"Interstate Coordination
of Maintenance Work on the Corridors"

Workshop 27-30 April 2015 – Istanbul/Turkey

Extending TEN-T in South-Eastern Europe

Dipl-Ing. Dr. Helmut Adelsberger
Consultant Engineer Vienna

1.
The status quo of the transport system in South-Eastern Europe

Dipl.-Ing. Dr. Helmut Adelsberger

Political background in SEE

- **South-Eastern Europe consists of:**
  EU Member States (EU MS) and
  non Member States (with / without candidate status):
  Candidate countries:
  - **Albania,**
  - **FYROM (blocked),**
  - **Montenegro,**
  - **Serbia,**
  - **Turkey;**

  potential Candidate Countries:
  - **Bosnia and Hercegovina,**
  - **Kosovo.**
- **"Western Balkans" region is surrounded by EU MS, relevant for "intra-EU" transit traffic flows.**

SEE: Pan-Europ. Corridors

SEE: TEN-T (HR) and SEETO network

Rail

Road

Transport Infrastructure in SEE

- there is "geographical continuity" throughout WB.
- but deficiencies in infrastructure and services, e.g.:
  - network configuration,
  - technical parameters,
  - insufficient maintenance,
  - low punctuality and reliability;
- borders are serious obstacles:
  excessive waiting times, sometimes closed overnight;
- this leads to bypassing WB (e.g.: Turkey – Trieste):
  => economic disadvantages for bypassed countries,
  reduced traffic demand and infrastructure revenues.

Improving infrastructure (expensive!) saves minutes;
improving border crossing (low investments) hours!

2.
The TEN-T Policy Review (Reg. 1315/2013-EC)

Dipl.-Ing. Dr. Helmut Adelsberger

The new TEN-T

- correspond with the objectives of the Treaty: competitiveness, cohesion, environment, climate, ...;
- form a dual layer network, covering the entire EU:
  - Comprehensive Network,
  - Core Network;
- comprise all modes of transport (and their linkages): road, rail, sea and iww, ports, RRT's, airports;
- comprise technological innovation.

The Core Network is:

- the strategically most important nodes and links;
- based on a uniform, rational planning methodology;
- to be implemented by 2030.

Core Network – main nodes

main urban nodes:
- **the capitals of all EU-Member States,**
- **the „MEGA's" according to ESPON Atlas 2006**
- **further large cities and conurbations > 1 mill. inh., incl. their ports, RR-terminals and airports;**

main sea and inland ports:
- **if transhipment > 1% of corresponding EU total (bulk, non-bulk, linear interpolation)**
- **per each NUTS 1 region (with access to sea) the most important seaport per coastline**

main border crossing points:
- **the most relevant one per mode and borderline, EU MS – neighbouring Non-EU-Member State**

Core Network – links (1)

basically all transport modes;

only links of the Comprehensive Network,

connecting main urban nodes:
each one with its "neighbouring nodes" (traffic flows!),
following the "relevant" traffic flows;

main sea ports and border crossing points:
only with the "relevant" hinterland main urban node;

land border lines between EU-Member States:
cross all borders on land by min. 1 Core Network link;

bundle Core Network links as far as possible
(with view to traffic flows)!

Core Network – links (2)

separation of rail passenger and freight traffic:
- **Functionality (e.g. links to seaports only for freight),**
- **technical parameters, e.g. high speed, gradients, etc.**
- **bypassing nodal agglomerations (capacity)**

