



# Economic and Social Council

Distr.: General  
24 August 2016

Original: English

---

## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on Inland Water Transport

##### Sixtieth session

Geneva, 2–4 November 2016

Item 6 (d) of the provisional agenda

##### European inland waterway network:

Good Navigation Status of European inland waterways

## Concept of Good Navigation Status for European inland waterways

### Note by the secretariat

#### I. Mandate

1. This document is submitted in line with Cluster 5: Inland Waterway Transport, paragraph 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 (hereafter SC.3) will be informed about the study on Good Navigation Status of inland waterways funded by the European Commission (EU). The term ‘Good Navigation Status’ (GNS) was introduced in EU Regulation No. 1315/2013, which is on guidelines for the development of the trans-European Transport Network (TEN-T).<sup>1</sup> Article 15.3 (b)<sup>2</sup> stipulates that EU member States should ensure that inland waterways that are part of this transport network are required to be maintained so as to preserve good navigation status, while respecting the applicable environmental law. The main requirements for such waterways are based on the classification of inland waterways proposed by Resolution No. 92/2 of the European Conference of Ministers of Transport (ECMT) in 1992 “On new classification of inland waterways” which was implemented in the European Agreement on Main Inland

---

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

<sup>2</sup> Note of the secretariat: here and below articles of EU Regulation No. 1315/2013 are referred to.

Waterways of International Importance (AGN). Subsequently, EU commissioned a study on GNS, which began in January 2016.

3. This document highlights the working paper as transmitted by the consortium<sup>3</sup> that carried out the study and is submitted for discussion at the sixtieth session of SC.3.<sup>4</sup>

4. SC.3 is invited to take part in the discussion of the GNS concept. SC.3 may wish to consider possibly aligning this concept with UNECE instruments and the development of a common, harmonized approach at the pan-European level and applicable to the E waterway network.

## **II. A concept of Good Navigation Status**

### **A. Purpose and organization of work**

5. The GNS study is set in the framework of EU Regulation No. 1315/2013 on the guidelines for the development of the trans-European transport network, which requires all waterways of the TEN-T core and comprehensive network to feature GNS no later than the year 2030. The aim of the study is to:

- Specify, in close cooperation with relevant experts, a broadly accepted concept of what GNS means in practice;
- Develop a common methodology that allows for a sufficient level of differentiation taking into account specific demand requirements and transport characteristics; and
- Define the technical content on which GNS is addressed.

6. The process is supervised by a Steering Group, chaired by the EU, in close cooperation with River Commissions such as the Central Commission for Navigation on the Rhine (CCNR) and the Danube Commission (DC). A working group of experts is consulted on a regular basis via bilateral contacts, regional working meetings, pan-European working meetings and surveys. The study is planned to last for 20 months and is expected to be finalised in October 2017.

### **B. Provisional views on the GNS approach**

7. There are a number of national and international initiatives to further develop and improve the conditions for seamless and reliable navigation on the inland waterways in Europe. The identification of GNS elements and indicators in the study will build on the approaches and findings of these initiatives as much as possible, in order to ensure efficiency and achieve the underlying purpose. Together with stakeholders and experts, the scope of GNS towards 2030 as well as the possibilities to link to existing or planned initiatives shall be identified as a first step of the study. Here, UNECE activities may also be of relevance in identifying and discussing possible synergies.

8. An important step at the beginning of the study was the first pan-European meeting on GNS at the TEN-T days (Rotterdam, the Netherlands, 20 June 2016) where the potential scope of GNS was discussed. From a broad perspective of possible themes and elements of

---

<sup>3</sup> Members of the consortium are STC-Group Holding, STC-NESTRA, PLANCO, Vlaamse Overheid, Inland Navigation Europe and viadonau.

<sup>4</sup> The study is in progress and the views and proposed approaches do not necessarily represent the position of EU and or its member States.

GNS, the waterway dimensions that determine the size- and draught-limit of vessels and the reliability of these parameters were identified as being ‘core elements’ of GNS. Furthermore, it was agreed that the core should also address capacity issues such as waiting times and operational hours of locks and bridges.

