

FLEGT Watch 08 February 2021 questions

1) Is there any training requirement before using FLEGT Watch Program? (From Ms.Arpaorn)
All the users in the different African countries have been trained. Typically, the training (5 days) includes: <ul style="list-style-type: none"> • Introduction to remote sensing; • Use of FLEGT Watch (organization, users' management, definition of monitored areas, alerts...); • Photo-interpretation; • One-day mission in a forest with FLEGT Watch App; • Mission reporting and results sharing.
2) Do you have any experience working with country in South East Asia before? (From Ms.Piyathip)
We only had one experience in Myanmar (Forestry Department), in 2009 on behalf of United Nations Environment Program (UNEP). It was a 5-days training on Geographic Information System (GIS), the use of multi-source imagery for hazard mapping, the Digital Elevation Models, the processing of radar imagery and the communication of the results.
3) How much do you charge for using your data and service? (From Ms.Piyathip)
The satellite data from Copernicus Constellation are free as well as meteorological data from ECMWF (European Centre for Medium-Range Weather Forecasts) or precipitation data from NASA (Global Precipitation Measurements) or JAXA, the Japanese Space Agency (Global Satellite Mapping of Precipitation). The clients can use the service: <ul style="list-style-type: none"> • On their data center in their facilities. The software is installed on the data center receiving satellite data through the Internet. The client is then running himself the service for the end-users. Price is 300 Keuros (license to use, installation and training included) + 20 Keuros/year for the maintenance • On the VisioTerra infrastructure (storage 1Pb, many servers, 1Gb/s optic fiber link). In this case, the software and the data remain on the VisioTerra infrastructure and the client receives documented alerts when an event is detected and regular dashboards (indicators charts, maps). He can of course access our infrastructure to use FLEGT Watch (process data, visualize them and share the results with his colleagues in client-server mode). All the registered users can also download and use the application on Android for ground missions. Price depends on the total surface of the monitored areas. An average price is about 50 Keuros/year Gabon and Tunisia preferred the first solution for the geoservices they use. The other countries the second.
4) How long does it take the satellite to show changes in deforestation? (From RFD deputy director)
There are 2 Sentinel-1 radar satellites in the Copernicus Constellation (2 more satellites will be launched by 2023). The revisit time of a single satellite is 12 days (the satellite observes the same spot every 12 days) and 6 days when the 2 satellites are active. The image is available 2 to 3 hours after the observation and can be automatically downloaded and analyzed by FLEGT Watch. From the comparison between previous acquisitions and the new one a "change score" is computed and if this score is greater than a threshold, a deforestation event is created and an alert is sent with a confidence index. These near real-time operations require a few minutes. We can say that, at worst, a new deforestation can be detected every 12 days (6 days at best).

For active fires, we use Sentinel-2 optical data. In this case, revisit time is 5 days (again with 2 satellites). Thus, a new active fire can be detected every 5 days at best if the sky is not too cloudy.

5) Does FLEGT Watch has any counterpart or aiming to work with which organization in Asia?
(From Ms.Piyathip)

In our opinion, FLEGT Watch can be useful for various end-users.

Government officers will use FLEGT Watch to:

- detect illegal encroachments/intrusions/felling in natural forests where logging is prohibited;
- detect active fires and burnt areas;
- manage mission reports from rangers or designated observers (with photos, audios, videos, comments);
- have traceability reports from private companies if they use the Pallitracks module (see below).

Environmental NGOs or CSOs could be interested in:

- forests environment issues: active fires, burnt areas, deforestation => gain or loss of forest area, impact on greenhouse gases (carbon balance)...
- using an app on smartphone to collect observations during visits to natural parks or forest concessions (if allowed)

Private companies can use FLEGT Watch to:

- detect illegal cuts made by third parties;
- follow the evolution of cuts seen by satellites in their concessions;
- detect active fires or burnt areas => insurance compensations;
- provide images attesting to the compliance of felling plots with the development plan;
- provide traceability reports with the Pallitracks module (see below).

VisioTerra is working with Prosygma, an African company from Cameroon. Prosygma is offering a management system for private forest concessions and timber traceability. The system called Pallitracks is presented in the following website <http://pallitracks.prosygma-cm.com/> unfortunately in French. We hope you can translate the "Fonctionnalités" page to know all the available functions. In the future, FLEGT Watch and Pallitracks will be interfaced in the same system. Pallitracks will become a new module dedicated to the private sector.

