

# European Inland Waterway Transport Platform

Annual Report 2021



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# 1. Introduction

## 1.1. Coordination of the Platform in 2021

In the year 2021 the impact of COVID-19 pandemic was still felt by the IWT sector and also had several practical implications. Just like in 2020, the majority of meetings and encounters with partners and stakeholders had to be organised virtually, through teleworking and digital exchanges, which had an influence on everyone concerned. Nevertheless, the level of activities performed and overall productivity was kept high. Especially the climate change topic and its ramifications for the industry entailed a considerable amount of work in the second half of 2021.

### Internal Matters

In 2020, the IWT Platform decided upon and started streamlining internal processes. In the course of 2021, these new modes of working were further implemented. One of the areas that was given more attention was communication. First, we refurbished our website and more actively used our [LinkedIn](#), [Twitter](#) and [Facebook](#) social media accounts. We provided regular updates of sector-related news, articles, events and additional information from our partners and colleagues in the waterborne sectors, logistics, transport and mobility. The IWT Platform was able to focus more and more on providing valuable content.

### External Developments

Climate change is at the heart of the conversation everywhere, not only for the Inland Navigation community, but for the global society, economy and business. A battle to end the greenhouse gas emissions is a challenge, a massive opportunity and a threat at the same time. It goes in line with the

EU's climate neutrality and zero emissions goals, hence the need for the Platform to dedicate plenty of resources to all related aspects.

As was already laid out in **the European Green Deal** and **the Sustainable and Smart Mobility Strategy (SSMS)**, the entire transport sector will have to make serious efforts towards achieving decarbonisation, including *inland shipping*, which is recognised for its special role in the process. Inland waterway transport is key to these decarbonisation efforts, being one of the most CO<sub>2</sub>-efficient modes of transport, along with rail. *Transport by inland waterways and short sea shipping should increase by 25% by 2030 and by 50% by 2050*. In order to reach these goals, the existing framework for multimodal transport has to be remodelled.

We continued following developments in European legislation that affect the inland navigation sector. The EU took further steps by announcing the Fit for 55 Package, Taxonomy, NAIADES III Action Plan, etc.

On 14 July 2021, the European Commission published its **Fit for 55 package**, which aims at achieving the European Green Deal. The package includes a range of initiatives, such as the Energy Taxation Directive (ETD), an expansion of the Emissions Trading System (ETS), a revision of the Renewable Energy Directive and many others. Fit for 55 refers to the EU's target of reducing net greenhouse gas emissions by at least 55% by 2030 and reaching climate neutrality by 2050. The proposed package aims to bring EU legislation in line with the 2030 goal. For example, **the ETD** foresees a tax system for energy products which must both preserve the internal market and support the green transition by setting the right incentives.

✓ [Click here to read more on IWT sector calling for more consistency with Fit for 55](#)

Simultaneously, **the EU Taxonomy** sets up the financial scene by specifying under which conditions the fleet is eligible (or not) for financing. You will read more about it in the next chapter. In a nutshell, it is a classification

system to establish a list of environmentally sustainable projects and activities that would allow to target financial investments towards them. The main goal is to meet the objectives of the European Green Deal.

- ✓ [Click here to read more on:](#)
  - [IWT sector's feedback on the Taxonomy Draft Report](#)
  - [IWT sector's contribution on the preliminary recommendations for technical screening criteria](#)

In the Sustainable and Smart Mobility Strategy of 2020, the European Commission also announced a follow-up of NAIADES II. Main objectives are to renew the barge fleets and to improve access to financing. [NAIADES III 'Boosting future-proof inland waterway transport' Communication](#) was published on 24 June 2021 and focuses on two pillars: *sustainability and digitalisation*, in order to *support the modal shift to inland waterways*. The NAIADES programme set out the 'Inland Waterway Transport Action Plan for 2021-2027'. Goals are to move more transport by inland waterways and to shift gradually towards zero-emission inland waterway transport. In December 2021, an insightful [public hearing on NAIADES III](#) was organised at the European Parliament. The hearing examined the major elements of the new programme and its implications for the IWT sector. More specifically, experts discussed how the proposed measures could contribute to reaching the economic and environmental objectives of the programme.

- ✓ [Click here for our press release on the NAIADES III publication](#)

At the same time, in June 2021, the TRAN Committee of the European Parliament adopted its own initiative report '**Towards Future-proof Inland Waterway Transport (IWT) in Europe**' by the rapporteur, MEP Caroline Nagtegaal-van Doorn.

The report covers five areas:

1. Modal shift: freight from road to inland waterways
2. Greening of inland waterway transport
3. Digitalisation and autonomous shipping
4. Education and training, working conditions and research and innovation (R&I)
5. Future-proof ports: energy and circular hubs.

MEP Caroline Nagtegaal-van Doorn took an initiative believing that in order to achieve the goals of reducing CO2 emissions, it would be crucial to unleash the full potential of the inland waterway transport. The report fully acknowledges the importance of IWT on several fronts regarding either modal shift or future energy transition. The report also underlines the potential of digitalisation and data-sharing in contributing to reduced congestion in ports.

- ✓ [Click here to read more on the adoption of the report by TRAN Committee and see our press release on the adoption by the European Parliament in September 2021](#)

Both NAIADES III and the European Parliament report will be playing an important role in the upcoming boost of inland waterway transport.

Work on other fronts will be continued in 2022. The best example is the **Combined Transport Directive** from 1997. This Directive supports the intermodal transport and the shift from road freight to lower emission transport modes such as inland waterways, together with maritime transport and rail. Looking at the Sustainable and Smart Mobility Strategy's objectives and targets though, this piece of legislation was no longer fit for purpose and in need of general revision. Currently, we are awaiting feedback from the earlier [public consultation](#). The Commission adoption is planned for the 3rd quarter of 2022.



## 1.2. IWT Platform's objectives

In a nutshell, the Platform's objectives are to take up the challenges facing the IWT sector and to turn potential threats into full-blown opportunities. The momentum is here, however as you will read in more detail in the next chapters, it takes and will take a lot of effort and commitment.

There are several priority areas that the respective Platform Committees are closely following up, for example **decarbonisation** and **modal shift**. Besides, let's not forget about the always relevant **digitalisation** and **infrastructure** issues. You can read more about these aspects in the chapters covering the work of the Innovation & Greening Committee and the Infrastructure Committee. One specific example is that in December 2021 the European Commission published the revision of the Trans European Network-Transport (TEN-T) Guidelines Regulation. [Several consultations](#) were organised beforehand, including the consultation on Inland Waterways.

✓ [Click here for our press release on the TEN-T revision](#)


The Environment & Safety Committee of the Platform continued to work with true dedication on dangerous goods and waste-related topics that will remain high on the agenda in the coming years. Furthermore, the Nautical & Technical Committee, together with the Social & Education Committee and third parties have worked on a study of the human factors in inland shipping accidents. And finally, the Social & Education Committee drafted [an informative brochure](#) to accompany the new European law on professional qualifications in inland navigation.

Apart from working on the more regulatory and operational framework for the future-proof inland navigation sector, the Platform is also involved in **research and innovation activities** that affect the industry. In previous years, the Platform managed to position itself as a valuable consortium partner when submitting several project proposals. Recently, we took a few

additional steps in both contributing to an execution of the **running H2020 projects**, and familiarising barge owners and operators with the project's proposals, which could prove useful for them.

### An overview of our ongoing EU-funded projects:

IWT Platform is currently participating in several EU-funded research projects that will have an impact on the entire inland navigation sector.


 **PLATINA 3:** a dedicated inland navigation project: *Platform for the implementation of a future inland navigation action programme*. The project started in 2021 with the aim to provide innovative collaboration between all relevant IWT partners, while focusing on a boost for innovation in the sector and bringing all stakeholders together. Throughout the year, good progress was achieved. The project is structured around several relevant areas: *Market, Fleet, Jobs & Skills, and Infrastructure*.

PLATINA 3 addresses priority topics for the success of IWT:

1. Integration & digitalisation of IWT in view of modal shift & synchro modality
2. Zero- emission, automated & climate resilient fleet
3. Skilled workforce anticipating zero-emission & automation
4. Smart & climate resilient waterway and port infrastructure with clean energy hubs.

The project organises regular Stage Events. In 2021, [the first Stage Event 'Budapest Sessions'](#) was held on 7-8 April 2021, hosted by the Danube Commission. The [second Stage Event 'Strasbourg Sessions'](#) was organised on 19 October 2021, and was hosted by the Central Commission for the Navigation of the Rhine (CCNR). At that Event, IWT Platform's coordinator Nik Delmeire presented one part of our assignment related to reducing economic and financial barriers to modal shift. All materials are available online.


Visit the project website: <https://platina3.eu>

 **IW-NET project:** The *Innovation driven Collaborative European Inland Waterways Transport Network*, is underway. The project was launched in 2020, and in autumn 2021 the project was already half-way of its 36 months' duration. Promising results are in the pipeline; however, it is still too early to fully showcase them to the general public. IW-NET will deliver a multimodal optimisation process across the EU Transport System, increasing the modal share of IWT and supporting the EC's ambitions to reduce transport GHG emissions by two thirds by 2050. Main focus areas are threefold: IWT Digitalisation, Infrastructure Improvements, and Innovative and Green Vessels.






