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Working Party on Inland Water Transport

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

Fiftieth session

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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)

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

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 the Standardization of Technical and Safety Requirements in Inland Navigation (SC.3/WP.3) at its forty-ninth session asked the secretariat to prepare draft amendments to the Inventory of Most Important Bottlenecks and Missing Links in the E Waterway Network (Resolution No. 49, revised) for its fiftieth session in February 2017 (ECE/TRANS/SC.3/WP.3/98, para. 28).
3. Draft amendments to Resolution No. 49 made by the secretariat on the basis of the third revision of the Inventory of Main Standards and Parameters of the E Waterway Network (Blue Book) adopted by the Working Party on Inland Water Transport at its sixtieth session (ECE/TRANS/SC.3/203, para. 42) are reproduced below.

II. Amendment proposal to Part III of the Annex to the Inventory of Most Important Bottlenecks and Missing Links in the E Waterway Network (Resolution No. 49, revised)

A. Belarus

Strategic bottlenecks

4. In paragraphs 1 and 3 *replace* 1.60 by 1.70.
5. In paragraph 4 *replace* 1.30 by 1.40.
6. In paragraph 2 for the existing text, *substitute*
Dneprovsko-Bugskiy Canal (E 40) from Kobrin to Pererub — low maximum draught (1.70 m); upgrading of locks to class Va is envisaged.
7. *Add* a footnote in the end of paragraph 2
Upgrading of lock No. 3 Ragodosch was started in 2015, the startup is planned for 2019; upgrading of lock No. 4 Ovezichi is planned for 2019-2020.

B. Belgium

Basic bottlenecks

8. *Add* a new paragraph 4 and *renumber* the existing paragraphs 4-7 accordingly
Plassendale-Nieuwpoort Canal (E 02-02-01).
9. In paragraph 5 *delete* up to 7 m.

Strategic bottlenecks

10. *Add* new paragraphs 1 to 5 and *renumber* the existing paragraph 1 as 6
 1. Condé-Pommeroeul Canal (E 01) — re-opening of a section currently not in service.
 2. Nimy-Blaton-Peronnes Canal (E 01) — upgrading from class IV to class Va is envisaged.
 3. Canal du Centre (E 01), Obourg Lock — construction of a new class Va lock is envisaged.
 4. Charleroi-Bruxelles Canal (E 01), Marchienne, Viesvilles and Gosselies Locks — construction of new class Va locks is envisaged.
 5. Meuse (E 01) — construction of class VIb locks is envisaged at Ivoz-Ramet and Ampsin-Neuville.
11. *Add* a new paragraph 7 and *renumber* the existing paragraph 2 as 8
Canal de Lanaye (E 01) — construction of a class VIb lock is under way.
12. *Add* a new paragraph 9 and *renumber* the existing paragraph 3 as 10
Roeselare-Leie Canal (E 02-04), Roeselare-Ooigem section — improvement of waterway for class Va. Project is under study.
13. *Add* new paragraphs 11 to 14 and *renumber* the existing paragraph 4 as 15

11. Charleroi-Bruxelles Canal (E 04), Lembeek-Bruxelles section — upgrading the waterway and the locks to class Va. Project is under study.
12. Haut Escaut (E 05) on section Bléharies-Hérinnes – Tournai passage — upgrading to class Va.
13. Boven-Schelde (E 05), Kerkhove-Asper section — renewal of weirs and upgrading lock capacity to class Vb. Project is under study.
14. Boven-Zeeschelde (E 05) on section Gent circular canal-Baasrode — upgrading from class IV to class Va. Project is under study.

C. Bosnia and Herzegovina

Basic bottlenecks

14. *Replace 507.0-174.8 by 515.2-178.0.*

D. Croatia

Basic bottlenecks

15. For the existing text, *substitute*
 1. Drava (E 80-08) from 0 km to 14 km — 3 critical sections with inadequate fairway parameters.
 2. Sava (E 80-12) section between Sisak and Brčko — upgrading from class III to class IV.

Strategic bottlenecks

16. For the existing text, *substitute*
 1. Danube (E 80) from 1,433.1 km to 1,295.5 km — 17 critical sections with inadequate fairway parameters.
 2. Sava (E 80-12) section between Brčko and Serbian/Croatian State border — upgrading from class IV to class Va.

E. Czech Republic

Strategic bottlenecks

17. For the existing text, *substitute*
 1. Elbe (E 20) from Mělník to Chvaletice — narrow width of lock gates (12.00 m); from Chvaletice to Pardubice the construction of a lock at Přelouč is necessary.
 2. Vltava (E 20-06) from Mělník to Praha — low height under bridges (4.50 m) and narrow width of lock gates (11.00 m).

F. France

Missing links

18. In footnotes 3 and 4, for the existing text, *substitute*

³ The secretariat was informed by the Government of France that the Seine-Schelde connection project had been modified.

⁴ The secretariat was informed by the Government of France that the project concerning the Saône-Moselle Link/Saône-Rhine Link has been abandoned.

