Evolutions and perspectives of the TEN-T Policy

EUROPEAN NETWORK OF LOGISTICS COMPETENCE CENTERS
OPEN ENLOCC TALKS

SEPTEMBER 2020
Main services

▪ Transport policy and planning studies
▪ Demand and market analyses (including PPPs)
▪ Ex-ante and ex-post evaluations of transport investment programs and projects

Multimodal experience

▪ Rail, road, port, inland waterways, airport accessibility, urban transport and intermodal infrastructure
▪ Studies for the development of international transport corridors for both passenger and freight traffic
  ― Baltic Adriatic Core Network Corridor, Baltic-Adriatic Rail Freight Corridor, North Sea-Baltic Core Network Corridor, North Sea-Baltic Rail Freight Corridor, Scandinavian-Mediterranean Rail Freight Corridor, Rail Baltica Global Project
▪ Specialised support to INEA
  ― Evaluation of about 100 projects/CBA since 2015 (rail, MoS, multimodal, innovation)
  ― Organisation of a workshop for INEA, DG MOVE, EIB and DG REGIO to discuss about economic appraisal methods for the evaluation of large infrastructure projects

Specialised tools and software

▪ Trade-based transport models
▪ Economic and financial modelling
▪ Transport and traffic modelling: GIS, Cube, EMME, R, Saturn, Transcad, Tranus, Visum
Main milestones

- **1990**: first action plan on trans-European networks by the EC
- **1993** (Maastricht treaty): the TEN-T became one of the key instruments for cohesion and growth within the European Union
- **1994** (Essen European Council): "Essen List" including the 14 projects supposed to contribute most to European integration
- **1995**: adoption of the first financial regulation for the TEN-T
- **1996**: Community Guidelines for the development of the TEN-T adopted by the European Parliament and Council, (including the Priority Projects)
- **2004**: First revision of the TEN-T Guidelines, including 16 additional projects (reflecting the enlargement of the Union)
- **2006**: Establishment of the Trans-European Transport Network Executive Agency – renamed in 2014 into Innovation and Networks Executive Agency – INEA
- **2007**: adoption of a new financial regulation for the period 2007-2013
- **2010-11**: Revision process of the TEN-T guidelines leading to the adoption of a dual layer approach, i.e. core network as a subset of the comprehensive network
- **2013** (December): entry into force of Regulation (EU) 1315/2013 (Trans European Transport Network) and Regulation (EU) 1316/2013 (Connecting Europe Facility)
From priority projects to Core Network Corridors
Evolutions of the TEN-T policy

Dual Regulation:
Regulation (EU) 1315/2013 (TEN-T)
Regulation (EU) 1316/2013 (CEF)


Objectives
- Strengthen the social, economic and territorial cohesion of the Union
- Contribute to the creation of a Single European Transport Area which is:
  - Efficient, sustainable, increases benefits for users, supports inclusive growth

Dual layer approach
- By 2030: a single European TEN-T core network
- By 2050: a TEN-T comprehensive network, as “ground layer”, to facilitate accessibility to all European regions

Implementation strategy and tools
- **Strategy**
  - Support the development of the core network
  - Synchronise investments in order to optimise network benefits
- **Tools**
  - A stronger dedicated financial instrument Connecting Europe Facility - CEF
  - 9 multimodal Core Network Corridors, involving at least 3 Member States
  - 9 consultative Corridor Fora, chaired by a European Coordinator and involving a number of stakeholders
  - Coordinators also for ERTMS and Motorways of the Sea
  - Tentec database (official planning and monitoring platform)
Current TEN-T policy

Work plans and Corridor Fora activities

**Content of the work plans**
- Analysis and description of the corridor characteristics
  - With reference to the alignment set in Regulation 1316/2013
  - According to the standards defined in the Regulation 1315/2013
- Market analysis
- List of investments required to develop the corridor by 2030
  - Focusing on those needed to reach compliance
- Impact of the work plan on the environment, jobs and economic growth
- Effects of the work plan on innovation deployment, climate change and resilience
- Recommendations by the European Coordinators

