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

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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
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?
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

Information requirements
- Follow EU and national legislation regulating freight transport in the EU hinterland

Obligation for competent authorities in EU MS
- Accept the information electronically
- Use the same requirements/technical specifications for accessing and checking information

Option for the economic operators
- Can still choose to use paper documents
- If choosing to present the information electronically, obligation to use certified eFTI platforms or service providers

Common requirements for service providers and platforms
- Platforms’ functionalities
- Service providers’ obligations

One stop shop certification
- Harmonized rules for third-party certification valid EU-wide

Entry into force
Reg EU 2020/1056

Notification of MS

Delegated Acts on eFTI data set & national requirements; Implementing Acts on common rules for authorities

Implementing Acts on eFTI platforms & service providers specifications

Delegated Acts on rules for certification of eFTI platforms & service providers

Application start date

Full application (start of obligation of MS authorities to accept eFTI data)
WHY eFTI?

Multiple ongoing initiatives:
- eFTI, DTLF
- Pilots / Living Labs (FEDeRATED, FENIX, DIGINNO-Proto/DINOCAP 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

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<th>Step</th>
<th>Activity</th>
<th>Timeline</th>
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<tr>
<td>1</td>
<td>EU PRACTICES (ALIGN)</td>
<td>Feb</td>
</tr>
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<td>2</td>
<td>STATE OF PLAY (UNDERSTAND)</td>
<td>Mar - Jul</td>
</tr>
<tr>
<td>3</td>
<td>IMPACT (ASSESS)</td>
<td>Aug - Sep</td>
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<td>4</td>
<td>ACTION PLAN (DEVELOP)</td>
<td>Oct - Nov</td>
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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 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)

Analysed years:

- 2025
- 2028
- 2030
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
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
Year 2023  |  Cycle 1  
---|---
H1 | E-freight pilot in road  
- Road: Establish E-freight pilot in road  
- Define concept & collect business requirements  
- Design eFTI gates & platforms in road  
- Adjust SEED  
- Test eFTI gates & platforms in road  
- Conclude with recommendations  
- Launch pilot in road

Year 2024  |  Cycle 2  
---|---
H2 | Regional multimodal E-freight Living Lab  
- Road, Rail and WW: Establish multimodal regional E-freight Living Lab  
- Define concept, building on the conclusions of the e-freight pilot in road  
- Establish regional multimodal e-freight Living Lab: confirm solution, adjust design of eFTI gates & platforms, test multimodal solution  
- Run E-freight Living Lab  
- Implement ongoing adjustments and scale-up  
- Launch multimodal Living Lab

Year 2025  |  Cycle 3  
---|---
H1 | Connection with the EU  
- Connect eFTI gates & platforms with the EU  
- Test multimodal Western Balkan eFTI gates and platforms with the EU  
- Conclude with recommendations  
- Adjust the existing solution, if needed  
- Align and implement potential connection to the EU eFTI network  
- Launch connection with the EU

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 group active on national, regional and EU 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

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<th>Areas</th>
<th>Cycle 1: E-freight pilot in road</th>
<th>Cycle 2: Regional multimodal E-freight Living Lab</th>
<th>Cycle 3: Connection with the EU</th>
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<td>Transport modes</td>
<td>Road</td>
<td>Road, Rail and Inland Waterways</td>
<td>Road, Rail and Inland Waterways</td>
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<tr>
<td>Multimodality aspect</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
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<tr>
<td>Cross-border aspect with the EU</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
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<tr>
<td>Participants</td>
<td>Montenegro, North Macedonia and Serbia</td>
<td>All Regional Partners</td>
<td>All Regional Partners and the EU member states</td>
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<tr>
<td>Period</td>
<td>1.5 years</td>
<td>3.5 years</td>
<td>2 years</td>
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<tr>
<td>Alignment with the EU developments</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
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<td>Potential economic impact</td>
<td>✗</td>
<td>Under 100% uptake rate businesses would save about EUR 7.2 million annually⁹</td>
<td>Under 100% uptake rate businesses would save about EUR 27.3 million annually¹⁰</td>
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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 planed 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