Visit the project website: [IW-Net Project | IW-Net](#)

 **ENTRANCE project:** *European matchmaking platform for innovative transport and mobility tools and services.* The project started in 2021, and the ENTRANCE Platform is already live and in use – we urge you *to sign up*. The ENTRANCE Platform is for any stakeholder who is directly involved in the adoption of zero (or near-zero) emission transport and mobility solutions. The project identifies innovative zero-emission transport solutions and promotes their registration on the ENTRANCE Platform where they can be matched with potential buyers and financing opportunities. The overall concept focus of the ENTRANCE project lies in the “supply-demand-finance” triangle, which is envisaged for all transport and mobility modes and all relevant stakeholders.


Visit the project website: [Entrance \(entrance-platform.eu\)](#)

 **PIONEERS:** *Portable Innovation Open Network for Efficiency and Emissions Reduction Solutions.* This new project was granted and launched by the end of 2021. It addresses the challenges faced by European ports to reduce their environmental impact while remaining competitive in a sector characterised by continuous growth. The work is led by the Port of Antwerp, which operates the biggest port area in the world while the Ports of Barcelona, Constanta and Venlo represent the ideal mix of size, location, operation models and area of influence to test a number of demonstrations during the project lifecycle.

A set of five objectives were defined:

1. Reduce the port's total environmental footprints by introducing Clean Energy production, storage and supply
2. Deploy sustainable port infrastructure beyond energy supply and demand
3. Introduce eco-friendly improvements relying on digitalisation and new methods of operations
4. Co-define and transfer PIONEERS demonstrations to fellow ports during the project lifecycle
5. Deliver and disseminate a Port Master Plan for the transition towards GHG-neutral shipping and wider multimodal mobility by 2050.

Visit the project website: <https://pioneers-ports.eu/>

 **DT4GS:** at the end of 2021, another project was granted to the IWT Platform, in reply to the call “*Digital twin models to enable green ship operations*”. Stay tuned for more information related to this project once the internal preparatory stage is finished.

Participating in project proposals and then in granted projects involves a lot of work, and that is just the beginning. It is both necessary and urgent

to place the IWT sector, its challenges and struggles much higher on the EU research and innovation agenda than it currently is. This can i.a. be achieved by active participation in [the Waterborne Technology Platform](#). As a representative of IWT sector, the Platform is contributing to the objectives of the Waterborne TP and is positively influencing the future EU R&I agenda.

At the same time, the Platform wants to bring in more IWT companies and barge operators to the EU-funded projects that can only benefit the sector and win a business case. In order to achieve that, we need more outreaching actions and, so to speak, advertising activities to popularise a wider participation at bottom level. To start with, we organised an Info-Session on the Horizon Europe in September 2021, which was well attended and is still resulting in possible partnerships for proposals that are being drafted right now. You can [view online](#) all the details and materials from the session.

*Nik Delmeire*  
*European IWT Platform's Coordinator*

*Kasia Zelichowska*  
*Communication & Project Management*

# 02. Innovation & Greening Committee

What are the future perspectives for sustainable and innovative inland navigation?



## 2. Innovation & Greening

Following the year 2020, when the Innovation & Greening (I&G) Committee became fully operational, the main focus of work in 2021 continued to be on the greening aspects and digitalisation. At the same time it is worth mentioning that we had to add to our agenda the innovative modal shift.

### 2.1. Innovative Digitalisation

The focal point of digitalisation and what benefits it has for the IWT sector lies within the **Digital Transport & Logistics Forum (DTLF)**. Digitalisation is changing thoroughly the way production, transport, supply chain, and consumption is organised. Since 2015, DTLF has provided a platform for constructive dialogue and cooperation between experts and stakeholders from various transport modes and logistics. DTLF works in two main subgroups (i.e. *Paperless Transport* and *Corridor Freight Information System*), which are composed by Teams dedicated to specific topics defined in work programmes. It is hence of crucial importance that the IWT sector takes active part in these discussions. An initiative with the Inland Navigation Europe (INE) from 2020 to set up a “mini-DTLF” was continued, with a narrower target however: more attention was put on the implementation of the [Electronic Freight Transport Information \(eFTI\)](#), rather than on the Corridor Freight Information Systems.

It was our goal to bring DTLF closer to the members of the I&G Committee, which was accomplished, albeit to the extent possible, given the ongoing COVID-19 pandemic. Representatives of DTLF’s team working on the eFTI implementation sat together with the representatives of barging companies. This exercise will be continued.

Though less outspoken than mentioned in the 2020 report, DTLF as a whole remains at more ‘abstract cloud level’ and might be progressing slower compared to other (commercial) programmes. Perhaps the time has come

for DTLF to check whether its relevance and applicability on a more practical business level could be improved.

Furthermore, the IWT Platform continued to contribute to [CESNI/TI](#) (*Working Group on Information Technology*) meetings and to the European Technology Platform [ALICE](#) (*Alliance for Logistics Innovation through Collaboration in Europe*). As the ALICE Platform assists and advises the European Commission on the implementation of the EU Programmes for research, one of the spotlights is dedicated to reaching the zero-emission integrated transport system. Digital solutions will definitely contribute to reaching that objective.

### 2.2. Innovative Modal Shift

During 2021, the concept of modal shift was gaining momentum. Moving transport, whether freight goods or passenger traffic, away from heavier and less environmentally friendly modes such as roads and aviation towards greener modes such as railways and inland waterways, is a keystone of EU strategy. As mentioned above, transport by inland waterways and short sea shipping should increase by 25% by 2030 and by 50% by 2050. By 2030, rail and waterborne-based intermodal transport should be able to compete on equal footing with road-only transport in the EU. Expectations, or rather targets to achieve, are hence very clear; how to reach them, however, is not. As an industry, the entire IWT sector will have to be bold and innovative, together with ports, terminals and cargo-owners to start with. The effort will have to be a collective one.

In the spring of 2021, IWT Platform launched its own study on Modal Shift in order to complement what had already been studied and reported in the past years. The outcome of that study is expected to be published in the 1st quarter of 2022. It will feed into the ongoing Platina 3 project where modal shift rightfully gets a lot of attention.



The IWT Platform is also teaming up with a number of parties across Europe that already work on modal shift, especially on a more business case's aspect of it. The aim is to map out in detail what the main drivers of modal shift are in order to make the change possible and also what the main challenges and obstacles are to propose appropriate measures to eliminate or lessen them.

Finally, the European Commission announced a review of the Combined Transport Directive. The 'old' Directive from 1997 supported intermodal transport, however much greater efforts are needed in order to achieve a modal shift from road to inland shipping and rail. The adoption is planned for the 3rd quarter of 2022.

## 2.3. Innovative Greening

In our 2020 Annual Report "*transition*" was the main theme. Right now, we can conclude with certainty that this theme was extended to 2021, and we were facing some big new challenges.

To start with, we focused on the final developments of the **2016/1628 NRMM Directive**, which describes the obligation and implementation of **STAGE V engines** in inland waterway transport. In August 2021, we published [a news article on the subject](#). Perhaps you know that the transition period was extended in 2020 due to COVID-19 delays. In 2021, another extension of the transition period was proposed, and this transition period was indeed extended for a second time. Whether this was a substantiated conclusion and a good step forward for our sector remains to be seen. What we mean is that CCR2 engines were allowed to be installed for a longer period even though the newest STAGE V engines have a decrease in air polluting emission of 80-90%. Looking at it from a distance, we may conclude this affects the sector negatively in the framework of zero-emission transition. But we must add that retrofit solutions are more than market ready, and adapting a CCR2 engine to zero-emission is still a mid to long-term solution.

Since the implementation of the NRMM Directive and its STAGE V engines created a lot of uncertainty, in June 2021, the Platform organised an *online webinar: 'Greening Challenges and Stage V – Perfect match or not?'*. The event provided the participants with a comprehensive overview of the first-hand developers of STAGE V solutions and a glimpse on biofuels, which concluding from the CCNR Study on financing the greening of the fleet is a zero-emission solution in combination with STAGE V combustion engines. You can [view online](#) all the materials from the webinar.

Right after creating some clarity on STAGE V, the European Commission launched its *Fit For 55 package* in July 2021. It is a clear summary of the economic measures that are being developed in order to achieve the zero-emission goal. Some of these measures are seriously affecting IWT, for example the *Energy Taxation Directive*. This Directive initiates a taxation on fossil fuels, knowing that the IWT sector has until now been exempt from taxes on fuels – as per the Declaration of Mannheim. The effect of such change could be theoretically manageable on its own and we dare to say, unavoidable. However, in combination with the other measures, such as the *Fuel Quality Directive* (FQD), the *Alternative Fuel & Infrastructure Regulation* (AFIR), the higher impact of the CDNI surcharge, an earmarked contribution for a dedicated EU IWT Greening Fund etc., we are beginning to look at our energy source as a taxation mechanism for everything. Question is - are we clearing the financial bottleneck by these means? A question we don't have the answer to yet, but we will be spending a lot of effort on in 2022 and beyond.

