

# Study on Good Navigation Status

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UNECE Working Party IWT  
4-6 October 2017, Geneva



# Legal background: 1315/2013, Article 15

## *Transport infrastructure requirements*

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.*

**Article 38:** “Member States shall take the appropriate measures for the core network to be developed in order to comply with the provisions of this Chapter by 31 December 2030.” => Develop GNS towards the year 2030 and subsequently preserve GNS

# Definition of “Good Navigation Status”

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“Good Navigation Status (GNS) means the state of the inland navigation transport network, which enables **efficient, reliable** and **safe** navigation for users by ensuring **minimum waterway parameter values** and **levels of service.**”

Moreover, GNS is to be achieved considering the wider socioeconomic and **environmental sustainability** of waterway management.

# GNS Scope and components

- Building on existing practice of achieving and maintaining standards: no new targets will be set by the study, proposals are primarily oriented towards existing standards and agreements
- Regarding free-flowing river sections, target values should be related to reference water levels, in order to reflect the natural and statistical variations in water discharge.
- Focus on „how to reach targets“ and „monitor performance“
- Flexibility: Finding acceptable mix between overall concept and regional differentiation plus different types of waterways, taking into account local conditions > no „one size fits all“ approach.

# Study outcome end of 2017

## ➤ SET OF DELIVERABLES

- **Concept** for Good Navigation Status
- Network **assessment** – where are we now
- **Roadmaps** for critical sections on TEN-T network
- **Good practice** guidelines for implementation: model GNS process

## ➤ Use of result is “open”:

### Technical background

= Input for guidance document for Member States by Commission

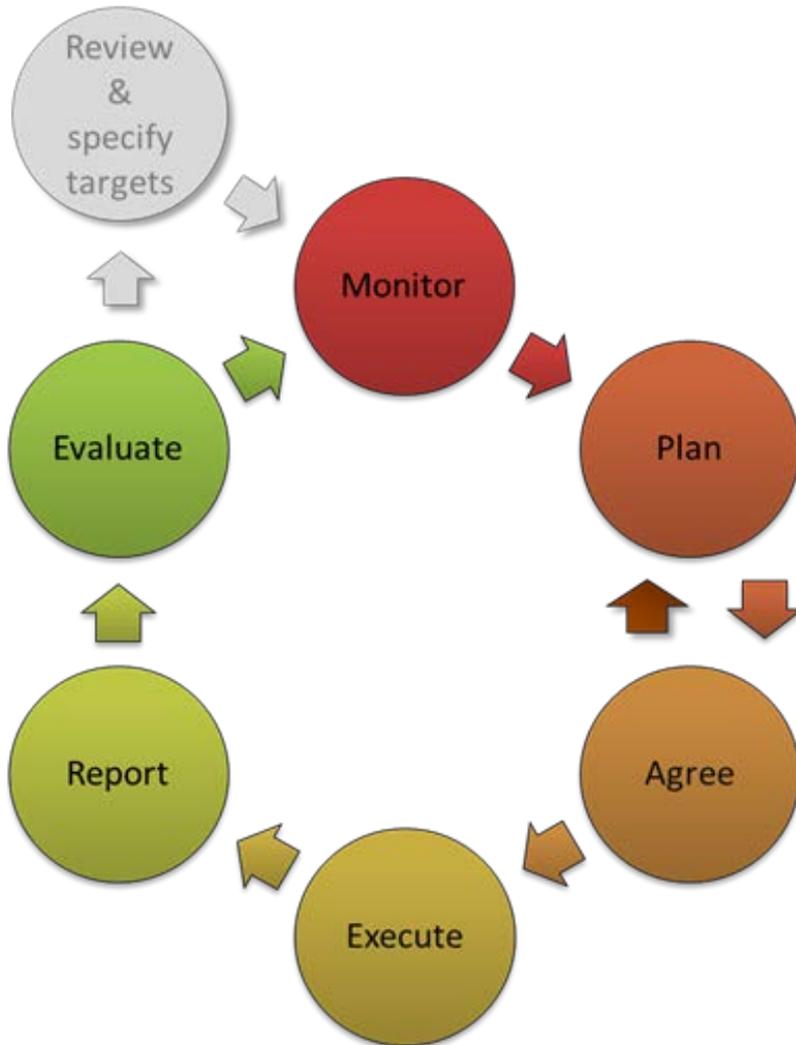
= Input for further policies by Commission