**Topics addressed in the CNC Fora and related working groups**
- Validation of the results of the CNC studies
- Presentation of other studies related to the implementation of the TEN-T policy
- Coordination and discussion about relevant issues concerning the development and completion of the corridor at standard by 2030
- Sharing results and progresses with other CNCs and with Rail Freight Corridors
<table>
<thead>
<tr>
<th>Mode</th>
<th>Type (P: Passenger/ F: Freight)</th>
<th>KPI</th>
<th>Reference Regulation 1315/2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail network</td>
<td>P/F</td>
<td>Electrification</td>
<td>§12 except for isolated networks</td>
</tr>
<tr>
<td></td>
<td>P/F</td>
<td>Track gauge 1435mm</td>
<td>§13 as priority for RR infrastructure development</td>
</tr>
<tr>
<td></td>
<td>P/F</td>
<td>ERTMS implementation</td>
<td>§12 except for isolated networks</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Line speed &gt;=100km/h in accordance with art. 39 para. 2. Item a) (ii) of the Regulation 1315/2013</td>
<td>§39 requirement for core network</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Axle load (&gt;=22.5t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Train length (740m)</td>
<td></td>
</tr>
<tr>
<td>Inland waterway</td>
<td>F</td>
<td>CEMT requirements for class IV IWW</td>
<td>§15 (CEMT Resolution Nr. 92/2)</td>
</tr>
<tr>
<td>network</td>
<td>F</td>
<td>Permissible Draught (min 2.5m)</td>
<td>§15 with exemptions for duly justified cases</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Permissible Height under bridges (min. 5.25m)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>RIS implementation</td>
<td>§16</td>
</tr>
<tr>
<td>Road network</td>
<td>P/F</td>
<td>Express road/ motorway</td>
<td>§18</td>
</tr>
<tr>
<td></td>
<td>P/F</td>
<td>Availability of clean fuels</td>
<td>§39 infrastructure for alternative fuels defined in § 3(w)</td>
</tr>
</tbody>
</table>
## Current TEN-T policy

Infrastructure standards: Key Performance Indicators (Transport nodes)

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<tr>
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</thead>
<tbody>
<tr>
<td>Airport</td>
<td>P/F</td>
<td>Connection to rail</td>
<td>§30 interconnection airports and railways</td>
</tr>
<tr>
<td></td>
<td>P/F</td>
<td>Availability of at least one terminal open to all operators in a non-discriminatory way and application of transparent, relevant and fair charges</td>
<td>Article 25 (1)</td>
</tr>
<tr>
<td></td>
<td>P/F</td>
<td>Availability of clean fuels</td>
<td>§26 reducing environmental impact of aviation; European Advanced Biofuels Flightpath of 2011</td>
</tr>
<tr>
<td>Seaport</td>
<td>F</td>
<td>Connection to rail</td>
<td>§30 interconnection ports and railways</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Connection to IWW CEMT IV</td>
<td>§22 except for physical constraints</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Availability of clean fuels</td>
<td>§23 promotion of alternative fuels defined in § 3(w)</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Availability of at least one freight terminal open to all operators in a non-discriminatory way and application of transparent charges</td>
<td>Article 22 (1b)</td>
</tr>
<tr>
<td></td>
<td>P/F</td>
<td>Facilities for ship generated waste</td>
<td>§22 compliance with EC Directive 2000/59</td>
</tr>
</tbody>
</table>
### Current TEN-T policy

**Infrastructure standards: Key Performance Indicators (Transport nodes)**

<table>
<thead>
<tr>
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<th>Type (P: Passenger/ F: Freight)</th>
<th>KPI</th>
<th>Reference Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inland ports</td>
<td>F</td>
<td>Class IV waterway connection</td>
<td>§15</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Connection to rail</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Availability of clean fuels</td>
<td>§16 promotion of sustainable IWW transport</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Availability of at least one freight terminal open to all operators in a non-discriminatory way and application of transparent charges</td>
<td>Article 15 (2)</td>
</tr>
<tr>
<td>Rail-Road Terminals  (RRT)</td>
<td>F</td>
<td>Capability for Intermodal (unitised) transhipment</td>
<td>§13 enhancing interoperability and connecting to IWW; §28</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>740m train terminal accessibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Electrified train terminal accessibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Availability of at least one freight terminal open to all operators in a non-discriminatory way and application of transparent charges</td>
<td></td>
</tr>
</tbody>
</table>
Current TEN-T policy

