

# Technical Assistance for the Deployment of Smart and Sustainable Mobility in the Western Balkans

CONNECTA-TRA-CRM-REG-MOB-07

9th Road Technical Committee 05/10/2022 Belgrade



### **Project Synopsys**

- Project title: Technical Assistance to Connectivity in the Western Balkans (CONNECTA)
- Sub-project title: Technical Assistance for the Deployment of Smart and Sustainable Mobility in the Western Balkans
- Contracting Authority: European Commission Directorate-General for Neighborhood Enlargement Negotiations (DG NEAR)
- Area: Connectivity Transport Reform Measures
- Project followed by: Transport Community Permanent Secretariat
- Project implemented by: Mott MacDonald Ltd. (UK) in Consortium with WYG, CeS COWI, TRENECON, SYSTEMA
- Responsible CONNECTA Transport Key expert: Giorgos Xanthakos
- Project Manager: Danijel Vučković
- Project team: 29 experts
- Project duration: 16 months (Mar 2022 June 2023)



### Purpose & Objectives & Expected Results

Purpose/Scope of TA

Development of **strategic documentation** needed for the deployment of smart and sustainable mobility in the Western Balkans

**Objectives** 

The main objective is to enhance mobility by focusing on sustainability and smart transport in the region, especially along indicative extensions of TEN-T road network in Western Balkans.

The specific objective of this TA is to:

- Component 1 Assess impact of the Sustainable and Smart Mobility Strategy for the Western Balkans and
- Component 2 Develop strategic framework for deployment of e-charging infrastructure in the Western Balkans

**Expected results** 

#### Component 1

- Baseline scenario
- Different impact scenarios
- Action Plans including targets for each Regional Party Component 2
- Current state of play/plans for deployment of e-charging stations
- Proposal on e-charging infrastructure needed to boost electric vehicle demand up to 2030, 2040, 2050
- Contractual/Business models
- Roadmap for each regional partner on extending the e-charging stations



## **Updated Workplan**

Task TOR		Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
	Mobilization - Inception period (start on December 1, 2021)																	
	INCEPTION REPORT			t														
i	Determining Baseline Scenario and analyzing Sustainable and Smart Mobility Strategy in the Western Balkans roadmap																	
ii	Development of different impact scenarios																	
iii	Preparation of Action Plans and national targets for each Regional Party																	
	REPORT 2: Impact assessment and cost effectiveness analysis of the Sustainable and Smart Mobility Strategy for the WB															k		
i	Assessment of current plans for deployment of e-charging stations along the indicative extension of the TEN-T netwrok in the WB																	
ii	Proposal on e-charging infrastructure on the TEN-T netwrok in the WB needed to boost electric vehicle demand up to 2030, 2040, 2050																	
iii	Identification of the potential contractual/business models (public, private, public-private partnership)																	
iv	Preparation of a Roadmap for e-charging stations, for each Regional Partner along the indicative extension of the TEN-T in the WB																	
	REPORT 3: Strategic Framework for deployment of e-charging infrastrucutre in the WB															k		
	Preparation of Draft Final Report (consolidation of key findings from all activities)																	
	DRAFT FINAL REPORT																	
	Review and comments by stakeholders																	
	FINAL REPORT																	
	Approval by Contracting Authority																	
	Workshops					•	>	•	>	<b>~</b>	4	<b>&gt;</b>		<b>*</b>	>		-	<b>-</b>
	Progress Reports			•	•	• <	•	•	<b> </b>	•	•	• <	•	<b>\</b>	> <	•	•	



### Sustainable, smart, and resilient mobility

In practical terms, sustainable, smart, and resilient mobility in Western Balkans by 2050 means:

- **zero-emission vehicles** and available **alternative fuels infrastructure** on Western Balkans <u>roads</u>, railways, ports, and airports.
- more travellers using fast railway connections between regional urban areas across a wider region.
- integrated multimodal climate neutral solutions in the cities.
- efficient, punctual, and competitive rail and waterborne freight transportation.
- More reliable information to users and decision makers on the environmental impact of transport.
- seamless travel across the region using sustainable mobility choices, including <u>single tickets</u> for multimodal transport.
- Digitally connected supply chains balanced <u>across modes</u>, and electronic data exchange without delays.
- Safe and fast travel, and a quality network ensured by TEN-T standards and services, enabling resilience to climate change effects (such as floods).
- a single interoperable transport market without physical and non-physical barriers for doing business and travel.
- a workforce adjusted to the changing digital environment with high level of protection of worker's rights.



