



Interreg
North Sea Region
#IWTS 2.0
European Regional Development Fund



#IWTS: Mobilising small waterway transport potentials

Dec 2020

Newsletter No 5

#IWTS collaboration leads to tangible results

#IWTS 2.0 is an Interreg VB North Sea Region project. 10 partners from the region seek to enhance smaller waterway transport potentials in a transnational context.

New waterway-, barges- and training solutions will enable green modal shifts from road to water.

Total budget
€ 3.462.734

Project duration:
01/08/2017 to 30/06/2021

www.northsearegion.eu/iwts20



TRANSSHIPMENT OF BULK WASTE TO IWW

In search for an opportunity to build an innovative transshipment solution the market is still missing, POM Oost-Vlaanderen scanned the companies in her network to get bottom-up ideas. In the response of these companies, the need for a solution to transship bulk waste stood out.

So POM got into closer contact with partners like IMOOG, Suez, RENEWI, and CELIS to understand the problem and to see how partnerships with their expertise and support can lead to a satisfactory solution.

Information received from waste collectors and waste processors

In the inland waterways transport sector, waste is mainly transshipped using large grabs. However, this method often causes nuisance because of littering due to wind and (intense) motions of the crane (e.g. hoisting and slewing). For this reason, processors of waste tend to move away from the option to transport via inland waterways. In general, vessels are loaded/unloaded in an open area, whereas trucks can be loaded/unloaded in an interior space.

Trying to solve the problem, POM setup a market research of possible solutions in order to avoid this littering. This research project started with the inventory of existing waste grab methods.

Based on the research, POM decided to start from existing grabs and modify them to make them suit the needs. So POM purchased of a volume grab. Together with Billowy (engineering) and Barco Construct (construction), several conceptual solutions have been developed. The concepts can range from adding material to partially or even completely redesigning the grab.

Some of the proposed design options are at this moment being executed and tested. After a thorough analysis of the test results, these concepts can be approved, adjusted or redeveloped in case of need. This cycle will be repeated in order to achieve the most feasible and efficient solution. The term 'efficient' is defined here as a solution where little or no littering due to wind and hoisting/slewing of the crane exists.

Keep reading our newsletters to find out about the results!



CENTRE OF EXPERTISE

The Maritime Academy inland training & research Centre of the Maritime Academy Harlingen (MAH) is a Centre of expertise in the field of inland shipping. This expertise Centre has the world's most advanced inland navigation simulators, which are used for training and examinations. Furthermore, the expertise Centre has a large amount of knowledge related to the implementation and management of simulators.

The ever-changing laws and regulations in the maritime sector are causing an increase in the demand for solutions, training and advice in the inland shipping market. The Green Deal, the energy transition, and developments in the field of propulsion (electrification of ships, hydrogen applications) are results of these changes impacting on maritime education in the Netherlands and internationally.

The MAH inland waterway training and research Centre is here to respond to this demand by participating in European projects in the maritime sector; offering consultancy & research from the hand of experts in the field of inland shipping and by means of its full mission IWT simulators for training, assessment and infrastructure testing. The full mission IWT simulators are used for the training of students, crew members, personnel and other professionals in the maritime sector.

"#IWTS: Mobilising small waterway transport potentials"

Additionally, the MAH Centre of expertise offers tailor-made training and courses for experienced IWT staff (i.e. tank ship-personnel, personnel of large convoys), focused on enhancing the personnel abilities in dangerous or unusual situations.

Project support

The MAH inland waterway training and research Centre also plays an important role within various European projects. One of these projects is the Inland Waterway Transport Solutions project (#IWTS 2.0). In this project the MAH is lead partner and is currently working together with partners from Netherlands, England, Sweden, Germany and Belgium to bring about a modal shift. The MAH Centre of expertise contributes to this project by using the contemporary full mission IWT simulator in training, vessel design and waterway development.

MAH is in fact supporting several partners in the project. In October the fully emission free barge Green Wave was launched. To identify hindrances and opportunities a simulator model of the barge and the environment of Ghent - where the barge eventually will be sailing - was built. With these new 'digital simulation' and this way of digital assessing decision making processes, design of locks, canals and barges can be supported. It is an effective way to explore new opportunities and to assess and overcome as many hindrances as possible before projects are actually implemented.