Basic bottlenecks

19. *Delete* the second sentence.

Strategic bottlenecks

20. *Substitute* the existing paragraph 1 *by* new paragraphs 1-6 and *renumber* the existing paragraphs 2 and 3 *as* 7 and 8

1. Condé-Pommeroeul Canal (E 01) — increasing the water depth up to 3.50 m is under consideration in the framework of the project on reopening this Canal for navigation.

2. Dunkerque-Escaut link and Escaut (E 01) up to Condé — lifting of bridges up to 5.25 m is completed, lifting up to 7.00 m is envisaged.

3. Deûle and Deûle Canal (E 02) from Quesnoy/Deûle to Lille — upgrading to class Va is under way, increasing the water depth up to 3.50 m is envisaged, from Lille to Bauvin — lifting of bridges up to 5.25 m is completed, lifting up to 7.00 m is envisaged.

4. Lys Mitoyenne (E 02) — increasing the water depth to 4.50 m is considered.

5. Network Nord Pas-de-Calais (E 02 and E 05) — lifting of bridges and upgrading of links with Belgium to class Va. Lifting of bridges up to 5.25 m is being finalized (summer 2012), lifting up to 7.00 m is envisaged.

6. Rhône-Sète Canal (E 10-04) — works on upgrading to class Va are under way.

G. Germany

Basic bottlenecks

21. *Delete* paragraph 1 and *renumber* paragraphs 2-6 accordingly.

22. Paragraph 4, for the existing text *substitute*

Berlin region waterways (connection to Westhafen Berlin) — upgrading to classes IV and Vb under way.

23. In paragraph 5, *delete*

to enable navigation of vessels with two layers of containers.

Strategic bottlenecks

24. For the existing text, *substitute*

1. Rhine (E 10) — low fairway depth during dry seasons: from St. Goar to Mainz (1.90 m) and low height under bridges at Kehl/Strasbourg.

2. Rhine-Herne Kanal (E 10-03) — upgrading to class Vb is under way.

3. Dortmund-Ems Kanal (E 13) from 108.3 km to 21.5 km — upgrading to class Vb is under way.
 4. Weser (E 14) from 360.7 km to Minden — upgrade to Va under way.
 5. Elbe (E 20): middle Elbe from Lauenburg upstream to the border between Germany and the Czech Republic — low fairway depth during dry seasons (1.20 m).
 6. Main (E 80) upstream from Würzburg — low fairway depth (2.50 m); project is under way.
 7. Danube (E 80) from Straubing to Vilshofen — low fairway depth (2.00 m at LNWL).
 8. Danube (E 80) — low height under bridges at Bogen (2,311.27 km) — 5.00 m; at Passau (2,225.75 km) — 5.15 m; upgrading to 7.00 m is necessary.
 9. Weser (E 14) — upgrading of Minden and Dörverden Locks is under way.
25. In the end of paragraph 7, *add* a footnote
- Low Navigable Water Level; corresponds to a long-term mean water level reached or exceeded on all but 20 ice-free days per year (approximately between 5 per cent and 6 per cent of the ice-free period).
26. In the end *add* a new section
- Other bottlenecks, the elimination of which is anticipated to become economically viable only in the framework of a replacement programme supported by a particular investment scheme:
1. Datteln-Hamm Kanal (E 10-01) — to the east of the Hamm harbour.
 2. Neckar (E 10-07) — adaptation of fairway width and lock dimensions.
 3. Dortmund-Ems Kanal (E 13) to the north of the Mittellandkanal.
 4. Canals branching off from the Mittellandkanal (E 70-02, 70-04 and 70-06) — low fairway depth and height under bridges, insufficient dimensions of locks.

H. Hungary

Strategic bottlenecks

27. In paragraph 1, *replace* 1,810.0 by 1,811.0.
28. *Add* new paragraphs 3-5
 3. Danube (E 80), at HNWL — low height under the road/rail bridge at Dunaföldvár (1,560.55 km) — 8.73 m between pillars II-III and III-IV, respectively. Upgrading to 9.10 m is required.
 4. Danube (E 80), at HNWL — low height under the road/rail bridge at Baja (1,480.22 km) — 8.09 m between pillars III-IV and 8.40 m between pillars II-III. Upgrading to 9.10 m is required.

5. Danube (E 80), between 1,811.00-1,433.00 km, the draught of 2.5 m is assured during 180-260 days a year depending on the water level. The project aimed at the elimination of bottlenecks is under way.

I. Italy

Missing links

29. In paragraph 2, *replace* E 91-03 by E 91-05.

Basic bottlenecks

30. *Replace* Cremona by Piacenza.

Strategic bottlenecks

31. For the existing text, *substitute*
 1. Veneta Lateral Waterway (E 91) from Marghera to Porto Nogaro — upgrading from class IV to class Va is envisaged.
 2. Mantova-Adriatic Sea Canal (E 91-03) from Ostiglia to Baricetta lock — adaptation to class Va is envisaged.
 3. Ferrara waterway (E 91-04) from Ferrara to Porto Garibaldi — upgrading to class Va is under way.

