

Information on forests - sound and comprehensive

## Forest data availability in the member states and its current use at the EU level?

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Forest-related reporting at the EU level – what we know and what's missing?

Brussels

10<sup>th</sup> October 2023

## **NFIs in Europe - ENFIN**

uropean ational

ventory

European National Forest Inventory Network (ENFIN). The members supply forest data and information at national and sub-national levels for up to 100 years.



#### Strong Expertise





## NFIs within EU

#### Covering 95% of the EU forest area Covering 97% of the EU growing stock

Established sample based NFIs







## **NFIs within EU**



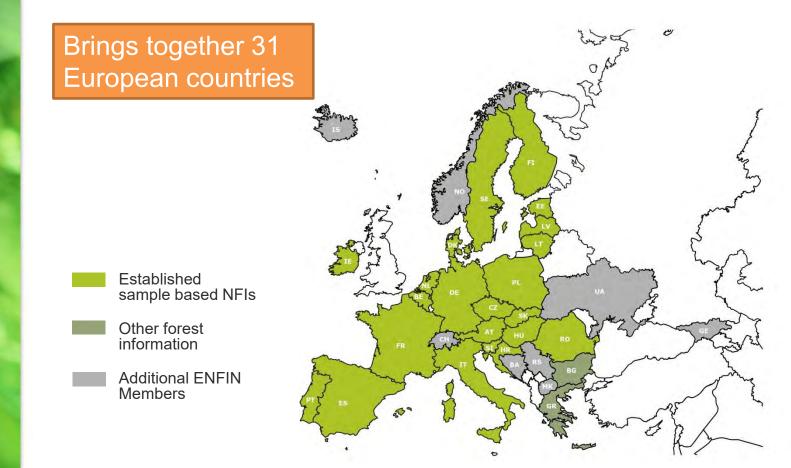
Established sample based NFIs

Other forest information





## **NFIs in Europe - ENFIN**







## **NFIs at the national level**

Statistical estimation and information

• Continuous matching with upcoming forest (related) policies

how NFI information can serve the decision situation



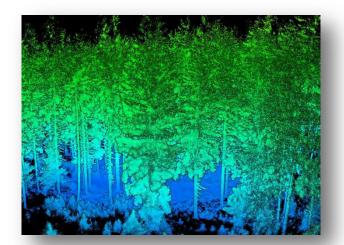




Biodiversity loss Climate change

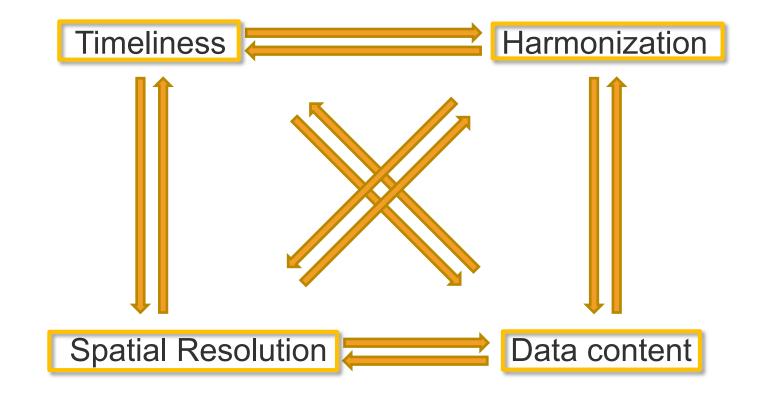
Phasing out fossil materials Increased forest damages

Monitoring fit for purpose? Improved Forest Monitoring



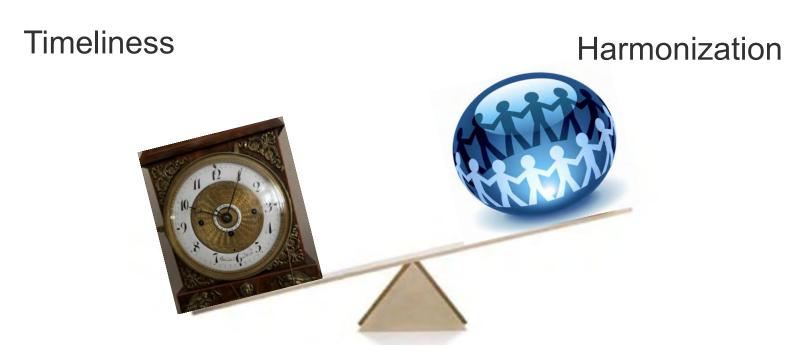


## What is relevant for a European system?









Trade-off





#### Timeliness

#### Harmonization



#### **Right Balance**



## **ENFINs Harmonization Work**

- Forest Area with Forest Available for Wood Supply: SCs with JRC <u>https://doi.org/10.1016/j.forpol.2019.102032</u>
- Above Ground Biomass: SCs with JRC: reports, publication about mapping DOI:10.2760/311876
- Growing stock and Stem Volume: H2020-Diabolo: <u>https://doi.org/10.1016/j.foreco.2021.119868,</u> doi.org/10.1007/s13595-019-0800-8
- > Increment:

European National

Forest

SCs with JRC: reports, publication is ongoing

Sound statistic estimation on the European level

→ So far not really used for reporting!

