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

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Item 4 of the provisional agenda
Future cooperation on the European vessel/hull database

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Note by the secretariat

I. Mandate

1. At its thirty-eighth session, the Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation (SC.3/WP.3) discussed the possible UNECE role in hosting and operating a future pan-European database of inland vessels, currently being developed with the European Union (EU) by the Platform for the implementation of the EU NAIADES programme (PLATINA). SC.3/WP.3 requested the secretariat to prepare, for its thirty-ninth session, a first concept note addressing the issue in more detail that, following further consideration and fine-tuning, could be transmitted to the fifty-fifth session of the Working Party on Inland Water Transport (SC.3) (ECE/TRANS/SC.3/WP.3/76, para. 23).

2. The present document has been prepared by the secretariat in line with this request for consideration and approval of the Working Party.

II. Establishment and operation of a possible pan-European Hull Data Base (pEHDB)

A. Introduction

3. At the fifty-fourth session of SC.3 (13–15 October 2010), PLATINA presented its work on a pilot European Hull Database. The goal of such a database is to facilitate the
exchange of information on a set of hull data for inland vessels (unique identification number, name, length, breadth of the vessel, single or double hull, etc.) on the basis of international requirements on technical prescriptions and electronic reporting. The pilot project was initiated by PLATINA in 2010 to provide a pilot service to “early” users and to gradually interconnect with additional vessel certification authorities and river information services (RIS). While the technical side of the project has been well developed, no decision has yet been taken on the future operator of such a database following expiration of PLATINA.

4. SC.3 expressed the view that any future European database should be open to all interested member States of the United Nations Economic Commission for Europe (UNECE), whether or not EU member States. SC.3 also noted that UNECE already maintains comparable complex and secured information technology systems, such as the on-line International TIR Data Base (ITDB) containing more than 60,000 records and covering 57 countries. The representatives of Austria, Bulgaria, Czech Republic, Russian Federation, Serbia, Slovakia, as well as of the Danube and Sava Commissions supported the view that a future pan-European Hull Database (pEHDB) could be maintained by UNECE. SC.3 asked the secretariat to actively pursue consultations on its role in the operation of the future database with all relevant stakeholders and, in particular, with the European Commission (ECE/TRANS/SC.3/187, para. 29).

5. At its thirty-eighth session, SC.3/WP.3 was informed about the results of such consultations. It was highlighted that there seemed to be a consensus on the value added of the pan-European dimension of such a database. However, before a decision on the future operation of a pEHDB could be taken, three sets of issues needed to be considered.

6. Firstly, operational requirements in terms of human resources, information technology (IT) and data exchange procedures needed to be clarified. Secondly, administrative and legal arrangements, based on internationally established procedures providing the basis for secured data exchange among competent authorities, including data protection, needed to be addressed. Lastly, the financial implications of establishing and operating such as pEHDB for a sustained period under the auspices of UNECE would need to be analysed and appropriate funding procedures established (ECE/TRANS/SC.3/WP.3/76, paras. 21–23).

7. The recently adopted UNECE White Paper on Efficient and Sustainable Inland Water Transport in Europe (ECE/TRANS/SC.3/189) calls for streamlining procedures and complementarities in work among UNECE, European Commission (EC) and River Commissions in order to optimize the use of limited resources and reap synergies. In line with such objectives, UNECE is recommended to further focus its work on activities related to pan-European navigation rules (European Code for Inland Waterways) and on technical work related to a pEHDB operated under the auspices of UNECE.

8. The present document provides further information on operational, legal and administrative as well as financial requirements that need to be addressed before a pEHDB can be established.

