



Towards sustainable and smart mobility in WB - role of digitalisation and multimodality

Sixth Technical Cooperation Workshop for the Western Balkans
EU ELECTRONIC FREIGHT TRANSPORT INFORMATION REGULATION AND THE USE OF UN/CEFACT
SEMANTIC STANDARDS AND MULTIMODAL TRANSPORT REFERENCE DATA MODEL IN THE
WESTERN BALKANS

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Content



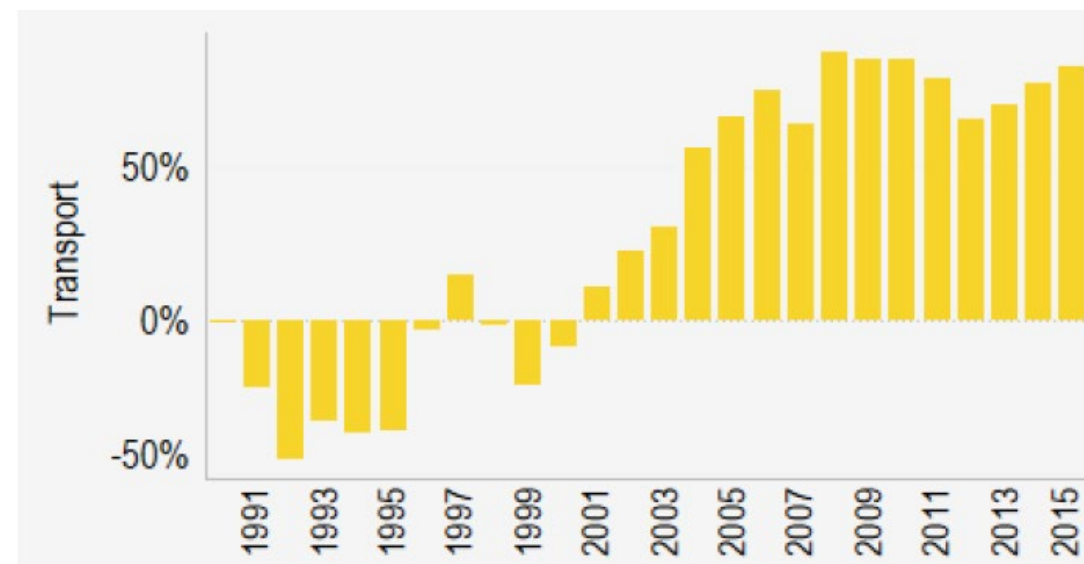
- State of play: Climate change, transport, multimodality
- Sustainable and Smart Mobility Strategy
 - Multimodality
 - Digitalization
- TCT digitalization projects

Climate change



GHG emissions

- Sources of GHG emissions in WB- energy and transport, 2/3 of overall share
- Transport sector
 - 12% share of these emissions in 1990
 - 16% share of these emissions in 2018