- Link to further work in Core Network Corridors
- Basis for project selection criteria by INEA (CEF funding..)

# Key characteristics of a model GNS process

- The proposed process should fulfil the main attributes of integrated waterway management (PLATINA, 2016):
  - **Targeted:** Every waterway maintenance or management activity should be performed within the framework of defined targets, e.g. target values, levels of service, etc.
  - **Strategic:** For a coordinated, effective and efficient achievement of targets, a specific waterway management strategy should be applied, aiming for achieving and maintaining GNS at least by the time-horizon 2030 and maintaining the status from 2030 onwards.
  - **Multi-disciplinary:** Waterways are not only traffic routes but are characterized by a variety of other uses with sometimes conflicting interests.
  - **Participatory:** Due to the multi-disciplinary character of waterways, participatory management is advisable in order to understand and respect the other uses of waterways. All relevant stakeholders should therefore be engaged in the planning process to achieve and maintain GNS.

# Proposed GNS model process



- Implementation process to be rolled out in Europe towards achieving GNS by 2030. It is based on good practices from existing procedures, development and maintenance plans, user involvement processes, regulations, etc.
- Important role for involvement of users and wider stakeholders and other uses of waterways
- Monitoring and development based on facts, creating transparency

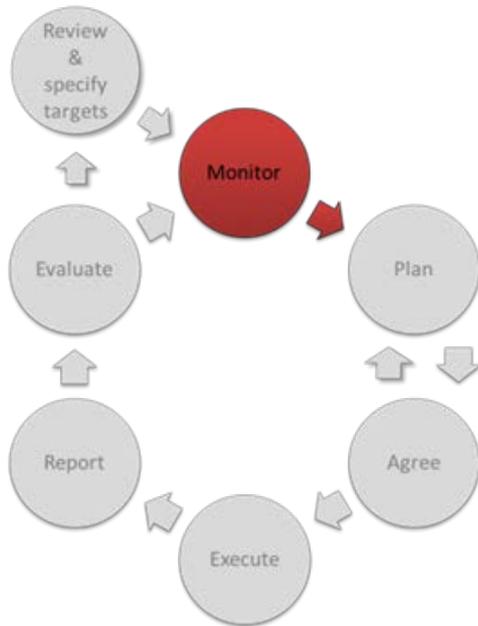
# GNS Implementation process

## Step 0: Review & specify targets

- It is not the key objective of the proposed GNS process to identify or define new target dimensions for waterway sections at the start of each cycle.
- Only applicable if overall waterway management targets are apparently lacking with a view to reaching GNS by 2030 (comparison with minimum height and draught)
- In these cases a consultation of stakeholders shall be initiated in order to possibly (re)define target values and to agree on a long-term vision to reach the (re)defined target values.