B. Technical and operational requirements

9. Based on experiences made by PLATINA, the tasks of the future operator of a pEHDB include the following elements:

   (a) Develop and maintain the information architecture, data volumes, number of transactions and data files, including sequence for establishing connections between users, measures to promote electronic links among national databases and the pEHDB, identification of possible additional functionalities, etc.;
(b) Identify and establish, if applicable, synergies with other international data exchange systems operated by UNECE;

c) Develop (model) administrative agreements to allow countries to join the pEHDB based on standard and commonly agreed procedures;

d) Establish a supervisory and management structure, including a Steering Committee and/or management board of representatives of participating Governments and organizations;

e) Setup a communication structure among pEHDB users and with the IT system supplier(s);

f) Identify the role and responsibilities of possible IT system supplier(s) and manage contracts for subcontractors, if necessary;

g) Define, prioritize, specify, implement and test requests for specific functionality of the pEHDB and/or its interfaces with national authorities;

h) Develop, maintain and test a contingency plan for the pEHDB in case of hardware or application failures, security incidents, etc;

i) Review of data to define additional mechanisms for enhancing data quality, back-ups and for the testing of data restoration;

j) Define and monitor performance parameters and related service levels.

10. During the pilot operations of a European Hull Database undertaken by the EU-funded PLATINA project since March 2010, technical specifications have been developed and applied that could be used, with only minor modifications (e.g. additional languages), for the pEHDB operated by UNECE. Similarly, technical data exchange procedures among public authorities in different countries have been developed by PLATINA that could be used as a basis for similar communication protocols under the pEHDB.

11. Also extensive expertise and experiences with IT systems suppliers have been acquired by PLATINA that might be utilized and further developed in order to decentralize or outsource IT support functions. This would allow coping with the frequent updating and upgrading of information technologies and would permit the operator of the pEHDB to focus on supervisory and core functions.

C. Legal and administrative arrangements

12. An important issue to be analysed in detail and to be resolved in establishing a pEHDB is the secured exchange of data among public authorities of participating countries in compliance with national data protection laws and regulations. Such exchange of data exists on the basis of various international arrangements provided for by United Nations bodies, such as International Maritime Organization (IMO) and UNECE. Such arrangements provide for the mandate and the conditions under which such data exchange among United Nations Governments is possible.

13. For the purpose of the pilot European Hull Data Base as developed under PLATINA, a minimum set of hull data is exchanged among vessel certification authorities and exchanged with RIS authorities in compliance with the Rhine Vessels Inspection Regulations of CCNR, the EU Directive 2006/87/EC laying down technical requirements for inland waterway vessels and the EC Regulation 164/2010 on the technical specifications for electronic ship reporting in inland navigation. Vessel certification authorities require such data to avoid, for example, the assigning of two European Vessel Identification
Numbers to one and the same vessel. RIS authorities need this data for several RIS applications, such as keeping lock diaries and preparing lock statistics.

14. In addition to these legal provisions, letters were exchanged among the non-public service provider (via donau) and the participating authorities from nine countries in the spring of 2010. A special service agreement was established under the PLATINA pilot project to allow data exchange among participating national authorities to enable the full-scale use of the EHDB. This agreement is expected to be signed in April 2011.

15. Similarly, the operation of the pEHDB under the auspices of UNECE will require the preparation of solid documentation and an agreement on the specific conditions and requirements for the exchange of data among public authorities of UNECE member countries and the UNECE secretariat. This agreement should cover issues such as data protection, data security, data control and liability in case of infringements.

16. As a basis for such documentation, the provisions on data exchange on vessel identification as contained in Section 2–7 of the UNECE Resolution No. 61 on Recommendations on Harmonized Europe-Wide Technical Requirements for Inland Navigation Vessels (ECE/TRANS/SC.3/172/Rev.1) could be used.

17. Similarly, reference could be made to the provisions on registration of inland navigation vessels as enshrined in the 1965 Convention on the Registration of Inland Navigation Vessels (in force since 24 June 1982). This UNECE Convention has nine Contracting Parties: Austria, Belarus, Croatia, France, Luxembourg, Montenegro, the Netherlands, Serbia and Switzerland. In accordance with article 11 of the Convention, the registration offices of the Contracting Parties are authorized to correspond directly with each other for the purposes of transferring the registration of inland vessels. The Convention does not yet reflect new practices in the registration of inland vessels, such as the unique European vessel identification number, and may need to be updated in this respect. However the Convention deals with the proof of ownership of a vessel while the unique European vessel identification number and the EHDB are based on certification of vessels and RIS. The different tasks might fall under the competency of different national authorities.

