

Adriatic Ionian Region Masterplan for
Transport Interconnectivity (AIM-TI)

Technical Assistance for the development of the Masterplan

Phase 2

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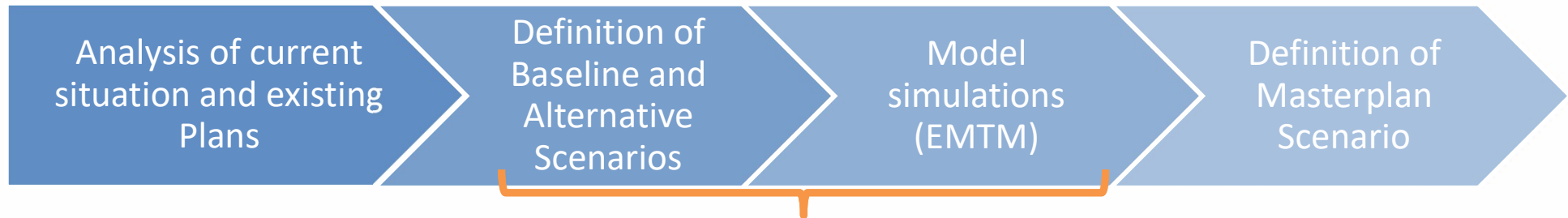
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Objectives and approach (1/2)

