



Deployment of e-freight in the Western Balkans and implementation of the Regulation (EU) 2020/1056 on electronic freight transport information

Impact assessment and implementation roadmap

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Agenda



Topics

1. Introduction: eFTI – what and why?

2. Regional project: overview

3. Impact assessment: economic and environmental impact

4. Roadmap

5. Conclusions and next steps

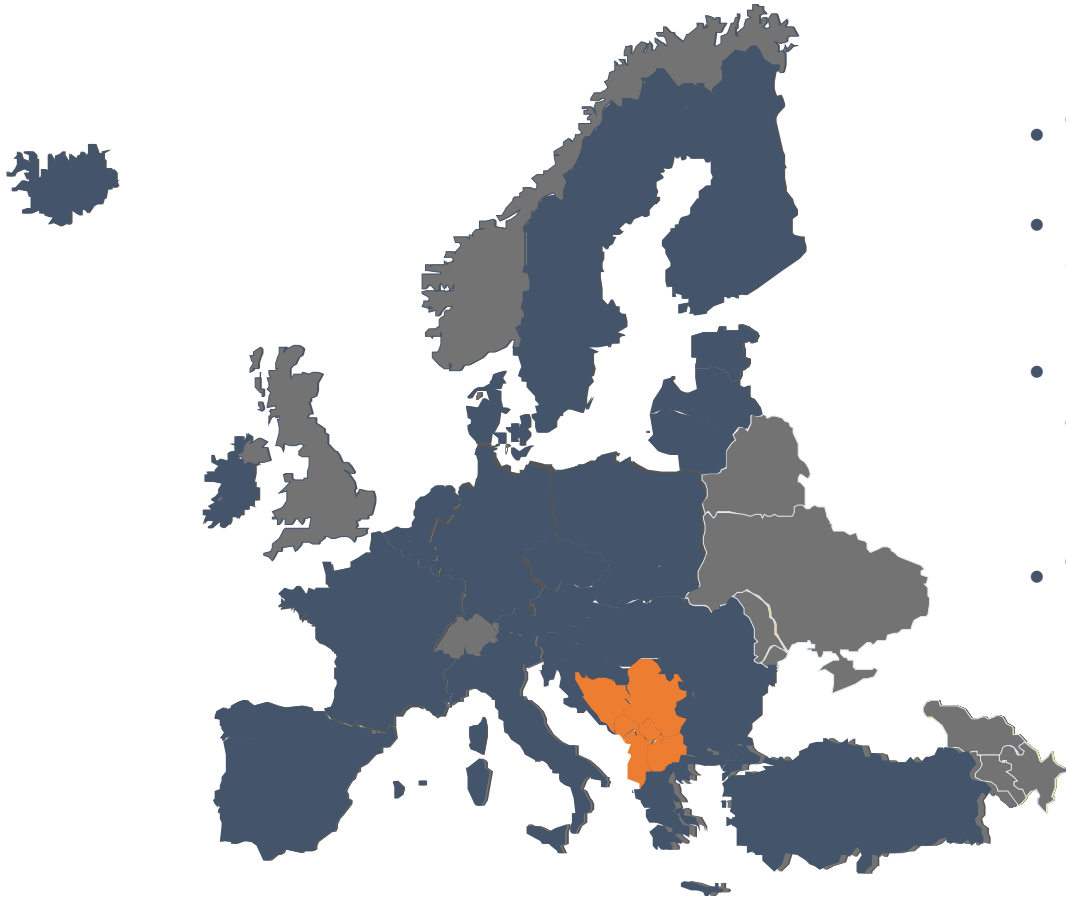
What would be if freight information is exchanged only digitally?