9. The definition of GNS that is currently proposed by the consortium is: “Good Navigation Status (GNS) enables cost-efficient, reliable and safe navigation for users on the inland navigation transport network while considering the sustainability of waterway management.” This means that GNS shall meet the following criteria prescribed by EU Regulation No. 1315/2013:

(a) At least class IV of waterways included in the comprehensive TEN-T inland waterway network (Article 15.3 (a)); exemptions from the requirement of 2.5 m draught and 5.25 m height under bridges available all the year round may be granted by EU based on justified criteria;

(b) Higher standards for modernizing existing waterways and for creating new waterways (Article 16 (b)). This implies that other targets than waterway dimensions meeting class IV may be defined on certain sections. The consortium proposes that this shall be done by the responsible national/regional waterway authorities on the basis of internationally agreed specifications (e.g. ECMT classification) or through international agreements currently in force (e.g. AGN). The consortium also proposes that minimum standards for the development of GNS shall be taken into account in the development of GNS (see para. 19 below);

(c) Availability of River Information Services (RIS) on inland waterways<sup>5</sup> referred to in Article 15.3 (c) and alternative clean fuels<sup>6</sup> referred to in Article 39.2 (b);

(d) Preserving GNS (Article 15.3 (b)) by reaching targets on specific GNS core indicators related to the physical waterway infrastructure and its use, as well as addressing additional GNS elements.

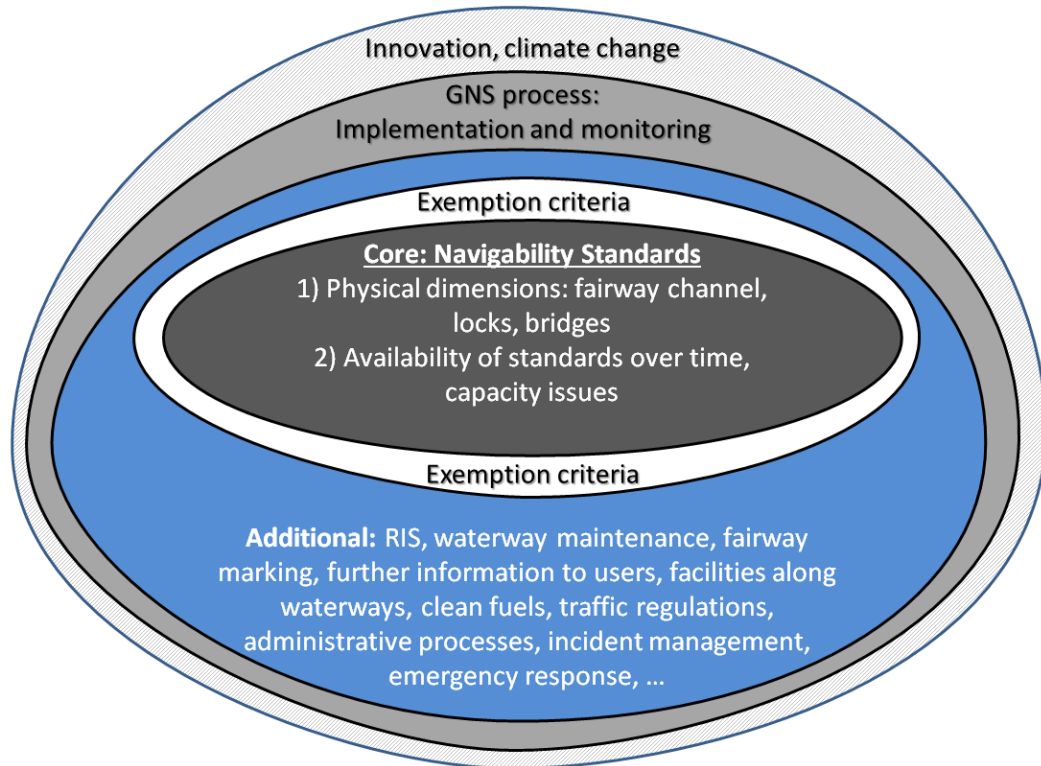
### **C. GNS concept proposed by the consortium**

10. The GNS concept proposed by the study consortium is shown in the figure below. The elements of GNS are to be divided into two groups: core elements for GNS (including their indicators and key performance indicators) and additional elements.