OVERALL MASTERPLAN WORKFLOW

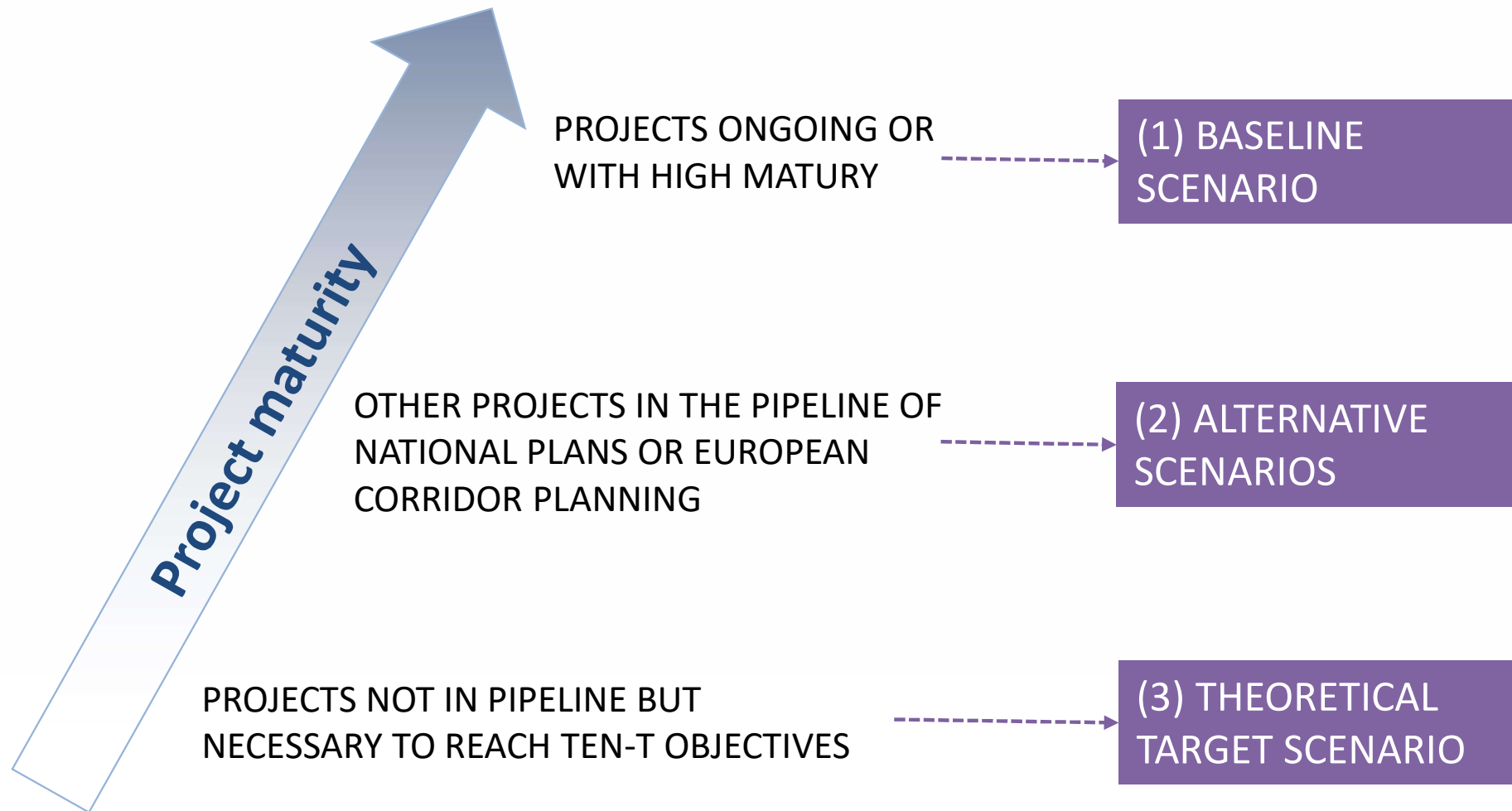


- The present document is aimed at presenting the approach and a definition of the alternative scenarios to be considered in the EMTM (EUSAIR Multimodal Transport Model) simulations.
- The **Baseline scenario** was defined by selecting the main projects with a national/macroregional relevance which are either under construction (ongoing) or planned and financed (high level of maturity).
- **3 alternative scenarios** will be defined by pointing out:
 - The infrastructural design (nodes and networks), in order to feed the simulations of the EMTM – the rail-road simulation model
 - The implemented policies, in order to feed qualitative assessments



Objectives and approach (2/2)

Analysis of existing plans and projects



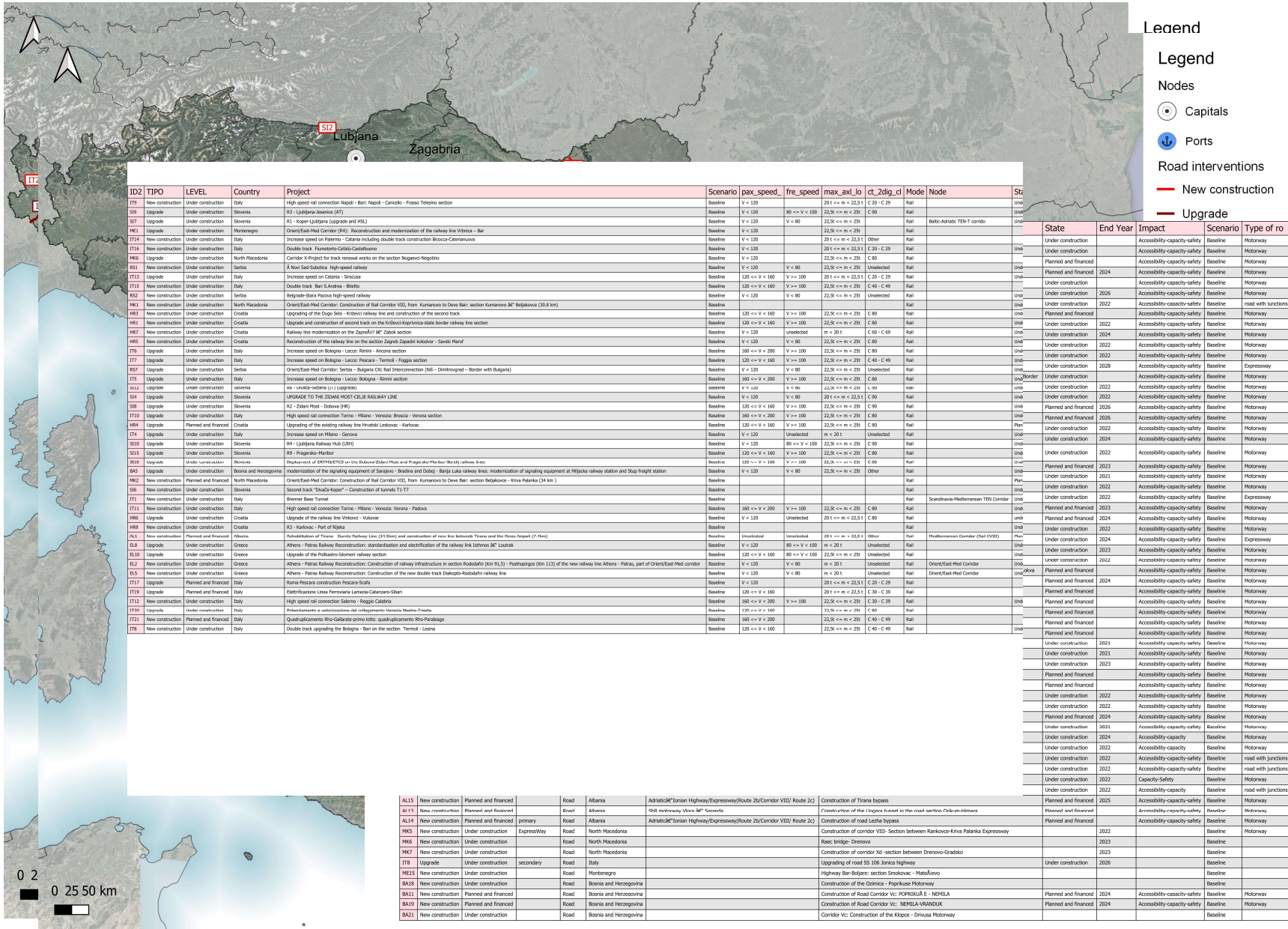
Baseline scenario infrastructural design (road)