"#IWTS: Mobilising small waterway transport potentials"



KNOWLEDGE IN ONE PLACE



"#IWTS: Mobilising small waterway transport potentials"

REGULAR TRANSPORTATION ON THE AIRE & CALDER AGAIN

The Canal & River Trust is now making real progress towards their ambition of bringing freight back on to the water and into the city of Leeds. Having not facilitated a frequent freight movements on the water for over a decade, we are now witnessing the regular transportation of aggregates on the Aire & Calder Navigation, which is a result of participation in the IWTS2.0 project.

Through the project, we have been working with local businesses, barge owners, and freight owners to highlight and remind people of the benefits of moving freight by water. The Aire & Calder is capable of facilitating 500t barges, and the wharf facilities are still available, but over time, stakeholders have been seduced by road transport.

Our IWTS2.0 Conference in October 2018 has proved to be quite inspiring in the local area and has stimulated new opportunities which are now being realised.



They are using a local barge operator, Branford Barges to transport the sand. Branford Barges actually attended our conference.

Work in progress

At the time of writing, we have completed nine journeys containing c350t each (over 3,000t in total). As we build momentum, and overcome some teething problems around dredging, we will boost the load to 500t per journey. The plan is to complete two loads per week, up to 1,000t in total (i.e 50,000t per annum). That will meet current demand, but new business enquiries are steadily increasing, so there is confidence this demand will increase over time with good marketing. The equivalent journey by road is 40km, so the tonnes / kilometre calculation will be significant.

The IWTS2.0 project has been integral to this new commercial activity. The project has enabled us to really raise the profile of the waterway and the opportunities it present, and we have created and strengthened relationships with many local stakeholders. We are confident that when we start properly promoting this activity it will generate further interest.



THE CHRISTENING OF GREEN WAVE

With the construction of the urban boat Green Wave, project partners TESCO and De Groote-Houtboerke provided an answer for solving logistic issues within city centers. This fully emission free barge was developed within the #IWTS project for the city of Ghent to transport goods on its narrow waterways. The process leading up to the final christening of the ship is described by Mrs. Marylou Overmeer, CEO of TESCO.

"It is not very often that you can launch a ship that you have been so closely involved with as I was with the Green Wave. The project stems from the idea of providing a truly environmentally friendly solution to the ever-congested inner city freight traffic. Ultimately, we dared to take the plunge and develop the ideas into a realistic and concrete plan; and that was only the beginning."

Developing an idea

After the first ideas, a plan could be worked out, calculations and drawings were made and after some more recalculations and adjustments to the drawings, finally consultation could be planned with the shipyard and other parties involved.



IDENTIFYING NEW WATERWAY OPPORTUNITIES

“The start of the construction and to see the ship slowly grow into something that you see in your mind, is a process with ups and downs. It is an exciting process though! This also applies to the moment when you bring all parties involved together to assess and admire the final result of all your hard work.”

“Due to the COVID19 situation a launch in the traditional sense was unfortunately not possible. Just a small group of people could be present at the actual launch. Via a livestream other people were able to join in and listen to the different speeches and presentations. It is of course very exciting to hear what everyone thinks about the ship, how it eventually is received and what they say about it.”

QUOTE

The Dutch Minister of Infrastructure and Water Management Cora van Nieuwenhuizen about the Green Wave:

“The Green Wave is only a small barge, but is making big waves when it comes to inspiring a sustainable modal shift.”

One of many

With the disconnection of the power cable, with which the barge can be charged, the barge was officially (and symbolically) christened. Then it was time for a short first trial run: “It was a liberating moment and I am very proud of the result. It was a very successful afternoon and I think the MS Green Wave will be the first of many!”



CASE STUDIES SUPPORT LOGISTICS TRAINING FOR IN- LAND NAVIGATION

#IWTS 2.0 delivers innovative solutions for smaller waterways. By developing a series of case studies, bremenports, a partner in the project, put those ideas onto the mental radar screens of logistic decision makers, young professionals and students alike.

“We found out that there is almost no literature for students and young professionals covering inland navigation” as Lars Stemmler, project manager at bremenports, points out. “A case study is an ideal format to showcase and discuss the potential of inland navigation in logistics seminars.” Other partners in the Interreg-funded #IWTS 2.0 project provided the real cases to write about.

