



# Navigating the Future of European Waters with Autonomous Innovation

Overview of CINEA's Horizon waterborne automation projects  
including AEGIS, AUTOSHIP and MOSES

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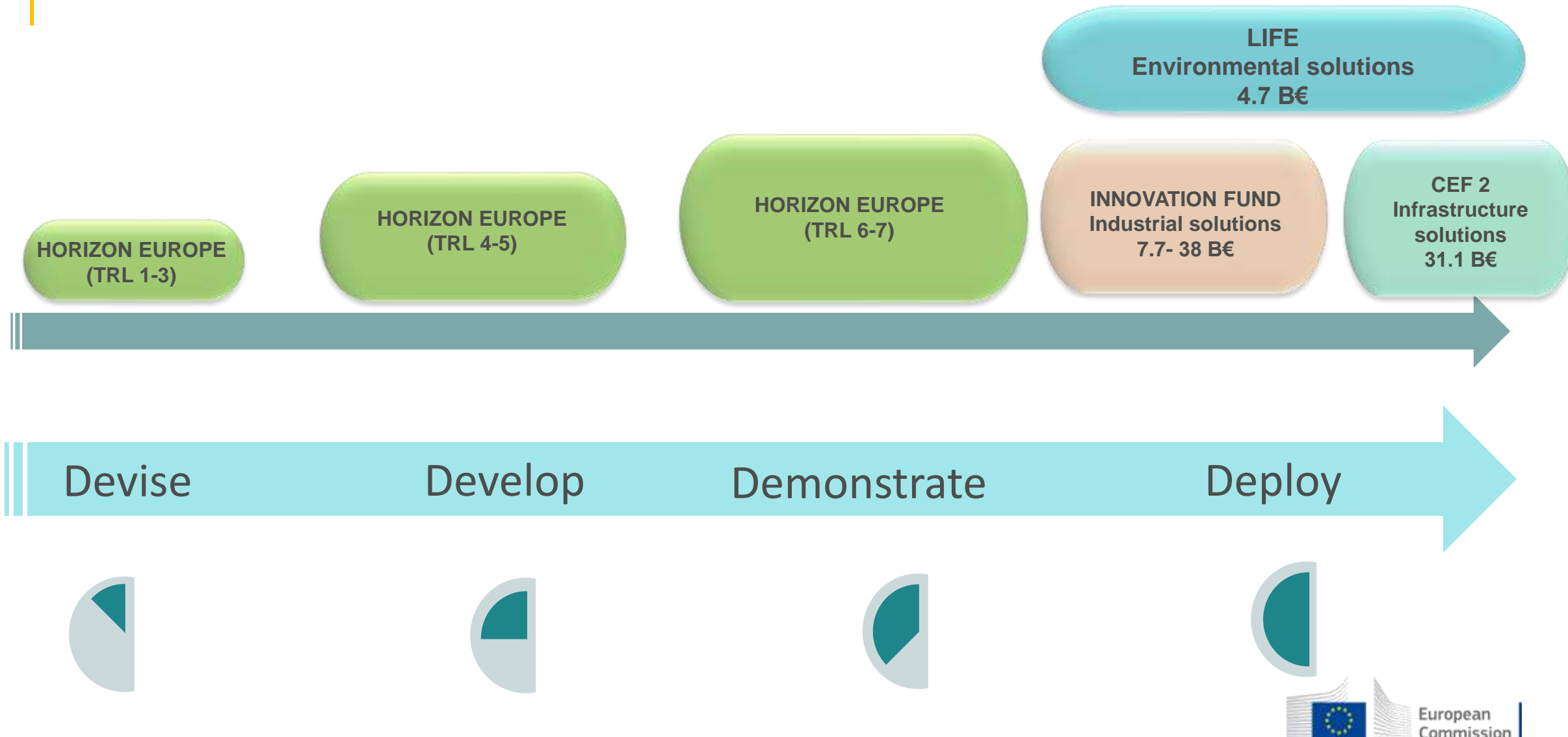
7.11.2023

# Agenda

- CINEA and its waterborne portfolio of R&I projects
- Overview of CINEA's waterborne automation/digitalisation R&I projects
- AEGIS
- AUTOSHIP
- MOSES