Connecting Europe Facility (CEF) Instrument basics for Transport

CEF Transport Budget for the period 2014-2020
- About 24bn EUR
  - Over 11bn EUR for "Cohesion" Member States

CEF Transport Funding Objectives
- Removing bottlenecks
- Enhancing rail interoperability
- Bridging missing links
- Improving cross-border connections
- Ensuring long term sustainable and efficient transport systems
- Optimising integration and interconnection of transport modes
- Enhancing the interoperability of transport services

CEF Transport Funding Priorities
- Core Network Corridors
  - Cross-border sections, last mile connections and multimodal logistics platforms, missing links (Pre-identified sections in the CEF Annex)
- Other cross-border sections and bottlenecks
- Horizontal priorities:
  - ITS, ERTMS, interoperability, innovation&new technologies, safe and secure infrastructure
Current TEN-T policy

Connecting Europe Facility (CEF) Instrument basics for Transport

CEF Transport Funding Focus
- Core, but also comprehensive TEN-T
- More sustainable modes of transport (railways, IWW)
- Innovative financial instruments (*blending*)
- Connections with neighbouring countries

Complementarity CEF – ESI Funds – EFSI
- CEF: High EU added-value on TEN-T and core network (corridors)
- ESIF:
  - High EU added-value projects to remove bottlenecks in transport networks, by supporting TEN-T infrastructure on both the core and comprehensive networks
  - Regional mobility, through connecting secondary and tertiary nodes to TEN-T infrastructure
- European Fund for Strategic Investments (EFSI): EU-budget guarantee providing the European Investment Bank (EIB) Group with additional credit risk protection set up to support (Junker List)
- Blending: actions combining CEF support with EFSI, EIB, National Promotional Banks or private sector investors
Current TEN-T policy

First five years of CEF


Allocated funds
- About 23bn EUR for a total of 756 actions
  - 1722 submitted proposals for a total request for funding of EUR 51.5bn
  - 780 selected proposals for a total request for funding of EUR 24.5bn
  - 756 signed grant agreements for a total request for funding of EUR 22.8bn, corresponding to a total investment of EUR 48bn

<table>
<thead>
<tr>
<th>Funding priority</th>
<th>EUR bn</th>
<th>N. of projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building cross-border infrastructure and bridging missing links</td>
<td>18.9</td>
<td>332</td>
</tr>
<tr>
<td>Deploying sustainable and efficient transport</td>
<td>0.9</td>
<td>155</td>
</tr>
<tr>
<td>Interconnecting transport modes and enhancing interoperability</td>
<td>3</td>
<td>269</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22.8</strong></td>
<td><strong>756</strong></td>
</tr>
</tbody>
</table>

CEF FUNDING PER BLENDING CALL PRIORITY
CEF Funding by Transport Mode
€ billion (n. of actions)

- Rail: 16.3 (266)
- Road: 1.9 (170)
- Air: 1.6 (69)
- Inland Waterways: 1.4 (56)
- Maritime: 1.1 (98)
- Multimodal: 0.5 (97)