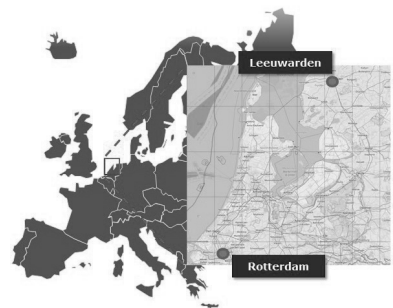
Transportation challenge

Take for example the case of shifting the transport of construction parts from road onto the waterway: delivering heavy concrete prefabricated elements in a densely populated area - a task only trucks can undertake? Apparently, not, as the companies VBI, Combex Bouwlogistiek and MCS successfully show.

“#IWTS: Mobilising small waterway transport potentials”

They turned to inland navigation for moving 200 tons concrete elements from a manufacturer to the construction site 450 km across The Netherlands. The Province of Fryslân, a partner in #IWTS 2.0, supported the test. The case study describes vividly how a regular barge container liner service can make a difference. Until now the supply chain only resorted to trucks for the collection and delivery of the cargo. The concrete elements were lashed onto flat-rack containers for a seamless interchange between the transport modes.

The transport of concrete elements as part of a load of containers is logistically easy to plan. The challenge is to perform as few operations as possible. Every operation with a reach stacker or crane increases costs. The recipe for successful modal shifts are that the total handling and transportation costs must be competitive to road-only transportation. In this case, the use of flat-rack containers did the trick.



MORE SHOWCASES

This case is part of a series of case studies that showcase the wide variety of options to integrate inland navigation into supply chains. Each case has been carefully researched and reviewed by practitioners. The cases come with review questions ready to be used in logistics classes, seminars and workshops.



#IWTS2.0: "Mobilizing small waterway transport potentials"



Inland shipping in urban logistics – of "Beerboats", "Green Waves" and other ships in town.

bremenports
Bremen's Breitenhaven | GmbH & Co. KG

"#IWTS: Mobilising small waterway transport potentials"

ALL CASES ARE AVAILABLE ELECTRONICALLY ON THE PROJECT WEBSITE:

<http://project-iwts20.eu>

Here you can learn more on:

-how containers and feedstuff are moved across Northern Germany.

-how inland shipping is used to pilot-ship concrete elements across The Netherlands.

-how bricks made the modal shift from road to waterway.

-how inland shipping gets into town – to facilitate urban logistics.

<https://northsearegion.eu/iwts20> or on <https://project-iwts20.eu>



HOW TO MEET IN TIMES OF CORONA

Since the beginning of this year we are coping with the coronavirus. At first it didn't seem like much to worry about, but that picture quickly changed. The whole world seemed to come to a standstill. In some countries there was a total lockdown; shops, restaurants, sports facilities, museums, schools etc. closed down and almost everyone was forced to stay at home. Nobody could ever have imagined living in such circumstances!

Working situation

The situation did of course not only effect our personal lives, but also the way we do our work. Working from home became suddenly the new standard; at least for most companies. And it must be said; it has its advantages. The employee can save time, because there is no need to travel back and forth to work and the employer can save on travel costs. And there are fewer traffic jams, which is very beneficial to the environment! On the other hand working from home can of course be very lonely. A nice chat at the coffee machine is not an option.

Impact on the project

The success of a project in which various European partners work together also depends on good communication. In general there are a lot of gatherings and meetings involved.

"#IWTS: Mobilising small waterway transport potentials"

It used to be very normal to book a meeting room or in many cases even to take a car, train or plane to attend a meeting or presentation. But in this corona pandemic we found out that working from home and meeting online is certainly very well possible in many cases. Zoom, Teams, Skype, Webex, all kinds of online tools never have been used as much as now. It is amazing to see how quickly people adapt to new situations.



Back to normal?

Hopefully we will soon be able to resume our pre-crisis life. What will the impact be when all this is behind us? Will we be more aware of our vulnerability? Will we be able to hold on to the positive things that the coronavirus has brought us? Like working from home perhaps? Will we be traveling less? At least that wouldn't be such a bad idea. After all, 'greening' is of paramount importance in many of these European projects and is a hot topic in the recent years. This certainly applies to the IWTS project. The aim is to facilitate and promote the use of inland waterway transport on smaller and hitherto unused waterways in the North Sea region. A modal shift from road to water not only reduces costs, but will also contribute to a more sustainable and 'greener' world.