### **Targets**

- 1) By 2030, at least 10 per cent of cars and 5 per cent of lorries in operation, to be zero-emission
- 2) By 2050, 90 per cent of all cars, vans, buses as well as new heavy-duty vehicles to be zero-emission.
- 3) From 2022, all newly constructed railway lines to be electrified.
- 4) By 2050, greenhouse gases emissions from waterborne transport to be largely eliminated and airports to be made zero -emission nodes.
- 5) By 2023, InterCity Rail transport between capitals in the Western Balkans, on existing connections, to be reestablished
- 6) By 2025, the Regional Rail Market to be opened.
- 7) By 2030, rail freight traffic to increase by 20 percent. This to double by 2050
- 8) By 2030, transport by inland waterways and short sea shipping to increase by 15 per cent. This to increase by 30 percent by 2050
- 9) By 2035, scheduled collective travel under 500 km, within the Western Balkans, to be carbon-neutral
- 10) By 2035, the Core Rail Network to be compliant with TEN-T standards.
- 11) By 2035, regional capitals and major urban nodes to be transport emission free.
- 12) By 2035, rail and waterborne-based intermodal transport to compete on equal footing with road-only transport in the Western Balkans.
- 13) By 2050, All external costs of transport within the Western Balkans to be covered by the transport users.
- 14) By 2035, seamless multimodal passenger transport to be facilitated by integrated electronic ticketing and freight transport to be fully digitalised.
- 15) By 2040, automated mobility to be deployed on a large scale.
- 16) By 2035, A multimodal Trans-European Transport Network equipped for sustainable and smart transport with high-speed connectivity to be operational for the core network, and, by 2050 for the comprehensive network.
- 17) By 2050, the death toll for all modes of transport in the Western Balkans to be close to zero.
- 18) By 2050, all process related to transport of dangerous goods (production, packing), as well as transport per se to be safe, eco-friendly, and more sustainable.

MACDONALD CONNECTA CONSORTIUN

### Component 1 - Assess impact of the SSM Strategy for the WB

- Methodologies for the implementation of component stages, <u>developed</u>
- Assessment of baseline situation in the Western Balkans in transport, developed but not submitted
- Assessment of Business As Usual scenario including transport modelling and GHG assessment, on going
- Impact assessment (qualitative and where possible quantitative) of Flagship
  Actions included in the Strategy for Sustainable and Smart Mobility in the
  Western Balkans (SSM), developed more than 50%. Set of activities, updated
  SSM Action Plan, is under development for implementation of all measures
  until 2030, 2040, 2050, on going
- Multi-criteria analysis of the Flagship actions (69 actions in 10 areas) to prioritize key Actions and needed activities, definition of weighing criteria and development of simplified CBAs, on going
- EV penetration modelling scenarios: Business As Usual, Do-something(s) moderate, Decarbonisation scenarios (targets)
- Shifting of transport to the green transport modes
- Energy consumption and GHG emissions modelling



#### Component 2 - Strategic framework for e-charging infrastructure in WB

- D1 "Assessment of the current state of play/plans for deployment of e-charging stations along the extension of TEN-T network in the Western Balkans": Second submission to TCPS: Submitted on 08 August 2022. Feedback received only from the TCPS and PE Roads of Serbia and our team addressed those comments but not yet submitted to the TCPS.
- D2 "Proposal on e-charging infrastructure on the TEN-T network in the Western Balkans needed to boost electric vehicle demand up to 2030, 2040, 2050 ": Postponed to mid-December 2022 due to the replacement of the transport planner
  - Review of trends in identification of EVCS locations in EU and internationally: 1<sup>st</sup> draft ready
  - Transport model development: On going
  - Identification of additional EVCS locations (2030, 2040, 2050): <u>Not started</u> (Methodology: under development)
  - Assessment of impacts (from the development of EVCS): Methodology prepared and the energy consumption and GHG emission model developed, and the outputs from the trasnport modeling need to be incorporated once finalized.



#### Component 2 - Strategic framework for e-charging infrastructure in WB

- D3 "Identification of the potential contractual/business models (public, private, public-private partnership": End of December 2022
  - Data collection (on: business models used/ foreseen per RP and internationally; EVCS CAPEX and OPEX per RP): On going
  - Based on the so far collected data the ToC of C2/D3 is proposed to be modified (to reduce repetitions)
  - Methodology for cost assessment of potential business models at 2030, 2040, 2050: On going
  - Partial drafting of D3: Started (on going)
- D4 "Preparation of a Roadmap for each Regional Party on extending the echarging stations on the extension of the TEN-T network in the Western Balkans": End of February 2022
- D5 "Report of Component 2 Strategic framework for deployment of e-charging infrastructure in the Western Balkans": End of March 2022



#### **Contact information**

Danijel Vučković

**Project Manager** 

email: danijel.vuckovic@connecta-ta.eu

mob. +381 60 63 555 00

skype: vuckopk79





**Any comments/suggestions?** 