- Over **26,000 trees** saved annually if all freight information is exchanged only digitally in the Western Balkans
- ... while Central Park in New York City has over **18,000 trees**
- ... **234,000 boxes** of printing paper could be saved



EU trade relationship with WB



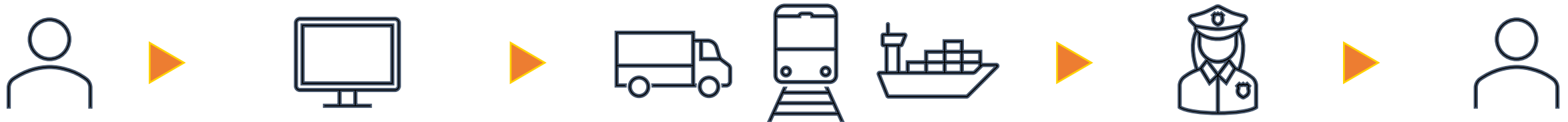
- The EU is the **#1 trade partner** in the Western Balkans
- EU – Western Balkans trade exceeds **70%** of total Western Balkan trade
- Potentially **millions of cost-savings and opportunities** for administrative simplification are missed without digitisation of freight information exchange
- The **EU has already recognised the benefits** of digitisation of the freight transport information

Introduction: eFTI – what and why?

eFTI in practice: paperless freight transportation

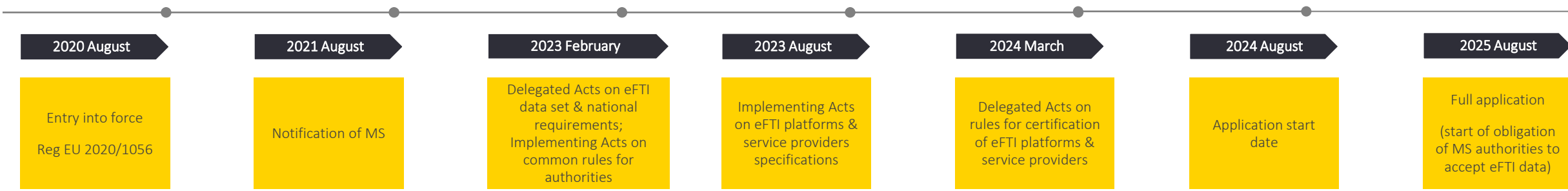
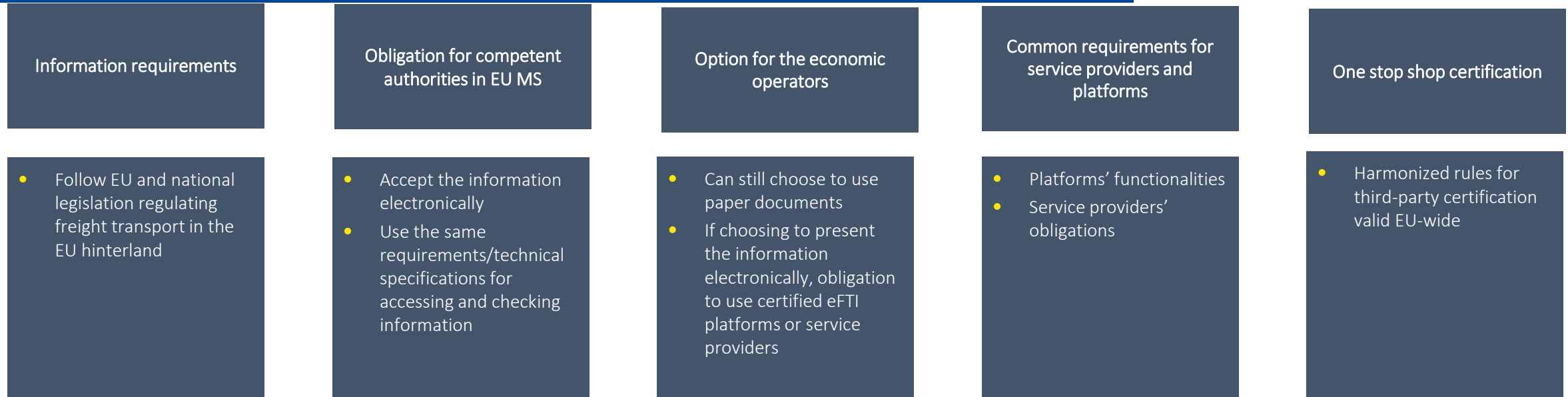


- ▶ Two companies from different countries trade
- ▶ Before cargo leaves a country, freight information about goods is entered to certified platform of a choice
- ▶ Platform generates unique shipment ID, which business can choose to share with business partner for access / editing
- ▶ Cargo starts its journey, but no documents are with the driver
- ▶ Cargo is stopped for inspection, driver shares unique ID of cargo, and inspection is done online
- ▶ Same happens with other competent authorities that request documentation



- ▶ Not distant future - requirement would be fully applicable as of August 2025
- ▶ Enabled by eFTI Regulation (in force since 2020) and all EU MSs must comply by 2025
- ▶ Authorities would be obliged to accept information in electronic format if businesses decide to do so

HOW: eFTI timeline



WHY eFTI?