# GNS Implementation process

## Step 1: Monitor

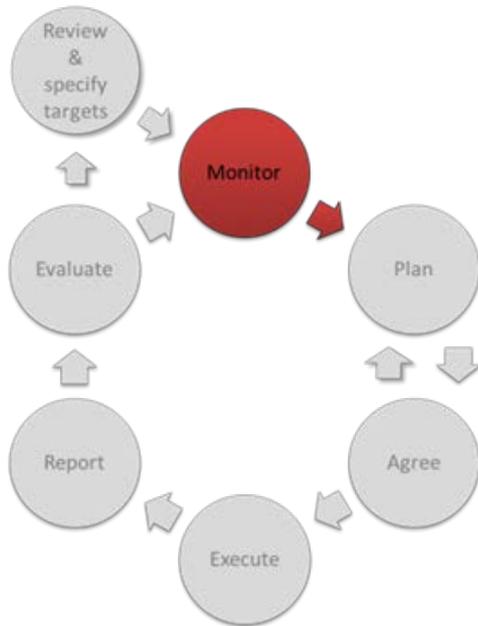


### 1a) Data collection:

- **Fairways:** monitor current state and shallow sections by means of hydrographic surveys, monitor closures of navigation through ice, floods, accidents, events...
- **Locks:** monitor closures and waiting times at locks and lock availability, for instance through data from electronic lock dispatching tools and AIS position data
- **Bridges clearance:** Monitor closures and bridge clearance values either through vertical sensing systems or through calculations related to reference gauges.

# GNS Implementation process

## Step 1: Monitor

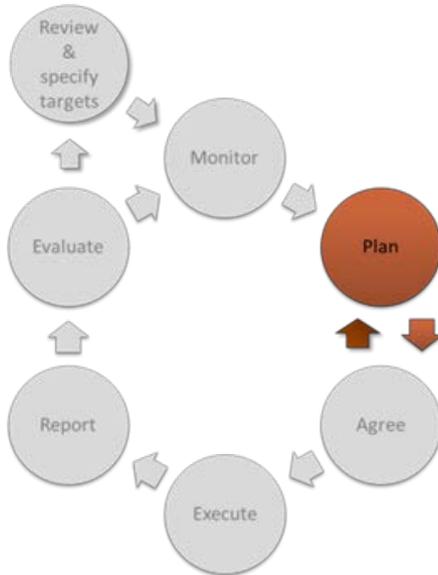


### 1b) Data analyses / network assessment:

- Identify critical sections based on surveying data
- The actual location of shallow sections, which do not meet the minimum standards (as defined in step 0), may vary, especially in the free flowing sections. Frequent river bed surveying activities shall therefore be carried out, depending on the dynamic character of the particular stretches.
- Locks and bridges which cause the most critical limitations shall be identified through systemised data analyses (e.g. longest average waiting times, longest downtimes, strongest clearance limitations).
- In addition to measurements, stakeholder feedback shall be organised regularly, in order to jointly identify and validate the most critical bottlenecks. This is the starting point for making plans to solve bottlenecks and to achieve GNS.

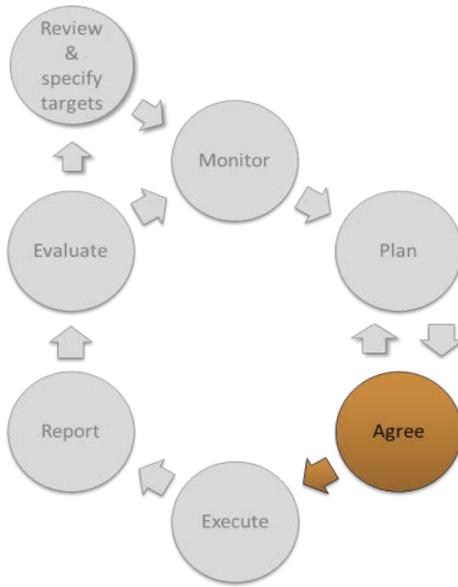
# GNS Implementation process

## Step 2: Plan measures



- Based on monitoring results and analyses, the remedial and/or preventative actions and measures need to be defined, planned and presented in GNS Plans prepared by Member States.
- In case of international waterways, this shall be done in close cooperation with international coordination platforms such as River Commissions.
- GNS Plans shall basically refer to already existing plans and programmes on regional/national level and on the level of river commissions.
- For larger project initiatives costs and benefits of measures shall be analysed from a neutral and broad socio-economic perspective.