Changes in Western Balkans GHG emissions relative to 1990, transport sector

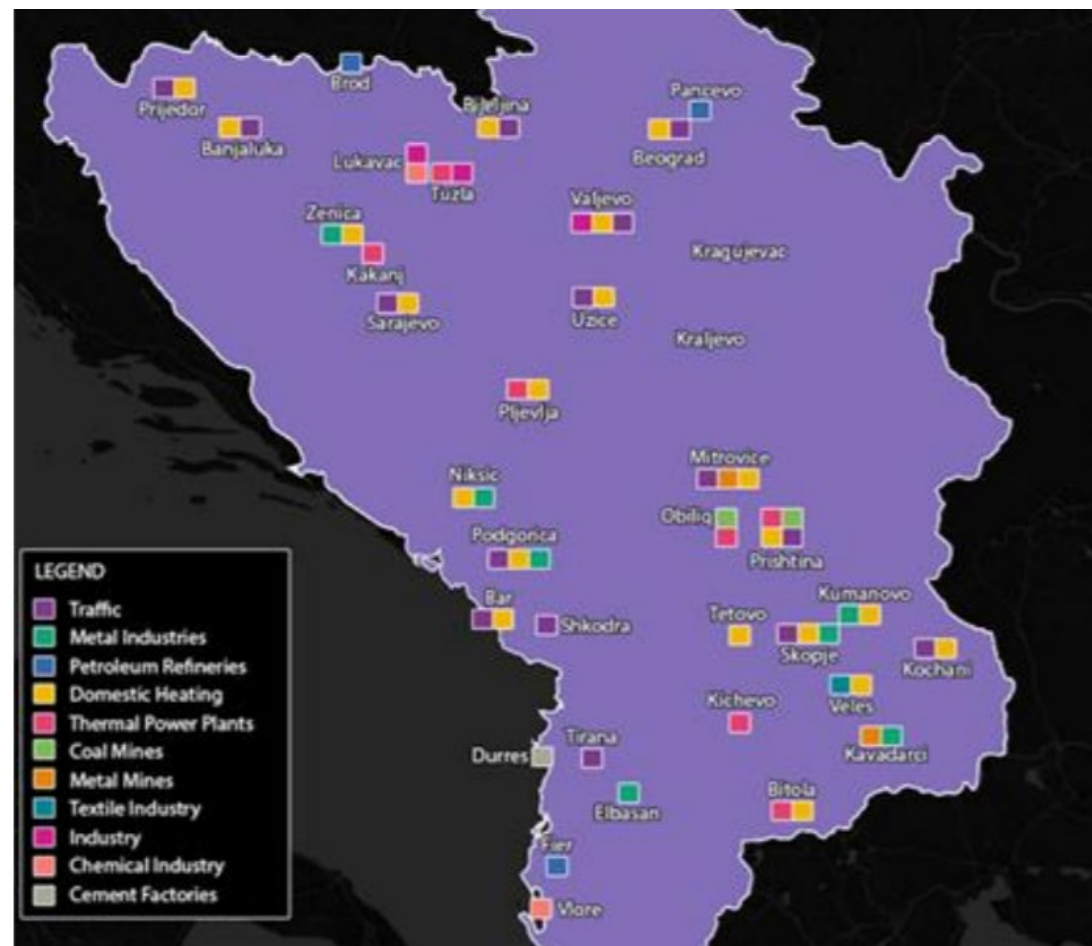
Climate change and transport



On air quality

- Particulate matter (PM10 and PM2.5), SO2, O3 and NO2 concentrations are often above the yearly average, daily maximum and hourly maximum limits
- 8 out of 15 most polluted cities in Europe are in Western Balkans according to the Air Quality report
- Air pollution contributes
 - between 4 per cent and 19 per cent of total premature mortality
 - reduces life expectancy by between 0.4 and 1.3 years

Source: UN environment, "Air Pollution and Human Health: The Case of the Western Balkans", 2019