Multiple ongoing initiatives:

- eFTI, DTLF
- Pilots / Living Labs (FEDeRATED, FENIX, DIGINNO-Proto/ DINNOCAP and others)
- UN/CEFACT multimodal standards
- Deployment of e-freight in the Western Balkans and other regions
- ...



- Completeness of investments



- Millions of working hours and costs could be saved annually
- More transparency – better data accuracy, monitoring and control for authorities, real-time access to the info



- EU digitisation policy is a major step to reduce the carbon footprint making transportation paperless, greener and more sustainable
- Thousands of trees saved per year



- Following the standards and being part of global ecosystem



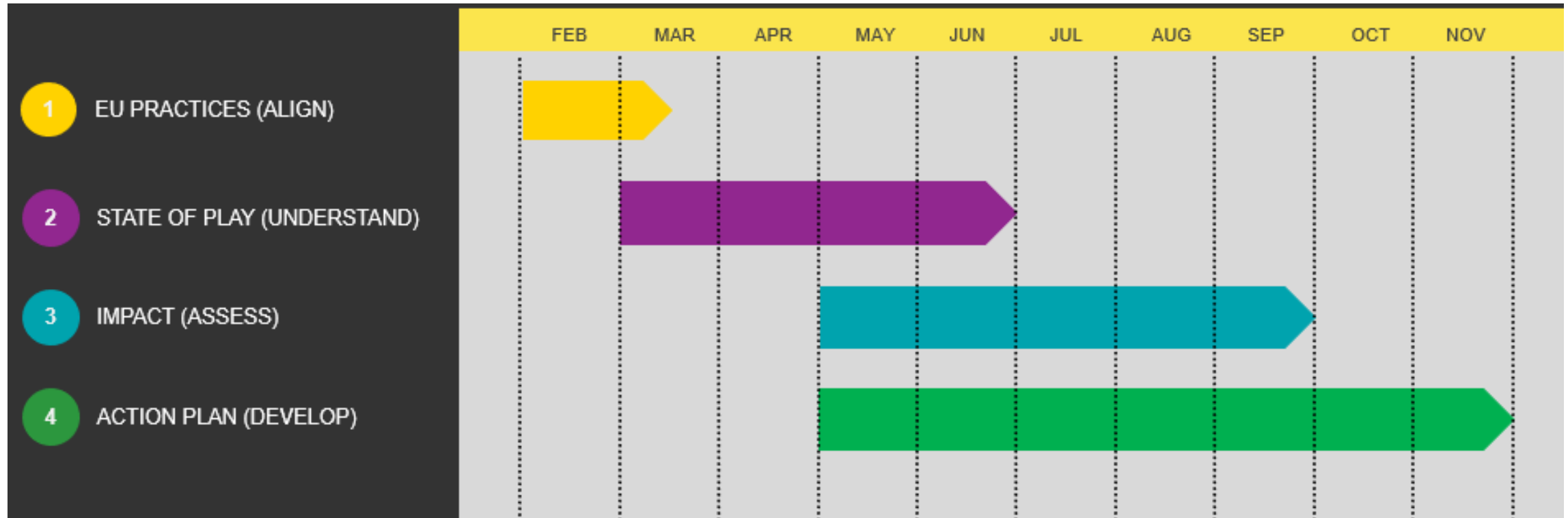
Regional project: overview

Project summary



- **Implemented by** EY and local and global expert team
- **Timeline:** February 2022 - December 2022
- **Client:** Permanent Secretariat of the Transport Community
- **Geography:** Western Balkans
- **Stakeholders:**
 1. The ministries of transport (and other ministries based on need)
 2. Road, railway and inland waterways authorities / associations in the Regional Partners, as well as commerce associations
 3. CEFTA representatives
 4. Regional Cooperation Council representatives
 5. And others
- **Transport modes covered:** road, rail and inland waterways
- **Objective:** to enable an interoperable electronic freight information exchange system in the region, reducing administrative burden for logistics operators, and facilitating multimodal transport. Special focus - to be expandable to neighbouring EU MSs
- **Ultimate result:** develop the implementation plan and pilot projects to deploy e-freight and implement the eFTI Regulation in the Western Balkans

Project activities and timeline





Impact assessment: economic and environmental impact

Key facts about impact assessment



Object: economic and environmental impact assessment of e-freight in the Western Balkans as per Regional Partner / Economies readiness.

Analysed options:

- ▶ **Baseline** - reflects developments under current trends and policies, without intervention by the national governments and regional organisations in the area of electronic transport documents.
- ▶ **Option 1 (O1)** - electronic freight information accepted by the authorities within the Western Balkans only.
- ▶ **Option 2 (O2)** – electronic freight information accepted by the EU and the Western Balkan authorities.
- ▶ **100% uptake of e-freight information exchange** - electronic freight information accepted by the EU and the Western Balkan authorities and all businesses exchange information digitally.

Analysed years:

- ▶ **2025**
- ▶ **2028**
- ▶ **2030**

Analysed impact