AND YOU REALLY BUILD THAT?

On Wednesday the 7th of October 2020, our project coordinator Jörn Josef Boll of the Maritime Academy in Harlingen was invited to present the #IWTS 2.0 project to the 64th session of the Working Party on Inland Water Transport of the United Nations Economic Commission for Europe (UNECE). The Commission aims to facilitate economic integration and cooperation and promotes sustainable development and economic prosperity.

The Working Party on Inland Water Transport is responsible for numerous pan-European legal instruments in the field of Inland water transport since the 1960s like the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) and the European Agreement on Main Inland Waterways of International Importance (AGN). Besides his task as project coordinator of #IWTS 2.0, Mr. Boll is a frequent contributor to the work of the UNECE and the principal author of the current White Paper on the Progress, Accomplishment and Future of Sustainable Inland Water Transport.



"#IWTS: Mobilising small waterway transport potentials"

A wide variety of IWT experts and policy makers from all over Europe were attending the presentation, where a comprehensive overview of the project set up, its aims and - probably most important - its achievements was given.

The most recent successes of #IWTS 2.0 on the first freight barges on the Aire and Calder Navigation in decades, due to the work of our partner Canal & River Trust and the christening of the zero emission barge for inner city transport 'GreenWave' by our partners TESCO and De Groote-Houtboerke were of particular interest for the delegates.

The whole presentation was scheduled to last 45 minutes, but Mr. Boll was asked to answer questions for almost the same amount of time afterwards and also invited on the spot to give another presentation to the UNECE, once #IWTS 2.0 is concluded.

The slide provides a comprehensive overview of the #IWTS 2.0 project. It includes a list of project details, a map of the North Sea Region, and logos of the various partners and funding bodies involved.

The Project:

- 11 partners in 5 countries
- Overall aim: modal shift from road to water
- Emphasis on transport over smaller waterways
 - by adapting existing waterways
 - by creating tailor made transport solutions
 - by creating awareness for IWT possibilities in the logistics chain
- 6 work packages
 - Project Management
 - Communication
 - Developing Smaller Waterways
 - Developing Smaller Barges and dedicated transhipment solutions
 - Education and Training
 - Regional IWT modal shifts and adaptation of proven concepts
- Kick off in September 2017
- End of project: June 2021
- Overall budget 3,46 Million Euros
- ERDF-funding 50%

Partners and logos include: Interreg North Sea Region #IWTS 2.0, European Union, ESPR, brennerpartners, Maritime, provide-partners, POM, De Waard Waterweg, University of Hull, TESCO, and others.

#IWTS 2.0

Inland navigation provides an environmentally friendly way to serve transport needs in a growing, and increasingly digital logistics industry across Central Europe. The project #IWTS 2.0 – IWTS for Inland Waterway Transport – brings together public infrastructure managers, private barge operators and training institutions to offer a fresh perspective on inland shipping.



#IWTS 2.0

PARTNERS & CONTACT

Contact:

