



ALERT JIP

Captain Arjen van der Loo Dr. Ir. Fenneke Sterlini Ir. Willemijn Pauw Captain Martijn Schipper Welmoed van der Velde PhD LLM

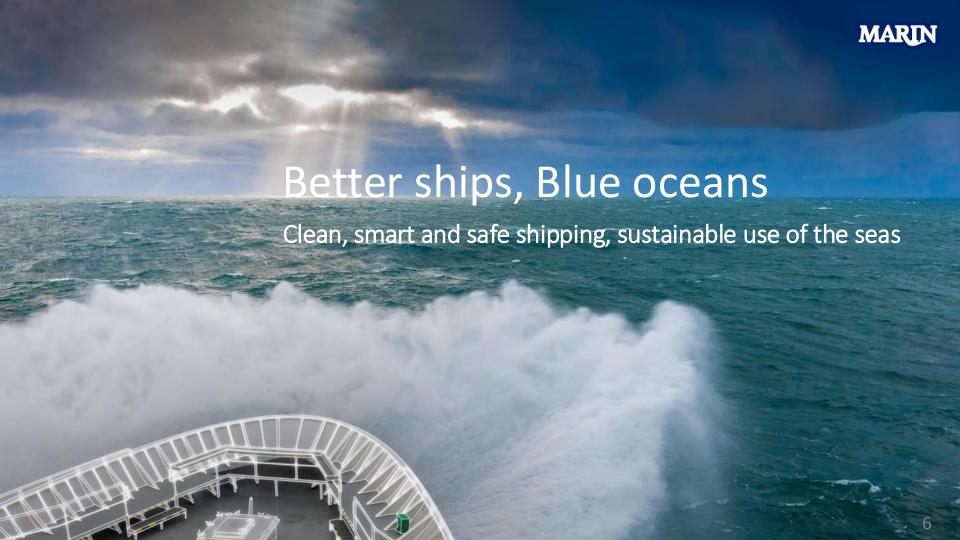
Safely leaving the navigation bridge unattended for periods of time.

Agenda



- Introduction
- ALERT: the idea and scope
- Q&A





Facts & figures



NSMB

sector initiative



> 90 years of experience



active in 39 countries



Wageningen, Ede, Houston, Chesapeake



innovative & independent



industry & government



civil & defence



concept to operations



450+ colleagues



€ 60 M turnover



70% commercial, 30% funded



JIPs & networks

Advantages of cooperating in a Joint Industry Project

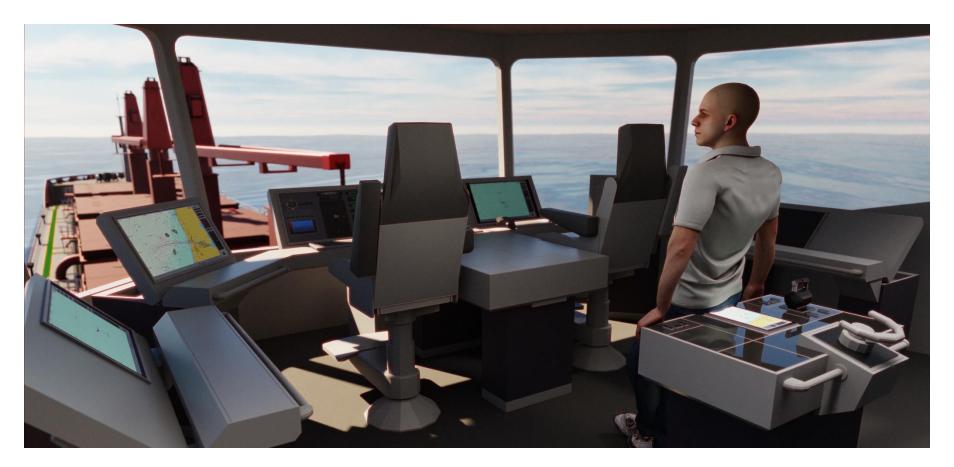


- Participate in large R&D
- Leverage on costs
- Specify the scope
- Learn from experience of other participants
- Education & training of staff
- Common understanding/method/tool
- Profiling company / Authorisation to clients
- Part of network (clients, suppliers, authorities, R&D)
- Marketing