---

<sup>5</sup> Directive 2005/44/EC of the European Parliament and of the Council of 7 September 2005 on harmonized river information services (RIS) on inland waterways in the Community.

<sup>6</sup> Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure.



11. The core elements shall be compliant with the following characteristics:
  - Focused on physical waterway infrastructure (navigability standards for users);
  - Applicable for the entire TEN-T waterway network;
  - Directly targeted by TEN-T and/or AGN;
  - SMART<sup>7</sup> criteria and targets apply; it would be feasible to have a quantitative indicator to make GNS measurable on the EU level.
12. The priority of elements was confirmed by the GNS Working Group.
13. Thus, specific core elements are:
  - Dimensions of the navigation channel in rivers, canals and lakes (depth and width of the fairway, height under bridges);
  - Availability of the physical waterway infrastructure by measuring the yearly score on the targeted infrastructure dimensions related to the applicable reference water level;
  - Dimensions of locks, ship lifts and bridges;
  - Availability and capacity of locks, ship lifts and moveable bridges (operational hours, closures, waiting times at locks and bridges).

<sup>7</sup> Specific, Measureable, Acceptable, Realistic and Time-bounded.

14. The main indicators for a core element are proposed to be:

- Navigation reliability of a waterway section: the percentage of the year in which the waterway section achieves the targeted dimensions and is 100 per cent available;
- Average waiting times at locks and bridges.

15. The target values of waterways' dimensions in the core indicators shall comply with Articles 15.3 (a) and 16 (b). The consortium proposes that for the availability and capacity core indicators, target values – agreed (trans-)nationally/regionally and across sectors – shall apply. These core indicators shall be developed according to minimum standards (see para. 19 below). These core indicators are to be monitored via the EU information system to coordinate and support TEN-T policy (TENtec database).<sup>8</sup>

16. For the set of GNS additional elements, the following characteristics apply:

- They relate to a wider range of topics (e.g. information to users, facilities along waterways, etc.);
- The relevance of elements might be limited to specific regions and there can be large regional differences;
- Specific EU regulations might already apply for an additional element or an issue (e.g. the EU Directives 2000/60/EC<sup>9</sup> (the Water Framework Directive), 2005/44/EC and 2014/94/EU (see para. 9 (c) above));
- SMART criteria need not to apply, no European quantitative indicator is applicable (e.g. more qualitative descriptions about processes are more relevant for reaching good scores on the core indicators);
- Experts in the GNS Working Group confirm their relevance to GNS.

17. The consortium proposes that for the additional elements, targets and objectives that are agreed (trans-)nationally/regionally and across sectors – shall apply. These shall be developed according to the minimum standards set out in para. 19 below. These targets and objectives shall be based on good practice guidelines on how to develop GNS, which are to be developed within the study. These guidelines cover or refer to valuable sources about other GNS aspects such as, for example, the provision of information to users of rivers, lakes and canals, communication with users of the river and waterway maintenance and management. The guidelines shall be regularly updated.

18. Exemption criteria will be applied<sup>10</sup> in duly justified cases, exemptions shall be granted to member States by EU from the minimum requirements on draught (less than 2.50 m) and on minimum height under bridges (less than 5.25 m) for 365 days per year. This could relate to local conditions on waterway sections (e.g. hydrology, hydro-morphology), extreme weather events, cost-benefit-aspects or environmental requirements. As a general approach, they need to be agreed among the affected riparian States and coordinated with EU after a process covering the minimum standards for the development of GNS.

<sup>8</sup> [http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/index\\_en.htm](http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/index_en.htm).