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#### Growing stock monitoring by European National Forest Inventories: Historical origins, current methods and harmonisation

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## **NFIs as Backbone for EU Forest Reporting**

NFIs supporting EU Forest Policies:

based on Interviews with Commission Experts and on a Questionnaire

Directl	y measured
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Indirectly derived, using reliable methods Indirectly assessed or derived using models with uncertainty Information needs not fulfilled by NFI today European definition missing

	Fit for 55 B	D strat Ta	ixo F	or. Stra	RED III	LULUCF	Defor.	Restor.	Sum
	31 %	49 %	10 %	54 %	30 %	39 %	38%	45 %	42 %
	29 %	17 %	19 %	20 %	22 %	<b>3</b> 5 %	9%	20 %	22 %
/	20 %	6 %	8%	6%	4 %	26 %	0%	7 %	10 %
	20 %	22 %	58%	18 %	26 %	0%	40%	27 %	23 %
	0 %	6%	4 %	3%	17 %	0%	13%	1%	3%

2/3 of EU policy data needs directly measured in NFIs or derived from NFI variables







Trade-offs





#### **Spatial Resolution**

Data Content

Raster NUTS

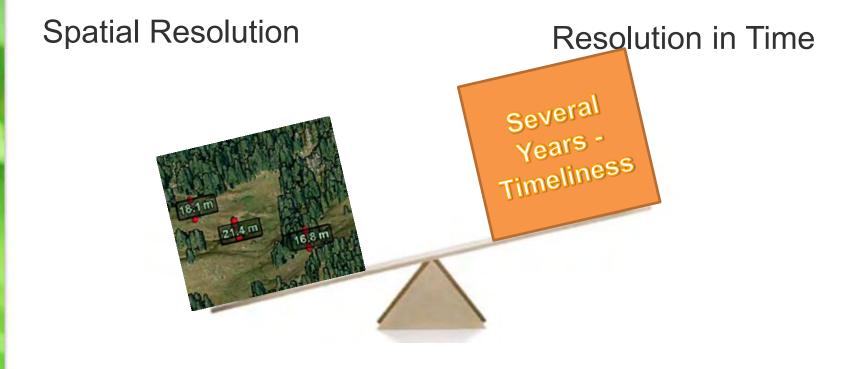


General Data Protection Regulation

Right Balance ?







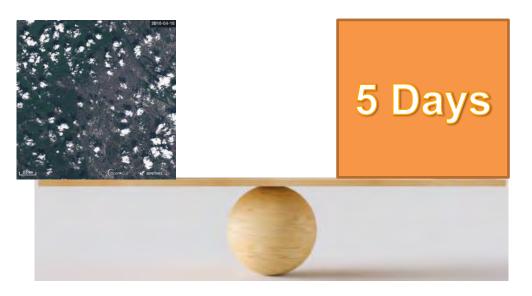
Trade-offs





### **Spatial Resolution**

#### **Resolution in Time**



Right Balance ?

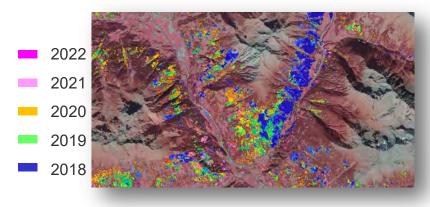




## Main Goals for improved Forest Monitoring

 Measuring the success of established policies

• Timely damage monitoring



 Creating scenarios for future forests



## **ENFINs proposed Tools for a Solution**

- Harmonisation of existing systems
- Developing new indicators
- European estimation platform and procedures to derive European Forest Information
- Facilitating European Remote Sensing





# Thank you very much!



National Forest Inventories (NFIs) represent comprehensive, reliable, large-scale monitoring systems. ENFIN serves as a European network to promote NFIs, harmonise forest information and support decision makers in a broad range of forest related policies.

The overall objectives of ENFIN are to

- provide a platform for the harmonisation of forest inventory information at European scale
- optimise synergies between NFIs and promote new knowledge and enhanced methods
- support forest policies with harmonised forest information and adapt data collection to new emerging policy needs.