THE CCNR RELEASES THE THIRD EDITION OF ITS REFLECTION PAPER "ACT NOW!" ON LOW WATER AND EFFECTS ON RHINE NAVIGATION

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Back in November 2019, the CCNR organised a workshop on low waters and their effects on Rhine navigation. This workshop led to the publication of the first edition of the "Act now!" reflection paper. A second edition of the reflection paper was published in 2021, to which an inventory of relevant projects contributing to overcome the challenges related to low waters was added.

On 18 January 2023, the CCNR organised a follow-up expert workshop on "Low water and its impact on Rhine navigation". The CCNR is therefore very pleased to announce the publication of its third edition of the reflection paper "Act now!", in four languages. It takes into account both the outcomes of the workshop on low water of 2019 and of the follow-up expert workshop of 2023. The main updates concern an analysis of the low water event of 2022 as well as new developments in the fields of infrastructure, vessel adaptation, digital tools or at the level of shippers and logistics. You will find below the executive summary of the third edition of the reflection paper.

The third edition of the "Act now!" reflection paper is available on the following page https://www.ccr-zkr.org/13020156-en.html together with all information regarding the workshops organised by the CCNR on the low water topic. The full reflection paper can be downloaded in PDF format in French, German, Dutch or English.

We wish you an enjoyable read!

SUMMARY

In November 2019, in the aftermath of the 2018 low water event and ten years after a first workshop on "Navigation on the Rhine and climate change" the CCNR organised a workshop on low waters and their effects on Rhine navigation.

During long periods of extremely low waters, it becomes challenging to ensure the continuity of inland waterway transport. This has negative economic consequences. While low water events are not new and are not as such an exceptional phenomenon, the vulnerability of inland waterway transport towards low waters has increased.

This is the result of several factors which are both internal and external to inland navigation. Extreme weather conditions can limit efficient navigation on inland waterways in the short-term, while in the long-term, it might influence the modal choices of shippers. With climate change, this phenomenon could become even more frequent and severe in the future. In addition, over the past decades, the Rhine fleet has changed, both the size and the laden draught of vessels have increased significantly. At the same time, the integration into the logistics chains of the industry, the "Just-In-Time" principle and the associated high demand on the reliability of transport services pose great challenges to IWT. Yet, the inland navigation sector has a vital role to play in achieving the ambitious modal shift and emission reduction targets in the transport sector that have been set at international level, such as the Mannheim Declaration and the European Green Deal. Inland waterway transport will continue to be indispensable, especially for carrying large freight volumes or for the transport of heavy and oversized goods, hence the urgent need to address this challenge.

ABOUT THE CCNR

The Central Commission for the Navigation of the Rhine (CCNR) is an international organisation that exercises an essential regulatory role in the navigation of the Rhine. It is active in the technical, legal, economic and environmental fields. In all its areas of action, its work is guided by the efficiency of transport on the Rhine, safety, social considerations, and respect for the environment. Many of the CCNR's activities now reach beyond the Rhine and are directly concerned with European navigable waterways more generally. The CCNR works closely with the European Commission as well as with the other river commissions and international organisations.

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In 2019, it was concluded that, although there were no "one size fits all" solutions to address the low water challenges being faced by the inland navigation sector, many solutions were available to meet those challenges. A range of actions needs to be taken regarding adaptation of fleet, infrastructure, logistics and storage concepts, as well as implementation of digital tools, to ensure that inland navigation remains a reliable mode of transport. The majority of the required measures are already well known and available, but it is now time to take a first step towards implementation. To support this, there is consensus among inland navigation key actors that funding and financing solutions must be made available. Another key conclusion of this workshop was the need for a platform to facilitate intensified dialogue between the relevant industrial, logistical, political and environmental organisations. The CCNR appeared as the natural exchange platform on the Rhine. This is how the idea of an "Act now!" process was born. As part of this process, the "Act now!" reflection paper was published in 2020, supplemented in 2021 by an inventory of relevant projects.

Four years later, in January 2023, the CCNR organised a follow-up workshop which led to the publication of the present third edition of the reflection paper "Act now!". During the follow-up workshop, high hopes were expressed that low water phenomena can be tackled. This workshop was timely as the 2022 low water event was a renewed reminder that this age-old phenomenon is an urgent concern, with important impacts.

Today, tangible impacts of these low water phenomena on the inland navigation sector have been observed, in particular the very high risk of a reverse modal shift or seeing certain shippers becoming more reluctant to opt for IWT. Nevertheless, concrete measures have also already been taken by some of these shippers. At the same time, inland waterway maintenance and development is put under pressure, as new environmental legislation and the need for win-win situations to share the available water with other users and for other uses, must be considered.

To improve the inland navigation sector's resilience to low water phenomena, a package of complementary measures must be implemented, in the form of four main levers:

- Digital tools: progress has been made as regards forecasting tools for water levels on the Rhine. The German authorities are now providing low water forecasts for 4 and 14 days ahead for some Rhine gauges relevant to navigation and for some up to 6 weeks. Further improvements are possible with, for example, longer term forecasts or greater forecasting accuracy. Other digital tools may yet be developed, such as 100-year projections of discharges and water levels and the development of waterway digital twins to propose alternative river routes depending on the low water situation.
- Infrastructure: these measures need to be seen in a midterm perspective. Yet they are of significant importance given the sensitivity of the Middle Rhine to low water levels. The package of measures in the "Rhine low water" action plan, which was initiated in Germany in 2019, includes two infrastructure measures for the Middle and Lower Rhine. Due to the urgency of the situation, the German authorities have also set up a commission to accelerate the project to remove bottlenecks along the Middle Rhine. In the Netherlands the development of rivers is tackled in the "Integrated River Management Programme".
- Vessel adaptation: the inland waterway operators and shippers are showing great interest in research projects to do with navigation during low water periods. Investments in newbuilds of dedicated vessels, capable of operating under low water conditions has also increased. The challenge remains to develop innovative vessels capable of operating during low water conditions while remaining economically viable also under other water level conditions. Public funding is important in this regard, such as in Germany and France where such funding possibilities are also available for retrofitting existing vessels.
- Actions at the level of shippers and logistics: such actions can include more long-term chartering contracts with operators equipped with barges still capable of operating when water levels are low, optimised handling, additional storage capacity, and well-prepared communication processes, adding barges to a pushed convoy during low water periods to transport equivalent volumes distributed among more barges, or short-term shift to other modes.

Again in 2023, the need for greater dialogue between the key actors on future measures for adapting to low water conditions and strong cross-border cooperation between the Member States was confirmed. Indeed, just as there is no "one-size-fits-all" solution, nor is there a single actor capable of solving every problem. It is therefore important to encourage private and public initiatives and to catalyse collaborative actions. To support and encourage these discussions, the CCNR will continue to organise these "Low water talks" at regular intervals over the coming years.

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