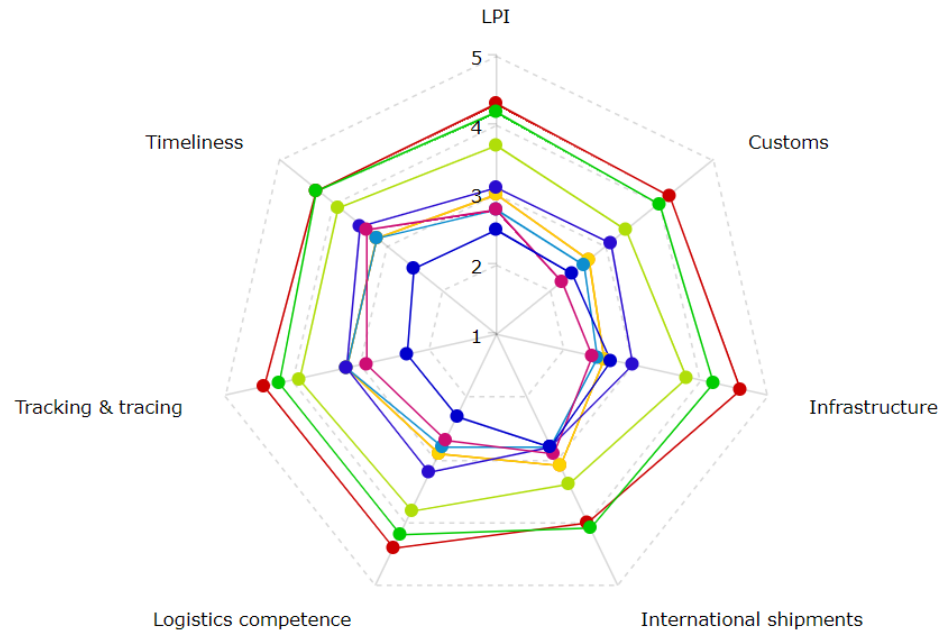
Emission sources in the Western Balkans

Climate change and transport



- The EU has set a target that all Member States (MS) will be **climate neutral by 2050**
 - 90% of pollution comes from road sector
 - 80% of investments in the last 20 years were in the road sector => rail sector underinvested
 - Multimodal transportation on initial stage as well digitalisation
 - Underused inland waterways

Logistics performance index & LSCI



Liner shipping connectivity index,	
Economy /quarter	Q4 2022
Albania	160
Italy	15
Montenegro	152

- Bosnia and Herzegovina 2023
- Bosnia and Herzegovina 2023
- Italy 2023
- Montenegro 2023
- North Macedonia 2023
- Serbia 2023
- Singapore 2023
- Finland 2023
- Albania 2023

Source: <https://lpi.worldbank.org>,
<https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=92/>

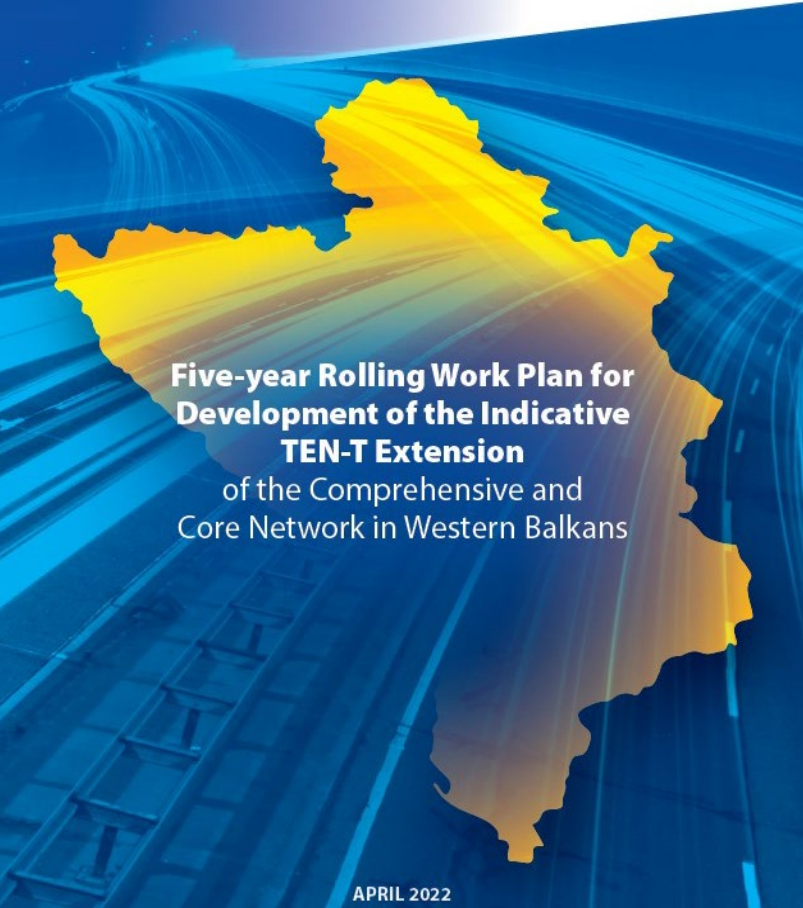
Border crossing delays



- around 26 million hours – almost 3,000 years – of truck drivers' time are wasted at border crossings in the Western Balkans.
- reducing average wait times at the border by 3h - > add 3% to GDP in each of the six economies over the medium term.