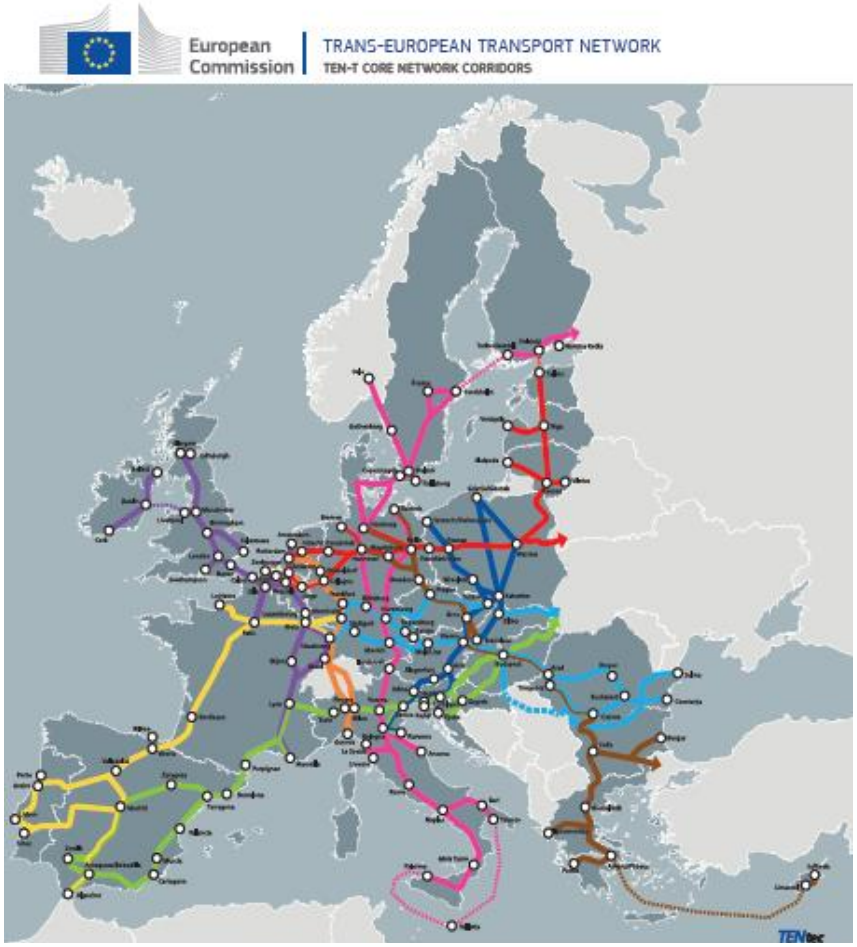
inland waterway: 100 % of Comprehensive in Core!

“Motorways of the Sea”:
- **Assignment to Core Network as per functionality**

minimum standards:
- **all modes of transport: ITS (ERTMS, RIS, …)**
- **rail freight: 22,5 t axle load, 740 m train length, etc.**

only infrastructure existing or in operation by 2030.