Besides the economic measures of the Fit For 55 package, we have to mention here **the EU Taxonomy** as well. This framework is created by the EC to formulate a definition for a 'Green Economic Activity'. Earlier in May 2021, we published [a news article on the subject](#). Of course, we do believe that the IWT in its whole is a green economic activity, and should be favoured in all aspects. Unfortunately, the current Taxonomy framework concludes differently. Something to keep in mind when the Taxonomy



framework shows up in other corners, for example when banks look at it for financing your business.

The technical questions regarding the transition towards zero-emission is majorly a mental shift, as we need to get familiar with a rainbow of solutions to choose from. Which 'green' techniques and solutions fit within your transport business case? Short distances look at the batteries, while high power requirements will keep relying on combustion engines with, for example, biofuels. We need to adapt this new way of decision making and get used to it.

Much more complicated question is, in our opinion, the creation of a business case. Do we - as a sector - rely on the subsidies or can we integrate the external costs by ourselves? Or can other policy measures in place stimulate the transition in an economically sustainable way? We can't give any answers yet, however we are focusing on it.

It is clear that greening as a topic is alive and kicking in IWT, and it will demand our energy, skills and commitment to make sure that we continue this transition in an economically sustainable way. We need as well your contribution! Members of your organisation and businesses, your skippers, your CEO's, your financial advisors and your technical experts to form a roadmap that is both technically feasible and economically acceptable. Let's continue the collaborative work set up within the EU IWT Platform and beyond, to make sure we jump on the right water train!

*Nik Delmeire,  
Daisy Rycquart*



# 03. Environment & Safety Committee

What is the focus on waste and safety regulations in International inland navigation?



## 3. Environment & Safety

### 3.1. CDNI Part

2021 was another year of intense work for the IWT Platform on issues related to [the CDNI](#), *the Convention on the collection, deposit and reception of waste produced during navigation on the Rhine and other inland waterways*. CDNI aims to protect the environment, and especially water. The CDNI came into force on **1 November 2009** in Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland.

The sector and its representatives contributed to important discussions and provided valuable input for future research. Latter was jointly developed within the work of the Environment and Safety Committee, always with the aim of finding a common position in the interest of the international sector and representing it within the CDNI bodies.

#### ✓ Part A CDNI (Oily and Greasy Waste)

A major and long-awaited event was the Round Table. It was supposed to take place a year earlier, but unfortunately the COVID-19 pandemic made it impossible. It was important to hold a discussion of such relevance in a face-to-face meeting. The Round Table was finally organised in April 2021 and afterwards we published [a news article on the subject](#). The future of Part A was examined with the focus on the development of the disposal fee and the disposal facility network.

The disposal fee was increased from 7.50 euros per 1000l of gas oil to 8.50 euros for the first time in 10 years since the convention came into force. This fact alone would not be reason enough to question the entire system. However, there are changes on the horizon. Not least, the greening of the sector will sooner or later lead to necessary changes in the system. Disposal costs are rising and revenues are falling. This is a development that has

already been going on for several years and is not exclusively due to special reasons, such as low water or COVID-19.

But how satisfied is the sector with the current service? Does it want the current network of disposal facilities to be maintained with the risk of having to increase the fee again? That is what we wanted to find out. The IWT Platform conducted [an online survey](#) and presented the interim results at the Round Table. According to the results, there is basic satisfaction with the service and the network of disposal facilities should be maintained, but the desire for more transparency with regard to costs was also expressed. The collected results could serve as a basis for further discussions. The final results, which basically confirmed the picture from the interim results, were presented in [the CDNI/G working group at the end of the year](#). It was interesting to learn how the experience with the system is perceived and how the evaluation is related to the fleet structure. The working group considered this effort of the IWT platform a very worthwhile contribution.

Also for CDNI, the importance of collecting and analysing the data has been acknowledged by the parties involved. Not only for a short term view, but also to support in strategic decisions for a sustainable and futureproof system.

Recommendations for next steps were drafted and submitted to the Contracting Parties. Here, as well, we provided very valuable suggestions. The recommendations were included in the CDNI Secretariat's 2022 work programme.

#### ✓ Part B CDNI (Cargo-related Waste and Degassing)

The ratification process regarding the new CDNI degassing regulations, which were already adopted in 2017, is [still ongoing](#). The amendments will enter into force six months after the deposit of the last ratification, acceptance or approval certificate by all six states. Several times, the IWT Platform has urged timely ratification to the Contracting States, both by letter and in meetings, and described the negative consequences for the





industry: national degassing bans, a patchwork of regulations, waste tourism. All the negative consequences that should be avoided by international regulations. Unfortunately, ratification is not in sight before the end of 2023.

The situation regarding the degassing infrastructure also definitely requires improvement. Approval procedures take too much time. In some cases, the degassing infrastructure is not available as far as fixed reception facilities are concerned. Mobile degassing is already taking place, but this is still in a kind of pilot phase, as there are uncertainties with regard to approval.

#### ✓ Part C CDNI (Other Waste)

Concerning Part C of the CDNI, the discussions about the financing and the disposal network began. Part C covers other special waste, domestic refuse, domestic wastewater, cleansing slurry and slops. The Contracting States are obliged to establish or arrange for the establishment of disposal facilities for these categories of waste as well.

However, the inland navigation industry sometimes reports that there are not enough options for disposal. In the Netherlands and Belgium, so-called "waste parks" were established as a consequence, where disposal of domestic refuse and other special waste takes place against payment. The price is based on weight or volume. At least with regard to the disposal of domestic refuse, this contradicts a basic idea of the CDNI, namely that no special charges may be levied for disposal in the ports, at the handling facilities and at holding areas and locks.

Since "waste park" does not fall within the terminology of the CDNI, there can hardly be any objections to the payment. But there is a risk that the Contracting States will no longer see the need to provide opportunities for a free disposal and will not fulfil their obligation under the Convention.

In order to create an initial basis for discussion, an inventory was made with regard to the network of disposal facilities as well as an investigation of the financing in the respective Contracting States. The result shows that

currently there is no uniform network and no uniform financing. The extent to which this is necessary at all for all types of Part C waste, and what concrete form it should take, must of course still be discussed.

Many fundamental issues require clarification and a common understanding between the Parties. In the coming international discussions, the principles of the CDNI must always be taken into account: environmental protection, the prevention of illegal waste disposal and, last but not least, the principle of solidarity. Of course, we will contribute to the discussions in the expectation that a common solution satisfactory to the sector will be found.

### 3.2. Safety - Dangerous Goods Committee

In 2021, there were many important developments and changes in the field of dangerous goods transport. The focus of the IWT Platform's work was on the meetings of [the UN-ECE ADN Safety Committee](#), which usually take place twice per year in Geneva. Due to the ongoing COVID-19 pandemic, the **January 2021 meeting** was held virtually while the **August 2021 meeting** was organised in a hybrid form. EBU and ESO, united in the IWT Platform, participated in the meetings and drafted proposals in advance with the input of the Environment and Safety Committee for amendments/modifications to the ADN.

Key issues of special importance to us during the two sessions were:

#### ✓ Provisions of cofferdams

For the January 2021 meeting, EBU/ESO submitted a proposal to allow ballasting of cofferdams in order to achieve more draught in canal navigation and thus facilitating bridge passing. The risk of collisions should therefore be reduced. A working document was then submitted later in August, answering the questions raised in the discussion in January. It provided a comprehensive historical overview going back to ADNR-1972,



justifying why the ban on filling cofferdams with water and the daily check for tightness are no longer necessary today.

Despite the principal support for the proposal by most Contracting States, there were numerous questions again. Among others – why the proposal does not include Type G ships. Or why the ships are not designed to have more draught. Concerns were also expressed about the possibility of rust forming in the cofferdams.

EBU/ESO therefore had to substantiate the proposal in more detail and address the new questions. The topic will be followed up in January 2022.

#### ✓ Loading and unloading instructions

The Netherlands prepared a document to clarify questions on the previous proposals on loading and unloading instructions, and once again presented an example using the loading and unloading rate calculation in a connected document. A number of concrete text amendments were proposed regarding the requirements for the loading and unloading rate instruction. The background to the documents is to close a gap in the ADN - in the ADN, there is a reference to the "*loading and unloading instruction*", but there is no indication of who should create it and how it must be formulated.

As the current regulations are only generally formulated, a variety of formats have been developed by the filling and carrying industry over the last decades to meet the requirements of the regulation attached to the ADN. Safe loading and unloading requires basic information regarding both the carrying vessel and (the vapour density of) the substance being carried. According to the document provided, this information is not always properly communicated or used, which can create potentially dangerous situations during loading and unloading.

The aim is to make it easier for the ship's crew and the jetty operator to calculate the loading/discharging speed in such a way that a static electricity discharge is avoided. It was pointed out several times in Geneva that in Germany the chemical and oil transport companies do not have

information regarding vapour densities. It was decided to set up an informal working group to look into the matter further, which has already started its work. EBU/ESO participate in this working group.