J. Lithuania

Basic bottlenecks

32. For the existing text in brackets, *substitute*
1.20 m and 1.50 m, respectively; the depth of 12.5 km fairway stretch in Kaunas is less than 1.20 m.
33. In the end, *add* a footnote
Nemunas (E 41): insufficient depth of the fairway stretch along 100 km of Nemunas river stretch in the border area and on the territory of the Russian Federation.

K. Netherlands

Basic bottlenecks

34. *Delete* the existing text.

Strategic bottlenecks

35. Add new paragraphs 9-12
 9. IJsselmeer-Meppel (E 12) — insufficient fairway depth and/or width, the project is under study.
 10. Amsterdam-Rijnkanaal (E 11) — removing bottlenecks at the Zeeburg locks (upgrading to class VIb).

11. Zaan (E 11-01) — adaptation to class Va with regard to fairway depth and/or width — height under the bridges and lock capacity is required.
12. Noordzeekanaal (E 11) — upgrading of sea locks at IJmuiden to class VIc is being studied.

L. Poland

Missing links

36. For the existing text, *substitute*
 1. Danube-Oder-Elbe Connection (E 30).
 2. Gdansk-Brest Connection (E 40), excluding its existing navigable sections.

M. Republic of Moldova

Basic bottlenecks

37. In paragraph 1, the second part of the sentence, *substitute*
upgrading from class II to class Va is required.

N. Romania

Basic bottlenecks

38. For the existing text, *substitute*
 1. Prut (E 80-07) from the mouth to Ungheni.
 2. Bega Canal (E 80-01-02) up to Timisoara.

Strategic bottlenecks

39. In paragraph 1, for the existing text, *substitute*
 1. Danube (E 80) from 845.5 km to 175 km — low fairway depth during dry seasons (below 2.50 m — value recommended by the Danube Commission) at several critical sections, i.e.:
 - from 845.5 km to 610 km, with fairway depth limited to 1.90-2.50 m for 12-46 days a year;
 - from 610 km to 375 km, with fairway depth limited to 1.60-2.00 m for 20-40 days a year;
 - from 375 km to 300 km, with fairway depth limited to 1.40-2.50 m for 61-126 days a year; according to Notice No. 3/08.06.1992 issued by the Romanian River Administration (AFDJ), the navigation on the sector 346 km – 240 km is diverted via Bala-Borcea branch when the depths in Cernavodă are 1.50 m with decreasing tendency;
 - from 300 km to 175 km, with fairway depth limited to 2.00-2.50 m for 5-32 days a year.

40. In the end of paragraph 2, *replace* 6.90-7.00 m for 10-20 days a year *by* 7.01 m for 2-16 days a year.

O. Russian Federation

Strategic bottlenecks

41. In footnotes 6-8, for the existing text, *substitute*

⁶ In 2008 a second lock at the Kochetovsky hydraulic complex became operational. To eliminate the insufficient draught, the construction of a low-head hydraulic complex near the Bagaevsky village is being considered.

⁷ Due to the fact that the Tcheboksary Reservoir is not filled up to the project level and that the water level of the Volga River at the Nijniy Novgorod-Gorodets section went down, the depth of 3.50 m at sill of the Gorodetski Lock is only ensured for 2–3 hours a day. To eliminate the insufficient draught, design works were started in 2014 to build a low-head hydraulic complex in the area of Bolshoye Kozino, the startup is planned for 2021.

⁸ The construction of a second parallel lock is in progress. The startup is planned for 2021.

P. Serbia

42. In the beginning *add* a new section

Basic bottlenecks: Begej (E 80-01-02) from its mouth to Serbian/Romanian border — upgrading from class III to at least class Va is required.

Strategic bottlenecks

43. *Add* paragraphs 5 and 6

5. Sava (E 80-12) from its mouth to the State border — upgrading to at least class Va is required.

6. Tisza (E 80-01) — upgrading from class IV to class Va is under study.

Q. Slovakia

Strategic bottlenecks

44. In paragraph 1, for the existing text, *substitute*

1. Danube (E 80) from Devín (1,880.26 km) to Bratislava (1,867.0 km) — insufficient depth at low water level and insufficient height 8.90 m at locks of Gabčíkovo Hydro Electrical Complex (1,819.3 km). Upgrading is required to 9.10 m.

45. *Add a new paragraph 3*

3. Váh (E 81), from Komárno (0.0 km) to Žilina (240.0 km) — insufficient fairway depth. Canalization of the river and its upgrading to class VIa (Komarno-Hlohovec) and class Va (Hlohovec-Žilina) in conjunction with the construction of new locks, and reconstruction of existing locks, are required.

R. Ukraine

Basic bottlenecks

46. In paragraph 2, *replace* Kilia arm *by* Kiliiske Mouth.

47. In paragraph 3, *replace* Dnestr *by* Dnister and Belgorod Dnestrovsky *by* Bilhorod Dnistrovskyi.
