

# UNMANNED SHIPS - THE REGULATORY FRAMEWORK

International seminar  
on autonomous vessels for inland waterways

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# Part 1: Maritime vessels

(focusing on international law)

# The stability of maritime law

- Rules from the age of sail survived...
  - Steam, diesel, nuclear propulsion
  - Growing size of ships and ports
  - World Wars and new States
  - Unitized cargoes
  - Safety and environmental awareness
  - ... and Unmanned Shipping ?

# Status of legal research

- Unmanned Marine Vehicles (UMVs)
- EU projects
- Comité Maritime International
- National initiatives

# Feasibility and risks

- Which business model ?
- Is it realistic and acceptable ?
- Human factor in accidents
- New dangers
- The social dimension

# Is it still a ship ?

- No uniform definition
- UN Law of the Sea Convention
- Public law conventions
- Private law conventions
- National laws and regulations
- Conclusion: most existing rules will remain applicable

# Is there still a link to a Flag State ?

- UN Law of the Sea Convention
- Position of the shore-based controller
- A virtual instead of a genuine link
- New rules on ship safety, port state control, piracy, traffic routing, facilitation of maritime traffic ?

# Masters, seafarers, pilots etc (1)

- The Captain – a romantic memory
  - Captain’s Law
- The shore-based controller
  - Is not a seafarer (e.g. definition under STCW), and seafarer law is not really relevant
  - Yet he will assume huge responsibilities
  - The COLREGs will have to be complied with
  - Reporting duties
  - Port State Control procedures



# Masters, seafarers, pilots etc (2)

- Ship documentation and VDR
- Passenger transportation
- The 'on-bridge team'
- The pilot
- The tugboat
- VTS
- The harbour master

# Masters, seafarers, pilots etc (3)

- The stowaway
- The pirate and the terrorist

# Phantom contracts and phantom liability (1) ?

- Responsibility and the path of control
- The charter party
- Crew management contracts
- Shipowner's liability
- Limitation of liability

# Phantom contracts and phantom liability (2) ?

- The Hague Rules & the Rotterdam Rules
  - transport documents
  - due diligence
  - liability for errors by the shore-based controller
- Shipping agency contracts
- Terminal operators
- Collision liability
- Pollution damage

# Phantom contracts and phantom liability (3) ?

- Salvage
- General average
- Arrest
- Liens and mortgages
- Insurance and insurability

# Conclusion

- Maritime law appears to be relatively well armed
- Some adaptations will be needed

## Part 2: Inland waterway vessels

(focusing on domestic law  
– research in progress !)

# Sources of law

- International
- EU
- Rhine
- Belgian
- Flemish
- Local (ports)
- Forthcoming codification of Belgian and Flemish legislation



# Registration

- Code of Commerce
  - Definition of inland vessel does not refer to presence of crew on board as a constitutive element
  - Neither is it a condition for registration

# Safety (1)

- Vessel Safety Act, 5 June 1972
  - Definitions of ship and inland vessel do not refer to presence of crew on board as a constitutive element
  - The Act provides a basis for (1) the introduction of requirements relating to medical fitness and qualifications of the ‘crew’ which may be imposed through Royal Decrees; (2) derogations in specific cases

## Safety (2)

- A shore-based controller is not a ‘crew member’ but a ‘ship master’ (Dutch ‘kapitein’) for which no fitness and qualification requirements can be imposed (on the basis of the 1972 Act)

## Safety (3)

- Decree on Technical Requirements for Inland Waterway Vessels, 19 March 2009
  - Obligation to carry a ‘Community inland navigation certificate’
  - Certificates are issued by an Inspection Commission
  - Implications of these requirements to be analyzed further

# Steering / navigation licence

- Inland Waterways Steering Licence Act, 21 May 1991 and Navigation Licence Decree of 23 December 1998
  - Licence must be held by anyone who steers an inland vessel – including, it would seem, a shore-based vessel controller
  - Licensing conditions relate to age, medical fitness, exam and practice on board
  - Details are laid down in Royal Decrees and some derogations are possible

# Manning

- Inland Waterways Manning Requirements Decree, 9 March 2007
  - A crew member is defined as a person working on board
  - Definition of push train etc to be analyzed further
  - Decree lays down qualification, age criteria, sailing and rest periods for crew members as well as minimum manning levels
  - Temporary derogations are possible (to be analyzed further)

# Waterway and traffic regulations

- General Police Regulations for Navigation on Inland Waterways (Royal Decree of 24 September 2006)
- General Regulations for the Waterways of the Kingdom (Royal Decree of 15 October 1935)
- Specific regulations for individual waterways and ports
- To be analyzed further

# River Information Services

- River Information Services Decree, 19 December 2008
  - Shore-based vessel controller would appear to be a RIS user



# Contracts of carriage (1)

- Inland Affreightment Act, 5 May 1936
  - Applies to cabotage
  - Rights and duties of the ‘skipper’ to be analyzed further
  - Some exemptions of liability are conditional upon compliance with technical standards and manning requirements

# Contracts of carriage (2)

- CMNI
  - Applies to cross-border carriage
  - Seems neutral vis-à-vis the absence of a crew

# Liability (1)

- Code of Commerce (Art 46 et seq)
  - The ship owner and the operator are jointly liable
  - The ship owner and the operator are liable for acts committed by their staff
  - Personnel of the owner and the operator is liable for fraud, intentional faults and frequently occurring minor faults – this would equally apply to shore-based vessel controller

# Liability (2)

- Right to limit liability
  - Current regime
    - Tonnage limitation
    - Code of Commerce, LLMC and Royal Decree of 24 November 1989
    - Status of tug and push trains to be analyzed further
  - Forthcoming regime
    - Tonnage limitation
    - CLNI
    - Status of tug and push trains to be analyzed further

# Collision liability

- Code of Commerce
  - Based on 1910 Maritime Collision Convention
  - Liability is based on fault of the 'ship'
  - Absence of crew is no issue

# Wreck removal

- Wreck Removal Act, 11 April 1989
  - Duty of owner to remove wreck and sunken objects
  - Tonnage limitation
  - Seems neutral vis-à-vis absence of crew on board

# Provisional conclusion

- Several laws and regulations seem neutral vis-à-vis the absence of a crew on board inland waterway vessels
- Technical and manning rules and some specific issues need further investigation