CEF Funding by Member State

<table>
<thead>
<tr>
<th>Member State</th>
<th>Funding (€ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>€894.3</td>
</tr>
<tr>
<td>BE</td>
<td>€636.9</td>
</tr>
<tr>
<td>BG</td>
<td>€417.5</td>
</tr>
<tr>
<td>CY</td>
<td>€63.1</td>
</tr>
<tr>
<td>CZ</td>
<td>€1,143.5</td>
</tr>
<tr>
<td>DE</td>
<td>€2,284.1</td>
</tr>
<tr>
<td>DK</td>
<td>€824.6</td>
</tr>
<tr>
<td>EE</td>
<td>€220.5</td>
</tr>
<tr>
<td>EL</td>
<td>€573.6</td>
</tr>
<tr>
<td>ES</td>
<td>€1,080.3</td>
</tr>
<tr>
<td>FI</td>
<td>€179.6</td>
</tr>
<tr>
<td>FR</td>
<td>€1,947.2</td>
</tr>
<tr>
<td>HR</td>
<td>€430.5</td>
</tr>
<tr>
<td>HU</td>
<td>€1,091.8</td>
</tr>
<tr>
<td>Other countries</td>
<td>Funding (€ million)</td>
</tr>
<tr>
<td>BA</td>
<td>€0.1</td>
</tr>
<tr>
<td>IL</td>
<td>€46</td>
</tr>
<tr>
<td>MK</td>
<td>€0.1</td>
</tr>
<tr>
<td>NO</td>
<td>€11.3</td>
</tr>
<tr>
<td>RS</td>
<td>€11.8</td>
</tr>
</tbody>
</table>

First five years of CEF Funding
EUR 21.8bn out of 22.8 allocated to the core network

CEF FUNDING FOR THE TENT-T CORE NETWORK*

€ billion
(number of actions)

Rhine-Danube  3.9  (102)
North Sea-Baltic  3.1  (98)
Mediterranean  3.0  (142)
Baltic-Adriatic  2.5  (97)
Scandinavian-Mediterranean  2.4  (93)
Orient/East-Med  2.0  (100)
North Sea-Mediterranean  1.5  (110)
Atlantic  1.6  (86)
Rhine-AlpineNetwork  0.7  (81)

First five years of CEF Funding
### Expected achievements in rail transport

<table>
<thead>
<tr>
<th>Expected achievements in rail transport</th>
<th>Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrification of line tracks and sidings</td>
<td>1,904 km</td>
</tr>
<tr>
<td>Improvement/modernisation of railway lines for freight</td>
<td>2,863 km</td>
</tr>
<tr>
<td>Adapt of railway lines to the European standard track gauge</td>
<td>1,402 km</td>
</tr>
<tr>
<td><strong>ERTMS</strong></td>
<td></td>
</tr>
<tr>
<td>• Track-side deployment</td>
<td>5,941 km</td>
</tr>
<tr>
<td>• Track-side upgrade</td>
<td>858 km</td>
</tr>
<tr>
<td><strong>ERTMS on-board deployment</strong></td>
<td></td>
</tr>
<tr>
<td>• Retrofitting</td>
<td>2,498 vehicles</td>
</tr>
<tr>
<td>• Upgrade</td>
<td>607 vehicles</td>
</tr>
<tr>
<td>• Prototypes</td>
<td>80 vehicles</td>
</tr>
</tbody>
</table>

### Number of new or improved rail connections to nodes of the network

<table>
<thead>
<tr>
<th>Number of new or improved rail connections to nodes of the network</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Airports</td>
<td>Inland ports</td>
</tr>
<tr>
<td>Improved</td>
<td>3</td>
</tr>
<tr>
<td>New</td>
<td>4</td>
</tr>
</tbody>
</table>

### Number of supply points of alternative clean fuels for road transport

<table>
<thead>
<tr>
<th>Number of supply points of alternative clean fuels for road transport</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>11,978</td>
</tr>
<tr>
<td>Compressed Natural Gas</td>
<td>425</td>
</tr>
<tr>
<td>Liquified Natural Gas</td>
<td>274</td>
</tr>
<tr>
<td>Liquified Petroleum Gas</td>
<td>123</td>
</tr>
<tr>
<td>Hydrogen透</td>
<td>51</td>
</tr>
</tbody>
</table>
Perspectives of the TEN-T policy

Review of the TEN-T policy

Source: https://ec.europa.eu/transp ort/themes/infrastructure/ten-t/review_en

CEF Regulation 2
- Expected to be adopted in 2020
  - Extending the core network corridors
  - Simplify the list of pre-identified sections

