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## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on Inland Water Transport

##### Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation

###### Fiftieth session

Geneva, 15-17 February 2017

Item 4 (c) of the provisional agenda

###### Inland waterways infrastructure:

###### Inventory of Most Important Bottlenecks and Missing Links in the E Waterway Network (Resolution No. 49, revised)

## Bottlenecks and inland ports in the TEN-T core network corridors

### Note by the secretariat

#### I. Mandate

1. This document is submitted in line with Cluster 5: Inland Waterway Transport, para. 5.1 of the programme of work 2016-2017 (ECE/TRANS/2016/28/Add.1) adopted by the Inland Transport Committee at its seventy-eighth session on 26 February 2016.
2. The Working Party on Inland Water Transport at its sixtieth session decided to consider the outcome of the work on the prioritization of bottlenecks of the waterways being a part of the comprehensive network set out by Regulation (EU) No. 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network<sup>1</sup> in the course of the next revision of Resolution No. 49, with the intent to use this as a basis for possibly mainstreaming the Inventory of Main Standards and Parameters of the E Waterway Network (Blue Book) (ECE/TRANS/SC.3/203, para. 46).
3. The secretariat in consultations with the European Commission (EC) prepared an overview of the bottlenecks on the inland waterways included in the core transport

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<sup>1</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32013R1315&from=EN>.

corridors of the trans-European transport network (TEN-T) and inland ports. The Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation (SC.3) may wish to consider the outcome and decide whether the proposed approach can be used for further work on Resolution No. 49.

## **II. Inland waterways and port hinterland connections as elements of the TEN-T network**

4. Inland waterways and hinterland port connections constitute important elements of the trans-European network. Main definitions are introduced by Regulation (EU) No. 1315/2013 of the European Parliament and of the Council of 11 December 2013 and Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility (CEF).<sup>2</sup>

5. The following basic definitions relevant for Resolution No. 49 include:

(a) “comprehensive network” means the transport infrastructure identified in accordance with Chapter II of Regulation (EU) No 1315/2013; the comprehensive network shall be completed by 31 December 2050;

(b) “core network” means the transport infrastructure identified in accordance with Chapter III of Regulation (EU) No 1315/2013. The core network shall consist of those parts of the comprehensive network which are of the highest strategic importance for achieving the objectives for the development of TEN-T. It shall be identified and developed by 31 December 2030;

(c) “core network corridors” means an instrument to facilitate the coordinated implementation of the core network as provided for in Chapter IV of Regulation (EU) No. 1315/2013 and listed in Part I of Annex I to this Regulation;

(d) “bottleneck” means a physical, technical or functional barrier which leads to a system break affecting the continuity of long-distance or cross-border flows and which can be surmounted by creating new infrastructure or substantially upgrading existing infrastructure that could bring significant improvements which will solve the bottleneck constraints;

(e) “cross-border section” means the section which ensures the continuity of a project of common interest between the nearest urban nodes on both sides of the border of two member States or between a member State and a neighbouring country.

6. Regulation (EU) No. 1315/2013 establishes guidelines for the development of a trans-European transport network comprising a dual-layer structure consisting of the comprehensive network and of the core network, the latter being established on the basis of the comprehensive network. Articles 14 to 16 of this Regulation set out the infrastructure components, requirements and priorities for inland waterway infrastructure development.

7. According to Article 14, the inland waterways infrastructure shall comprise, in particular:

- (a) rivers;
- (b) canals;
- (c) lakes;

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<sup>2</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1316&from=EN>

(d) related infrastructure such as locks, elevators, bridges, reservoirs and associated flood-prevention measures which may bring positive effects to inland waterway navigation;

(e) inland ports, including the infrastructure necessary for transport operations within the port area;

(f) associated equipment;

(g) telematic applications, including River Information Services (RIS);

(h) connections of the inland ports to other modes in the trans-European transport network.

8. To be part of the comprehensive network, inland ports shall have an annual freight transshipment volume exceeding 500 000 tonnes. The total annual freight transshipment volume shall be based on the latest available three-year average, as published by Eurostat.

9. Equipment associated with inland waterways may include equipment for the loading and unloading of cargos in inland ports. Associated equipment may include, in particular, propulsion and operating systems which reduce pollution, such as water and air pollution, energy consumption and carbon intensity. It may also include waste reception facilities, shore-side electricity facilities, and used oil collection facilities, as well as equipment for ice-breaking, hydrological services and dredging of the port and port approaches to ensure year-round navigability.