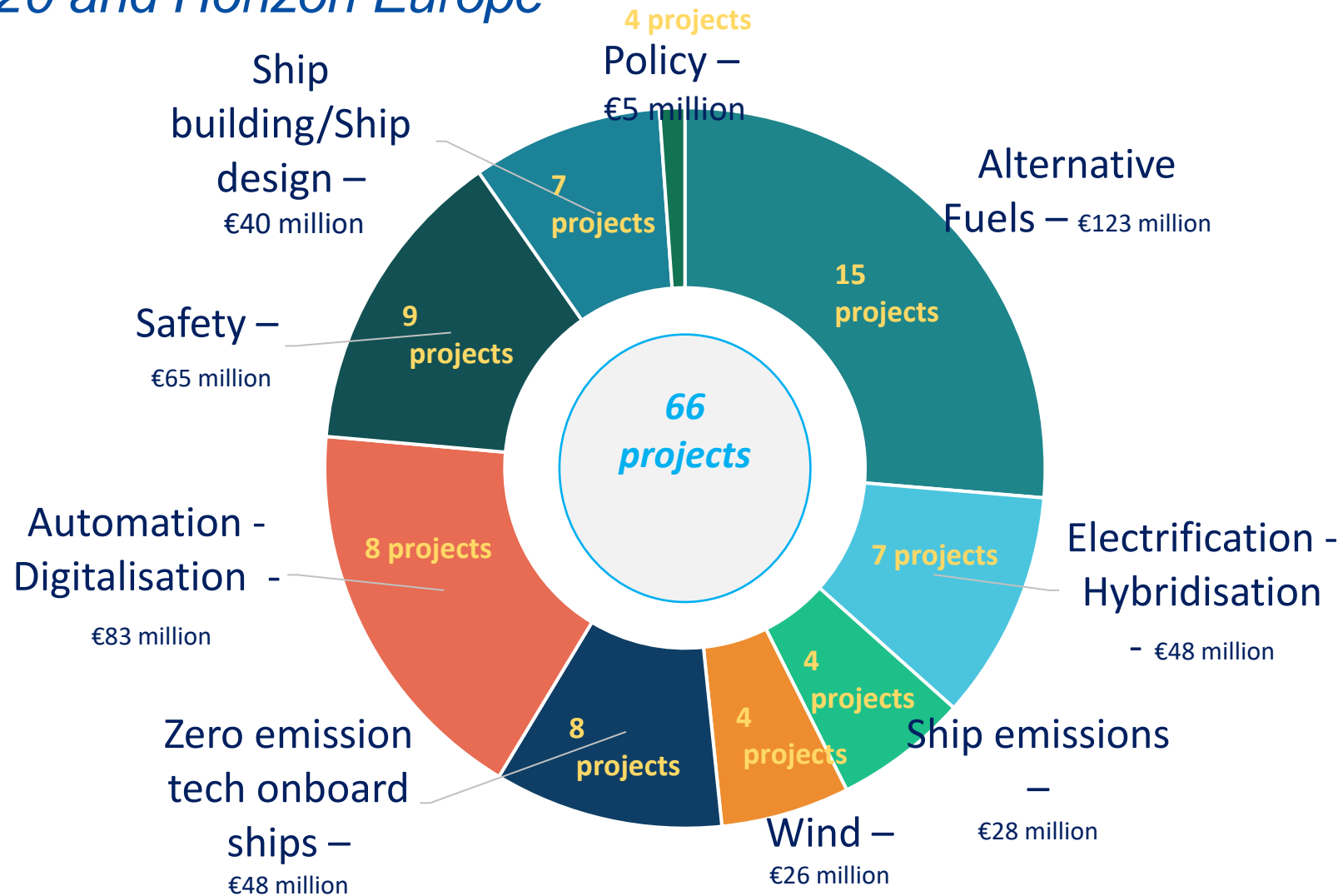
# CINEA and its waterborne portfolio of R&I projects