6) In which way does FLEGT Watch Program can support FLEGT VPA process in Thailand?
(From Mr.Montree)

FLEGT Watch has been funded and their specifications have been defined by the European Union (EU). FLEGT Watch has been designed to be applied worldwide. Its first application was focused on 8 African countries. VisioTerra has not been directly involved in a FLEGT VPA negotiation process. We think that the use of FLEGT Watch by the Government officers in charge of natural forests is a strong argument to show that Thailand fights against illegal loggers. With the Pallitracks module, the timber traceability can be improved if necessary. And if Thailand wants to be transparent with NGOs and CSOs in terms of forest monitoring, the use of the Android application could be offered to independent observers.

7) Who can access the FLEGT Watch? I tried to access FLEGT Watch of the country you demonstrated yesterday, but could not.
(From Dr.Somrudee)

Only duly designated and registered people can use all the functions of the version of FLEGT Watch for West and Central Africa. That is the reason why you could not access all the functions shown during the demonstration. The registration process would be adapted to your context and the Thai version of FLEGT Watch would only be used by people designated by the authority.

8) Certain areas in Thailand are under the oversight of the military and often be regarded as not

<p>accessible to the public. How will FLEGT Watch deal with the areas? (From Dr.Somrudee)</p>
<p>FLEGT Watch analyzes data only on areas of interest defined by the users. Thus, the users will have to define areas without intersection with the military zones. If this condition is met, there will be no alert concerning changes or fires in the military zones.</p>
<p>9) To be useful for FLEGT monitoring, certain information inputs are need—have to provide to the program, Is that correct? For example, info about reserved forest boundaries — in order to see if there are any encroachments. In Thailand, some reserved forest areas are permitted to be used by forest dwellers. And some boundaries between different kinds of forests (reserved or national parks) are also unclear even to the authorities. Can FLEGT Watch program be applied to Thailand given the unclear information? (From Dr.Somrudee)</p>
<p>As mentioned in the previous answers, FLEGT Watch is working on areas defined by their boundaries (the user can draw them or import shapefiles). If the real boundaries of the forests are unclear, the user in charge of the monitoring can draw a monitored area encompassing the forest to be sure any changes, fires or encroachments will be detected. If forests dwellers are allowed to cut some trees, deforestation alerts will be ignored.</p>
<p>10) There are several indexes the FLEGT Watch program can accommodate, making the program so useful for analysis. However, data for each index (if not physical and can be observed from satellites) have to be available. But in Thailand, data availability can be a challenge. (From Dr.Somrudee)</p>
<p>All the indexes used by FLEGT Watch are computed from satellite data (radar or optical). European Earth Observation data (Copernicus Constellation) are free and available on the Internet. The other data required are the boundaries of the forests to be monitored. If Thailand can access other useful satellite data, we can easily develop new modules to ingest and process them. If you are interested, you can provide us with some areas of interest (defined by closed polygons) and we will send you the latest radar and/or optical data on these areas.</p>
<p>11) How many FLEGT VPA countries have made use of FLEGT Watch? Please name the countries. Who finance their FLEGT Watch programs? What if they run out of fund, say next year? What would happen to their FLEGT Watch? (From Dr.Somrudee)</p>
<p>FLEGT Watch has been developed for forest monitoring in 8 countries negotiating or having signed a FLEGT VPA: Cameroon, Central Africa Republic, Democratic Republic of Congo, Gabon, Ghana, Ivory Coast, Liberia and Republic of Congo. The use of FLEGT Watch is funded by EU. For some African countries facing financial issues, we are seeking new funding from private forest companies, REDD+, GMES&Africa or other International Funding Organizations.</p>
<p>12) Who has ownership of FLEGT Watch of a particular country? VisioTerra? The country's government? Its sponsor? (From Dr.Somrudee)</p>
<p>VisioTerra is the owner of the FLEGT Watch system providing the services. Users from different countries have the right to use the software if they subscribe to the service. It could be the same for Thailand if FLEGT Watch were simply adapted to the Thai context. However, if new developments and specific functions are required, Thailand can become the owner of these developments, VisioTerra remaining the owner of the intellectual property rights.</p>