18. In view of the above, the following seems to be among the possible options for a secured exchange of data among public authorities of participating countries:

Option 1: Prepare of amendments to UNECE Resolution No. 61 or negotiate a separate UNECE Resolution on the subject to be adopted by the UNECE Working Party on Inland Water Transport and endorsed by the UNECE Inland Transport Committee.

Option 2: Revise and update the UNECE Convention on the Registration of Inland Navigation Vessels including therein provisions on unique vessel identification numbers and international data exchange of these numbers.

Option 3: Prepare a specific UNECE legal instrument (treaty) on data exchange on unique vessel identification numbers for inland navigation vessels.

19. At the time of drafting this document, option 1 seems to provide the most promising solution as it can be negotiated within a short time by an existing body of UNECE having the required expertise and country coverage. It is felt that a UNECE Resolution, to be adopted individually by countries participating in the pEHDB, could constitute the basis for the required data exchange among public authorities of UNECE member States.
D. Financial arrangements

20. Major factors influencing the set-up and operational costs of the pEHDB include the following:
   (a) Number of countries and users and number of links to national databases;
   (b) Number and scope of national requests data change;
   (c) Quality of data provided by the national authorities;
   (d) Level of data services provided (reaction and repair time, operational hours of helpdesks, etc.);
   (e) Negotiation of legal agreements among countries;
   (f) Services required for the pEHDB management structure.

21. The set-up and operational costs of the pEHDB will significantly vary from the estimates made by PLATINA, if synergies at the technical, operational and legal level can be exploited with systems of a similar complexity and legal setting.

22. Since 1999, UNECE is responsible for the management the TIR ITDB database system covering annually 2.8 Million TIR Customs transit operations in 57 countries. This on-line system contains more than 50,000 secured records accessible only to national Customs authorities allowing them to exchange information on infringements into Customs procedures and to control access by operators to the TIR Customs regime. While the IT facilities of the TIR ITDB cannot be shared physically for security reasons, the legal, administrative and technical IT experiences and know-how of the UNECE secretariat could be useful, including office and conference facilities in setting up and operating a pEHDB under the supervision of its participating countries and organizations.

23. While, sound cost estimates for the operation of a pEHDB at UNECE will require more detailed studies, it is likely that extra-budgetary funds in the order of 350,000 to 400,000 Euro will be required annually for the required IT-services and 1.5–2 experts. During the first, possibly also in the second year, start-up costs in the order to 50,000 to 100,000 Euro may also be required. UNECE would need to contribute management and legal staff as well as required offices for 2 experts (staff and adequate conference facilities).

24. The financial rules and regulations of UNECE require the transfer of annual costs upfront, i.e. the funds must be available before the beginning of the operating year. Initially, the required funding for the set-up and operation of the pEHDB could be provided through specific funding arrangements with the European Commission within the possibly follow-up of the EU NAIADES programme. In the longer term the pEHDB could be financed from annual contributions of participating member States, based on the mutually agreed criteria, such as, for instance, the size of the inland fleet.

25. The issue of finding a financial arrangement for covering the set-up and operating costs of a pEHDB will need to be addressed, notwithstanding the decision on the UNECE involvement yet to be taken.

III. Issues for further consideration by SC.3/WP.3

26. The present document contains a few preliminary ideas on establishing and operating a pEHDB under the auspices of the UNECE. They are intended to serve as a basis for discussion by the Working Party. Countries are encouraged to critically review the above provisions before giving guidance to the secretariat to prepare a more detailed
concept note for consideration and possible adoption by the Working Party on Inland Water Transport at its fifty-fifth session (12–14 October 2011).