EU Members: Core Network Corridors

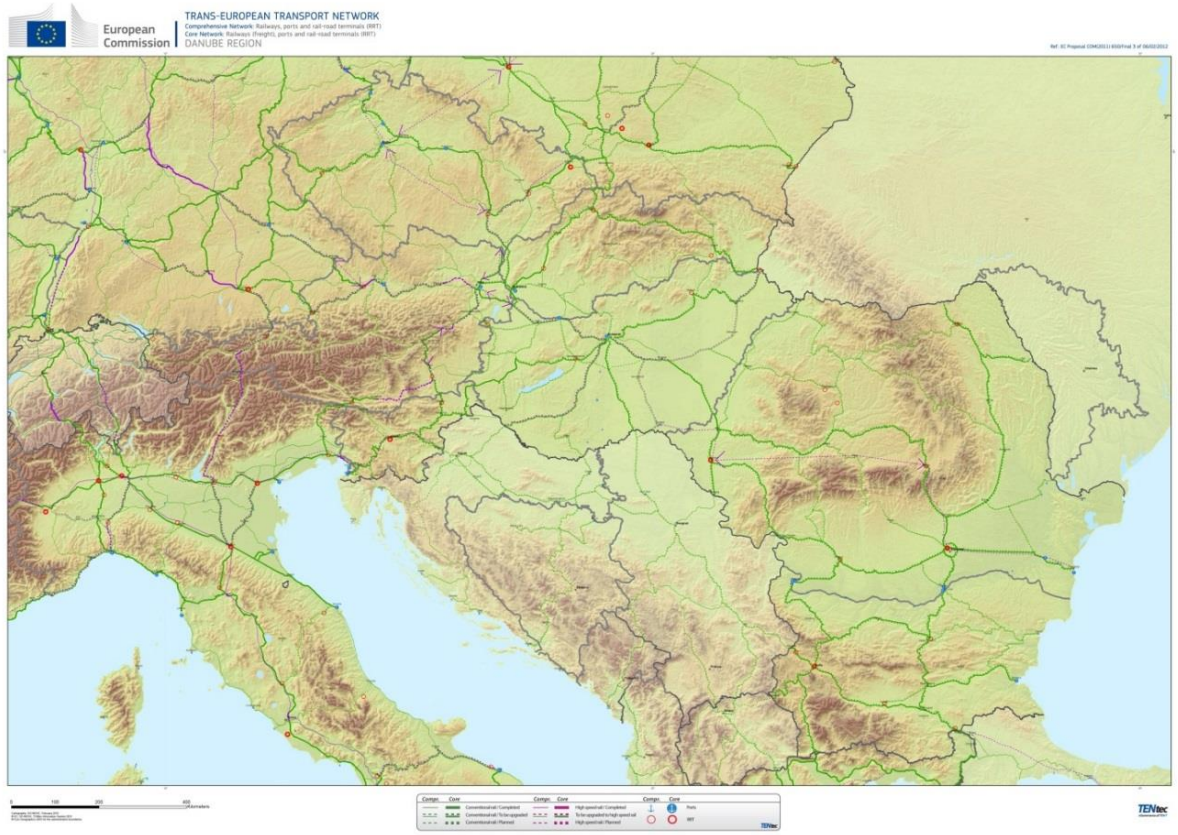


Corridors:

- 1. Baltic-Adriatic
- 2. North Sea - Baltic
- 3. Mediterranean
- 4. Orient/East Med
- 5. Scandinavian-Mediterranean
- 6. Rhine-Alpine
- 7. Atlantic
- 8. North Sea - Mediterranean
- 9. Rhine-Danube

Danube Region: TEN-T and SEETO

Rail (freight), ports and RRT's



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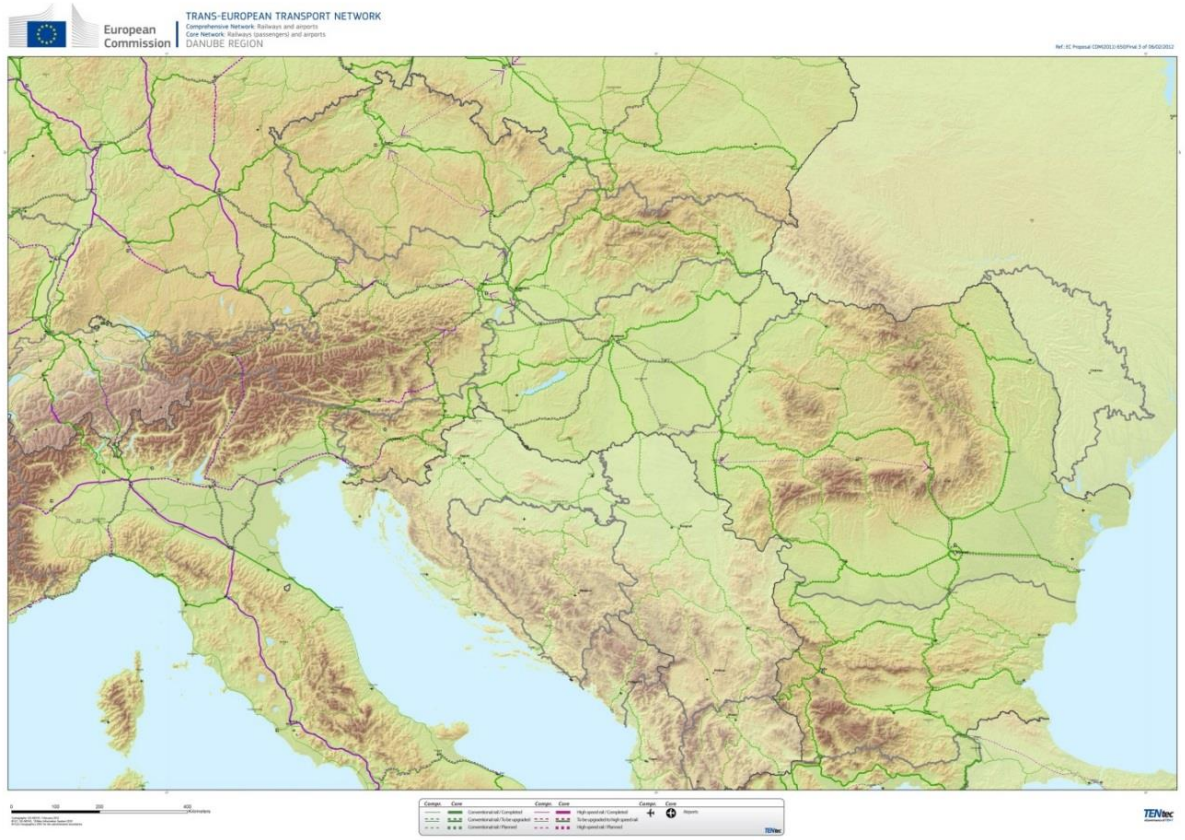
Danube Region: TEN-T and SEETO