#### ✓ Proposals for amendments of the regulations for the training of the experts

Germany proposed, among other issues, to offer only one retest to examinees who have attended the ADN gas or ADN chemical course and do not pass the examination. Furthermore, it was pointed out that the examination (and the re-examination) must be taken within 6 months after having attended the course. This deadline has already been set by the ADN Expert Training Working Group. EBU/ESO commented that more than one retake of the exam should be considered. The limitation to one repetition does not seem reasonable. In the case of the ADN Basic Certificate, it is also stipulated that the examination must be taken within 6 months after completion of the course (ADN 8.2.2.7.1.1). EBU/ESO pointed out that this is not the case for ADR and that the examination can still be taken after 3 or 4 years.

The Safety Committee agreed that Germany would submit a new proposal for the next meeting, which would foresee two repeat examinations within 6 months. Possible changes would come into force in 2023.

#### ✓ Carriage of fumigated bulk cargoes in cargo holds and fumigated cargo holds of dry-cargo vessels

For the purpose of insect removal, certain natural products and animal feeds are fumigated with substances such as phosphine. Either the fumigant is added to the cargo or the fumigation takes place beforehand in the silo on land. This creates dangers during transport on waterways for the persons on board and for the persons involved in loading and unloading the ships.

By including regulations in the ADN for the carriage of perishable natural products in fumigated cargo holds or of fumigated loose goods, the aim is



to exclude any risk to persons on board inland waterway vessels during carriage. This was Germany's proposal to the ADN Safety Committee, which was discussed in Geneva in August 2021, but could not yet be decided due to numerous open questions.

The background to the proposal are incidents in the past involving personal injury in connection with the transport of fumigated cargo. One example is the incident at the end of 2019, when a cargo of sunflower seed pellets was transferred from a seagoing vessel to several inland vessels in a Dutch port. The cargo had previously been fumigated on the seagoing vessel. During the voyage, toxic substances resulting from the previous fumigation were released in the holds of the inland vessels and persons had to be treated medically. On the inland vessels, as far as was known, there was no information about the fumigation of the cargo on the seagoing vessel.

The proposal to make the carriage of fumigated cargo in holds and the fumigation of holds of dry cargo vessels subject to the ADN was criticised and questioned by the European inland navigation sector. **The safety of the ship's crew should be the first priority.** It is true that the proposal contains a paragraph stipulating that the carriage of cargoes in bulk under fumigation or of fumigated cargoes in bulk may only take place in cargo holds that can be closed in such a way that the escape of gas is reduced to a minimum. However, there are some strong doubts as to whether this can actually be implemented in practice. More detailed investigations would have to be carried out. The proposal does not intend that dry cargo ships carrying fumigated cargo should require ADN approval. Nor is it intended to require an ADN expert to be on board.

The ADN Safety Committee advised that a correspondence group be formed on the subject in order to discuss the issue in detail and to bring the proposal to the point where it is ready for a decision. The group started its mandate at the end of the year. EBU/ESO also participate in this group.

### ✓ Construction materials

Some years ago, EBU/ESO submitted a proposal to the Safety Committee to list construction materials in a table that may be used on board of tankships in the cargo area. This seemed necessary in view of the fact that in practice there was great uncertainty as to which construction materials were permissible. As a result, the inland navigation sector carried out a comprehensive inventory. It was also agreed that the table should be continuously updated to reflect the current state of technology.

The submitted proposal aims at such an update of the table and was supported and decided by the Safety Committee. The amendments will be included in the ADN 2023.

### ✓ Other important topics were:

- *Certificate of approval for dry cargo vessels*
- *Special authorisation concerning UN 1288 shale oil*
- *Proposals for amendments membrane tanks/alarms*
- *Non-measurable substances*
- *Inspection of installations and equipment according to 8.1.7.2*

In 2022, the IWT Safety Committee will again focus on the topics related to the transport of dangerous goods on inland waterways and use the platform to exchange knowledge, opinions and form common positions to be able to represent the interests of the European inland navigation sector in Geneva.

*Elena Siebrecht,  
Frank Reijerse,  
Michael Zevenbergen*



# 04. Social & Education Committee

What is the focus on education and social regulations in International inland navigation?





## 4. Social & Education

The Social & Education Committee (S&E) deals with the issues affecting companies and crews of inland navigation. 2021 priorities were:

1. *The implementation of the Professional Qualifications Directive,*
2. *The Roadmap for European Manning Regulations,*
3. *Participation in the study on human factors root causes of accidents in inland navigation,*
4. *Work in PLATINA III project, especially in relation to jobs and skills.*

You can read more in detail below. We are involved in various committees, notably the Sectoral Social Dialogue, including different joint working groups of the Social Partners, the Commission Expert Group on Social Issues, CESNI/QP, CESNI QP/QM and CESNI/QP/Crew. In addition to the regular meetings of our committee, we attach a great deal of importance to having direct exchanges with the companies of our member organisations on the issues that particularly affect the enterprises. In 2021, this was mainly related to the Roadmap for a European Manning Regulation and the question of digital registration of working time. Furthermore, we have a good cooperation with the European Transport Workers' Federation and are convinced that things move forward when the social partners act together.

### ✓ COVID-19 challenge

In 2021, yet again COVID-19 posed a major challenge to the industry, even though the processes were already better tuned than in 2020. Within the Committee, we have kept ourselves informed about the regulations and developments happening in the individual Member States in order to be able to keep our companies up to date. Fortunately, inland navigation enterprises were able to maintain their efficiency. The work of the Committee with the EU institutions and [CESNI](#) also went extremely well despite imposed restrictions. Even though the face-to-face meetings would

be preferable in many cases, the numerous online events - often with a large number of participants and interpretation - were very successful. We would like to take this opportunity to thank all those responsible.

### ✓ Professional Qualifications Directive

The Directive (EU) 2017/2397 on the recognition of professional qualifications in inland navigation and repealing Council Directives 91/672/EEC and 96/50/EC should be implemented in all Member States on 18 January 2022. Unfortunately, by the end of 2021, it became clear that most Member States would not be ready in time with the transposition.

In 2021, CESNI/QP continued to work intensively on practical issues related to the implementation of the Directive, such as the finalisation of model exams, many issues concerning the administration of certificates of competency, service record books and logbooks, questions of interpretation of the various standards or the project of a common database for multiple choice questions for the boatmaster's exam.

Certainly, the implementation of the Directive is a very complex and work-intensive process and poses great challenges to the Member States. However, it is crucial that this process is **completed as soon as possible**, because without the implementation, enterprises, crew members and training institutes will face major problems with regard to the recognition of documents, the conduct and recognition of training programmes and examinations.

In December 2021, our S&E committee prepared [an online brochure](#) on the main contents of the new European legal framework. It is intended as a guide for all those who are active in inland navigation or who are interested in working or training in inland navigation. It can be found in four languages – English, French, Dutch and German – [here on our website](#).

## ✓ Roadmap for European Manning Regulations

As of today, there are no harmonised manning regulations in Europe. Already back in 2019, the CESNI created a temporary working group on crew-related requirements: **CESNI/QP/Crew**. In summer of 2021, this temporary working group was able to present a draft roadmap for European manning regulations. The representatives of the S&E Committee contributed intensively and proactively to this draft. The draft contains five chapters and covers the topics that are important for the future development of standards for harmonised European manning regulations. It was validated with modifications in the second reading by CESNI at the meeting on 28 October 2021.

Preceded there is a list of points on which consensus has already been reached. You can [read here a news article](#) we wrote about this topic in November 2021. Overall, it means that the focus of a new manning regulation must be on workload and competencies, security and flexibility. An important issue, concerning the relationship between the Working Time Directive and manning regulations, could be added to the consensus at the end. There is agreement that the two legal matters are two different pieces of regulation.

It is important to us that the development of a European manning regulation is done in close consultation with the sector. That is why we have strongly advocated for the expertise of the sector to be consulted on important issues. On 14 December 2021, after thorough preparation by a group of volunteers, a sector consultation for a webinar was organized. The event – [click here to read more in detail](#) - gathered over 80 participants. It involved interactive discussion and questioning, a lot of information was brought together with valuable insights that will feed into the work of CESNI/QP/Crew.

The mandate of CESNI/QP/Crew has been prolonged by CESNI so that standards for harmonised European manning rules can be developed on the basis of the work carried out so far.

## ✓ Digital Tools

Closely related to the development of European manning regulations is the legal framework for **e-tools**. The Commission intends to develop these at the same time as manning rules.

The development of regulations for e-tools is an important topic because, on the one hand, it must be ensured that the service and rest times regulated in manning rules can be reliably controlled. On the other hand, we have made it clear that the control of manning rules is not a basis for the control of working time. This falls within the context of the Working Time Directive.

In a sub-working group of our Committee, we developed a position paper on the digital registration of working time, which is oriented towards the provisions of the Working Time Directive. We plead for a voluntary action and a choice for the employer regarding the form of recording and digital technology. There should be no automatic, real time monitoring of employees, nor should there be a mandatory monitoring by the authorities.