Baseline scenario infrastructural design (rail)



Baseline scenario design (all modes)



Review of existing strategic documents

Considering different “strategic designs”:

- Revised TEN-T corridors
- The former Pan-European Corridors and the current proposals of TEN-T extensions in the Western Balkans

the results obtained by overlapping them in the EU and particularly in the Western Balkans outlines a network of priority corridors.

This represents the **base to draw down the EUSAIR Masterplan scenario** for detailed road and rail network development in every EUSAIR country.

However, further analyses have been carried out to define paths and areas to be connected through a **high-performance network**



Definition of Alternative scenarios

Scenario	South-North	East-West	Intra-regional connections
Focus on <u>road transport</u>	A.1		A.1
Focus on <u>intermodality</u>	A.2	B	A.2 and B

SCENARIO A.1

- increase of the possibilities of provision of North-South connections across the Region
- flexibility enabled by the road modality, therefore on improvements on the road network, both in the North-South axis and for the main internal connections

SCENARIO A.2

- increase of the possibilities of provision of North-South connections across the Region
- improvements on the rail network, on rail connections to ports and on IWW, both in the East-West axis to foster intermodal route and transport

SCENARIO B

- The increase of the possibilities of provision of East-West connections across the Region
- improvements on the rail network, on rail connections to ports and on IWW, both in the East-West axis to foster intermodal route and transport

The improvement of intra-regional connections is included in both scenarios, but in scenario A.1 it will be focused on road transport, whereas in scenarios A.2 and B it will be focused on intermodality