# GNS Implementation process



## Step 3: Agree

The basic aim should be the integration of all relevant interests (shipping industry objectives, environmental objectives, fishery, etc.) into the design of measures

Integrated planning would therefore include:

- Integration of relevant stakeholders in the initial scoping phase of a measure (process step 2)
- Identification of integrated project objectives comprising inland navigation aims, environmental law and needs and the objectives of other uses of the river reach such as nature protection, flood management and fishery
- Implementation of an integrated planning process to translate navigation and environmental objectives into concrete project measures thereby creating win-win results
- Conduct navigation and environmental monitoring prior, during and after project works, thereby enabling an adaptive implementation of the measures when necessary.
- Alignment of measures on waterway corridor level: continuity of navigation and common levels of service for the waterway, avoiding longer disruptions of navigation

# GNS Implementation process

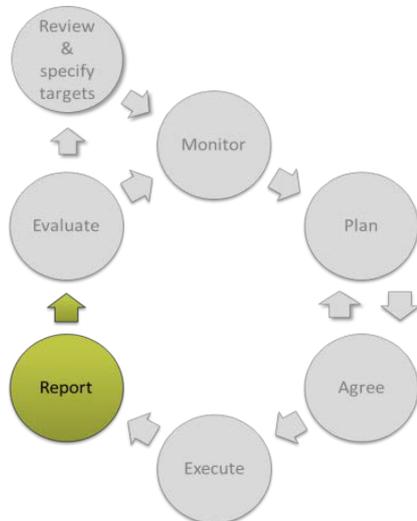


## Step 4: Execute

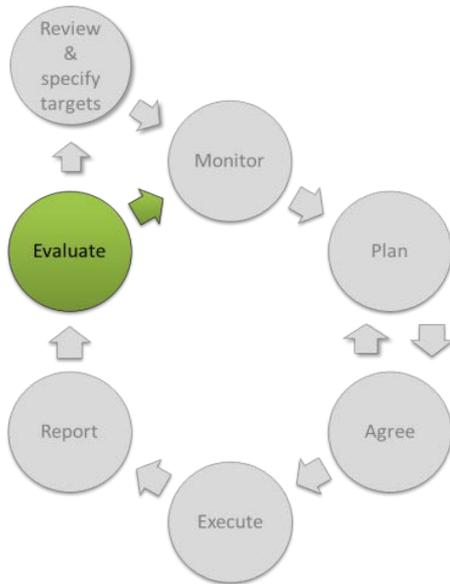
- Carry out / subcontract the agreed measures
- Inform waterway users in real-time about availability issues as regards the waterway (NtS)

## Step 5: Report

- Measure results of works (to check work of contractors)
- Document results of fairway management activities, provide updated data to TENTec
- Inform stakeholders ex post



# GNS Implementation process



## Step 6: Evaluate

- Assess effects that measures have to maintain or upgrade the status waterway with view to reaching GNS targets.
- It requires a sufficient number of hydrographic riverbed surveys, notably for the free-flowing sections. Hydrographic monitoring is a recurring process and is performed before, during, after, and in between of any fairway maintenance measure.
- In order to increase customer satisfaction, waterway administrations shall make use of consultative instruments. Anonymous stakeholder surveys help to evaluate their performance in connection with regular maintenance activities, or the provision of information, etc.
- The results and experiences of the GNS cycle shall be summarised and documented in GNS plans, in order to serve as an input for a learning curve of both waterway managers and involved stakeholders.

# Next activities in the study

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- Finalising the GNS Guidelines document, September 2017
- Drafting a possible process and criteria for exemptions, October 2017
- Network Assessments and Roadmaps for GNS: September – November 2017 (depending on availability of TENtec data)
- Preparing the Draft Report and the Final Report by November/December 2017

# Thank you for your attention!

More info:

<http://www.inlandnavigation.eu/what-we-do/good-navigation-status/>