## ✓ Fitness Check

### On market access

Fitness Check on market access in inland waterway transport covers seven pieces of legislation, as they constitute the basis for access and organisation of the inland waterway transport market.

Certain issues have already been analysed thoroughly and discussed within the Committee. The Fitness Check deals, for example, with [the Council Directive 87/540/EEC of 9 November 1987](#), on access to the occupation of carrier of goods by waterway in national and international transport, and



on the mutual recognition of diplomas, certificates and other evidence of formal qualifications for this occupation. This important directive is not handled uniformly in different Member States. The Committee considers it necessary that a common basic knowledge is created.

For this reason, we actively approached the study leaders and provided our input. As soon as the first results are available, we will evaluate them and draw our conclusions. This involves the task of drafting standards as part of the CESNI work programme, for competence of entrepreneurs including green and digital skills as input for an update of [the Directive 87/540/EEC](#). It is a good proposal to develop CESNI standards for this directive, as long as we do not make the theoretical barrier to entry into entrepreneurship too high.

### On social legislation

Furthermore, two pieces of social security systems' legislation will be assessed: the Derogation Agreement on determination of legislation applicable to Rhine boatmen concluded on the basis of Art. 16 (1) of [Regulation \(EC\) 883/2004](#), and the Posting of Workers [Directive 96/71/EC](#) and its enforcement [Directive 2014/67/EU](#). This part of the Fitness Check has **not** yet started. In 2021, Social Partners already worked on both legislations which are very demanding.

#### ✓ The Derogation Agreement

Fitness Check was one of few issues that shifted significantly due to Covid-19 pandemic. In July 2019, DG MOVE published [a roadmap](#) regarding the Fitness Check on market access in Inland Waterway Transport. According to the original timetable in the roadmap, the Fitness Check should have been completed by the end of 2020. Unfortunately, right now the process is still ongoing. However, certain issues have already been analysed thoroughly and discussed within the Committee. There are two groups of regulations that the Fitness Check should address: on one hand, there is a total of seven

regulations regarding market access; and on the other hand, two regulations in the field of social regulations.

In the first group, there is for example a [Council Directive 87/540/EEC](#) of 9 November 1987, on access to the occupation of carrier of goods by waterway in national and international transport and on the mutual recognition of diplomas, certificates and other evidence of formal qualifications for this occupation. It is an important directive, however it is handled very differently depending on the Member State. The Committee considers it absolutely necessary – especially for the European SMEs – that there is a common basic knowledge in this regard. Therefore the Committee wants to address the European Commission to provide more insight on the subject and that this directive will be upgraded together with the harmonisation part on training and education. Among the social regulations under discussion, in addition to Art. 16 of the [Regulation 883/2004](#) (being also a subject of the Social Security Working Group), there is a Directive on Posting of Workers and its effects on inland navigation. As a result, several points have already been identified that will be used in the upcoming Fitness Check.

#### ✓ Posting of Workers Directive

Posting of workers plays an increasing role in the internal market, particularly in the cross-border provision of services and is therefore fully applicable to the inland navigation sector. The situation is currently regulated by [the Posting of Workers Directive \(96/71/EC\)](#), and the Enforcement Directive on Posted Workers (2014/67/EU). However, in its existing form it is not suitable for providing adequate solutions to a great variety of situations in inland navigation. This has been showed in many discussions that the social partners had with the Commission in the Social Dialogue, and in many questions asked. Our Committee is working on a proposal in this matter.



### ✓ Platina 3 project

In the [PLATINA 3 project](#), we aim at bringing together the state of the art knowledge and studies, and to make good use of them to the benefit of our future. To this end, we would like to contribute with our work and expertise, and to be fit for it. PLATINA 3 *Work Package 3 on Jobs and Skills* foresees a specific role that skills play and will continue to play in the sector's green transition and the development of (semi)-automated sailing.

Within the S&E Committee, various connections between [PLATINA 3](#), [NAIADES](#) and [the European Pillar of Social Rights](#), were on the agenda and in our internal discussions. Also, important thematic studies - such as the thematic report on the labour market of the inland waterway transport (done by the CCNR) and the social dimension of automation in the transport sector (prepared by the ECORYS) are being extensively discussed.

### ✓ Study Human factors root causes of accidents in inland navigation - Phase 2b: Organisational Aspects

After Phase 1 had provided the important insight that human factors account for about 70-80% of the accidents, the European inland shipping industry organisations, united in the European IWT Platform, commissioned research agency Intergo to conduct a Phase 2 of the study for more in-depth examination.

Phase 2a covered Human-Machine Interface (HMI) and wheelhouse design, with a focus on the HMI in the wheelhouse. That part was followed by the Nautical & Technical Committee and you will read more about it in the next chapter.

S&E Committee supervised Phase 2b of the study on Human factors root causes of accidents in inland navigation: **Organisational Aspects** and their impact on accidents in inland navigation. The following four factors were identified as particularly relevant: *communication, qualification of crew members, fatigue and stress, and specific waterway situations*.

The Committee actively provided input during the preparation of the study and was represented in the Steering Group. Following the study, which aims to improve the safety of inland navigation in the long-term through providing recommendations, the results will be communicated and possible follow-up measures will be developed. [Click here to read more in detail and view the full report.](#)

### ✓ SSDC Work Programme 2022-2023

Social partners of the Inland Waterway Transport sector meet on a regular basis within the framework of *the Sectoral Social Dialogue Committee (SSDC)*. At those meetings, the partners – including IWT Platform's Secretaries from the S&E Committee – have productive and vivid discussions that focus on finding a common ground for the benefit of the entire IWT sector.

At the latest meeting in January 2022, [the newest Work Programme for 2022-2023](#) was presented. The Work Programme 2022-2023 produced is a reflection of the major topics and challenges we would like to discuss at a European level in the upcoming years. Consultation [with DG Mobility and Transport \(DG MOVE\)](#) and [DG Employment, Social Affairs and Inclusion \(DG EMPL\)](#) also play an important role in this process.

Important points, such as manning regulation, professional qualifications, automation, the current [Platina 3 project](#) and fitness-check got a place in this Work Programme. International agreements and their conclusions play an essential role for the entire IWT sector since not only does it operate in an international setting, but the workplace literally moves across Europe. International regulations and agreements make such free movement of ships, crew and cargo possible and effective.





## ✓ Outlook for 2021

In 2022, we are looking forward to elaborating standards for harmonised European manning regulations, according to the priority tasks in the CESNI Work Programme for 2022 – 2024, continuing the work in PLATINA 3 and starting to develop an adequate legal framework for digital tools.

Concerning the Directive on the Professional Qualifications, the most important in 2022 is for the Member States to transpose the Directive as soon as possible. We will keep on demanding that the adequate solutions for the sector and the training institutes are provided until full implementation of the Directive is accomplished.

We will evaluate the Fitness Check on market access when (if) it becomes available in 2022, and draw our conclusions. This involves the task of drafting standards as part of the CESNI work programme, for competence of entrepreneurs including green and digital skills as input for update of [Directive 87/540/EEC](#), which is an important piece of legislation in the fitness check. For the part of the social regulations that has not yet been started, we will finalise our questions and proposals.

In addition, work will continue on creating good solutions for social security, especially for hotel personnel in the river cruise industry.

*Andrea Beckschäfer,  
Ingrid Blom,  
Gerit Fietze*



# 05. Nautical & Technical Committee

What is the focus on technical regulations in International inland navigation?



## 5. Nautical & Technical

In 2021, the Nautical & Technical Committee (NTC) worked largely on the technical regulations for inland vessels. NTC's vision is that the IWT must concentrate on regulations that are necessary for innovation as well as those that could potentially impact the existing fleet of vessels. Simultaneously, to guarantee a higher level of safety we are paying considerable attention to navigation (police) regulations. It is NTC's mission to be pro-actively involved in the nautical and technical regulation of inland navigation.

### 5.1. Technical Part

The workplan for 2021 of the NTC largely corresponded to the workplan of the European Working Group on Technical Regulations ([CESNI/PT](#)) for the period 2019-2021. Considerable results were achieved in 2021, and the Committee is pleased to mention the most important of them below.

#### ✓ Adoption of the CESNI work programme 2022-2024

During its meeting end October, the CESNI committee adopted its [work programme](#) for the period 2022-2024. Based on the strategic guidelines proposed by the CCNR and the European Commission, the ambitious work programme is the result of intensive work of the delegations and consultations with the various inland navigation stakeholders, in particular the approved organisations representing the industry. The new work programme reflects the priorities of the CCNR and the European Union, and includes a number of tasks related to:

- new technologies and innovation, including the safe use of relevant alternative fuels and propulsion systems, and the skills to handle them, and supporting the transition towards zero-emission;
- modern and flexible manning requirements;

- the digitalisation of inland navigation, including automated vessels, digital documents, navigation and information equipment, as well as electronic tools for recording and exchanging information on crew;
- the revision and development of standards to guarantee a high level of safety in inland navigation and to follow the technical evolution.