Rail (passengers) and airports



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3.
TEN-T Core Network (C.N.) in South-Eastern Europe (proposal: "ACROSSEE")

Further Infrastructure Development

- **from SEETO to TEN-T (new MS):**
  planning methodology to be applied like in EU-28:
  new MS are not 3rd countries
  (b/c points to be replaced by "real" nodes)!
- **goal is an efficient, sustainable transport system in the WB.**
- **important players, initiatives and projects:**
  MS, non-MS, European Commission,
  SEETO, CEI, …;
  EUSDR;
  EU funded projects (e.g. SEETAC, ACROSSEE), …

Core Nodes relevant for WB

- Capital cities in WB
- Capital cities, MEGAs or large conurbations in neighbouring EU MS
- Seaports in WB exception for BIH: Ploce (HR)

Core Network: Railways (freight)

Core Network: Railways (pass.)

Remarks to proposed Core Network

- 2030 is implementation horizon of Core Network: network supplements beyond SEETO (arrows), proposed according to TEN-T planning methodology probably long-term => comprehensive network.

- strategic planning reconfirms PETC's and adds a few links (if implemented by 2030), but does not indicate capacities.

- spatial integration, territorial cohesion: infrastructure not only within, also towards a region (recommendation of TEN-T Expert Group 1 (2010)) => improvements in surrounding EU MS necessary.

Traffic Volumes (forecast 2030)

- existing model calculation (based on existing projects) shows rather little congestion,
  however it is difficult to calculate traffic peaks
  in urban or metropolitan areas.
- higher traffic volumes to be expected for "Corridor X" and branches, due to high growth potential of transit Middle East < = > Central / Western Europe
  (See slide "Freight Potential of Eurasian Corridors"!).
- improving b/c procedures more efficient
  than investing in infrastructure
- however low accuracy of TRANSTOOLS model
  seems to be a challenge!