- Source: World Bank: More Economic Integration Would Help Unleash the Potential of the Western Balkans

Investment needs

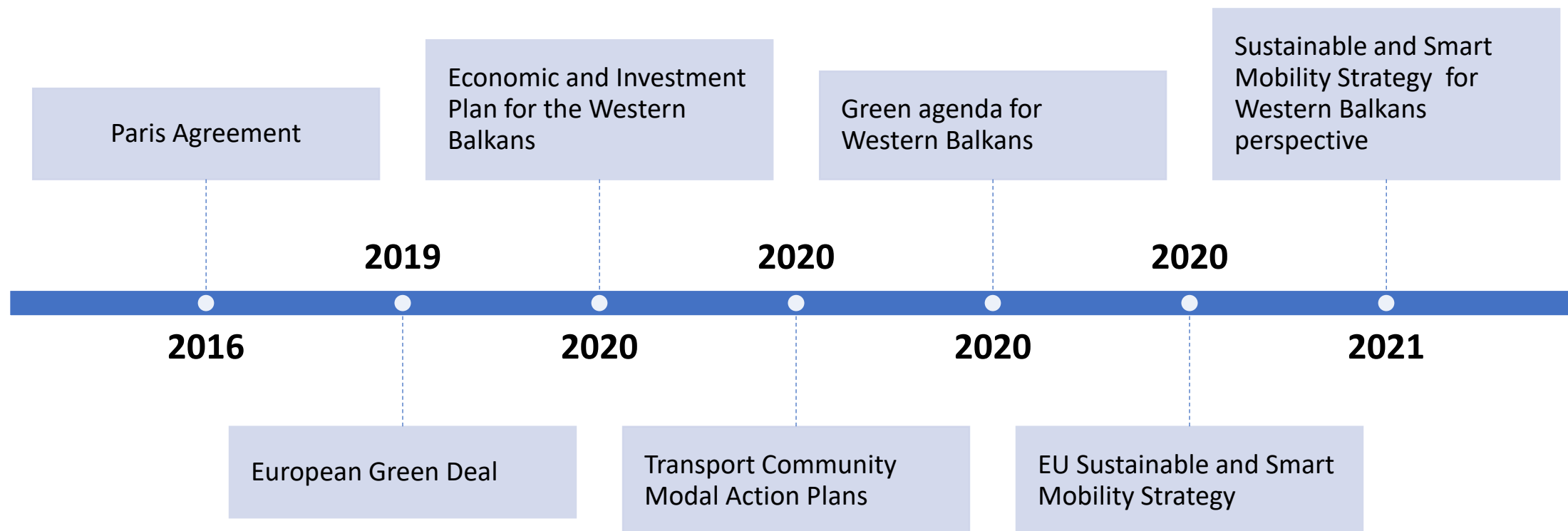


**Five-year Rolling Work Plan for
Development of the Indicative
TEN-T Extension**
of the Comprehensive and
Core Network in Western Balkans

APRIL 2022

- 74 transport projects (26 roads, 23 railway, 2 for ports, 1 IWW & 2 for airports)
- Total investment needed is €23 billion,
 - €8.67 billion for mature projects
 - €14.33 billion for projects under preparation
- Funding needs
 - road sector €15.46 billion,
 - rail € 7.37 billion,
 - inland waterways € 8.1 million,
 - ports € 26.3 million
 - & airports € 138.4 million

