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Working Party on Inland Water Transport

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

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Item 12 (a) of the provisional agenda

OTHER BUSINESS

**DEFINITION OF BOTTLENECKS, MISSING LINKS
AND QUALITY OF SERVICE IN INLAND NAVIGATION**

Note by the secretariat

I. INTRODUCTION

1. At its fifty-first session, the Working Party SC.3 was informed that an informal group of experts under the auspices of the UNECE Working Party on Transport Trends and Economics (WP.5) was revising document TRANS/WP.5/R.60, "Methodological basis for the definition of common criteria regarding bottlenecks, missing links and quality of service of infrastructure networks". The Working Party SC.3 reviewed the sections, which dealt with the inland water transport, and considered it useful to submit them for comments to the Working Party SC.3/WP.3, asking the SC.3/WP.3 to pay a particular attention to the issue of quality of service (ECE/TRANS/SC.3/178, para. 14).

2. The Working Party may wish to review the definition of bottlenecks, missing links and quality of service in inland waterways, as well as policy recommendations formulated by the group of experts, which are presented in the next section of the document. The full draft is available at the WP.5 Webpage: <http://www.unece.org/trans/main/wp5/inf20.html>.

II. A METHODOLOGICAL BASIS FOR THE DEFINITION OF COMMON CRITERIA REGARDING THE IDENTIFICATION OF BOTTLENECKS, MISSING LINKS AND QUALITY OF SERVICE IN INFRASTRUCTURE NETWORKS ^{1/}

A. Policy background and history of previous work in Inland Waterways

3. For inland waterways, speed is typically less of a consideration in terms of quality of service. Additionally, capacity of the network as a whole is significantly influenced by the fact that inland waterways are constructed to very different specifications with marked differences in capacity. UNECE, for example, identifies seven different categories (I through to VII).

4. There are thus major, structure-dependent bottlenecks to use of certain types of craft. However, the cost-effectiveness of measures to tackle such issues is always likely to be problematic. In the original document TRANS/WP.5/R.60 bottlenecks induced by inadequate lock capacity were seen as the prime bottleneck issue for inland waterways and a procedure for calculating lock capacity was given.

5. The amount of analytical work that has been done in relation to missing links is negligible and that on bottlenecks is limited and has mostly been standards-driven. In this sector, a 'light touch' analysis at the national level seems appropriate, especially as substantial progress seems to have been made under the auspices of the UNECE Working Party on Inland Water Transport in its activities related to the implementation of the European Agreement on Inland Waterways of International Importance (AGN).

6. States parties to the AGN agreement agreed to adopt its provisions as a coordinated plan for the development and construction of a network of inland waterways, and, therefore, undertook to work on removing the bottlenecks and missing links. The Working Party SC.3 maintains the agreement and monitors the progress in the development of inland waterways infrastructure. To support the AGN implementation, the Working Party has issued the "Blue Book" (ECE/TRANS/SC.3/144/Rev.1, 2006) on technical characteristics of European inland waterways and ports of international importance, which provides UNECE member states with a common definition and classification of inland waterway bottlenecks and a list of bottlenecks and missing links in the E Waterway Network.

7. Since October 2002, the Working Party SC.3 has maintained an inventory of the most important bottlenecks and missing links in the E Waterway Network (Resolution No. 49, ECE/TRANS/SC.3/159), which as of July 2007 identified 42 strategic and 31 basic bottlenecks in eighteen countries of Western, Eastern and Central Europe.

B. Definition of bottlenecks, missing links and quality of service

8. In the course of its work on the draft AGN the Working Party SC.3 endorsed the following definitions of "bottlenecks" and "missing links" in the inland navigation network, elaborated by the ad hoc Group of Experts on Inland Waterway Infrastructure:

^{1/} First draft revision, August 2007.

- (a) Those sections of the European waterway network of international importance that have parameter values being substantially lower than target requirements are called *bottlenecks*.

There are two kinds of bottlenecks: Basic bottlenecks are the sections of E waterways whose parameters at the present time are not in conformity with the requirements applicable to inland waterways of international importance in accordance with the new classification of European inland waterways (class IV); Strategic bottlenecks are other sections satisfying the basic requirements of the class IV but which, nevertheless, ought to be modernized in order to improve the structure of the network or to increase the economic capacity of inland navigation traffic.

- (b) *Missing links* are such parts of the future network of inland waterways of international importance that do not exist at present.

9. No definition of quality of service was given.

C. Recommendations for the Inland Waterway Network ^{2/}

1. Missing links

10. It is recommended that national administrations review the identification of missing links as established in the *Blue Book* based simply on their expert knowledge of their own network without formal guidelines, save that their thinking should have an explicit focus on expediting international freight movement and that they should be aware of possibilities for development in multi-modal transport. Compared to the road and railway sectors, the infrastructure capacity on inland waterways is more dependent of weather conditions, since a low level of water is often the major cause of restrictions. The other main factor relates to infrastructure and involves insufficient lock capacity. Many policies aimed at removing bottlenecks, therefore, focus on improving/adding locks and barrages and represent long-term projects requiring substantial financing.

2. Bottlenecks

11. It is recommended that the standards-based guidelines adopted by the UNECE Inland Transport Committee should continue to be employed. National administrations should continue to identify basic and strategic bottlenecks. The basic condition for the elimination of bottlenecks and completion of missing links is the positive result of economic evaluation” (TRANS/SC.3/133, paragraph 18).

12. In view of the progress already made in this area, relatively little extra work may be needed.

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^{2/} Section 4.4 of the first revised draft.