#### ✓ Application of the transitional provisions of Chapters 32 and 33 of ES-TRIN

The transitional provisions of the technical requirements for inland vessels are a complex subject. For example, in ES-TRIN different tables with transitional provisions are included in different articles and also in different chapters. The authorised area/zone and year of construction of the vessel determine which table with transitional provisions applies. There are also different legislative frameworks, those of [the CCNR \(RIVR\)](#) and [the Directive \(EU\) 2016/1629](#), with disparities in the transitional provisions. It is no coincidence that the CESNI work programme includes as a task: *'To clarify the conditions for the application of the transitional provisions of Chapters 32 and 33 of ES-TRIN'*.

A digital consultation of the inland shipping industry took place regarding the application of the transitional provisions in chapters 32 and 33 of ES-TRIN. On behalf of the inland shipping industry, the IWT Platform was involved in the work on the desired clarification of the transitional provisions in technical regulations for inland vessels. This is a complex matter for most inland navigation operators, therefore we provided explanations in [this memorandum of 17 May 2021](#). This is an important subject for inland navigation. Different variants are conceivable, each with different consequences.

During the work on this clarification of the transitional provisions, it became clear that first agreement must be reached on a number of important principles. Thus, during the discussions of this complex topic, it became apparent that there are different interpretations on important issues. One of these is the issue of the continued validity of the vessel's



certificate at successive renewals, so that the transitional provisions can be applied with the same understanding. In 2021, the following options were discussed in the working group CESNI/PT and also submitted to the NTC for consultation:

- **Option 1:** no entitlement to transitional provisions once the certificate has expired

Once the validity has expired, the transitional provisions can no longer be invoked when issuing this new certificate. The ship is considered to be a newly built ship.

- **Option 2:** Some flexibility and an additional year's entitlement to transitional provisions

If the inspection takes place within one year of expiry of the validity of the vessel certificate, the transitional provisions may continue to be invoked and the certificate may be extended. This is similar to the practices for ADN vessels.

- **Option 3:** Option 2 plus derogation

Similar to option 2 with the following, additional exception: If the survey takes place later than one year after the validity of the ship's certificate has expired and this is due to a health problem of the shipowner, or because a lawsuit is pending with respect to the ship, the Committee of Experts may decide to still allow invocation of the transitional provisions and extend the certificate.

- **Option 4:** The transitional provisions may always be invoked, no need of uninterrupted validity of certificate

However, if the certificate has expired, the extent of the inspection carried out should reflect the time during which it was not in service.

- **Option 5:** Option 2 + flexibility in case of special circumstances

This option will enable an additional degree of flexibility to put the vessel out of service (with a so-called "lay-up certificate") for a maximum of five years, but subject to strict conditions. This is similar to practices of classification societies in the maritime sector.

At the end of 2021, a **compromise** proposal from the CCNR was agreed. This includes the following: the vessel's certificate should in principle be continuously valid (i.e. renewal of the certificate before the expiry date). Tolerances may be accepted by the Inspection bodies (no harmonised solution at this stage). From the point of view of the inland navigation sector, we have once again stressed the importance of this subject. The NTC pointed to the need for a harmonised approach in Europe, also in view of a level playing field. In 2022 a temporary working group will continue with the desired simplification of the transitional provisions in chapters 32 and 33 of ES-TRIN.

✓ **Study Human factors root causes of accidents in inland navigation - Phase 2a: Human-machine interface and wheelhouse design**

At the end of 2019, CESNI organised a [workshop](#) about collisions between inland navigation vessels and bridges. One of the main outcomes was an emphasis put on the human factor's role in such incidents. Importance of the subject was repeated at another CESNI [workshop](#) on data collection on accidents in inland navigation. The NTC took an active part in those workshops and wanted to use a part of the available study budget to further investigate the human factors root causes of accidents in inland navigation. After all, human error causes approx. 70-80% of the inland shipping incidents, hence an in-depth analysis is needed to then examine possible measures and solutions. In some cases, technical measures are required, but the NTC is convinced of the importance of education as well as training and awareness. In the annual report of 2021 we informed you





of the [results](#) of the first phase of the study into the human factor in inland shipping accidents, a data and expert analysis.

Following this first phase of the study “**Human factors root causes of accident in inland navigation**”, two more in-depth studies took place in 2021:

- **Phase 2a Human factors root causes of accidents in inland navigation: HMI and wheelhouse design**, with a focus on the human-machine interface (HMI) in the wheelhouse, also seen in the light of current and future levels of information provision and automation. The Nautical & Technical Committee of the IWT Platform was closely involved in this research.
- **Phase 2b Human factors root causes of accidents in inland navigation: Organisational Aspects**, with a focus on organisational aspects as plausible root causes, being communication, fatigue and stress, specific waterway situations, qualification of the crew members. The colleagues of the Social & Education Committee were closely involved in this research.

The Inland Waterway Transport sector is on the eve of a major transition in terms of sustainability and digitalisation. This requires further development of standards and certain safety requirements. Therefore, the NTC was not only proactively involved in this study, but also used IWT Platform's study budget for this research. The first recommendation in the [report](#) "Human factors root causes of accidents in inland navigation: HMI and wheelhouse design" is to update and improve the available wheelhouse and HMI design guidelines. A user- and task based approach should be followed, and guidelines should anticipate on developments in automation. Industry commitment is an important first step in general use of these guidelines. The other recommendation is to develop a vision on minimum required availability, reliability, usability, and integration of information and automation at the helmsman's position. This should lead to systems that are safe and truly support navigation, without introducing new risks such

as distraction, creating a false sense of safety, and too many or unclear alarms.

We [presented](#) the [report](#) "Human factors root causes of accidents in inland navigation: HMI and wheelhouse design" and its [annex](#) to the CESNI/PT working group. We emphasised that, as far as we are concerned, the aim is not to adapt current wheelhouses, but to move slowly towards a certain "golden standard" together. The members of CESNI/PT responded to the report and presentation with great interest. The CESNI work programme includes the following: *To examine the follow-up of the research work on human factors root causes of accidents in inland navigation: Human Machine Interface and wheelhouse design.* We emphasised that this subject requires an integral and multidisciplinary approach, especially now that there are and will be many developments regarding automation.

The next challenge is to translate the recommendations of phase 2a and 2b into concrete measures and implementation. This doesn't happen overnight. An integral step-by-step approach must be applied in following-up the recommendations, with attention for technology, organisation (including leadership and strategy) and people. Careful interaction with stakeholders and experts is required and solution packages should be defined. This increases the chance of achieving the objectives in a steady and supported manner. The approach should be described in a roadmap. The NTC recommends developing this roadmap together with the relevant stakeholders within the European nautical field.

#### ✓ Other topics

*For example:* Information about ES-TRIN 2021 (effective 1 January 2022) and an explanatory notice of the amendments in ES-TRIN 2021, Installations ahead of the plane of the collision bulkhead or aft of the aft-peak, FAQ Electrical vessel propulsion, New chapter 12 ES-TRIN - Electronic Equipment and Systems, Waste water collection and disposal facilities, Discussions on engines, CCNR workshop on "Alternative energy sources for electrical propulsion systems in inland navigation".



## 5.2 Nautical Part

### ✓ Adoption of the RPG programme 2022-2024

The RPG meeting in August adopted the new work program for 2022 - 2023. We highlight some of the new and relevant ones for IWT.

- Promoting the use of alternative fuels in inland navigation - New fuels require new regulations and therefore the RPG working group is going to work out new regulations regarding police regulations.
- Adaptation of Article 6.21 of the Rhine Police Regulation (RPR) about pushed barges on the starboard side. IWT has explained the problem of amending Article 6.21(2). It concerns allowing two pushed barges to be carried on the SB side. The CCNR recognises the problem and this point is included in the work programme.
- Problem analysis concerning the navigable status. The visibility of the navigational status of AIS is important for safety. There are several possibilities to adjust the sailing status, manually or automatically. However, there are numerous statuses defined in AIS. Working group RPG proposes to reduce these to the 4 most important ones: sailing, at anchor, moored and aground.
- Possible adaptation of the RPR against the background of automated navigation. There are all kinds of rules in the Rhine Police Regulation that are no longer fitting for an unmanned vessel. There is a ministerial decision to the Mannheim Act that the CCNR should promote automated sailing. Therefore, police regulations should be ready for this as well.
- Extension of the electronic reporting obligation to all ships. The CCNR wants to extend the electronic reporting obligation to ships and convoys that are not yet subject to a reporting obligation. IWT advised the CCNR that all countries should follow the same timetable for the introduction of mandatory reporting.
- Position of navigation lights. IWT explained the following problems regarding article 3.08 of the RPR in the RPG working group:

- the question to what extent a second top light is useful;
  - the location of the side lights;
  - the position of the side lights, particularly in a convoy.
- All 3 issues are included in the work programme 2022-2023.

### ✓ Autonomous sailing

An important subject for the RPG working group is autonomous sailing. Within the CCR working group RPG, rules are being developed for the track control assistant (TCA). This concerns "trackpilots" that follow a pre-set route for a long time. There are no rules yet for these systems and the CCNR is developing regulations. Regulation is desirable, but the CCNR wants more regulations than necessary. IWT has commented on the proposed regulations.

