

# PROJECT NEWSLETTER NO. 2

November 2021



Sustainable urban freight transport with autonomous zero-emission vessels

**Interreg**  
North Sea Region  
AVATAR

European Regional Development Fund



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## Welcome to the AVATAR Newsletter No. 2 | New project partners | Presentations and meetings | Learning from each other

On our own account: AVATAR Newsletter No. 2 launched



Picture: AVATAR project

22.11.2021 –The AVATAR project consortium is publishing project newsletters at regular intervals, about three to four times a year, in which the main events, results, progresses made and general topics relating to the project are addressed. In this newsletter, 3 new project partners are welcomed, an overview of presentations and meetings is given and it is shown how project partners align and interact.

Read more here: [AVATAR website](#)

### AVATAR welcomes 3 new project partners



Picture: AVATAR new project partners

01.09.2021 – AVATAR welcomes 3 new project partners: SEAFAR, SSPA and Urban Waterways Logistics. Welcome on board! Thanks to Interreg North Sea Region, it was possible to extend the current AVATAR project.

In the project extension, focus lies also on innovative transshipment techniques, last-mile distribution, open source vessel, artificial intelligence, computer vision and the creation of an urban IWT alliance partnership. All themes are related to the setup of a market proof foundation of an autonomous fleet.

SEAFAR is a Belgian, innovative independent ship management company, offering services to operate unmanned and crew-reduced vessels for ship owners and shipping companies. SEAFAR develops technology to remotely operate automated vessels for inland and coastal shipping. Introducing SEAFAR represents the possibility to scale up the project by an industrial partner. SEAFAR will test the new AVATAR vessel with their equipment.



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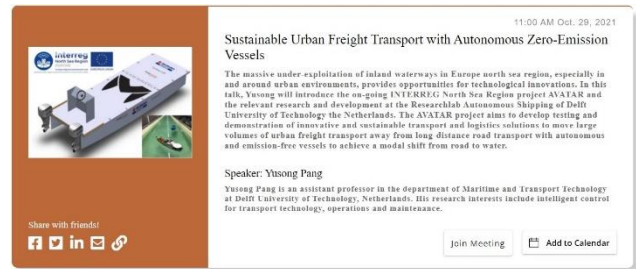
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New Swedish project partner SSPA is experienced in logging and analysing all movements in detail of the demonstrators with Automatic Identification System. The logistics researchers at SSPA are involved in several national and international research projects on the development of innovative and sustainable logistics solutions and transport concepts including transocean, coastal, inland and urban waterway transportation.

Urban Waterway Logistics (UWL) is a consortium of private companies in Flanders in the field of urban inland waterways transport. UWL delivers experience and knowhow in working with the urban boats, as developed under #IWTS2.0 and AVATAR. Skippers and building material to be transported is made available by UWL for real life testing of the urban boats in an urban environment.

Read more here: [LinkedIn](#), [SEAFAR](#), [SSPA](#) and [Urban Waterway Logistics](#), [#IWTS2.0](#)

## AVATAR to USA – Presentation for Texas Smart Cities Consortium



Picture: Texas Smart Cities Consortium

08.11.2021 – AVATAR project partner Yusong Pang (TU Delft) was invited to give a presentation for the Texas Smart Cities Consortium.

The Texas Smart Cities Consortium is a group for researchers, city officials, and others interested in smart cities research and development.

In his talk, Yusong introduced the on-going AVATAR project on highly automated vessels and the relevant research and development at the Researchlab Autonomous Shipping of Delft University of Technology.

The talk is available on this [link](#), based on the following [presentation](#).

Read more here: [Texas Smart Cities Consortium](#), [AVATAR Website](#), [LinkedIn](#)



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## OHB and E. Van Wingen visit the Green Wave vessel



Picture: AVATAR project

27.10.2021 - One of the AVATAR goals is to build a new, highly automated vessel (load capacity 25 ton, zero-emission) to be used for city freight distribution.

As a preparation for this development, project partners OHB and E. Van Wingen visited the Green Wave in Ghent. The Green Wave is the full electric urban vessel developed by TESCO and De

Groote-Houtboerke NV in the #IWTS2.0 project and is being used as a research vessel in the AVATAR project.

As you can see, the engineering team of E. Van Wingen took the opportunity to collect inspiration in order to co-develop the new AVATAR vessel with the appropriate engine and equipment.