Scenario A.1

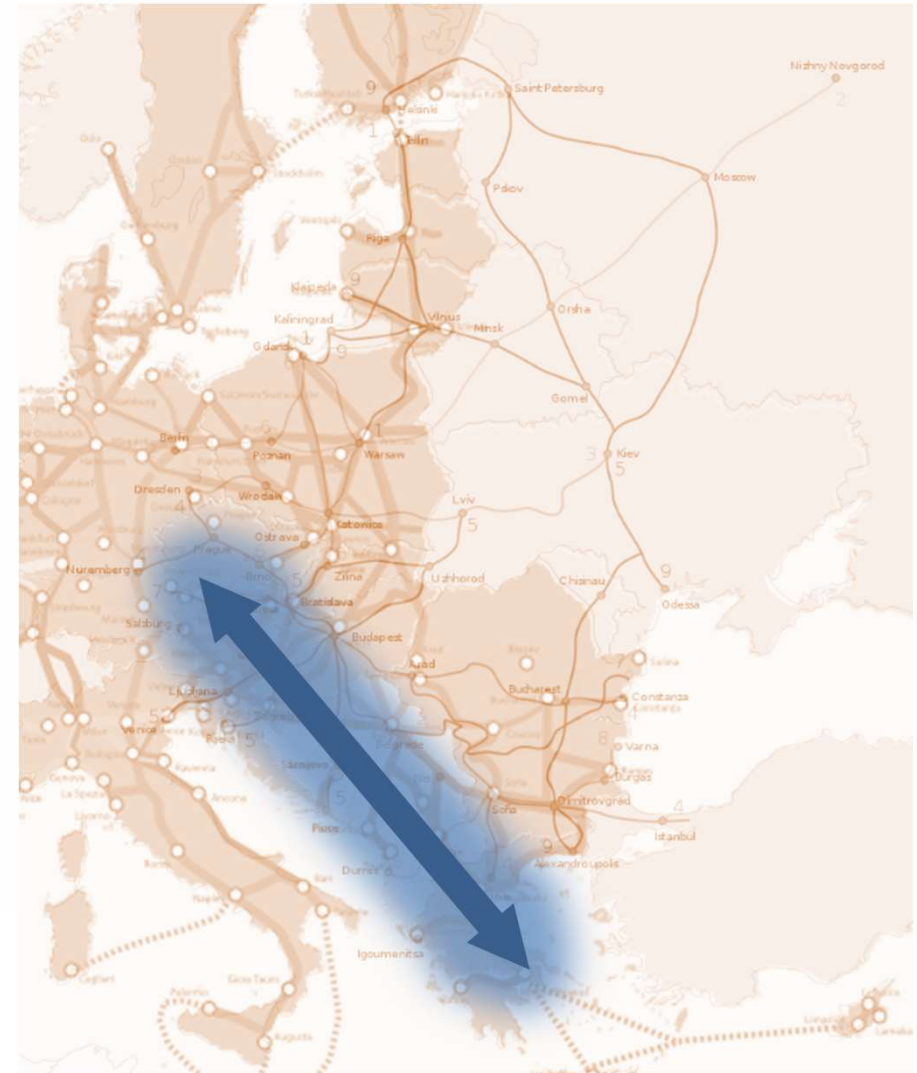
OBJECTIVES

Infrastructural design

Improving main North-South and internal road connections (***selected based both on the different existing corridor concepts and with a national focus***)

Policies

- Speeding up road border crossings via one stop shops and uptake of the GREEN LANE initiative
- Boosting the uptake of alternative fuels zero-emission vehicles for freight transport, for private transport and for LPT transport
- Improving road connections to ports and airports
- Deployment of ITS
- Bringing the existing ports, rail and IWW network to minimum standards
- Improvement of road and rail safety



