

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

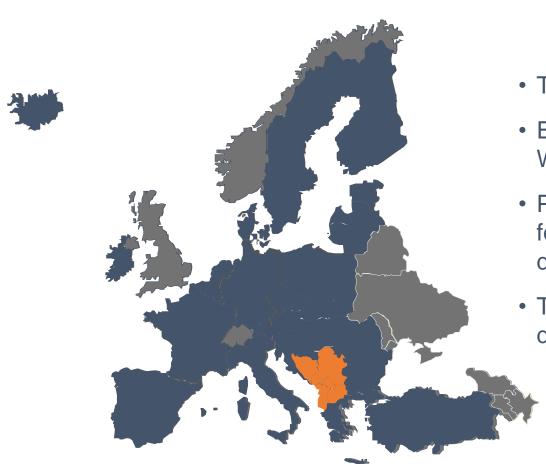
What would be if freight information is exchanged only digitally?



- 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



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

2020 August

Entry into force
Reg EU 2020/1056

2021 August

Notification of MS

2023 February

Delegated Acts on eFTI data set & national requirements; Implementing Acts on common rules for authorities 2023 August

Implementing Acts on eFTI platforms & service providers specifications 2024 March

Delegated Acts on rules for certification of eFTI platforms & service providers 2024 August

date

Application start

2025 August

Full application

(start of obligation of MS authorities to accept eFTI data)

WHY eFTI?







- · 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

of investments



 Completeness 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

Green & Sustainable



- 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

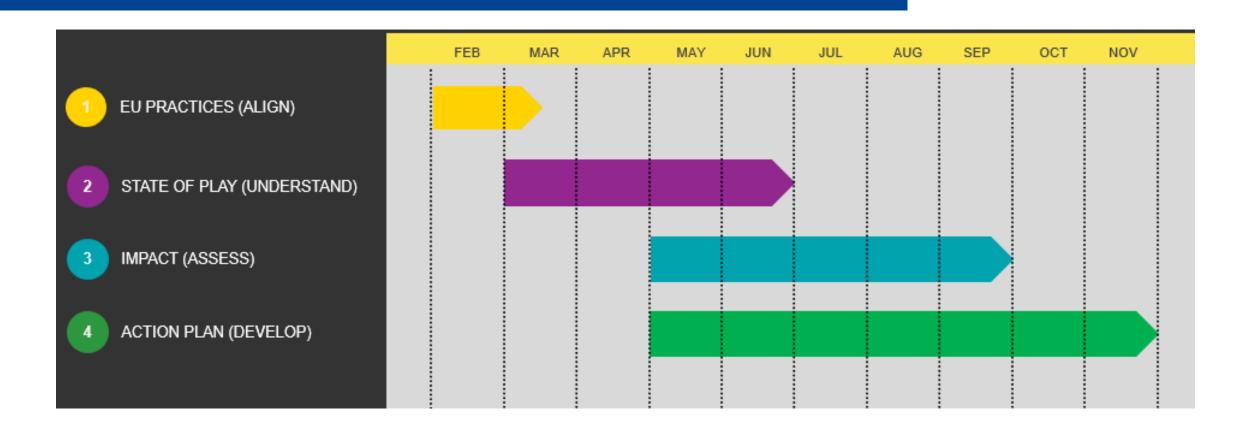
Project summary



- 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:
 - 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 impact

Economic impact on businesses:

- Administrative costs
- Printing and archiving costs
- Compliance costs

Economic impact on authorities:

- Compliance costs
- Certification costs
- Enforcement costs

Analysed years:

- **2025**
- 2028
- **>** 2030

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 EUR5,000 annually
- One-off compliance costs:EUR 7,750
- Payback period: 19 months

Medium company:

- Would save about EUR26,000 annually
- One-off compliance costs:EUR 23,750
- Payback period: 11 months

Large company:

- Would save about EUR75,000 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)
- 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

	Year 2023		Year 2	Year 2024		Year 2025		Year 2026		Year 2027		Year 2028		Year 2029	
	Н1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	
Cycle : E-freig	1 ht pilot in road	d		Cycle 2 Regiona	l multimo	dal E-freigh	nt Living La	b			Cycle 3 Connecti	on with the	EU		
Define concept & collect business requirements Design eFTI gates & platforms in road Adjust SEED Test eFTI gates & platforms in road Define concept & collect business requirements Establish reduces design of eF Run E-freight					ail and IWW: Establish multimodal regional E-freight Living Lab oncept, building on the conclusions of the e-freight pilot in road in regional multimodal e-freight Living Lab: confirm solution, adjust feFTI gates & platforms, test multimodal solution eight Living Lab ent ongoing adjustments and scale-up						Connect eFTI gates & platforms with the E 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	pilot in road					Launch mu	Iltimodal Livi	ng Lab		Launch con	nection with	h the EU	
-		nal structure - coord	::::::::::::::::::::::::::::::::::::::			ups, regional	supervising o	committee, age	encies respon	sible for de	velopment of	eFTI, bodies	for certificati	on of eF	
Assigi	n participants to	DTLF and follow E	U developmer	its in e-freig	ht				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	**********					
Establ	lish E-freight pil lish observers g	lot working groups* group							Initiate testi arrangemen with the EU						
Establ	Build digital capabilities and awareness about eFTI Regulation and regional progress in e-freight														
	digital capabilit	ies and awareness a	bout er II Keç							1					
Build		ies and awareness a		gislation, han	monise with	n eFTI Regula	tion and upd	ated elDAS R	egulation, ratif	y convention	ons in road, ra	ail and inland	waterways		

Year 2030

The 'North Star' -Target State by 2030:

Ongoing

concept
- Responsible

cooperate

trees

harmonisation with eFTI Regulation and

authorities and working groups active on national, regional and EU / DTLF level and

 100% uptake of efreight information exchange in the Western Balkans
 Administrative burden reduction - EUR 163.5

· Saved trees - 159.5k

 Regional multimodal E-freight Living Lab including eFTI gates and platforms is live and being scaled
 Connected to the EU

^{*} 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: Connection with the EU
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 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