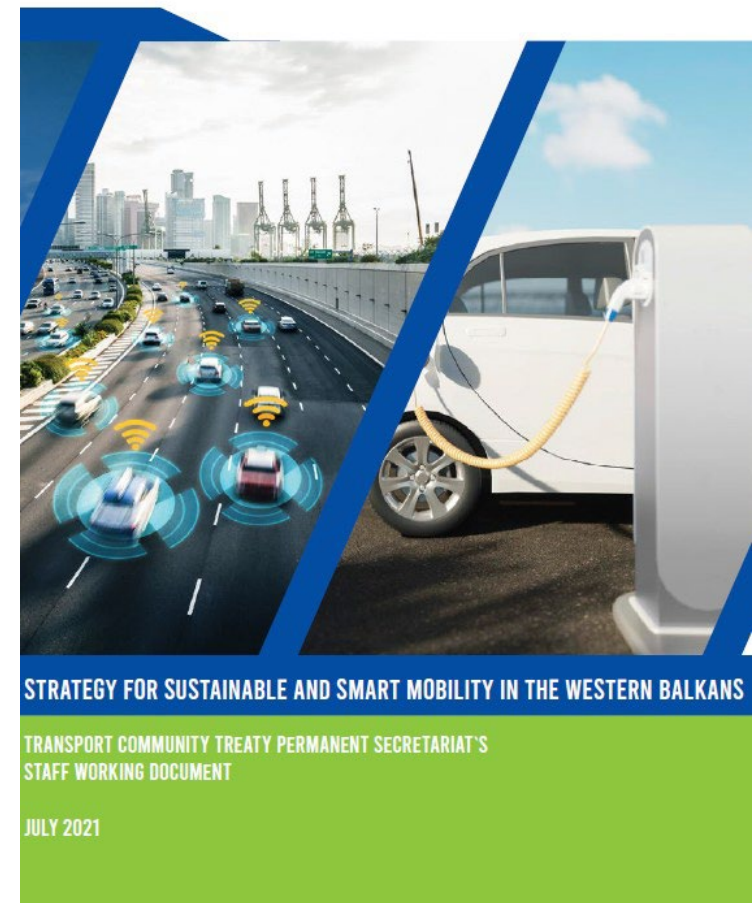
Policy framework



Sustainable and Smart Mobility Strategy for the Western Balkans



- The Sustainable and Smart Mobility Strategy for the Western Balkans (SSMS) was developed to **mirror the European Union's (EU) Sustainable and Smart Mobility Strategy** .
- **67 Actions in 10 Flagship** that are grouped in three objectives for mobility:
 - Sustainable mobility,
 - Smart mobility, and
 - Resilient mobility.
- The Actions include a wide variety of policy and investment initiatives - **move towards a sustainable transport system**.
- The purpose of the SSMS for the WB6 -**provide the region with a roadmap for the decarbonisation and digitalisation of its transport sector**.



SSMS WB Objectives & Roadmap



Flagship 1 - boosting uptake of zero-emission vehicles, renewable & low-carbon fuels and related infrastructure

Flagship 2 - creating zero-emission airports and ports

Flagship 3 - making interurban and urban mobility more sustainable and healthy

Flagship 4 - greening freight transport

Flagship 5 - pricing carbon and providing better incentives for users



Flagship 6 - making connected and automated multimodal mobility a reality

Flagship 7 - innovation, data and AI for smart mobility



Flagship 8 – working towards the single market

Flagship 9 - making mobility fair and just for all

Flagship 10 - enhancing transport safety and security



STRATEGY FOR SUSTAINABLE AND SMART MOBILITY IN THE WESTERN BALKANS

TRANSPORT COMMUNITY TREATY PERMANENT SECRETARIAT'S
STAFF WORKING DOCUMENT

JULY 2021

Roadmap Multimodal measures



FLAGSHIP 4 - GREENING FREIGHT TRANSPORT

Improving multimodality through transposition of intermodal/multimodal legislative framework	L	L- MoT, TCT Secretariat support	2025
Assessment of bottlenecks in modal interconnections and the current incentive system in place	S	S - TCT Secretariat	2023
Ensuring road/rail connections to TEN-T ports/airports, freight terminals , and removing bottlenecks for intermodal transport	S, I	MoT	2025
Construction of intermodal terminals and purchase of related equipment	S, I	MoT	2025
Participation in the NAIADES III Programme as observers, potential participation in Inland waterway and MoS Projects through CEF II	P, I, S	MoT, TCT Secretariat coordination	2021 -2027
Rail Corridor Initiative – Western Balkans to join the Rail Freight Corridors.	L, P	MoT, IM's	2022 - 2027