Economic impact on businesses:

- ▶ **Administrative costs**
- ▶ **Printing and archiving costs**
- ▶ **Compliance costs**

Economic impact on authorities:

- ▶ **Compliance costs**
- ▶ **Certification costs**
- ▶ **Enforcement costs**

Environmental impact:

- ▶ **Emissions**
- ▶ **Use of Natural resources (saved trees)**



Impact assessment: economic impact on businesses

Administrative burden reduction (2025 – 2030)



Administrative burden reduction: salaries of the employees working on freight related documents preparation.

2025 – 2030 in the Western Balkans:

- ▶ EUR **26.5 million** would be saved under option 1
- ▶ EUR **80.2 million** would be saved under option 2
- ▶ EUR **163.5 million** would be saved under 100% uptake of e-freight information exchange

- ▶ Businesses could **save twice more** if they fully digitised freight information exchange instead of following option 2
- ▶ Digitisation of freight information exchange **in road transport mode** would reduce administrative costs the most
- ▶ Full digitisation would **save more than 1/3** of current expenses on administrative matters (EUR **467.7 million** under baseline option)
- ▶ For all Regional Partners **O2 is preferred to O1** and **100% uptake is preferred to O2**

What about the costs for
businesses?



Compliance costs for businesses (2025 – 2030)



Compliance costs for businesses: one-off expenses on hardware and software needed to exchange freight information digitally in human readable format.

2025 – 2030 in the Western Balkans:

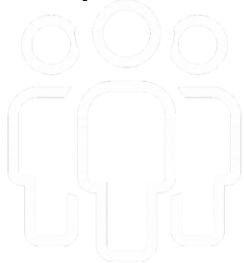
- ▶ EUR **29 million** under option 1
 - ▶ EUR **38.5 million** under option 2
 - ▶ EUR **47.8 million** under 100% uptake of e-freight information exchange
-
- ▶ Despite the largest compliance costs under 100% uptake of e-freight information exchange, the payback period is **21 months**.
 - ▶ Once the investments are fully paid back, the Western Balkan businesses would start saving **EUR 27.3 million annually**.

Impact on a single company under 100% uptake of e-freight information



Small company:

- ▶ Would save over **EUR 5,000** annually
- ▶ One-off compliance costs: **EUR 7,750**
- ▶ Payback period: **19 months**



Medium company:

- ▶ Would save about **EUR 26,000** annually
- ▶ One-off compliance costs: **EUR 23,750**
- ▶ Payback period: **11 months**



Large company:

- ▶ Would save about **EUR 75,000** annually
- ▶ One-off compliance costs: **EUR 142,500**
- ▶ Payback period: **23 months**

IMPORTANT: 100% uptake level, which brings the largest benefits to the businesses, is possible if measures towards the mandatory electronic exchange of freight information are taken in the Western Balkans.