<sup>9</sup> Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

<sup>10</sup> As defined in Article 15.3 (a).

## **D. Minimum standards for the development of GNS**

19. Minimum standards for the development of GNS, and their achievement by 2030, will involve a deployment process to be proposed by the consortium on transnational, national and/or regional levels (e.g. within River Commissions). These minimum standards will be determined through appropriate consultation with all domestic and foreign users in a cross-sectoral approach when developing a programme of specific objectives, targets and measures addressing the implementation mechanism to achieve GNS. It takes into account:

- Local conditions of the waterway sections;
- Extreme weather events;
- Cost-Benefit-Analysis;
- Environmental requirements, where possible creating synergies with sustainable waterway planning and maintenance (“working with nature”);
- Innovation and technological development (ship design, maintenance technologies, etc.).

20. The perspective shall be focused on facilitating national and international trade and transport via waterways while aiming to achieve sustainable waterway management.

21. The consortium proposes a regular cross-border check and dialogue procedure within the process on the status of various core and additional GNS elements (for example, the status of bottlenecks on the waterways and addressing coordinated planning of projects and maintenance works from a corridor perspective in order to maximise waterway availability for users in a sustainable manner). This dialogue will involve organisations in charge of waterway management and maintenance as well as waterway authorities which are responsible for policy and financing as well as further users of rivers, lakes and canals. The implementation and effectiveness of measures will be monitored, with the aim of seeking continuous improvement and proactive implementation.

## **E. Planned further work by the study consortium**

22. A first network assessment on the achievement of GNS will be made as a part of this study. It will assess the extent to which GNS is implemented on the TEN-T network for inland waterways as 2030 approaches. This will begin towards the end of 2016, based on ongoing data collection for TENtec and in close cooperation with the involved waterway managers. The network assessment shall present measures and take note of planned investments and projects, such as the work plans described in the core network corridor. As a follow-up, a road map will be prepared that targets the sections of the network that are expected to have unsatisfactory navigation status by 2030. Here a link could also be made to the Inventory of Main Standards and Parameters of the E Waterway Network (“Blue Book”). Furthermore, good practice guidelines will be prepared by the consortium for the implementation of GNS, presenting key information on GNS elements illustrated with good practices.

23. In September and October 2016 regional workshops will be organized in Klaipeda, Budapest, Strasbourg and Berlin to discuss the GNS concept in detail. The list of indicators will be presented and discussed, as well as topics that need guidance, a review and selection of good practices. Moreover, a first discussion is planned to take stock of possible exemption criteria for waterways not currently meeting class IV requirements for the draught of vessels and the air clearance.

## F. Relevance for UNECE

24. It can be seen that as far as the waterway dimensions are concerned, there is a direct link not only to the TEN-T minimum requirements (reaching at least ECMT class IV dimensions) but also to AGN and the Blue Book.

25. Furthermore, a set of more qualitative additional GNS elements are also relevant to the work done by UNECE, for example, the implementation of UNECE resolutions on RIS and the European Code for Inland Waterways (CEVNI). Moreover, achieving GNS by 2030 will involve a deployment process, taking into account the viewpoints of waterway users as well as the cost-benefits, local conditions and environmental requirements and synergies. The process shall ensure that the measures necessary to attain GNS will be developed in a cross-sectoral and coordinated way between waterway managers on the various geographic levels (regional, national, transnational). Seamless transport across the whole of Europe will also require coordination with non-EU member States in Europe.

26. The following issues are proposed for discussion by SC.3:

- (a) Links between GNS, AGN and the Blue Book;
- (b) Establish a proper interface with pan-European instruments such as AGN and the Blue Book;
- (c) Added value of the GNS concept for non-EU member States to ensure that they profit from the GNS concept, e.g. non-EU member States along the Danube;
- (d) Support can be expected from ECE member States for the implementation and deployment of GNS in Europe.