ALERT JIP







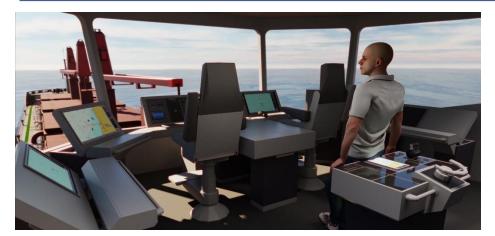


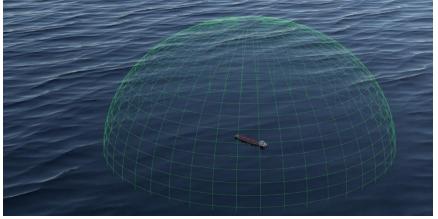
Can we improve overall *safety*, *efficiency*, and the *work-life balance* for the bridge watchkeeper by introducing periodically unattended navigation spaces*?

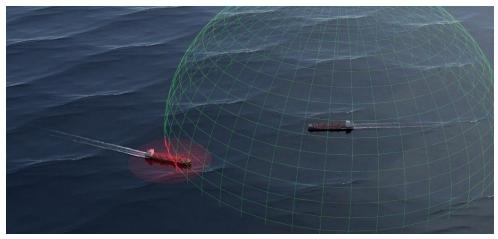
*) Similar to Unattended Machinery Spaces

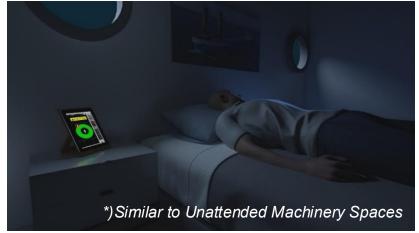
Periodically unattended navigation spaces *)











Project Objectives:



- 1. Create, demonstrate and evaluate a design of an automated watchkeeping concept and the outline of a human alerting system to address those tasks that require human action. *Including how this improves overall safety, efficiency, and the work-life balance for the bridge watchkeeper.*
- 2. Establish approval for trial under MASS regulation (MSC.1-Circ.1604 item 1.2.2) in such a way that participants can subsequently successfully apply for trial under the current legal framework.
- 3. Set up a draft-amendment to IMO regulations, specifically to STCW Regulation VIII/2, in order to extend the trial period to a permanent option, and to establish the conditions for safe unattended navigation spaces.

The prototype of the ALERT



The prototype is <u>a description</u> including:

- Flow chart/checklist
- Overview of required data/information such as equipment status, environmental conditions, navigational challenges
- Overview of thresholds to define status
- Classification of follow-up action (is automated or human interaction required?)
- Guidelines for the HMI
- Recommendations for (adaptation of) system settings such as thresholds

This prototype will contain:

- Specifications for deployment of the ALERT operational concept (ship owners/operators)
- Requirements for development of the ALERT system including variables and thresholds (system developers)

The level of detail of the prototype will be such that it is sufficient to evaluate the concept.



To enable an onboard reality assessment:



Establish trial approval under umbrella of MASS regulation:

 Demonstrate safety improvements - this requires a comparative risk assessments (baseline state vs. with ALERT concept)

Assess baseline and ALERT operations:

- Document low-workload period routines via onboard observations and questionnaires
- Integrate simulator evaluation findings

This provides a template (and precedent) for JIP participants to apply for trials under current legal frameworks & definition of draft amendments to IMO

The present IMO regulations give a guideline for alternative methods (Msc.1-Circ.1604 item 1.2.2):