10. Article 15 of Regulation (EU) No. 1315/2013 establishes the following requirements to the inland water transport infrastructure:

1. Member States shall ensure that inland ports are connected with the road or rail infrastructure.

2. Inland ports shall offer at least one freight terminal open to all operators in a non-discriminatory way and shall apply transparent charges.

3. Member States shall ensure that:

(a) rivers, canals and lakes comply with the minimum requirements for class IV waterways as laid down in the new classification of inland waterways established by the European Conference of Ministers of Transport (ECMT) and that there is continuous bridge clearance, without prejudice to Articles 35 and 36 of this Regulation.

At the request of a member State, in duly justified cases, exemptions shall be granted by the Commission from the minimum requirements on draught (less than 2.50 m) and on minimum height under bridges (less than 5.25 m);

(b) rivers, canals and lakes are maintained so as to preserve good navigation status, while respecting the applicable environmental law;

(c) rivers, canals and lakes are equipped with RIS.

11. The specific sectoral objectives of infrastructure development projects in the CEF framework relevant to inland water transport are set out by Article 4 of Regulation (EU) No. 1316/2013. They include:

(a) removing bottlenecks, bridging missing links and, in particular, improving cross-border sections;

(b) ensuring sustainable and efficient transport systems in the long run, with a view to preparing for expected future transport flows, as well as enabling this transport mode to be decarbonised through transition to innovative low-carbon and energy-efficient transport technologies, while optimising safety;

(c) optimising the integration and interconnection of transport modes and enhancing the interoperability of transport services, while ensuring the accessibility of transport infrastructures.

12. Priorities for inland waterway infrastructure development are set out in Article 16 of Regulation (EU) No. 1315/2013. They include the following:

- (a) for existing inland waterways: implementing measures necessary to reach the standards of the inland waterways class IV;
- (b) where appropriate, achieving higher standards for modernising existing waterways and for creating new waterways in accordance with the technical aspects of infrastructure of the ECMT, in order to meet market demands;
- (c) implementing telematic applications, including RIS;
- (d) connecting inland port infrastructure to rail freight and road transport infrastructure;
- (e) paying particular attention to free-flowing rivers which are close to their natural state and which can therefore be the subject of specific measures;
- (f) promotion of sustainable inland waterway transport;
- (g) modernisation and expansion of the capacity of the infrastructure necessary for transport operations within the port area.

### III. Bottlenecks on the inland waterways included in the core transport network corridors

13. The list of pre-identified projects aimed to eliminate bottlenecks on the inland waterways of the core network is given in Annex I of Regulation (EU) No. 1316/2013. The following waterway sections are included.

<i>Core network corridor</i>	<i>Waterway</i>	<i>Planned work</i>
North Sea-Baltic	Berlin-Magdeburg-Hannover, Mittellandkanaal, Western German canals, the Rhine, the Waal, Noordzeekanaal, IJssel, Twentekanaal	Studies, works for better navigability and upgrading waterways and locks
	Amsterdam locks and Amsterdam - Rijnkanaal	Locks studies ongoing; port: interconnections (studies and works, including Beatrix lock upgrade)
Mediterranean	Milano-Cremona-Mantova-Porto Levante/Venezia-Ravenna/Trieste	Studies and works
Orient/East-Med	Hamburg-Dresden-Praha-Pardubice	Elbe and Vltava studies, works for better navigability and upgrading
	Děčín locks	Studies
Rhine – Alpine	Basel-Antwerpen/Rotterdam-Amsterdam	Works for better navigability
Atlantic	Le Havre-Paris	Upgrading
North Sea – Mediterranean	Maas, including Maaswerken	Upgrading
	Albertkanaal/Canal Bocholt-Herentals	Upgrading
	Rhin-Scheldt corridor: Volkeraklock and	Locks: studies ongoing