Revision of Regulation 1315/2013
- Commission proposal for a revised TEN-T Regulation: by June 2021
- Preparatory process for the revision:
  - Open Public Consultation conducted between April and July 2019
  - Evaluation study ongoing, including targeted stakeholder consultations (online surveys, specific case studies, workshops) involving organisations and experts involved in the shaping and implementation of the TEN-T policy as well as the use of TEN-T infrastructure
  - A Commission Staff Working Document will be published upon completion of the evaluation study, foreseen for November 2020
  - Impact assessment (inception stage), also involving a consultation on policy issues, expected to be started in Autumn 2020

Additional relevant (legislation/policy) processes ongoing
- Elaboration of the strategy for sustainable and smart mobility
- Revision of the Regulation concerning a European Rail Network for Competitive Freight (Regulation EU 913/2010)
- Revised proposal for a Directive on Combined Transport
- Revision of Alternative Fuel Infrastructure Directive
- Proposal for more stringent air pollutant emissions standards for combustion-engine vehicles
CNC Extensions
Objectives

▪ Evaluating all provisions of the TEN-T Regulation (N° 1315/2013)
▪ Four areas of specific attention:
  — Network planning (planning method, core and comprehensive networks)
  — Infrastructure features (standards, equipment, quality requirements)
  — Interrelation between infrastructure and its use / transport operations
  — Implementation instruments (core network corridors, reporting, coordinators workplan etc.)

Case studies (part of the targeted stakeholder consultation) on issues of particular relevance for future TEN-T policy
▪ Urban nodes within the framework of TEN-T policy
▪ The functioning of TEN-T Corridors
▪ Standards and requirements of TEN-T infrastructure
▪ The TEN-T as an enabler of a future-oriented mobility system
▪ Rail infrastructure for high-quality passenger services
▪ Digitalisation in the framework of TEN-T policy
▪ Infrastructure quality, resilience (to climate change and various disasters), life-cycle approach for infrastructure – including aspects of preventive maintenance (notably through application of new technologies)
▪ TEN-T requirements from the perspective of “European passengers” (including aspects of accessibility for all users)
▪ Cooperation with third countries on TEN-T policy
Perspectives of the TEN-T policy

MFF 2021-2027

Sources:

CEF Transport Funding Priorities

- 21.384bn EUR
  - 10bn EUR for "Cohesion" Member States
  - 1.384bn EUR for missing major cross-border rail link between cohesion countries
  - 1.5 billion contribution from the Defence Fund to adapt the TEN-T networks to military mobility needs

Additional funds

- InvestEU (€5.6 billion)

- Recovery and Resilience Facility (€672.5 bn)
  - of which loans EUR 360 billion
  - of which grants EUR 312.5 billion

- ERDF and CF Funds (*a more connected Europe* policy objective for urban, local, and regional mobility)
Perspectives of the TEN-T policy

Relevant topics for freight transport and logistics

- **Core Ports and Rail-Road Terminals as key infrastructure components of the TEN-T network to be developed by 2030**
  - Compliance and performance of last mile connections are indicated as priorities in the work plans
  - Improvement of the infrastructure inside logistics nodes is also relevant, particularly if this will allow reaching the TEN-T standards
  - Core ports and RRTs are gateways to logistics clusters. Work plans are starting to look at transport nodes within wider logistics chains and clusters, with reference both to hard and soft measures

- **Transport digitalisation**
  - Ease access to terminals or facilitate information flows across logistics chains/clusters and modes
  - Ensure the supply chain/logistics nodes and clusters can work under critical conditions (Covid...), thanks to the simplification and dematerialisation of administrative procedures

- **New technologies and innovative transport solutions**
  - Boosting automation to improve efficiency of transport operations towards modal shift to more sustainable transport solutions
  - Greening transport operations and fleets (emissions, noise...)

- **CNCs Fora and Working Groups/Local events and RFCs (RAG and TAG) will be relevant platforms to promote and share new ideas and initiatives**
- ...
Tplan Consulting

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