# Synergies between programmes to deliver solutions



# Overview of Horizon Waterborne Transport running Projects

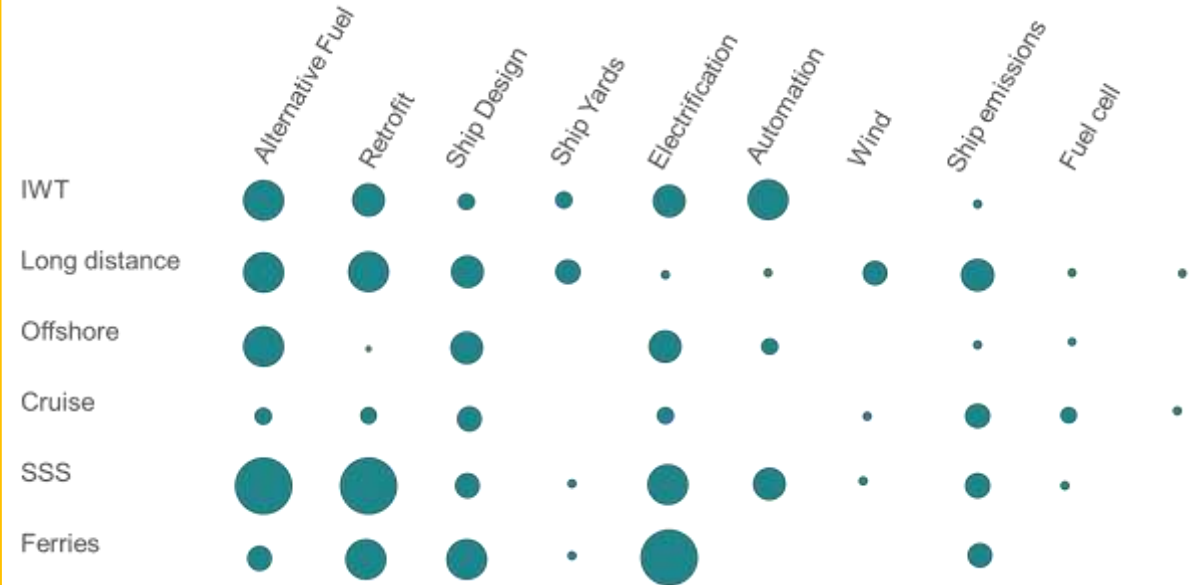
## Horizon 2020 and Horizon Europe



**Total EU contribution  
€467 million**

# Overview of CINEA's waterborne automation/digitalisation R&I projects

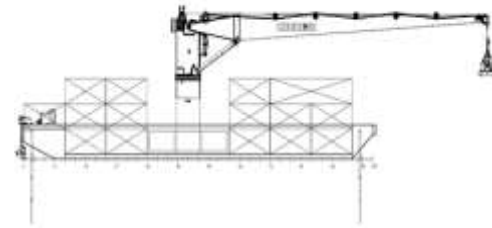
# Automation/Digitalisation projects



# Examples Automation/Digitalisation projects

## NOVIMOVE ~ 9 M€

Improve efficiency of cargo transport, cargo transfer and load factor, developing smart navigation



<https://novimove.eu/>

## ~ 15M€ SEAMLESS

Develop missing technology building blocks and key enabling technologies for a fully automated freight feeder service for SSS and IWT

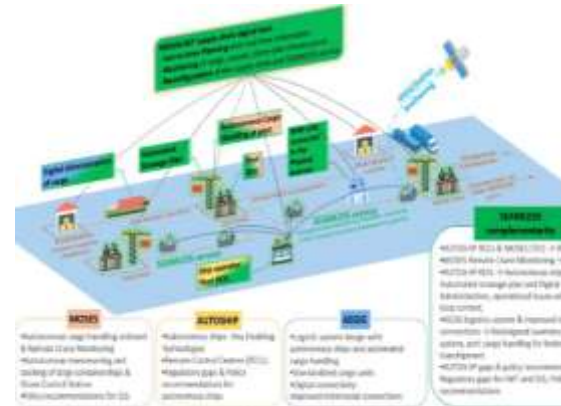


Figure 2. SEAMLESS concept and technology building blocks for seamless logistics

<https://www.seamless-project.eu/>



# MOSES



<https://moses-h2020.eu/>

~8M€

- Autonomous feeder vessel
- Swarms of autonomous tugs for autodocking
- Automated crane

# AEGIS



<https://aegis.autonomous-ship.org>



~7.5M€

Develop innovations for connected and automated transport

- smaller and more flexible vessel types
- automated cargo handling and crane
- autonomous ships
- new cargo units
- new digital technologies

# AUTOSHIP



<https://www.inlandwaterwaytransport.eu/iw-net-project/>

~ 20 M€

Demonstrate a complete set of key-enabling technologies (KET) for autonomous operations

- Inland Water Way: ZULU Class2 Pallet Shuttle Barge (PSB) operating in the Flemish region around the major EU port of Antwerp
- Short Sea Shipping: transport fish feed from the factories of Skretting and Cargill, out to fish farms along the Norwegian coast, sailing route for the demo will stretch between Denmark and Norway

# Horizon Europe 2024 Calls for proposals

# Horizon Europe WP 2024

2024 Cluster 5 - Destination 5 (Waterborne topics: 95 M€, Call Closure: 18/04/2024).

Topic number	Topic title	+/- n. projects	Action	EU M€
HORIZON-CL5-2024-D5-01-11	Achieving high voltage, low weight, efficient electric powertrains for sustainable waterborne transport (ZEWT Partnership)	2	RIA	15
HORIZON-CL5-2024-D5-01-12	Combining state-of-the-art emission reduction and efficiency improvement technologies in ship design and retrofitting for contributing to the "Fit for 55" package objective by 2030 (ZEWT Partnership)	2	IA	15
HORIZON-CL5-2024-D5-01-13	Demonstration of Technologies to minimise underwater noise generated by waterborne transport (ZEWT Partnership)	1	IA	6
HORIZON-CL5-2024-D5-01-14	Demonstrating efficient fully DC electric grids within waterborne transport for large ship applications (ZEWT Partnership)	2	IA	15
HORIZON-CL5-2024-D5-01-15	Advanced digitalisation and modelling utilizing operational and other data to support zero emission waterborne transport (ZEWT Partnership)	1	IA	7.7
HORIZON-CL5-2024-D5-01-16	Structuring the Waterborne transport sector, including through changed business and industrial models in order to achieve commercial zero-emission waterborne transport (ZEWT Partnership)	1	CSA	.85
HORIZON-CL5-2024-D5-01-17	Coordinating and supporting the combined activities of member and associated states towards the objectives of the Zero Emission Waterborne Transport partnership so as to increase synergies and impact (ZEWT Partnership)	1	CSA	1.5
HORIZON-CL5-2024-D5-01-18	Assessment of air pollutant emissions from low-carbon fuels in the heavy-duty, aviation, and maritime sectors	2	RIA	7

All topics on the funding and Tenders portal: <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/horizon>

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