<i>Core network corridor</i>	<i>Waterway</i>	<i>Planned work</i>
	Kreekaklock, Krammerlock and Lock Hansweert	
	Terneuzen-Gent	Studies, upgrading
	Canal Seine Nord; Seine – Escaut	Studies and works; upgrading including cross-border and multimodal connections
	Dunkerque-Lille	Studies ongoing
	Antwerpen, Brussels, Charleroi	Upgrading
	Waterways upgrade in Wallonia	Studies, upgrading, intermodal connections
	Canal Saône-Moselle/Rhin	Preliminary studies ongoing
	Rhône	Upgrading
Rhine – Danube	Komárom-Komárno	Studies and works for cross-border bridge
	Main-Main-Donau-Canal	Studies and works on several sections and bottlenecks; inland waterway ports: multimodal interconnections with rail
	Danube (Kehlheim-Constanța/Midia/Sulina)	Studies and works on several sections and bottlenecks; inland waterway ports: multimodal interconnections
	Sava	Studies and works on several sections and bottlenecks (including cross-border bridge)
	București-Dunăre Canal	Studies and works
Other Sections on the core network	Brunsbüttel-Kiel (Nord-Ostzeecanal) Other core network	Optimization of navigation status

#### IV. Inland and sea ports included in the core transport network corridors

14. The list of pre-identified projects focused on the upgrading of port infrastructure and the development of port interconnections and multimodal platforms on inland waterways and coastal routes of the core network is given in Annex I of Regulation (EU) No. 1316/2013. The table below includes only those ports relevant to the European Agreement on Main Inland Waterways of International Importance (AGN).

<i>Core network corridor</i>	<i>Port</i>	<i>Planned work</i>
Baltic-Adriatic	Gdynia, Gdańsk	Port interconnections, (further) development of multimodal platforms
	Świnoujście, Szczecin	Port interconnections
	Trieste, Venezia, Ravenna, Koper	Port interconnections; (further) development of multimodal platforms
Mediterranean	Barcelona	Interconnections rail with port and airport
	Cremona, Mantova, Venezia, Ravenna, Trieste	Port interconnections, (further) development of multimodal platforms
	Rijeka	Infrastructure upgrading and development, development of multimodal platforms and interconnections
Scandinavian-Mediterranean	Rostock	Interconnections ports with rail; low-emission ferries; ice-breaking capacity
Atlantic	Le Havre	Studies and works on port capacity, MoS <sup>3</sup> and interconnections
North Sea-Mediterranean	Dunkerque	Further development of multimodal platforms and interconnections
	Zeebrugge	Locks: studies, interconnections (studies and works)
	Antwerpen	Locks: studies ongoing; port: interconnections (including second rail access to the port of Antwerpen)
	Marseille-Fos	Interconnections and multimodal terminals
Rhine-Danube	Slavonski Brod	Studies and works
	Giurgiu, Galați	Further development of multimodal platforms and connections with the hinterland: studies and works
	Constanta	Port interconnections, MoS (including icebreaking services)

## V. Identification of bottlenecks and following up the progress in infrastructure projects

15. In order to facilitate the process leading to the implementation of the Core network corridors, EC nominated 11 European Coordinators for the core network corridors in March 2014, giving every Coordinator a precise mission for a four-year period. To support the European Coordinators in the preparation of the Corridor Work Plan – as the final outcome of the 2014 corridor activities – the European Commission launched nine Corridor studies. These studies aimed at providing a scientific basis for the definition of the Corridor Work Plan.

16. The work plans of the European Coordinators, establishing the basis for action until 2030, were approved in June 2015. They have been elaborated over the course of four consultative Corridor Fora, working group meetings in 2014 and the Corridor studies. The work plans reflect a benchmark of each Core Network Corridor, identifying where they fail

<sup>3</sup> Core network corridor “Motorways of the Sea”.

to meet the criteria as defined by the regulation, and indicate other bottlenecks additional to those reflected in Regulation (EU) No. 1316/2013.

17. Activities of the European Coordinators are supported by a consultative forum (the “Corridor Forum”). The Core Network Corridor Fora examine the progress achieved and also work in the “pipeline” of projects to be launched in the next period. Today, the priority of EC is following up the state of progress of the projects already launched, including the state of preparatory studies, public procurement, environmental assessment and other stages in view of updating the corridors work plans and also the list of projects ready for implementation.

18. The focus on European added value and assessing and addressing cross border gaps, bottlenecks and deficiencies along the corridors remains central. In addition, the intention is progressively to encourage, integrate and blend other innovations through transport policy initiatives such as, for example, smart and sustainable urban transport, green corridors and intelligent traffic management systems. Investigation of interoperability and intermodality as core concepts for the development of urban nodes, ports, airports, rail-road terminals and inland waterways will be intensified. Further analysis and efforts will be undertaken regarding the environmental impact of corridor implementation concerning noise pollution, the emission of greenhouse gases and their contribution more widely to combatting climate change.

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