- We want a document that only describes the necessary technical standards and recommend that the rest should be included in a best practice document.
- In terms of training, we believe that no special training is needed. An instruction from the supplier is sufficient enough in addition to the regular competencies of a skipper.

### ✓ Electronic reporting

The extension of the electronic reporting requirement to the vessels referred to in article 12.01 of the Rhine Police Regulations was approved by the Central Commission and came into force on 1 December 2021. The electronic reporting requirement can be processed via radiotelephony, in writing or electronically, but must be carried out electronically from 1 December 2021. The electronic reporting requirement is extended to the types of vessels indicated below.

- Vessels carrying containers on board,
- Vessels carrying goods covered by the ADN,
- Vessels of a length exceeding 110m,



- Cabin vessels,
- Seagoing vessels,
- Vessels with an LNG system aboard,
- Special transport operations.

Electronic reporting reduces the administrative workload for boat masters and inland waterway managers. This is a measure that is helping to modernise inland navigation and promote the use of new technologies.

## Outlook for 2022

To conclude, the NTC is pleased with the rewarding results achieved in 2021. The benefits of joining efforts in the Platform are visible to all. Close collaboration with the other Committees: Innovation & Greening, Infrastructure, Environment & Safety and Social & Education is guaranteed. Also in 2022, the Committee will contribute to a future-proof European inland shipping fleet!

*Lijdia Pater-de Groot,  
Leny van Toorenburg*



# 06. Infrastructure Committee

What is the focus on inland waterways and how to  
maintain / improve this infrastructure?





## 6. Infrastructure

In 2021, the Infrastructure Committee closely followed and engaged in the works of different parties in the field of infrastructure, in particular the European Commission and its TEN-T coordinators within the TEN-T corridor platforms, as well as the international River Commissions.

Of increasing importance are **the environmental aspects** of infrastructure which are guided by the legal framework of the European Commission and implemented at river basin level by the Member States with support of the International Commissions for the protection of the Rhine and the Danube. The inland navigation sector is holding *an observer status* at these commissions in order to balance the ecological and economic interests in various fields.

In 2020, the European Commission launched the discussion regarding the revision of [the old TEN-T guidelines](#) followed by [the launch of the consultation process](#) in 2021. The guidelines will be revised, building on the EU Sustainable and Smart Mobility Strategy (SSMS) which is driven by the European Green Deal and the transport sector's contribution to climate neutrality.

All the above objectives are governed by the overall EU and international policy towards climate neutrality in 2050. In light of these developments, the Committee aimed to contribute to the various discussions and be in dialogue with the responsible actors.

### Intended revision of relevant legislation

#### ✓ TEN-T revision

[The IWT sector welcomed the Commission proposal](#) setting out the new guidelines for the Trans-European Transport Network (TEN-T), in particular the acknowledgement of the important role of IWT sector in line with the

EU Green Deal. **Infrastructure is the backbone of the services and reliability of our sector.** With over 40,000 km of navigable waterways and 250 inland ports, inland waterway transport currently carries some 550 million tonnes of goods per year and is of increasing importance in the field of cruising and passenger transport. Societies and major industries in Europe are depending on a seamless supply of their goods via waterways. Contrary to the congested roads, European waterways dispose of free capacity, offering a significant modal shift potential in line with the EU Green Deal.

The SSMS seeks to increase the share of Inland Waterway Transport (IWT) by 25 % by 2030 and by 50 % by 2050. The European Commission underlines the importance of Inland Waterway Transport as sustainable mode of transport to realise its future sustainability goals. It emphasises that:

- *Insufficient investment in infrastructure over the past decade also led to a maintenance backlog.* Crumbling bridges, degrading road and rail infrastructure became a painful reality with higher risk of congestions, accidents, increased noise and lower level of service to society.
- *Inland waterways are vulnerable to climate change because river navigation depends on precipitation and water levels for its operations.* Droughts and floods have the most disruptive impacts for inland waterways because low water levels impose limitations to navigation services. Hence inland waterway transport is directly affected and already feels the impact of climate change.

The Commission rightly acknowledges that waterway transport needs a reliable, safe, cost effective and climate resilient infrastructure network. Since inland waterways have multiple functions: water supply, energy generation, recreation, biodiversity, etc., this requires *an integrated water policy* to ensure that such infrastructures have a neutral or positive impact on biodiversity.



In the first evaluation, the IWT sector believes that the chosen approach to revise the TEN-T guidelines with a focus on the newly to be defined 'Good Navigation Status' (GNS) should allow to address the shortcomings in the implementation of the current TEN-T guidelines and to take on board climate resilience within a river basin approach. Besides, the revision is focusing on the introduction of an alternative fuel network along the European waterways which is important in view of the energy transition of the sector. For this purpose the availability of sufficient alternative fuels and energy supply in both sea- and inland ports and along the entire network of navigable waterways is of major importance. The European Commission also acknowledged the shortcomings in the sea ports regarding the handling capacity of the entire hinterland chain, which for many years has caused huge congestion problems and costs to the IWT sector. By imposing the need for '*dedicated handling capacity for inland waterway vessels*' in the seaports this is considered to contribute to shifting more freight towards inland waterways.

The IWT sector will further evaluate the proposal and provide input to the upcoming negotiations with the Institutions.

#### ✓ TEN-T corridor fora

In 2021, the IWT Platform participated in different TEN-T corridor fora meetings to voice the needs of the sector with regard to a proper functioning of the waterways. *Inland waterways are part of 7 of the 10 corridors.*

At those meetings, the corridor coordinators and the involved Member States were called upon to materialise the goals of the SSMS that seek to increase the share of IWT sector by 25 % by 2030 and by 50 % by 2050, by realising the concept of the Good Navigation Status, including:

- performance upgrade and life cycle management of waterways,
- adaptation to climate resilience and future climate proof of infrastructure,

- clearance of capacity bottlenecks (fairway parameters, lock size, bridge clearance),
- deployment of clean energy supply infrastructure for alternative fuels and on shore power electricity,
- sufficient waste reception and degassing facilities,
- sufficient mooring and rest places.

Whereas the role of the corridors and their coordinators under the revised TEN-T concept will increase, the IWT Platform will continue to engage in the works of these fora and stay in close contact with the coordinators.

#### ✓ FAIRway Danube project

The international [FAIRway Danube project](#), co-financed by [the Connecting Europe Facility \(CEF\)](#) and coordinated by [viadonau](#), by the end of 2021 terminated with impressive results. The IWT sector, being involved in the Advisory Board, applauded the tangible results of this project. **FAIRway Danube** was launched back in **2015** with the ambitious goal of improving fairway conditions along the entire Danube. It realised harmonised fairway information and service standards on the Danube, together with important feasibility studies for the rehabilitation works alongside the preparation of national action plans and status reports on the state of the waterway in the individual Danube countries. The project delivered tangible successes: in Hungary, Slovakia, Croatia, Serbia, Bulgaria and Romania, a total of 37 gauging stations, five surveying vessels and four marking vessels were installed or put into service as part of the project.

The IWT sector welcomes the two follow-up projects - '*FAIRway works!*' and '*Preparing FAIRway 2 works in the Rhine-Danube corridor*'- the last one hopefully leading to a follow up FAIRway 2 project.

Strongly related to this project is the EU-funding project to innovate and modernize the Gabčíkovo locks. In the past year, the sector faced unexpected and short termed announced closure of the daily traffic. These



closures severely impacted the reliability and functioning of the sector, both freight and passenger carrying. The IWT Platform since has been in close contact with the responsible waterway authorities in order to guarantee timely notifications of any closures and to avoid and shorten these to a minimum.

### ✓ **EU Danube Region Strategy**

Under [the EU Danube Region Strategy](#), a **Workshop on Notices to Skippers, Standard 4.0** was organised in November 2021.

[Notices to Skippers \(NtS\)](#) have supported for years traffic safety on European inland waterways and provided information regarding the usability of the infrastructure (e.g. with regard to lock closures). Driven by regulations and directives of the European Commission and based on standardisation efforts of dedicated expert groups, NtS messages have become an indispensable communication channel for shipping companies. The Commission Implementing [Regulation \(EU\) 2018/2032 of 20 November 2018](#), amended the previous Commission Regulation and updated the technical specifications for Notices to Skippers, the so called **“Notices to Skippers Standard 4.0”**. The Regulation required the EU Member States to provide Notices to Skippers services for their inland waterways, which is of huge importance to the sector and its reliability.

The workshop aimed to develop a joint work programme which will ensure compliance with **the new NtS Standard 4.0** along the whole waterway. In cooperation with the Danube Commission and the IWT sector, user requirements and good practices were discussed. The IWT sector took this opportunity to voice the needs and expectations of the industry, emphasising the importance of a proper infrastructure for carriers – both passengers and cargo carriers – to be considered as reliable service providers. In case of the unavoidable closures of the waterways, due to necessary works, the sector needs to receive timely prior notifications which are easily accessible and user-friendly.