## III. UNECE documents relevant to the concept of Good Navigation Status

27. UNECE maintains at least three main tools that could be relevant to GNS:

- The plan for the development of the E waterway network established by AGN;
- Harmonized navigation rules and a common marking system of waterways;
- UNECE resolutions on RIS.

28. A comparison of provisions of Annex III to AGN<sup>11</sup> establishing requirements to technical characteristics of E waterways and EU Regulation No. 1315/2013 is set out in the table below.

29. Operational criteria for E waterways are not covered by EU Regulation No. 1315/2013. However, they are referred to in some of the core elements.

*AGN (Annex III)*

*EU Regulation No. 1315/2013*

(i) The class of a waterway shall be determined by the horizontal dimensions of motor vessels, barges and pushed convoys, and primarily by the main standardized dimension, namely their beam or width

Article 15.3 refers to ECMT Resolution No. 92/2, Note No. 1 to the table:

The class of a waterway is determined by the horizontal dimensions of the vessels or pushed units, especially by their width

<sup>11</sup> Note by the secretariat: as coasters and fluvio-maritime vessels are not referred to in the ECMT Resolution, subparagraph (xiii) was not considered.

(ii) Only waterways meeting at least the basic requirements of class IV (minimum dimensions of vessels 80 m x 9.5 m) can be considered as E waterways

Article 15.3

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

Restrictions of draught (less than 2.50 m) and of minimum height under bridges (less than 5.25 m) can be accepted only for existing waterways and as an exception

Article 15.3 (a), second paragraph:

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)

(iii) When modernizing waterways of class IV (as well as smaller regional waterways), it is recommended that the parameters of at least class Va should be met

Article 16 (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

(iv) New E waterways should, however, meet the requirements of class Vb as a minimum. In this regard, a minimum draught of 2.80 m should be ensured

Article refers to ECMT Resolution No. 92/2, para. 2

(v) When modernizing existing waterways and/or building new ones, vessels and convoys of greater dimensions should always be taken into account

(vi) In order to ensure more efficient container transport, the highest possible bridge clearance value should be ensured in accordance with footnote 4 of Table 1

Article 16 (b) (see above) refers to ECMT Resolution No. 92/2, footnote 6 to the Table

(vii) Inland waterways expected to carry a significant volume of container and ro-ro traffic should meet, as a minimum, the requirements of class Vb. An increase of 7% to 10% in the beam value of 11.4 m of specific vessels navigating on inland waterways of class Va and higher classes may also be envisaged in order to allow for future developments in container dimensions and easy transport of trailers

Article 16 (b) (see above) refers to ECMT Resolution No. 92/2 including footnote 8 addressing ro-ro and container transport while footnote 6 of Table 1 addresses the bridge clearance for container transport



---

 AGN (Annex III)

 EU Regulation No. 1315/2013
 

---

(viii) On waterways with fluctuating water levels, the value of the recommended draught should correspond to the draught reached or exceeded for 240 days on average per year (or for 60% of the navigation period). The value of the recommended height under bridges (5.25, 7.00 or 9.10 m) should be ensured over the highest navigation level, where possible and economically reasonable

Article 15.3 (b) (see above), Article 16 (b) (see above)

Article 16 (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

No specific targets as regards number of days above reference low water level in the EU Regulation. However, the reference to ECMT implies ECMT Resolution No. 92/2 including footnote 2 “the draught of an inland waterway must be specified with reference to local conditions”, and also footnote 6 on bridge height for containers. It may be further specified as part of exemption criteria in Article 15.3 (a) for not reaching class IV dimensions on all days of the year

(ix) A uniform class, draught and height under bridges should be ensured either for the whole waterway or at least for substantial sections thereof

Article 15.3 (a)

(x) Where possible, the parameters of adjacent inland waterways should be the same or similar

(xi) The highest draught (4.50 m) and minimum bridge clearance (9.10 m) values should be ensured on all parts of the network that are directly connected with coastal routes

(xii) A minimum bridge clearance of 7.00 m should be ensured on waterways that connect important sea ports with the hinterland and are suitable for efficient container and river-sea traffic

---