Read more here: [LinkedIn](#), [AVATAR website](#), [#IWTS2.0](#)

## Participation @ ITS World Congress Hamburg



Picture: AVATAR project

21.10.2021 - AVATAR project partner Thomas Brauner from Logistik-Initiative Hamburg had the chance to present the project during a session on "Delivering the most from data" on the ITS World Congress in Hamburg (11-15/10/2021). This also gave the opportunity to





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present the established project extension of AVATAR to the public, which allowed to integrate the new partners SEAFAR, SSPA as well as Urban Waterway Logistics to the consortium.

Download the presentation [here](#).

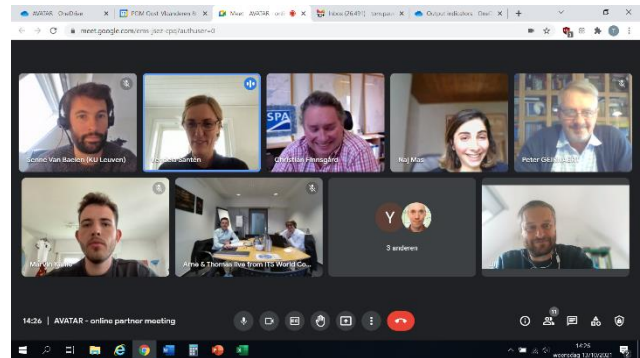
Furthermore, Logistik Initiative Hamburg hosted the GatewayHamburg stand on the accompanying congress exhibition, where interested stakeholders, experts and the public were able to get informed about innovation projects and solutions in the field of intelligent transport systems (ITS) and autonomous and connected driving on the road, rail, air as well as in the water.

The technology development platform eMIR - eMaritime Integrated Reference Platform, which is also used in the AVATAR project and as a joint development between the University of Oldenburg, OFFIS e.V. and DLR, was presented to the public by DLR.

Read more here: [ITS World Congress](#), [LinkedIn](#), [AVATAR website](#), [#IWTS2.0](#), [LIHH Blog](#)

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## AVATAR 4<sup>th</sup> online partner meeting



Picture: AVATAR project

13.10.2021 – On 13/10/2021 the 4th online AVATAR project partner meeting took place.

Developments were shared about the new AVATAR vessel, the adaption of the Maverick and the TUD fleet. Progress is also made about the economic assessment of city freight distribution. New partners SEAFAR and SSPA introduced themselves and aligned activities with the AVATAR project.

Read more here: [AVATAR Website](#), [LinkedIn](#)

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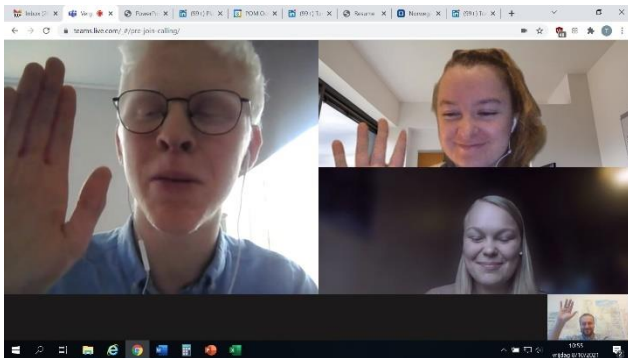
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## AVATAR aligns with students of Norges teknisk-naturvitenskapelige universitet



Picture: AVATAR project

08.10.2021 – AVATAR project partner Tom Pauwels (POM Oost-Vlaanderen) had the opportunity to give an interview to students Cybernetics and Robotics of the Norges teknisk-naturvitenskapelige universitet (NTNU). Ideas about the economic assessment of city freight distribution with highly automated vessels were shared with the students Maiken Gjerdseth, Thale Eliassen Fink and Peder Josef Foss. The students Cybernetics and Robotics of the Norges teknisk-naturvitenskapelige universitet (NTNU) are working on an assignment about future logistics at sea and river transport. Looking forward to their results! Happy to see that our report "Market review on city freight distribution using inland waterways" will be used as inspiration. Report is available via this [link](#).