Roadmap Smart mobility



SMART MOBILITY

FLAGSHIP 6 - MAKING CONNECTED AND AUTOMATED MULTIMODAL MOBILITY A REALITY

Enable B2A multimodal data exchange through implementation of the e-FTI Regulation and Maritime Single Window environment	L	MoT, TCT Secretariat coordination	2025
Use of modern software at border crossing points /common crossing points (such as e-qms, NCTS, SEED, NSW, Galileo app)	I	CEFTA partly MoT, Customs administrations TCT Secretariat in coordination with CEFTA	2022-2025

Roadmap smart mobility



Initiation of deployment of ERTMS through transposition of EU directives, TSIs, preparation of project documentation and deployment	L, S, I	MoT, Infrastructure managers, TCT Secretariat support	2022-2025
Deployment of ITS through transposition of EU directives, standards, preparation of project documentation and deployment	L, S, I	MoT, road authorities, TCT Secretariat coordination and prioritisation	2022 - 2025
Initiation of deployment of VTMS and e maritime services through transposition of EU directives, standards, preparation of project documentation and deployment	L, S, I	MoT, Maritime agencies, Port authorities, TCT Secretariat support	2025
Initiation of deployment of RIS through transposition of EU directives, standards, preparation of project documentation and deployment	L, S, I	MoT, Inland Waterway agencies, Port authorities, TCT Secretariat coordination and prioritisation	2025
Deployment of Mobility as a Service (pax and freight) applications and digital transport corridors, smart mobility solutions and multimodal travel information services	S, I	S - TCT with external help I - MoT, port operators, rail operators, road operators, TCT Secretariat support, border agencies	2022-2026
Deployment of Mobility as a Service (pax and freight) applications and digital transport corridors, smart mobility solutions and multimodal travel information services	P, I	P-RCC, Ministry in charge of telecommunications, in coordination with MoT I- Ministry in charge of telecommunications, in coordination with MoT	2022-2026
Enable environment for multimodal ticketing in passenger transport and transpose relevant legislation.	L	MoT, TCT Secretariat support	To be considered under review of TCT Annex 1
Assess the needs for setting up agencies or other bodies to support safe, smart and sustainable road transport operations	S	TCT Secretariat with MoT	2022 – 2023
Transpose the EU legal framework on the approval of connected and automated vehicles	L	MoT, TCT Secretariat support, in cooperation with the Ministry of telecommunications	To be considered under review of TCT Annex 1

Strategy implementation

Regulation (EU) 2020/1056 on electronic freight transport information



- **AIM OF THE REGULATION**

- The regulation establishes a legal framework that allows economic operators to share with enforcement authorities information in an electronic format concerning the transport of goods by road, rail, inland waterways and air
- Electronic freight transport information (eFTI) is a set of data elements processed electronically for the purpose of exchanging regulatory information among economic operators (mainly companies involved in freight transport and logistics) and between operators and competent authorities.
- Operators are not obliged to make regulatory information available electronically to a competent authority. However, when they choose to make this information available electronically, operators must:
 - use data processed on a certified eFTI platform and, if applicable, by a certified eFTI service provider;
 - make data available in machine-readable format via an authenticated and secure connection to the data source of an eFTI platform, and, when the data is requested for inspection, communicate to the authorities a unique identifying link to that data;
 - present data in human-readable format if requested by the competent authority, on the spot, on the operator's device.

