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## BACKGROUND TO THE EMMA PROJECT

### FUNDED BY THE INTERREG BALTIC SEA REGION PROGRAMME

*Enhancing freight Mobility and logistics in the Baltic Sea Region by strengthening inland waterway and river sea transport and promoting new international shipping services ([www.project-emma.eu](http://www.project-emma.eu))*

The Baltic Sea Region (BSR) is characterized by growing transport volumes especially between East and West. Road and rail infrastructure needs innovative and pragmatic solutions to cope with future requirements on transport facilities. Rivers, canals, lakes and also the Baltic Sea have huge capacity reserves, whereas in some parts of the BSR road and rail infrastructure is already overloaded.

Inland Waterway and River-Sea Shipping (IWT) still do not play an adequate role in the transport system compared to its potential. Too often, inland shipping is not even considered as transport alternative by many forwarders and stakeholders in the transport sector, even though of its benefits.

The question that needs to be answered is how the modal share of IWT can be increased in the Baltic Sea Region countries. This leads to EMMA's main objectives being:

- Tackling the challenges and opportunities focusing on IWT.
- Increasing the modal share of IWT to, from and between BSR countries.
- Fostering a better integration of IWT in the BSR transport chains and the EU Strategy for the BSR.

#### Benefits of the EMMA project in brief

Improving competitiveness of IWT | Strengthening the future development of IWT | Identification of possible new IWT services | Raising the awareness of the potentials of IWT | Ensuring better standing of IWT in policy and society | Five pilot activities proving feasibility of IWT in the BSR.

#### Project in Brief

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Project Partners   Associated Partners	20 (from DE, FI, LT, PL, SE)   43+	
Funding Programme	Interreg Baltic Sea Region Programme	
Project Budget	4.42 mil € (ERDF co-financed: 3,45 mil €)	
Duration	3/2016 – 2/2019	

#### EMMA Project Partners

**FINLAND** → Finnish Waterway Association | Lahti Region Development LADEC Ltd. | Regional Council of North Karelia | **GERMANY** → Port of Hamburg Marketing | Baltic Sea Forum | Chamber of Commerce and Industry Eastbrandenburg | Federation of German Inland Ports | Institute of Shipping Economics and Logistics | Port of Hamburg Marketing | **LITHUANIA** → Klaipeda Science and Technology Park | Klaipeda State Seaport Authority | Lithuanian Inland Waterways Authority | NPPE Klaipeda Shipping Research Center | **POLAND** → City of Bydgoszcz | Inland navigation Office in Szczecin | Kujawsko-Pomorskie Voivodeship | Northern Chamber of Commerce in Szczecin | **SWEDEN** → Avatar Logistics AB | Maritime Forum | Swedish Maritime Administration | Swedish Transport Administration | RISE Viktoria.

## EMMA PILOT ACTIVITIES

**Finland** - Lake Saimaa, located in the south-eastern Finland, stretches over four different regions and is the largest lake in Finland. At approximately 4,400 square kilometres Lake Saimaa is also the fourth largest natural freshwater lake in Europe. The Saimaa Canal, 43 kilometres in length, connects Lake Saimaa with the Gulf of Finland.



This pilot case aims to demonstrate an "Intelligent Saimaa" piloting environment by analysing what kind of information a river information system based on VTS or RIS (River Information Services) must provide to develop an intelligent water transport means. Further, ongoing projects in the Saimaa Canal and planned improvements to icebreaking operations can lengthen the annual activity of foreign up to 330 days in the next three years. Future plans for the vessel traffic in Saimaa in the near future include increasing the maximum vessel length by 10 meters, increasing the maximum draught to 4.45 meters and construction of a new ice-breaking bow designed to break a 12.6 meters wide fairway for vessels during the winter seas. The benefits of Saimaa vessel traffic include short first and last mile connections, very competitive price of warehousing and congestion free waterways and ports. These factors together with professional workforce in the area ensure that schedules are adhered to and costs are kept reasonable in the supply chains. Saimaa has 770 km of 4.35 meter deep waterways for vessels and travel time of vessels from northern Saimaa to sea ports in Central Europe is 4-5 days.

**Germany** - The North- -East German pilot focusses on improving transport management by a software prototype that provides information relevant to the planning and operation of IWT. EMMA uses available data sources such as RIS and combining them with necessary information for planning into one map-based web application. Thus, the public section of the web application will provide a real-time overview of the status of inland waterways in the region including the status of infrastructure as well as general traffic information. Many sources of information such as the European RIS Reference Data (RIS Index), water levels and Notices to Skippers (NiS) have been integrated successfully. The web application provides benefits especially for shippers, transport organisers, vessel owners, and skippers. The pilot will greatly enhance the transparency and thus the predictability of IWT. This will make IWT more reliable and ultimately help to increase its competitiveness. Cooperation with the Finish partners to contribute to their digitalisation strategies of Saimaa region is on-going.



**Lithuania** – The development of oversize cargo transportation from the Port of Klaipėda to the eastern and southern regions of Lithuania, the north-eastern region of Poland as well the western region of Belarus is in the focus of the pilot activity. Data collection and analysing of data related to for instance cargo flows and water levels is the first step to develop current supply chains further.



Forecasts of the oversize cargo transportation in Lithuania until 2026 have been finalised and potential shares for inland navigations derived. According to the forecast, about 1000 oversize cargo units are expected to be shipped by barge in the Lithuanian inland waterways in 2026. Next step is to find optimal locations for loading and unloading oversize cargo in Klaipėda port and in inland waterways. Further a draft design of the IWT means for the oversize cargo transportation in Lithuania is under development.