Impact assessment: economic impact on authorities

Total costs for authorities (2025 – 2030)



Authorities have two options:

1. To develop eFTI gates and platforms from the beginning
 2. To develop eFTI gates and platforms based on the developed solution (SEED)
-
1. If authorities developed eFTI gates and platforms from the beginning, they would spend **EUR 18.6 million** in total under option 2
 2. If authorities developed eFTI gates and platforms **based on the previous solution (SEED)**, they would spend **EUR 11.1 million** in total under option 2

The difference of **EUR 7.5 million** depicts the difference between the investment into a new IT system and investment in the adjustment of the existing one (SEED)

Certification costs for authorities (2025 – 2030)



Certification costs for authorities: include the one-off costs related to setup of a certification scheme of IT solutions as well as recurrent costs that are related to certifying IT solution providers through the established certification scheme and continuous checking if the certified IT solutions providers are meeting the certification requirements. The certification costs are calculated as salaries of the employees in the certifying authorities.

- ▶ **One-off set-up cost: EUR 42.3 thousand**
- ▶ **Annual recurrent costs: EUR 63 thousand**
- ▶ **Total costs (2025 – 2030): EUR 420 thousand**

Enforcement costs for authorities (2025 – 2030)



Enforcement costs for authorities: include maintenance costs incurred to operate the IT systems (eFTI gates and platforms) as well as time spent for conducting and supporting inspections.

2025 – 2030 in the Western Balkans:

- ▶ EUR **2.2 million** under option 1
- ▶ EUR **5.7 million** under option 2
- ▶ EUR **10.9 million** under 100% uptake of e-freight information exchange



Impact assessment: environmental impact

Saved natural resources (2025 – 2030)



2025 – 2030 in the Western Balkans:

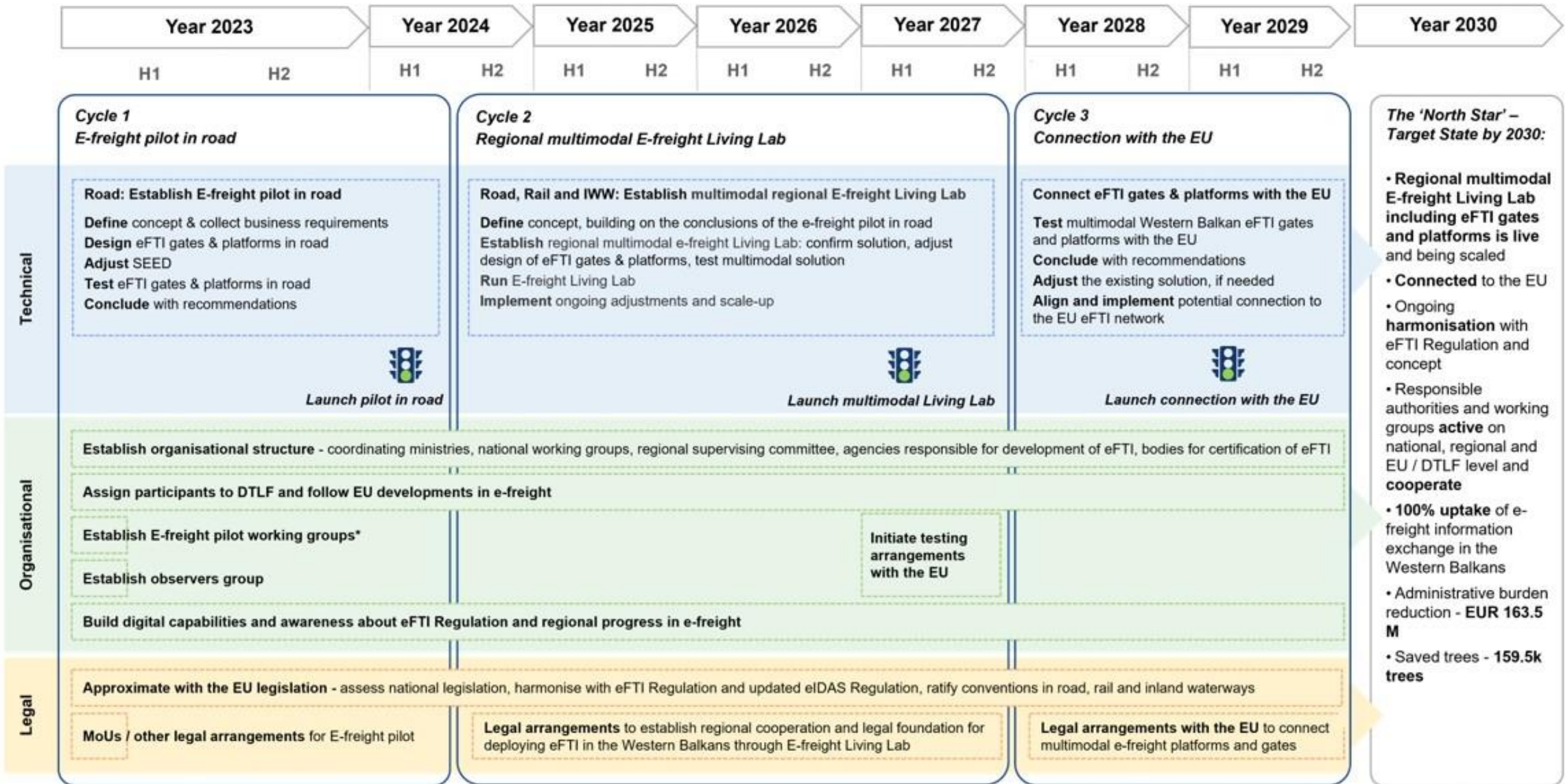
- ▶ **25.9 thousand trees** would be saved under option 1
- ▶ **81.4 thousand trees** would be saved under option 2
- ▶ **159.5 thousand trees** would be saved under 100% uptake of e-freight information exchange

