## The CCNR's work on digitalisation: Challenges and feedback

WORKSHOP ON THE INTRODUCTION OF ELECTRONIC DOCUMENTS IN THE FIELD OF INLAND NAVIGATION

8 September 2022

Urs MAURER, BAV (Switzerland)



# **GENERAL OVERVIEW**





#### Importance of digitalisation

The CCNR has been very active for a long time in the field of digitalisation of inland navigation.

Recently, the importance of the subject was underlined in the Mannheim Declaration in 2018.

Indeed, the ministers in charge of transport stated as follows:

Extract Mannheim Declaration

5. WE call on the CCNR to press ahead with development of **digitalisation**, automation and other modern technologies, thereby contributing to the competitiveness, safety and sustainability of inland navigation.

Conclusion

**Digitalisation** is an overarching subject for all working groups and committees of the CCNR, and especially CESNI!



# DIGITALISATION: A CONTINOUS EFFORT TO ADAPT CCNR REGULATIONS





#### Linked to CCNR regulations

Constant adaption

The CCNR is constantly adapting its regulations on the Rhine to enable innovation and digitalisation of inland navigation, being convinced that innovation and new technologies can improve safety and prosperity of the Rhine navigation.

Key aspects

**Electronic documents and automation** are two key aspects of digitalisation of inland navigation.

Innovative tools and new technologies can support the implementation of regulations, but only if they are compliant with them!



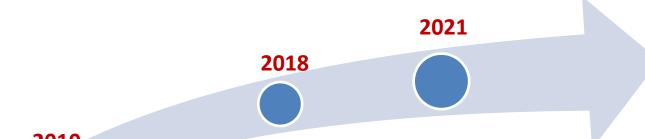


#### Example n°1: Electronic Reporting

Electronic Reporting is mandatory on the Rhine for many types of vessels (art 12.01 RPR).

The boatmaster has to provide a list of information to the authority before starting the voyage for safety purposes.

It has been gradually introduced for vessels and convoys since 1st of January 2010 through modification of the RPR (Rhine Police Regulation):



The CCNR agreed to extend electronic reporting to other vessel types in the future.

2010

**Extension to vessels** with fixed tanks aboard

special transport operations referred to in article 12.01(1) of the RPR:

**Vessels and convoys** carrying more than 20 containers and at a latter stage, all container vessels and convoys

vessels of a length exceeding 110m, cabin vessels, seagoing vessels, vessels with an LNG system aboard, special transport operations.

Extension to all vessels and



#### What is the *added* value of electronic reporting?

#### The purpose of electronic reporting is to:

- reduce understanding issues by replacing radiocommunication through electronic messaging,
- avoid multiple reporting of skippers to different competent authorities when navigating on the Rhine,
- limit the provision of the same data to different authorities,
- enable electronic data interchange between competent authorities,
- reduce administrative burden

Safer and easier

Electronic reporting contributes to improve the safety and the prosperity of the Rhine navigation and to make the boatmaster's obligations and the work for authorities easier!

A win-win situation.



#### I What is the *added* value of electronic reporting?

### Good example for communication regarding eletronic reporting





#### Example n°2: dematerialised certificate on board of a vessel

The Rhine Police Regulation (RPR) requests that some certificates must be present on board for Police control if necessary (Article 1.10).

In 2019, this article of the RPR has been reviewed by adding a new Annex 13.

#### Annex 13

- gives comprehensive list of these certificates that must be kept on board,
- also introduces the possibility to present some documents in a dematerialised format in case of control
- updated in 2021 with an extension to documents that can be kept on board dematerialised
- will be updated again in the future



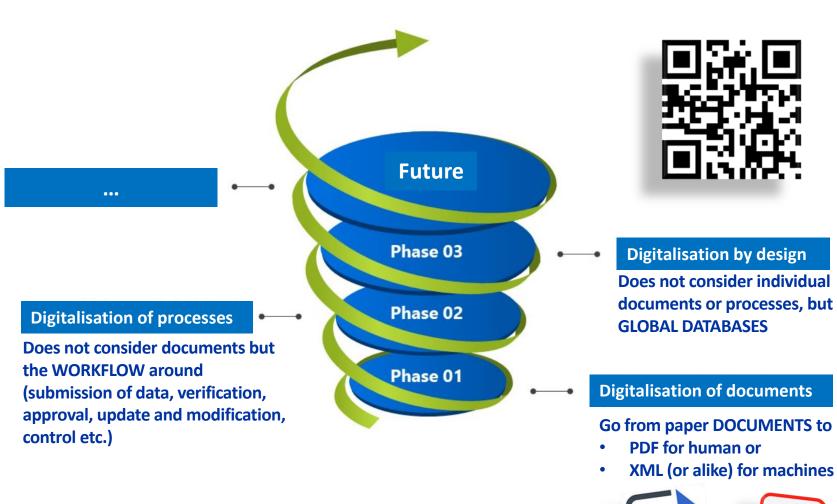


### CONCLUSIONS AND OUTLOOK FOR THE FUTURE





#### Different phases in digitalisation









Digitalisation is a continuous process

> The CCNR develops the scope of digitalisation (more documents allowed in electronic format in the Annex 13 of RPR, extension of the obligation of electronic reporting to new types of vessels including new data...)



But some new risks and challenges are to be addressed:

Harmonisation of documents and procedures becomes crucial

Multilingualism needs to be managed

**Cybersecurity** issues increase

Access to the network in all circumstances (or possibility of offline procedures)

Training of staff and crew to manipulate new technologies

Limit additional costs
for vessel operators, owners and authorities

Interoperability with other modes of transport

Automation
will bring new
challenges for
dematerialisation
in general





### THANK YOU FOR YOUR ATTENTION

QUESTIONS WELCOME!