The educational institutions approach on the challenges of digitalization in IWT

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Currently there is a growing shortage of personnel in western European IWT.

Crews are getting older and there is a insufficient influx of new, trained and skilled personnel.

Wages in western European IWT are comparable, if not higher than in the maritime world right now.

The contemporary fleet is digitalized and interconnected and demands an augmented set of skills from its crews.
Specialized semi-autonomous vessels, such as remotely controlled fireboats, may enter limited service in a relatively shorter time, but one always needs to remember what ultimately drives automation: money. As long as humans can do a given job for less money than a machine, automation remains in the realm of science fiction.
Aim: Implementation of a mutually recognised Regime for IWT crews on the European interconnected waterways (...and beyond)

Standards for competencies and qualifications on ML and OL incl. required experience and method of demonstration – practical examination!

Streamlining the legal framework in professional Qualifications in order to ensure workers mobility and a high level of safety in navigation

Defining the professional qualifications and competences in inland navigation according to defined Competence tables

The new directive replaces the old 97/50/EU (only boatmasters)

The new EU directive 2017/2397/EU

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Recognition of professional qualification in inland navigation

Harmonised rules on professional qualifications will foster labour mobility in European inland navigation

Competence-based standards for...

- Navigation
- Operation of the vessel
- Cargo handling and passenger transport
- Marine engineering and electrical, electronic and control engineering
- Maintenance and repair
- Communication
- Health and safety, passenger rights and environmental protection

Source: European Commission 2018
Future steps for the implementation of the new Directive
Recognition of professional qualifications on all inland waterways in the European Union by 2022

2018

CESNI will define and adopt competence standards as required by the directive

2020

Member States should transpose the laws and provisions necessary to comply with the new rules

Four-year period for transposition

16.01
Entry into force

17.01
CESNI standards have to be adopted under delegated or implementing acts

2022

17.01
Deadline for transposition into national law

Source: European Commission 2018
These tools (blended learning, training vessels, autonomous navigation, simulators and robotica) ensure a safe, efficient, reliable and repeatable training environment.

New legislative frameworks and a digitalized fleet demand a change in education and training culture.

In order to achieve a high training standard, the MAH choose to implement contemporary training tools.

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Blended learning

Students use digital learning tools from day one on the school.

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MV Prinses Maxima is equipped with a semi-autonomous “Bahnleitungssystem” since 2008.
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https://www.youtube.com/watch?v=E-weGUebQDs
Thank you very much!

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