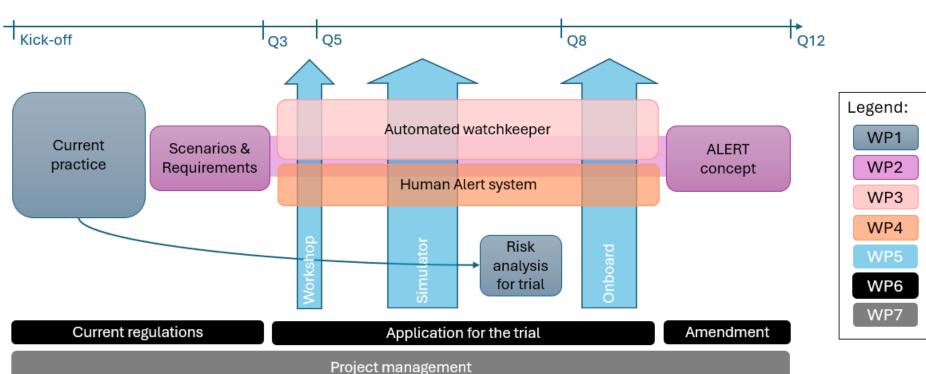
"trails to evaluate alternative methods of performing specific functions or satisfying regulatory requirements prescribed by various IMO instruments should be conducted in such a manner that they provide at least the same degree of safety, security and protection of the environment as provided by those IMO instruments".



Timeline



Start Q1 2026 ... 2028



Evaluation of the ALERT concept



Evaluate the operating concept, including how this improves overall safety, efficiency, and the work-life balance for the bridge watchkeeper.

- Workshop a first evaluation with end-users
- II. Simulator a structured evaluation with end-users in a controlled environment
- III. Onboard a reality assessment with 'Wizard of Oz' watchkeeper

Participants



- Participate in the project steering group (Live meeting every 6 months)
- Facilitate onboard observations (WP1) to establish baseline
- Participate in evaluation workshop and simulator (WP5)
- Facilitate onboard reality assessment (WP5)
- Provide a financial contribution

	#	Annual contribution:	Total in EUR	Total (EUR)
Ship owners/operators, class societies, equipment manufacturers	8	25k	75k	540k
Small Medium Enterprise*	7	15k	45 k	360k
MARIN	1	25k	75 k	75k
				990k

^{*:} Staff <50, turnover or balancesheet ≤ €10 million

Participants



	#	Annual contribution:	Total in EUR	Total (EUR)
Ship owners/operators, class societies, equipment manufacturers	8	25k	75k	540k
Small Medium Enterprise	7	15k	45 k	360k
MARIN	1	25k	75 k	75k
				990k

Confirmed

*: Staff <50, turnover or balancesheet ≤ €10 million







Lloyds, Seaspan

Start - Timeline and Process



The project will commence once we have secured sufficient interest and commitment from participants. We anticipate the following process moving forward:

- 1. Letter of Intent (LoI) Please sign the Letter of Intent if you intend to join the ALERT JIP (2025)
- 2. Participation Agreement Once we have received sufficient signed LoIs, we will request all participants to sign a formal participation agreement to officially start the project (Q1 2026)
- **3. Kick-off Meeting** We are planning a meeting for *March 2026*

LERT Joint Industry Project by leaving the navigation bridge unattended for periods of time.					
		orm / letter of intent			
Please e-ma	iil to :	MARIN, Arjen van Loo a.v.d.loo@marin.nl Tel: + 31 6 41 04 24 26			
Project refe	rence:	more information and the project proposal can be found on the ALERT JIP page - https://www.marin.nl/en/jips/alert			
Please selec	:t:				
0 1	We intend to be	come a ALERT-JIP participant.			
0 1	We would like m	ore information to make a decision on participating the ALERT-JIP.			
0	We do not have i	interest in this JIP, please remove us from the contact list.			
Company/o	rganization:	***************************************			
Contact per	son:				
E-mail addr	ess:				



- Questions?
- Recommandations?



- QR code links to <u>JIP website</u> with leaflet and proposal
- For more information contact:
 - a.v.d.loo@marin.nl
 - f.sterlini@marin.nl
 - w.pauw@marin.nl