Over 26,000 trees saved annually if all freight information is exchanged only digitally in the Western Balkans while **Central Park in New York City has over 18,000 trees**





Roadmap



- The 'North Star' – Target State by 2030:**
- Regional multimodal E-freight Living Lab including eFTI gates and platforms is live and being scaled
 - Connected to the EU
 - Ongoing harmonisation with eFTI Regulation and concept
 - Responsible authorities and working groups active on national, regional and EU / DTLF level and cooperate
 - 100% uptake of e-freight information exchange in the Western Balkans
 - Administrative burden reduction - EUR 163.5 M
 - Saved trees - 159.5k trees

* Indicatively – Montenegro, North Macedonia and Serbia

Phased approach of e-freight deployment

Areas	Cycle 1: E-freight pilot in road	Cycle 2: Regional multimodal E-freight Living Lab	Cycle 3: <i>Connection with the EU</i>
Transport modes	Road	Road, Rail and Inland Waterways	Road, Rail and Inland Waterways
Multimodality aspect	✘	✓	✓
Cross-border aspect with the EU	✘	✘	✓
Participants	Montenegro, North Macedonia and Serbia	All Regional Partners	All Regional Partners and the EU member states
Period	1.5 years	3.5 years	2 years
Alignment with the EU developments	✓	✓	✓
Potential economic impact	✘	Under 100% uptake rate businesses would save about EUR 7.2 million annually ⁹	Under 100% uptake rate businesses would save about EUR 27.3 million annually ¹⁰

Budget of the roadmap



Total budget of the project: EUR 17.5 million

- ▶ **Cycle 1:** E-freight pilot in road: **EUR 1.5 million**
- ▶ **Cycle 2:** Regional multimodal E-freight Living Lab: **EUR 10.1 million**
- ▶ **Cycle 3:** Connection with the EU: **EUR 5.3 million**

All Cycles: Awareness Building sessions: **EUR 608 thousand**

Conclusions and next steps

Conclusions and next steps



By end of 2022: project to be completed; the final report to be provided

Next year: site visit is planned and included in TCT budget

Next year: TCT with Regional Partners will explore opportunities how to implement pilots

Next year: TCT and Regional Partners will work on transposition of e freight Regulation