non-governmental forest organization.

#### CODIMEX Ltd

Producer of wood marking tags and related tools, wood measuring calipers, electronic calipers with connection to smartphones, mobile android forestry applications. Great experience on European market, products used in many countries. www.codimex.com.pl

#### TAXUS IT Ltd

Universal and dedicated IT systems for forestry and mobile applications. Producer of specialized software for forestry management. Company creates maps, databases, mobile software, server and desktop software. Experience in preparing systems for state forests, national parks.

www.taxusit.com.pl

INSTITUTE OF GEODESY AND CARTOGRAPHY (IGIK) - Remote Sensing Center IGIK is a research institute conducting research in the field of geodesy, cartography, aerial and satellite remote sensing and GIS. The Remote Sensing Center of IGIK covers a broad range of research and application-oriented projects related to the use of various Earth Observation satellite data for environmental monitoring and management. We collaborate with many national and international institutions as well as private companies. http://www.igik.edu.pl/

FOREST FRIENDS ASSOCIATION

Non-governmental organization focused on forest education and forestry training. Its mission is also to promote forests and forestry - including the prevention of deforestation, promotion of sustainable forestry management. www.tpl.org.pl

The TIS Group is open for the new partners from current and applying VPA countries, International Organizations, Universities and Research Centres. We invite everyone who supports the FLEGT idea.

## Welcome to the TIS Group!

## TRY THE TIS APPLICATION



Visit TIS webpage to find more information about TIS and download free demo TIS application on your smartphone with Android OS.

Check how does it work and how simple it is!

#### www.tis-group.eu





# TIMBER INVENTORY SYSTEM











## WELCOME TO TIS PROJECT

Polish forestry companies and organizations supporting the FLEGT idea want to actively participate in forest law enforcement actions.

FLEGT Programme is one of the most important implementations for sustainable development in forestry. TIS Group has prepared the TIMBER INVENTORY SYSTEM for everyone who supports the FLEGT idea and needs to fulfil the EU Timber Regulation requirements. We want to make our contribution to the worldwide fight against illegal logging and suport FLEGT Programme with TIS.

We believe that together we can build a very useful tool for FLEGT actions.



## THE TIS PROJECTS

#### LOCAL TIS PROJECT

addressed to the local foresters and forestry companies, wood sellers and buyers. Based on the VPA agreements, provides the proper inventory recording database, mobile applications, measuring tools and equipment for marking trees and logs.

#### **REGIONAL TIS PROJECT**

addressed to the regional forestry units and organizations, provides the proper software system and modern forest inventory tools and equipment. The project involves the forest management works if needed.

#### **NATIONAL TIS PROJECT**

common project of national authorities and TIS Group. Develop the national forestry law, VPA agreements and long term forest management plan. Provides software, (incl. GPS and satelitte images), mobile applications and comprehensive equipment. Staff training and local societies education are significant part of the project.

#### **CROSS-BORDER TIS PROJECT**

the project currently is under development. Due to heavily usage of mobile and satellite technology, allows for timber tracking, and with inventory and marking equipment it provides the ability for confirming the origin of imported wood to all interested parties. All projects are developed based on FLEGT regulations. All software is designed according to national forestry law regulations. Basic TIS equipment: smartphones with barcode scanners, simple electronic calipers, special tags with barcode.

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## **DESCRIPTION OF THE SYSTEM**

Timber Inventory System supports fight against illegal logging. All TIS users have to be authorized. The database will be trimmed on the basis of agreements between all interested parties. Each activity in TIS will be loged and can be controlled by the competent supervisory authorities.

#### **BENEFITS OF THE SYSTEM**

- Providing reliable information about the harvesting, traders and institutions responsible for the legality of the harvesting process and control of chain of custody.
- Providing reliable information for the buyer who wants to confirm the origin of wood.
- Facilitation for EU Institutions and International Organization concerning control of the wood imported on the EU market.
- Facilitation for the wood and wood products producers to ensure all interested parties that their products are made from legally harvested wood.

#### SYSTEM MAIN ASSUMPTIONS

- The system with a central database and internet acces
- System and data access granted only for authorised users through a web browser or a mobile application.
- The register of:

field work (forestry inventory)

harvesting

processing and transport of logs

by using mobile devices (i.e. popular smartphones). Ability to register field work offline without - all collected data can be synchronised with the server online or only on request.

- System can be integrated with existing IT solutions used by companies and institutions responsible for harvesting, wood processing, selling and transportation of timber.
- Basic activities recorded in register: harvesting plan, logging, processing, sale, transport, fees etc..
- More activities in register process can be prepared in accordance to domestic regulations and local requirements.

## **MOBILE TECHNOLOGY**

All results of work are registered and can be checked on smartphones i.e. legality of shipment. Applications can be connected via Bluetooth to simple electronic calipers, for gathering result of work directly from logging area. Custom applications can be developed for Android OSbased devices, depending on user requirements.

## SATELLITE TECHNOLOGY

Satellite Navigation provides location information for monitoring logging and transport of timber. The use of the Earth Observation data through analysis of versus high resolution satellite data sets allows identification of location, extent and date of logging, monitoring forest changes and forest condition assessment.

### EQUIPMENT

Logs and trunks are marked by plastic tags with barcode. Marking tags provides the same marking standard. The unique construction prevent illegal reuse of tags. For timber measurements simple electronic calipers and tapes can be used.

A smartphone with TIS application installed will be used for data registration, barcode scanning, determineing the geographical coordinates, taking pictures and transferring data to and from the cloud server. Barcodes on tags provide seamless connection between marked wood and data in the system.

## HOW DOES IT WORK?

 Authorized user performs harvesting, measurements, marking logs by barcode tags, registers field work data, takes pictures of logging area and sends all data to the TIS application.

- Authorized operator enters the transportation route.
- Authorized operators (i. e. customs officials) downloads the input data on the smartphone and checks them against paper documentation ncluded with wood transport.
- The delivery is checked again during transhipment and in destination place on the same way: authorized officer downloads the data from cloud server and check them with existing delivery and documentation.
- Confirmation of receiving wood is sent by the recipient to the TIS system.
- Authorized users can access data stored in cloud database and confirm wood's origin and legality.