Website

<https://northsearegion.eu/iwts20/>

Projectteam

Jörn Josef Boll

E: j.boll@maritiemeacademieharlingen.nl

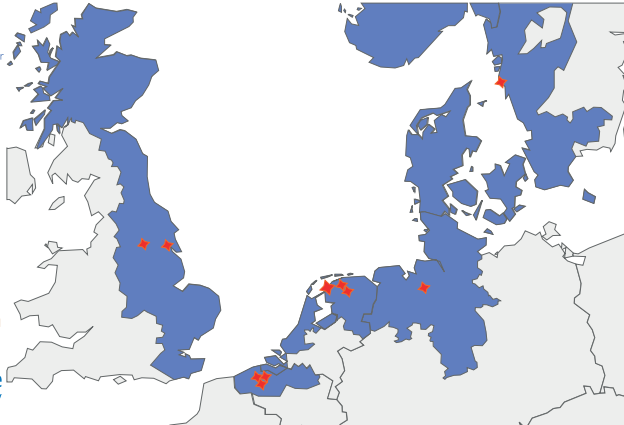
GSM: +31643544490

Robbert van Hasselt

E: r.vanhasselt@maritiemeacademieharlingen.nl

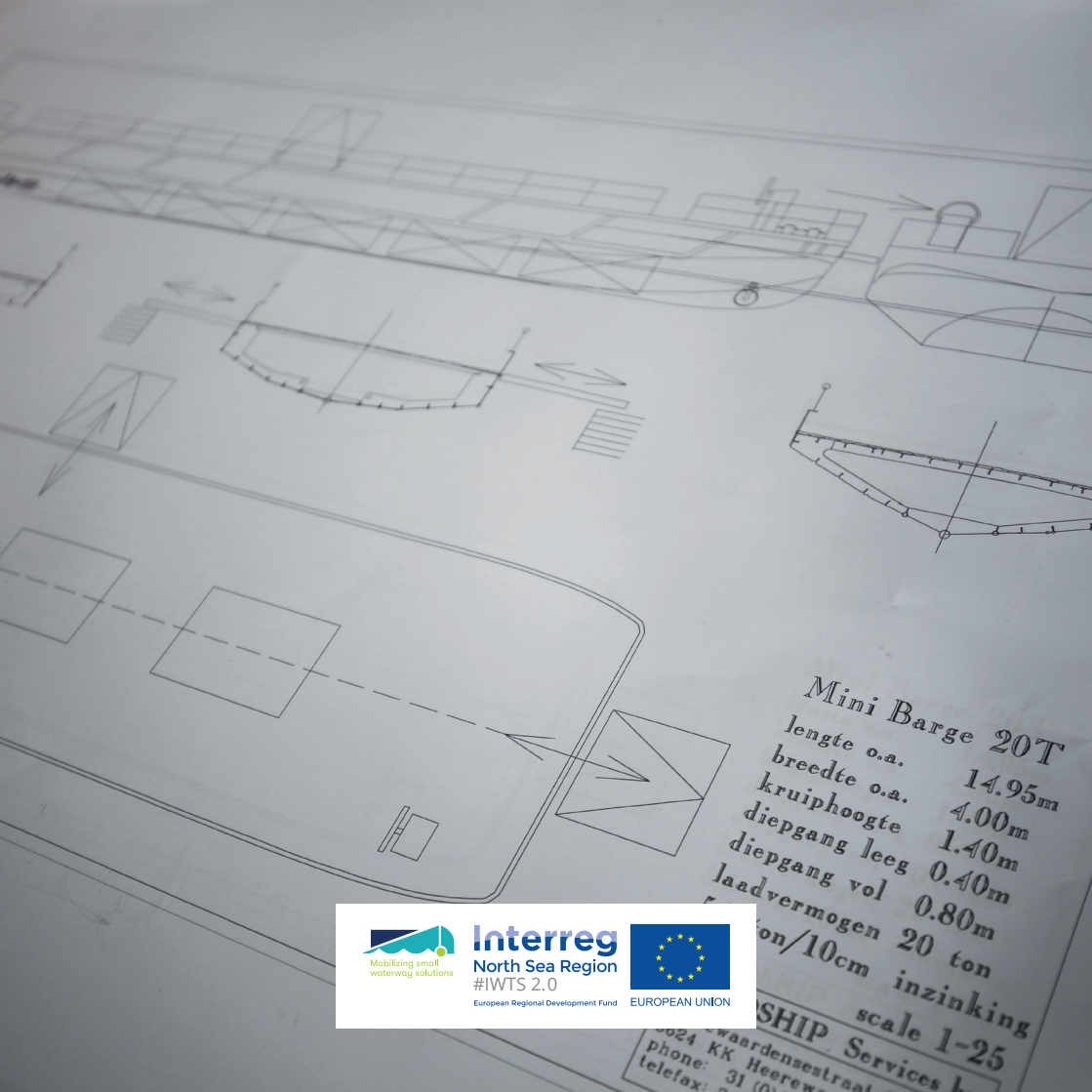
GSM: +31628657841

iwts@maritiemeacademie.nl



Your Maritime Solution Partner





Mini Barge 20T
lengte o.a. 14.95m
breedte o.a. 4.00m
kruiphoogte 1.40m
diepgang leeg 0.40m
diepgang vol 0.80m
laadvermogen 20 ton
ton/10cm inzinking
scale 1-25



Mobilizing small
waterway solutions

Interreg

North Sea Region

#IWTS 2.0

European Regional Development Fund



EUROPEAN UNION

024 waardensestraat
phone: 31 (0)
telefax: 31 (0)

SHIP Services