Scenario A.2

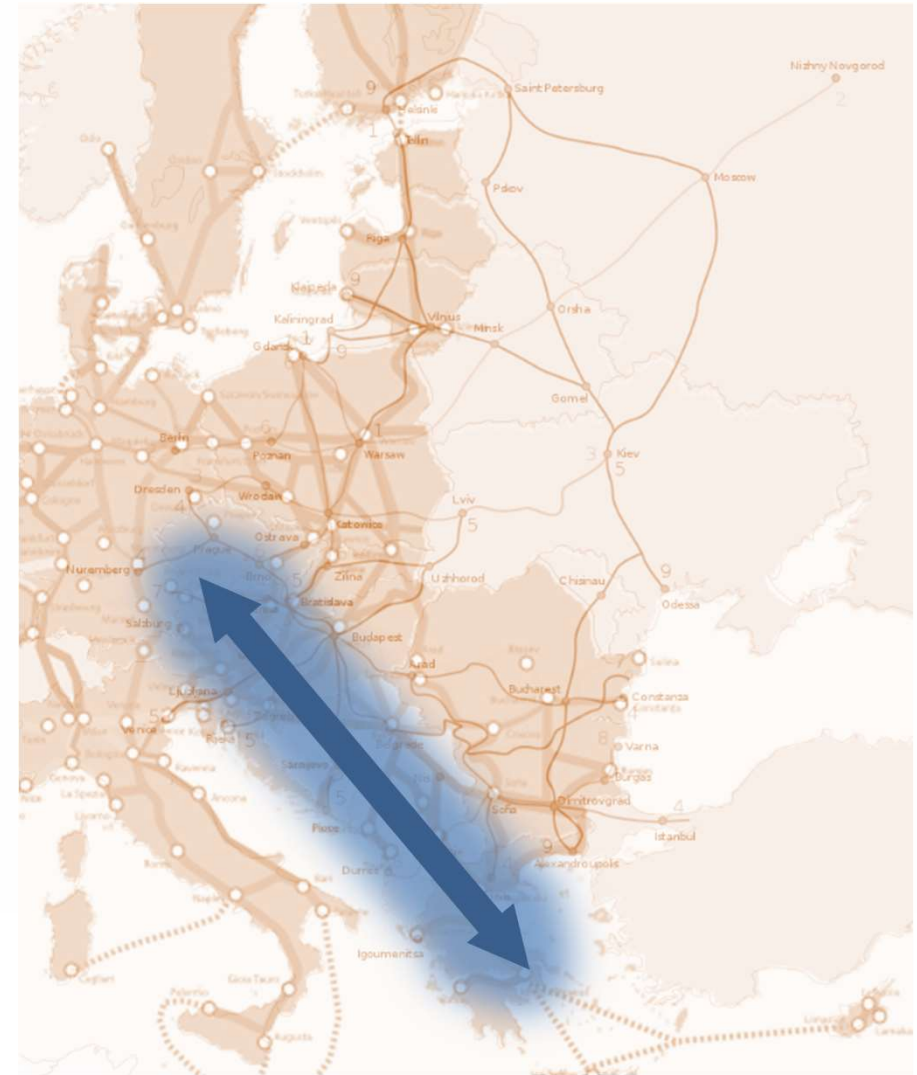
OBJECTIVES

Infrastructural design

Improving main North-South and internal rail connections (***selected based both on the different existing corridor concepts and with a national focus***)

Policies

- Greening ports and airports
- Greening fleets
- Speeding up procedures in ports
- Speeding up rail border crossing via one stop shops and uptake of the GREEN LANE initiative
- Extensive deployment of ERTMS and better management and coordination of international rail traffic
- Deployment of MaaS and Multimodal ticketing
- Improving rail connections to ports and airports
- Improvement of road safety (and rail crossings safety)



