

DIGITALISATION.

SMARTEST MARITIME INDUSTRY OF THE WORLD

Rotterdam is always on the look-out for finding smart solutions to 21st century challenged. Digital transformation and new technologies are explored and embraced, resulting in a nomination for i-Capital of Europe 2018. This extends to the port and maritime operators that are open for any kind of digital, innovative initiative that can help to make the supply chain more efficient. It hosts many fascinating experiments that should result in smart, efficient, sustainable and safe maritime sector.

Smart value chain

Rotterdam participates in the Port Call Optimisation Taskforce. The Digital Business Solutions department of the Port of Rotterdam and partners work on a range of applications that can be capitalised by any maritime party to increase their efficiency. This includes visualised global and local traffic flows, prediction of departure and arrival times of cargoes, global data standards for exchange of information, route planners that display the most efficient connections from Rotterdam overseas or to hinterland, and track & trace on individual containers. Also Blockchain applications are explored, developed and tested for port logistics transactions.

Largest 5G fieldlab in Europe

A 5G experimental network has been installed in the Rotterdam port. The new, dedicated frequency bands for 5G, together with state-of-the-art equipment have immensely increased the network capacity. This opens up opportunities for applying wireless sensors on a large-scale (for instance for traffic management, Internet-of-Things application, video-streaming from port facilities and augmented reality for operators.

Cybersecurity

The increasing dependency on digital platforms and systems asks for cyber resilience. After cyber attacks on the terminal in 2017 and further assessment by National safety authorities,

POTENTIAL

TO AUTOMATIZE 200 INTERACTIONS BETWEEN 28 PARTIES IN A SUPPLY CHAIN

8 PILOTS DEVELOPED TO PRODUCTS

IN THE LAST TWO YEARS

1,650

COMPANIES IN AND AROUND THE PORT OF ROTTERDAM CONNECTED IN NAVIGATE TRANSPORTATION APP

10 PILOTS OR PROOF OF CONCEPTS

IN THE KEY DOMAIN OF DIGITISATION REALISED IN THE LAST TWO YEARS

it is imminent that cyber security should get highest priority. A Port Cyber Resilience Programme stimulates cyber risk awareness and cooperation between the municipality, port, police, port-entrepreneurs association Deltalinqs and the Rotterdam companies to prevent cyber attacks.

Autonomous shipping and aqua drones

Rotterdam sets the scene for experiments related to unmanned shipping; both in the context of autonomous ships (Joint Industry projects) and with aquadrones. Successful aquadrones that operate in the Rotterdam port are underwater inspection robots, robots for hull cleaning, a robot that eats plastic litter from the water. Also developments with an autonomous inland ship are underway. The 'SMASH' initiative facilitates the testing in and around the Rotterdam waters. ('Floating Lab)

WHAT IS ROTTERDAM MARITIME CAPITAL OF EUROPE?

The Netherlands is the most competitive economy in Europe, and the Rotterdam region harbours the most competitive maritime cluster in the world. This cluster brings together an enormous diversity of activity: Maritime Business Services, Commodity Trading, Port & Logistics, Shipbuilding & Superyachts, Offshore, Energy & Industry. This unique maritime region of Rotterdam and its 75km radius is therefore branded Rotterdam Maritime Capital of Europe.



Rotterdam owes its unique competitive strengths to its location at the heart of Europe's most affluent and densely populated region and the innovative export-oriented character of the Dutch economy. In its heart, the city of Rotterdam is a great place to live: a relaxed, vibrant and truly international city with superb infrastructure and a diverse, highly skilled workforce.

Rotterdam Maritime Capital of Europe is the most complete and competitive maritime region in the world. A network which is constantly working on innovations and developing talent, which has resulted in the area being a front runner where energy transitions, digitisation and circular economy are concerned.

The Port and City of Rotterdam have set some ambitious goals for 2030. Its strategy is focussed on both modernising the traditional industry, with a specific focus on sustainability and the environment, as well as pioneering innovations.

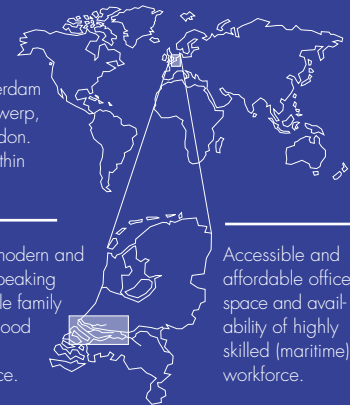
The government, companies, educational institutes and research facilities are all working together to actively realise these ambitions together. Making sure Rotterdam is and will continue to be Europe's maritime capital.



Efficient and easy transport connections: Rotterdam-The Hague airport, Schiphol Amsterdam airport, Eurostar to Antwerp, Brussels, Paris and London. Key European cities within 3 hours reach.

Affordable living in a modern and international, English speaking environment. Favourable family living conditions with good (international) schools. Strong work-life balance.

Accessible and affordable office space and availability of highly skilled (maritime) workforce.



WHY DOING BUSINESS IN THE WIDER ROTTERDAM REGION?

1. Biggest 5G field-lab in Europe, 'Floating lab' for tests with unmanned waterborne vehicles, large offer of test- and demo locations.
2. Integrated service platform for planning, shipping and tracking of freight.
3. Up-to-date and safe network of sensors that can gather and exchange real-time info on the state and use of infrastructure.
4. Cyber security resilience.

MORE INFORMATION.

[ROTTERDAMMARITIMECAPITAL.COM](https://rotterdammaritimecapital.com)

**ROTTERDAM.
MARITIME
CAPITAL
OF EUROPE.**

**ROTTERDAM.
MAKE IT
HAPPEN.**