



# Class & Regulatory Compliance for Wind Assisted Propulsion – WiSP JIP

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# Agenda

- Industry Developments
- Existing Class and Regulatory Framework
- Potential Path Forward



## **Wind-Assisted Ship Propulsion Joint Industry Project**

**Transparent performance prediction and compliance with regulations**

Source: WISP JIP (<https://www.marin.nl/jips/wisp>)



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# Industry Developments

## Class Requirements

- Specific requirements from major class societies

## International Regulations

- IMO MEPC: inclusion of wind propulsion systems in EEDI assessment
- Two proposals submitted during MEPC 74
  - MEPC 74/INF.39
  - MEPC 74/5/30

# Existing Class and Regulatory Framework

## GAPS

### Class Requirements

Novel concepts and designs verification

Requirements will need to be updated for emerging applications

### Regulatory Requirements

Navigational safety (visibility, radar, etc.)

Sea trial verification (environmental conditions, EEDI, etc.)

Minimum propulsion power

## RISKS

Statutory items: case-by-case reviews for flag state approval

- Extended review period
- Pending flag state approval

Challenges in sea trials: maneuvering and EEDI verification

- Minimum wind speed requirements
- Final performance assessment needs extensive operation data
- Poses challenge to delivery and contract

# Potential Development to Improve Compliance Procedure

## Maneuverability

- Standardized maneuverability methodology and sea trial verification
- Dedicated minimum propulsion power calculation

## Structures

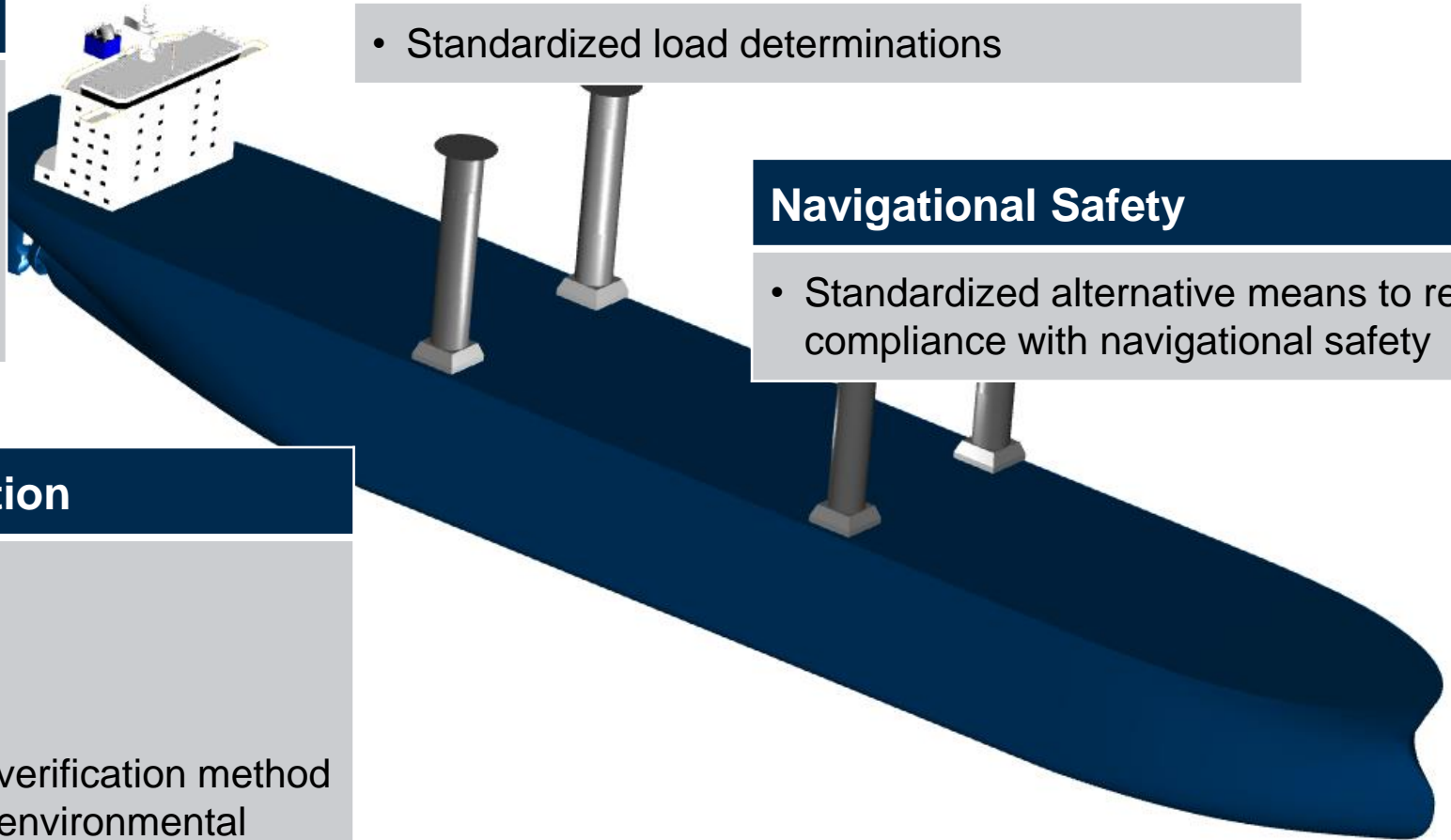
- Standardized load determinations

## Navigational Safety

- Standardized alternative means to reach compliance with navigational safety

## Sea Trial and EEDI verification

- EEDI calculations
  - Wind force matrix
  - Wind probability matrix
- EEDI verification
  - Dedicated EEDI sea trial verification method
  - Requirement on sea trial environmental condition





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Thank You

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