4.
The Eurasian Perspective, Turkey between East and West

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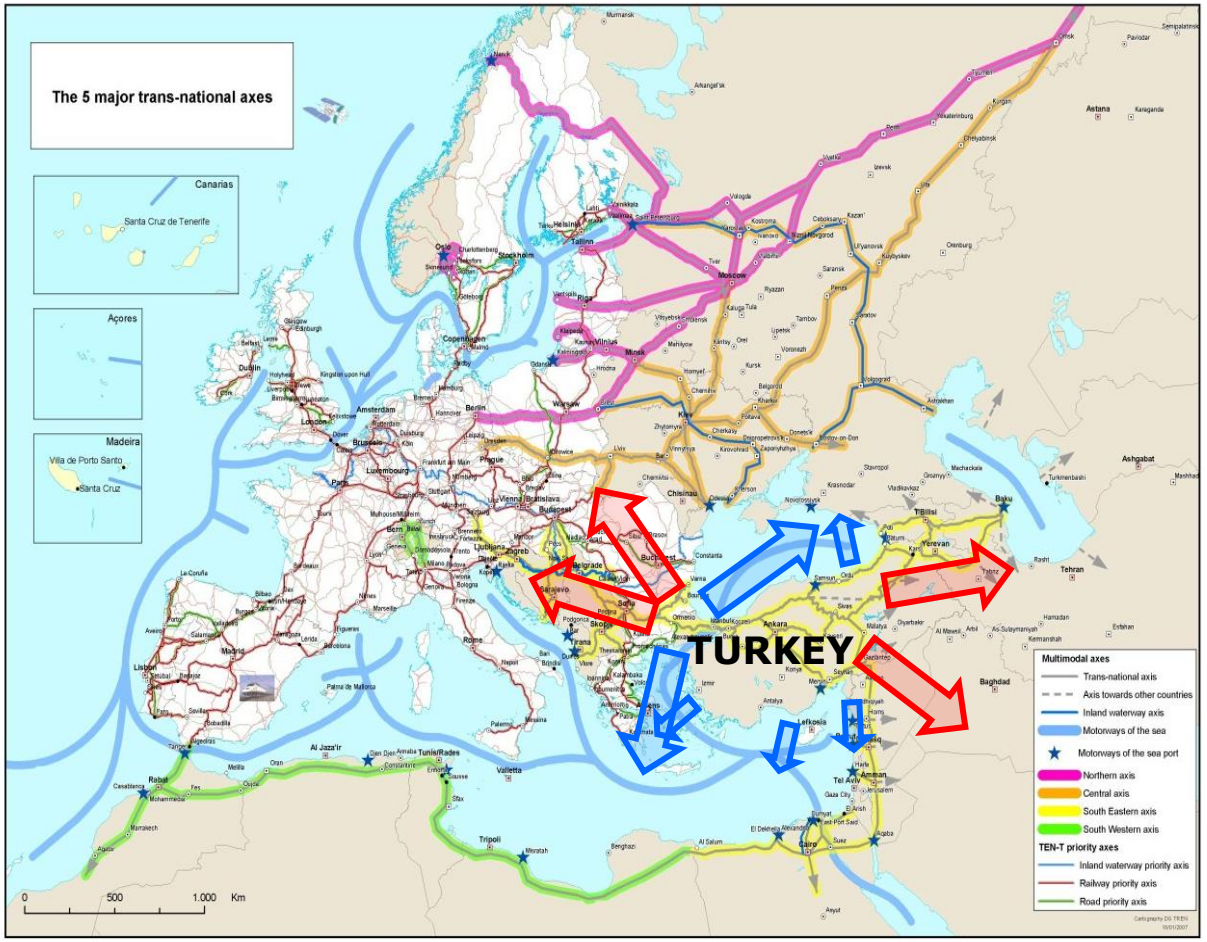
Turkey between Orient and Occident