Scenario B

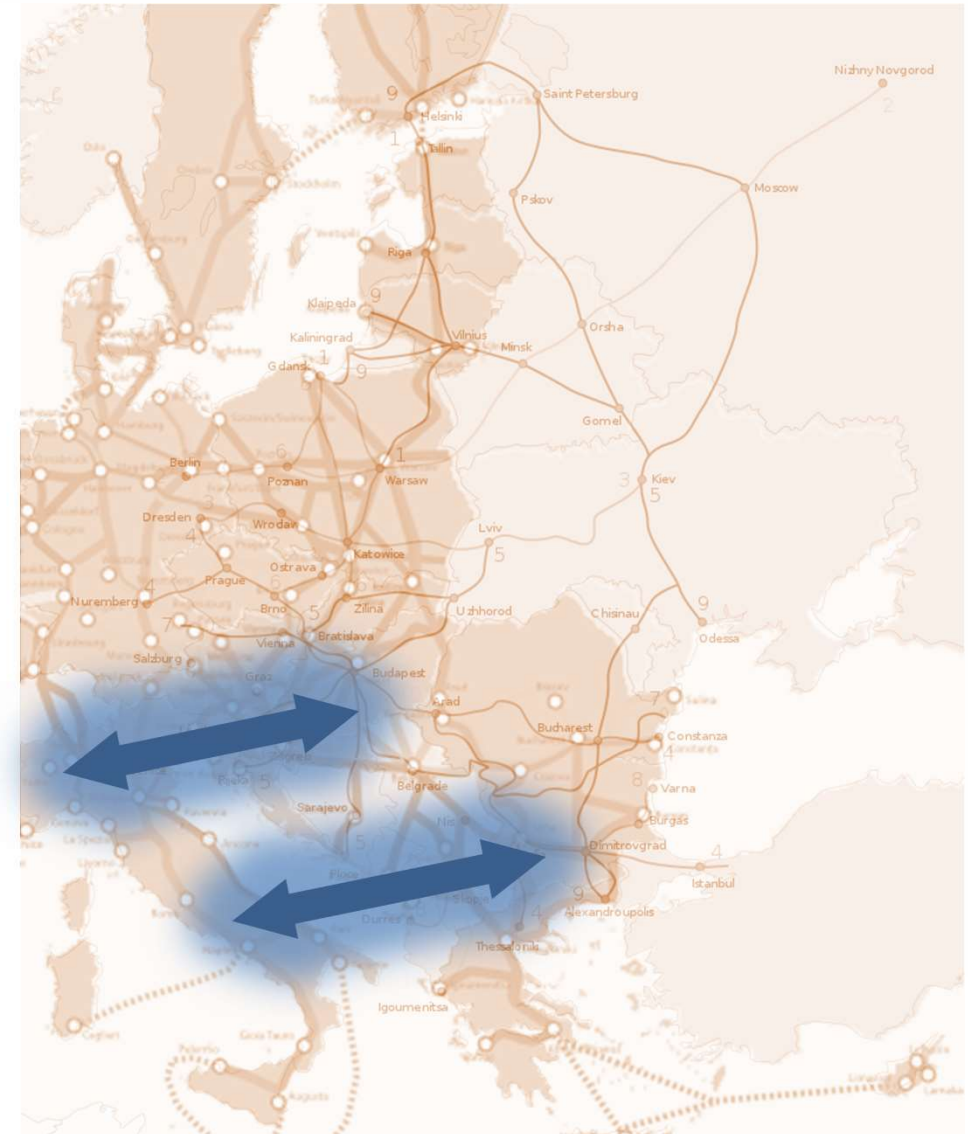
OBJECTIVES

Infrastructural design

Improving main East-West and internal multimodal connections (rail networks, maritime connections, IWW connections) (***selected based both on the different existing corridor concepts and with a national focus***)

Policies

- Greening ports and airports
- Greening fleets
- Speeding up procedures in ports
- Speeding up rail border crossing via one stop shops and uptake of the GREEN LANE initiative
- Extensive deployment of ERTMS and better management and coordination of international rail traffic
- Deployment of MaaS and Multimodal ticketing
- Improving rail connections to ports and airports
- Improvement of road safety (and rail crossings safety)

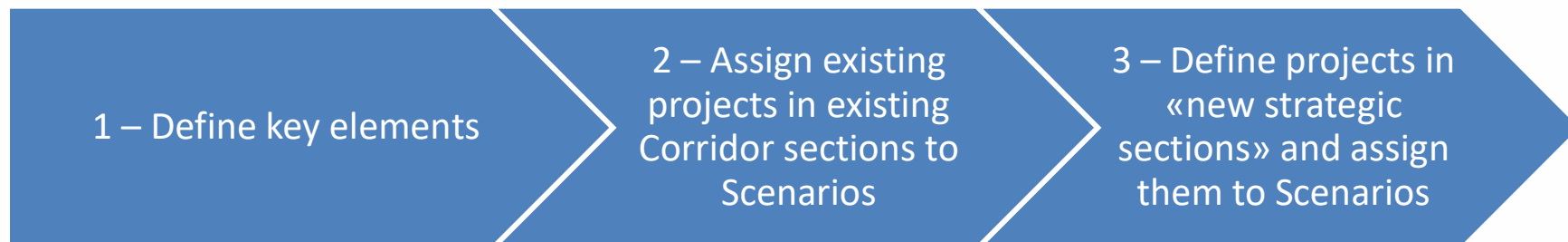


Methodology of the Masterplan infrastructural design

Approach

IMPORTANT!

Infrastructural design does not - at this stage – include considerations on the expected demand. This is instead estimated by the traffic model simulations and its results will feed the overall assessments leading to the final definition of Masterplan Scenario.