Project summary e-freight



- **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

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)**

Benefits and costs



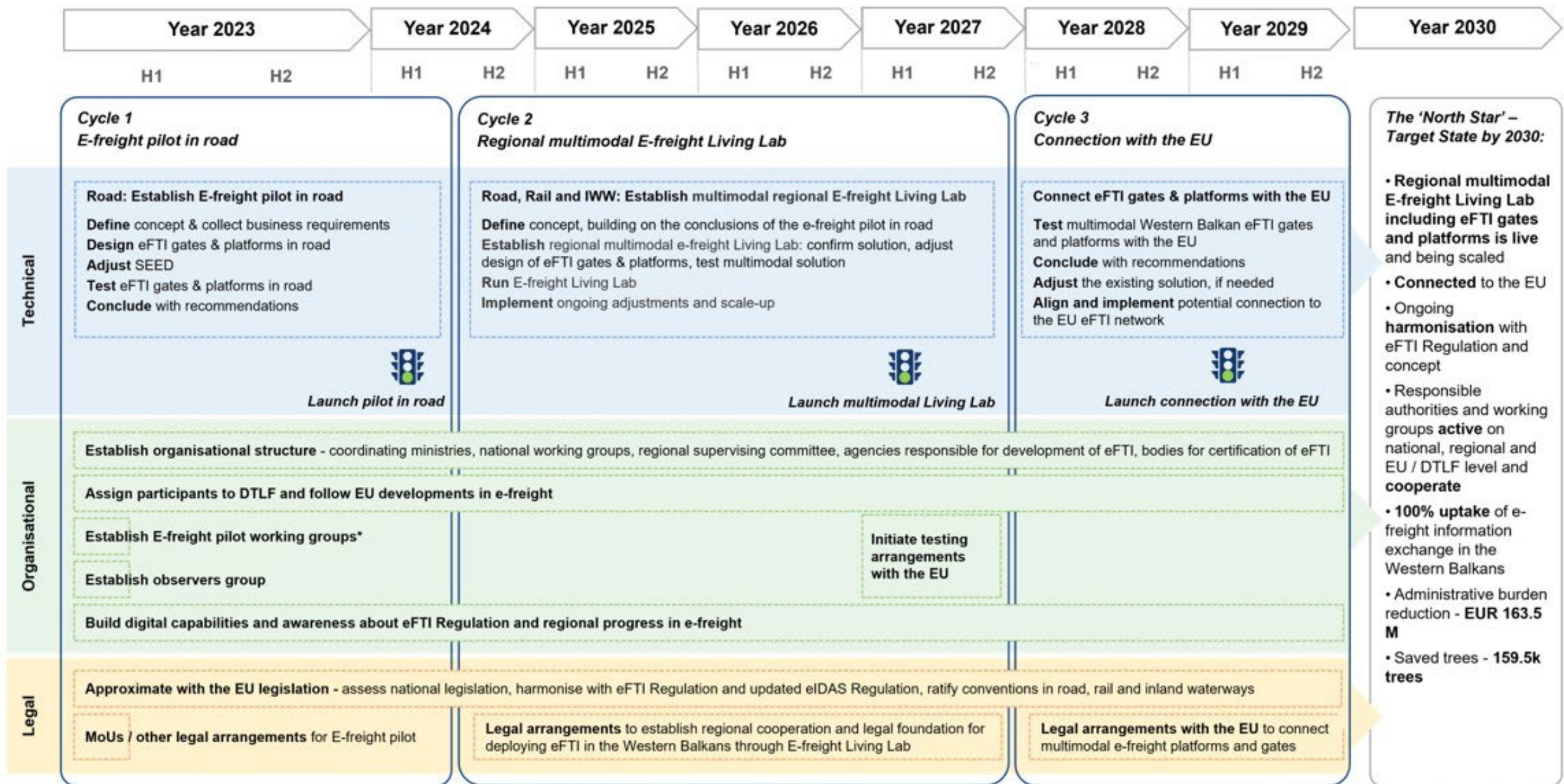
Administrative burden reduction: salaries of the employees working on freight related documents preparation.

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
- ▶ Full digitisation would **save more than 1/3** of current expenses on administrative matters (EUR **467.7 million** under baseline option)

Cost for authorities

- ▶ If authorities developed eFTI gates and platforms from the beginning, they would spend EUR **18.6 million** in total under option 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



* Indicatively – Montenegro, North Macedonia and Serbia

Current status



- On our Connectivity Summit 2023, 15-16 May, Ministers of Transport and director of Customs endorsed Joint CEFTA-TCT Declaration “Taking Forward the Green Lanes”
- Several possible instruments for financing: New Growth plan, Sustainable and Safe Transport Programme, TTFP

Way forward



- Piloting the 1st phase
- Transposition of Regulation (EU) 2020/1056 on electronic freight transport information
- Agreement on data sets and data exchange
- Ratification of international conventions

Thank you for your attention