Read more here: [AVATAR Website](#), [LinkedIn](#)

## AVATAR – The e-Maritime Integrated Reference Platform (eMIR)



Picture: eMIR, UOL

01.10.2021 – AVATAR project partner Carl von Ossietzky Universität Oldenburg is setting up a Shorebased Control Center and communication infrastructure for shore to ship coordination. For this purpose, the e-Maritime Integrated Reference Platform (eMIR) infrastructure will be used. In this role, eMIR - eMaritime Integrated Reference Platform serves as a demonstration platform by using existing hardware components for the development of remote control functionalities.

Read more here: [AVATAR Website](#), [LinkedIn](#), [eMIR](#)



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## Interview LIHH in DVZ Deutsche Verkehrs-Zeitung



Picture: LIHH

28.09.2021 – AVATAR project partner Logistik-Initiative Hamburg was interviewed by DVZ Deutsche Verkehrs-Zeitung about the AVATAR Interreg North Sea Region Project and gave some insights about the project focus and the roadmap for pilot tests.

Feel free to contact Thomas Brauner ([tb@hamburg-logistik.net](mailto:tb@hamburg-logistik.net)) about the content of the article!

By the way, the picture in the article shows the "Green Wave", one of the city ships with which Peter Geirnaert ([peter.geirnaert@hotmail.com](mailto:peter.geirnaert@hotmail.com)) from the project partner Opleiding-scentrum voor Hout en Bouw is already conducting #IWTS2.0 and AVATAR tests in Ghent, Belgium. The ships of the AVATAR project are expected to be ready for pilot tests in 2022.

The article (paywall, in German) is available [here](#).

Read more here: [AVATAR Website](#), [LinkedIn](#)

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## AVATAR and WaCaBa online workshop



Picture: WaCaBa (Water Cargo Barge)

18.06.2021 – AVATAR project partner Logistik-Initiative Hamburg and the WaCaBa project (Water Cargo Barge) organized on 15.06.2021 an online workshop about the potential of using Hamburg waterways for city freight distribution. Also here, highly automated vessels could play a role.

Public and private stakeholders discussed the





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opportunities and hurdles in the Hamburg context. Logistik-Initiative Hamburg and WaCaBa will define potential pilot projects. More information about the workshop is available [here](#).

Results of this workshop will inspire the other AVATAR project partners. That is why project partners are participating in the Interreg North Sea Region Programme!

Read more here: [LinkedIn](#)

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## Get to know the project partners. This time: POM Oost-Vlaanderen



Picture: POM Oost-Vlaanderen

The Development Agency East Flanders (POM East Flanders, [www.pomov.be](http://www.pomov.be)) implements the socio-economic policy of the provincial government. POM East Flanders creates sustainable industrial and business sites, revitalizes brownfields, creates and manages incubation and innovation centers. Focus is also on sustainable management of industrial sites (facilitating cooperation between companies), and realizes different business development projects. Furthermore, POM East Flanders

wants to further develop and consolidate the region as an excellent knowledge region and a top logistical region in Europe. Moreover, it is the ambition of the province to stimulate the development and implementation of clean technologies.

POM East Flanders also acts as an intermediate organisation between educational institutions and business by organizing regular meetings in order to exchange information about the job market in logistics (including inland navigation).

The organisation also initiated Fabriek Logistiek, a test centre where businesses, with their own staff and commodities, can try and compare existing and new concepts regarding warehousing in a realistic environment and for a complete process flow.

POM Oost-Vlaanderen is AVATAR project coordinator and is involved in the economic assessment study, taking also into account innovative transshipment techniques and last mile distribution.

Read more here: [POM website](#) and [Fabriek Logistiek](#)



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## About the Interreg AVATAR project

AVATAR – Autonomous vessels, cost-effective transshipment, waste return. AVATAR is a project co-funded by the INTERREG North Sea Region Programme 2014 - 2020.

The AVATAR project aims to tackle challenges of city freight distribution by developing, testing and assessing adequate technologies and business models for urban autonomous zero-emission IWT. Through this, the project unlocks the economic potential of urban vessels and corresponding waterways, increases available solutions for full-cycle automation and sets up a sustainable supply chain model for urban goods distribution and waste return.

Further information and project news can be found on the project website and LinkedIn

<https://northsearegion.eu/avatar>



<https://www.linkedin.com/company/avatar-interreg-north-sea-region>



A general status of the project is available via this [link](#).

## Contact for queries

To get in touch with AVATAR, please contact the lead beneficiary organisation.

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