Methodology of the Masterplan infrastructural design

Logical steps

STEP 1 Identification of key elements

1.1

- Awareness of the geographical scope

1.2

- Identification of relevant nodes

1.3

- Identification of existing network

1.4

- Identification of strategic routes (Corridors)

1.5

- Identification of existing relevant projects

STEP 2

2

- Assign existing projects to Scenarios A.1, A.2 and B

STEP 3 Assign new projects to Scenarios A.1, A.2 and B

3.1

- Select potential «new strategic» sections

3.2

- Identify existing complementary sections

3.3

- Identify new complementary link

3.4

- Assign new projects to Scenarios



Infrastructural design – STEP 2

Definition of the transport corridor

STEP 2

2

- Assign existing projects to Scenarios A.1, A.2 and B

ID	mode	country	object	name	maturity	endyear	Scenario A S-N	Scenario A IntraR.	Scenario B E-W	Scenario B IntraR.
HR5	Road	Croatia	New construction	Construction of road A5 Osijek - HU border	planned	2023	1	1		
HR8	Road	Croatia	New construction	Construction of road road DC 10 Vrbovec - Križevci - Koprivnica - Hungarian border towards Kapo	Planned				1	1
SI1	Road	Slovenia	New construction	Construction of new interconnecting junction between the existing motorway and the regional road	Planned				1	1
SI3	Road	Slovenia	Upgrade	Upgrade road Draženci – Gruškovje	planned		1	1		
SI4	Road	Slovenia	New construction	Construction of road Postojna - Jelšane	planned	2035	1			
SI5	Road	Slovenia	New construction	TIR Truck Park Sermin	planned	2023				1

[...] 37 road interventions identified

SCENARIO

ID	mode	country	object	name	maturity	endyear	ASISspeed	ASISaxl	Scenario A S-N	Scenario A IntraR.	Scenario B E-W	Scenario B IntraR.
AL2	Rail	Albania	New construction	Rehabilitation of Vora/Vorë - Han i Hotit Railway Line	Planned		Unselected	20 t <= m < 22,5 t	Yes			
AL3	Rail	Albania	New construction	Construction for a new railway Pogradec – Korçë border to Greece (Krystalopigi)	Planned		Unselected	Unselected	Yes			
AL4	Rail	Albania	New construction	The rehabilitation of Durrës – Pogradec – Lin railway and the construction of a new railway link Lin – border to North Macedonia (part of rail Corridor VIII)	Planned		Unselected	20 t <= m < 22,5 t	Yes		Yes	
BA1	Rail	Bosnia and Herzegovina	New construction	Route 9a (parallel to Corridor X): Banja Luka-Prijedor-Novi Grad-Dobrljin	Planned		V < 120	22,5t <= m < 25t			Yes	
BA2	Rail	Bosnia and Herzegovina	upgrade	Route 9a (parallel to Corridor X): Doboj-PetrovoNovo-Tuzla	Planned		V < 120	22,5t <= m < 25t			Yes	
BA3	Rail	Bosnia and Herzegovina	upgrade	Route 9a (parallel to Corridor X): ŽviniceCapardeZvornik (incl. tunnel Križeviči)	Planned		V < 120	22,5t <= m < 25t			Yes	
BA4	Rail	Bosnia and Herzegovina	upgrade	Route 9a (parallel to Corridor X): Brčko-Banovići	Planned		V < 120	20 t <= m < 22,5 t	Yes			
BA5	Rail	Bosnia and Herzegovina	upgrade	modernization of the signaling equipment of Sarajevo - Bradina and Doboj - Banja Luka railway lines; modernization of signaling equipment at Miljacka railway station and Stup freight station	Under construction		V < 120	22,5t <= m < 25t			Yes	
BA6	Rail	Bosnia and Herzegovina	upgrade	modernization of the signaling equipment of Sarajevo - Bradina and Doboj - Banja Luka railway lines: Banja Luka-Doboj line	Completed	2019	V < 120	22,5t <= m < 25t			Yes	
BA7	Rail	Bosnia and Herzegovina	upgrade	Sarajevo –Bradina	Completed	2016	V < 120	22,5t <= m < 25t			Yes	
BA8	Rail	Bosnia and Herzegovina	upgrade	Mediterranean Corridor (Rail CVC): Overhaul of Sarajevo - Podlugovi Railway Section	Planned		Unselected	Unselected	Yes			
BA9	Rail	Bosnia and Herzegovina	New construction	construction new rail lines (ČapljinaTrebinje-Nikšić as a part of Adriatic Ionian corridor	Planned		Unselected	Unselected	Yes		Yes	

[...] 34 rail interventions identified