The IWT sector welcomes the initiatives undertaken by the Danube Commission to elaborate recommendations regarding full implementation and harmonisation of the Notices to Skippers Standard 4.0, which supports the industry’s plea. Under RISCOMEX, a single access point will be developed.

### ✓ **Berths and mooring places along the river Rhine**

IWT also has a permanent place in the IEN working group of [the CCNR](#). A short overview of some of the topics that were discussed there are:

#### *[Mooring Upper Rhine Passenger shipping](#)*

In Neuf Breisach and Hunningen there will be berths for passenger navigation. In Vogelgrün 2 places for a length of 135 meters. For this, the waiting place in front of the lock will be moved up by 70 meters. In Vogelsheim, further downstream, there will also be 2 lengths for 135 meters and 2 widths. The work will start in the 1st quarter of 2022 in Vogelgrün, then in Vogelsheim and finally in Hunningen. Work will start there around 3rd quarter of 2022. In total there will be 7 places.

#### *[Expansion of Freight Berths on the Upper Rhine](#)*

The first two phases of the study have been completed. The results are now being analysed, priorities are being set and funding is being investigated. The first impression is that additional places are being considered near Markolsheim and Ottmarsheim. The concept study has been commissioned for 1 or 2 places (1st quarter 2022). Two new ducal boxes will also be installed in Fessenheim below the lock and two more above the Vogelgrün lock (3rd quarter 2021).

#### *[Berths formula](#)*

Sufficient berths and mooring places are of huge importance to the IWT sector. This is also part of the GNS concept of the TEN-T guidelines. There



is a strong need to elaborate a right berths formula combining the experience of the involved authorities and the needs of the sector.

The discussion was and will be canalised in workshops dedicated to this topic, for which a first one took place in 2021 in Vienna, to be followed by another workshop on moorings in February, 2022. The IWT sector in these workshops voiced its expectations and needs.

#### ✓ Revision of the Combined Transport Directive (CTD)

**Intermodal transport** under the current [Directive 92/106/EEC](#) is mainly perceived as a combination of road and rail. Consequently, the scope of the current economic support measures defined in the Directive 92/106/EEC is very limited, consisting of fiscal measures (namely the reimbursement or reduction of taxes) which concern only combined rail-road transport operations.

In its roadmap, the Commission recognises the shortcomings of this Directive and directly links them to the new EU policies as recently elaborated in the EU Green Deal, the Sustainable and Smart Mobility Strategy and NAIADES III on inland navigation policy. The revision of the CTD is therefore understood as a logical and necessary next step to contribute to these goals. It should create a level playing field between the modes, mainly to repair the restricted perception of intermodality in the current directive. For this purpose, IWT and short sea shipping should receive the same treatment in terms of economic support measures as the combination road-rail. The IWT sector welcomes the objective of the initiative by widening the scope of support to facilitate modal shift towards IWT. It should create a level playing field and repair the existing legislation in this sense.

#### ✓ Adaptation of inland waterways and ports to the climate change

Climate change will bring new challenges for the inland navigation sector, notably in relation **to water quantity**. The European inland navigation is more and more impacted by extreme and extended low water periods, the latest one in the second half of the year 2018. The impact of low water was particularly pronounced on the Rhine, on its tributaries, on the Upper and Middle Danube, and on the Upper and Middle Elbe. The interruption in the logistics chains caused considerable economic losses.

Following predictions of experts<sup>1</sup>, due to climate change in the future more restrictions on the navigability of rivers in terms of low and high water levels are expected.

In the aftermath of the extreme low water period in 2018 in central Europe, affecting the major rivers Danube, Elbe, Weser and Rhine, [the CCNR organised a Workshop on Low Water](#) in coordination with [the International Commission for the Protection of the Rhine \(ICPR\)](#) and [the Commission for the Hydrology of the Rhine \(CHR\)](#) which led to the release of its [reflection paper “Act now!” on low water and effects on Rhine navigation](#) in February 2021. Since 1900, there have been 11 extreme low water periods, meaning a period of extremely low water every 20-25 years. However, in the past 50 years the IWT vulnerability increased due to longer low water periods. The report concludes that a range of actions needs to be taken rapidly regarding adaptation of infrastructure, fleet, logistics and storage concepts, as well as implementation of digital tools, in order to ensure that inland navigation remains a reliable mode of transport and to avoid a permanent shift away from inland waterways to other transport modes.

Reaching high-quality and climate proof infrastructure is embedded in various European policies. The IWT sector will closely follow and contribute to the discussions in this field, reason why it is involved in the works of the

<sup>1</sup> Bundesanstalt für Gewässerkunde (Federal institute of Hydrology) in “Risk of climate change on German waterways: what do we expect” at the Platina 3 Stage 3 event.





river protection commissions and the relevant Task Groups at European Commission level as described below.

### ✓ **Water Framework Directive (WFD) and participation in the WFD Navigation Task Group**

In 2021, the IWT Platform via its cooperation in the WFD Navigation Task Group attended the Strategic Coordination Group meetings where most of the planned WFD Common Implementation Strategy activities took place.

Among the topics of relevance to the IWT Platform discussed at these meetings were:

- The increasing emphasis put on links between the WFD and the various **Green Deal initiatives** including: Zero Pollution Action Plan, Climate Adaptation Strategy, Horizon Europe Strategic Plan, and Blue Economy Communication (all now published); also, the evolving actions under the Biodiversity Strategy including on free-flowing rivers and a proposed nature restoration law.
- The evolution and agreement on the new 2022-2024 **Common Implementation Strategy (CIS) Work Programme**, under which the following activities are of particular interest: ongoing Ecological Status (*ECOSTAT*) Working Group activities on sediments, new *ECOSTAT* work on plastics and litter, ongoing work on Economics, new work on water quantity management under the Water Scarcity and Drought Working Group; and possibly other new climate change initiatives. See more below.
- Member States' progress in consulting on their third-round **river basin management plans**. Jan Brooke as Task Group Chair reviewed and provided IWT Platform with his initial comments on the draft Danube River Basin Management Plan.

The **WFD Navigation Task Group** discussed participation in the **Zero Pollution Stakeholder Platform** in December 2021 after the navigation sector's response to the consultation on the Zero Pollution Action Plan, and

worked together with ICOMIA and IWT to prepare a (successful) bid for a seat on the new Zero Pollution Stakeholder Platform.

Via the WFD Navigation Task Group, the IWT sector continued to follow the activities:

- As a member of the Working Group *ECOSTAT* (Ecological Status),
- As a member of the 'core group' of the WFD *ECOSTAT* activity on sediment management, contributing specifically to Chapter 2 on sediment quantity but also working with others to finalise this new CIS technical document, which is due for publication in early 2022,
- As a member of the *ECOSTAT* Hydromorphology ad hoc Task Group, finalising the CIS report on inter-comparison, across Member States, of good ecological potential. This document, which is due for publication in 2022, is important to the sector insofar as it should help to ensure a level playing field between Member States,
- As a member of the CIS Economics Ad Hoc Task Group including attendance at virtual meeting March 2021. Participation in this, now permanent, Working Group under the 2022-2024 Work Programme remains important to the sector in relation to the water use vs. water service question and associated cost recovery; also, with regard to how hydromorphological modifications are categorised given their specific provisions in the Directive itself.

### ✓ **Activities within the International Commission for the Protection of the Danube (ICPDR)**

The ICPDR, as coordinating body ensuring co-operation on transboundary water management and coordinating basin-wide implementation of EU Water Framework and EU Floods Directives, on 8 February 2022 adopted the **"Danube Ministerial Declaration 2022"**, which addresses and adopts its vision for *Cleaner, Healthier and Safer Waters by 2027 - the three ICPDR pillars*. It introduced the Danube River Basin Management Plan (DRBMP) and Danube Flood Risk Management Plan (DFRMP) with their **2021 Update**. ICPDR in its 24<sup>th</sup> ordinary meeting on 14 and 15 December 2021, adopted



the updated River Basin Management Plan after an extensive evaluation and input from the Member States as well as consultation of stakeholders. The DRBMP Update 2021 offers rich and comprehensive information about water management issues for the most international river basin in the world. The IWT sector was involved in this process and provided its input to the updated plans. It welcomes the update of the DRBMP which considers inland navigation as an important sustainable water use.

Climate change will bring new challenges for the inland navigation sector, notably in relation to water quantity. The draft update recognizes that ensuring the continued safety of inland navigation is a challenge that needs to be addressed as a climate change-related risk. Some of the effects of climate change (drought, water scarcity, extreme hydrological phenomena and other impacts) are clearly of great relevance to the inland navigation sector.

The IWT sector also appreciates recognition that the integration with other sector policies is an important issue in the Danube River Basin in order to create synergies and avoid potential conflicts.

The IWT sector looks forward to continued engagement and further intensified exchanges with the relevant authorities and stakeholders to ensure that water resource management along the rivers supports sustainable water uses such as navigation, while at the same time it protects and enhances the water environment. It stresses the importance of full engagement with the inland navigation sector in the development and delivery of appropriate measures in the elaboration of the new River Basin Management plans in all countries involved.

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# Thank you!

For questions, suggestions or to plan  
a meeting, feel free to contact us!

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