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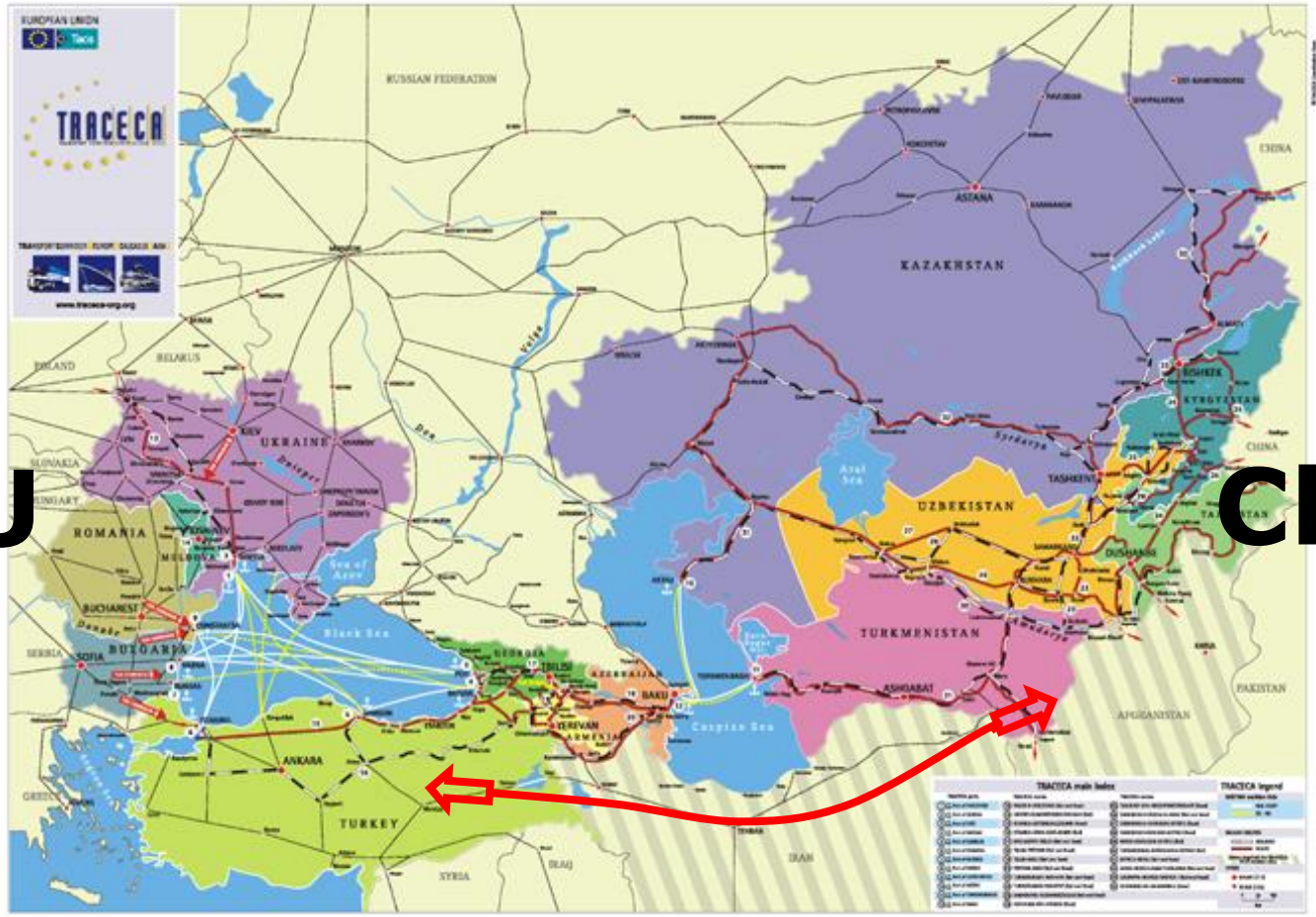
TRACECA & other East-West Corridors



EU China

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Freight Potential of Eurasian Corridors

- **Pre-conditions:**
  continuous standard gauge double track line,
  well organised, punctual operation,
  smooth border-crossing, interoperability,
  high level of security!

- **Freight:**
  medium value density (between sea and air transport),
  mainly "unitized" freight (containers).

- **Freight volumes to be expected (2030):**
  close to capacity of line,
  considering unbalanced flows and partly passengers:
  20 – 25 million tons per year (per each corridor)

5.
TEN-T C.N. Corridors in South-Eastern Europe (proposal: "ACROSSEE")

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Potential Core Network Corridors

"Core Network Corridor no. 10"

- **Currently 9 Core Network Corridors => traditional "Corridor X" (= backbone of SEE) could/should be "C.N.Corridor no. 10".**
- **south-east:**
  branch Xc Niš – Sofia to be extended to Istanbul and beyond (=> "New Silk Railway").
- **north-west:**
  gradient 30 ‰ of existing link Salzburg – Villach does not allow fully loaded 740 m long freight trains; therefore Salzburg – Ljubljana not in Core Network!
  - possible solution:
  splitting of corridor and using extended branch Xa Wels/Linz – Graz – Maribor – Zagreb for heavy freight.

THANK YOU
FOR YOUR KIND ATTENTION!

Dipl-Ing. Dr. Helmut Adelsberger
Consultant Engineer Vienna
hgadelsberger@telenet.be