Day 1: Session on Forests Management
Report by Rob Shaw, PEFC International

EARSC
European Association of Remote Sensing Companies

PEFC International

PEFC International is the world's largest voluntary Forest Certification Scheme

295 Million hectares of certified forest in over 55 countries

Over 20,000 Chain of Custody certified organisations

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Current focus for 2024 is to introduce solutions globally for EUDR – Deforestation (free) regulation, which will have a global impact and involve significant use of EO technology.

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Takeaways from Sessions

Forests make up 40% of European land use and key for biodiversity, climate, landscape, water management and people

Forests under increasing demands and stresses – wildfires, pests and diseases, storms, biodiversity loss, timber demand for multiple uses.

Major EU and national legislation and regulations being applied, e.g. EUDR, Green deal

Forests critical for climate resilience, carbon, timber, recreation, health.

Huge potential for EO and remote sensing to assist in forest protection, monitoring, but needs big data, cross-border cooperation and data standardisation. Integrating information from EO and remote sensing gives better outcomes

- **Monitoring of clear cutting now becoming common**
- **Challenges remain over other activities, e.g. thinning, and also EUDR "degradation"**
- **Clouds and winter daylight in northern areas still an issue**
- **Better integration of data and reporting needed at regional and EU levels**
- **Investment needed in technology and people**
- **When linked to GIS systems and ground truthing EO can provide a rich source of tree species and biodiversity information**

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Forest Management

How satellites can help?

- Monitoring of clear cuts for adherence to permits.
- Detection of diseases
- Mapping of access into the forests
- Monitoring of fire and storm damage.
- Replanting and sustainable development.

Where satellites are helping:

- In active use in: Sweden (core case), Portugal (core case), global tropical forests for ESG.
- Under assessment in Austria, Cyprus, France, Germany, Norway, Poland, Romania, Spain, mostly for disease detection and burnt area mapping.

The Benefits of using Satellites:

- Reduced costs of implementation of regulations
- Increased timber volume and reserves
- Improved forest ecosystem and biodiversity
- Better protection against threat of fire and emergency management
- Improved leisure facility for citizens

Forest Management

Insights:

- There is wide-awareness of the possible use of satellite data and uptake depends on the local forest conditions and legislation. In Sweden clearcut notification is set at 0,5ha whilst in some countries eg Czech Republic the limit size is smaller so making Sentinel use unattractive whilst commercial data may be too costly.
- Responsibility is devolved to local/regional administrations in many countries whereas the capability must be championed and introduced by a central (national) agency which becomes the trusted agent.
- Knowledge of the forests is important meaning that the service is often in-sourced through an administrative, remote-sensing or GIS department.
- The introduction of much more timely data (in Sweden) has made the monitoring product more attractive for other users and the use has increased in both public and private organisations.
- No platforms exist for the exchange of best practices but would be of interest to practitioners (in Sweden) particularly for knowledge of different processing techniques and data use (for example Sentinel 1 radar data).