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**Poland** - The Kujawsko-Pomorskie Voivodeship together with the City of Bydgoszcz are responsible for the implementation of the Polish pilot. The pilot includes a promotion and research cruise and a location study for the construction of a multimodal platform in the region of Bydgoszcz – Solec Kujawski. The first stage of the pilot was the promotion and research cruise of a container barge. It took place in April 2017 and it included 9 days of sailing up the Vistula River from Gdańsk through Bydgoszcz and Toruń to Warsaw. Every day of the cruise the river vessels (towboat + barge with about 40 containers) stopped by a different city by the Vistula River, where events for the promotion of sailing were held. The cruise demonstrated the transport potential of the river and the Vistula region, drew decision-makers' attention to main infrastructure bottlenecks and proved that it is possible to use water transport in current unfavourable navigating conditions. The location study for the construction of a multimodal platform (a river port with a logistics centre) presents an analysis of environmental, hydrological, technical and infrastructural determinants in the area between Bydgoszcz and Solec Kujawski, where its construction is planned.



Both actions present the possibilities, benefits and competitiveness of water transport in relation to other means of transport. They also justify the necessity to construct a modern multimodal platform in the region on the Vistula River. The EMMA project and actions planned in that context bring benefits for the entire region. They increase awareness among decision-makers, residents of the region and business community of the role and benefits of inland waterway transport for transporting goods. EMMA provides an opportunity for the region's economic development by creating new needs and services in the scope of inland waterway transport. It also strengthens cooperation between administration and business to

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develop sailing and promotes the region, which - thanks to water transport - could soon become an important logistics centre nationwide and internationally.

**Sweden** - From a commercial point of view, inland waterway transport is in the very early phase in Sweden. Even though the technical framework for inland waterway-vessels is in place since the end of the 2014, only a few initiatives or commercial pilots have been launched.

The Swedish pilot for inland waterway transport is divided into two parts. The first part identifies the logistics concept which has the greatest chance of being implemented. Related to this, EMMA has been studying transportation of liquid fuel, soil, rocks, building materials and containers in the Mälaren region, transportation of construction and building materials from Stockholm to Bålsta, recycling transport from Stockholm to Bålsta, in the Mälaren region, as well as container transport on the Göta River.



Initially, the Swedish pilot was expected to reach a concept description with identified logistical transport hypothesis, potential customers and institutional and technical barriers, as well as a viable business model for such a setup. However, the work has proceeded well and a real commercial pilot on the Göta River is expected to reach a test phase during the course of the EMMA-project. Such a pilot will also validate the hypotheses developed during the early phases of the project. In addition the Lake Mälaren pilot still is running under full development to possibly materialise still during the EMMA project.

In the Mälaren region, the EMMA project has identified different initiatives and studies related to transport. By bringing knowledge and people together, EMMA has contributed to a dialogue with policy and regulatory bodies, industry, consultants and the region. In the Mälaren region, EMMA works like an ice-breaker that hopefully will enable IWT in commercially viable logistic businesses in the near future.



## COOPERATION AND SUPPORT AGREEMENTS

### **EMMA is funded by the Interreg Baltic Sea Region Programme**

EMMA is funded by the Interreg Baltic Sea Region Programme 2014-2020, which supports integrated territorial development and cooperation for a more innovative, better accessible and sustainable Baltic Sea Region.

The project is led by Port of Hamburg Marketing Reg. Assoc. and executed together with twenty project partners from DE, FI, LT, PL and SE.

The total budget available amounts to EUR 4.42 million of which EUR 3.45 million are co-financed by the Baltic Sea Region Programme (ERDF). The EMMA project's lifetime is from March 2016 to February 2019.

### **EMMA appointed as flagship project by the European Commission**

The European Union Strategy for the Baltic Sea Region (EUSBSR) is the first macro-regional strategy in Europe. It aims at bringing together initiatives in different sectors (growth, sustainable development, transport etc.) as well as promoting cooperation between stakeholders in the Baltic Sea Region.

The Strategy also promotes flagship projects in the Baltic Sea Region. These flagships have a macro-regional impact and start from joint initiatives involving partnership from different countries.

In summer 2016 the EMMA project was approved as flagship in the Policy Area Transport. This reflects the importance the European Commission attaches to the further development of inland navigation in the Baltic Sea Region.

### **EMMA cooperated with the Good Navigation Status initiative of the European Commission**

The European Commission DG MOVE tendered a study on support measures for the implementation of the TEN-T Core Network related to sea ports, inland ports and inland waterway transport.

EMMA provides input to the consortium of this study to substantiate the concept of "Good Navigation Status" referred to in article 15 paragraph 3(b) of Regulation 1315/2013.



## EMMA receives support by the following Associated Partners

Associated Organisation	Associated Organisation (cont.)
Association for European Inland Navigation and Waterways	Ministry of Transport and Communication of the Republic of Lithuania
Association of Polish Regions of Baltic Adriatic Transport Corridor	PCC Intermodal S.A.
BKS Binnenschiffahrtskontor Sommerfeld Ltd.	Port Authority Eisenhüttenstadt
CEMEX Logistik Ltd.	Port Authority of Södertälje
Chamber of Commerce and Industry Lüneburg-Wolfsburg	Port Authority Schwedt
Chamber of Commerce Mälardalen	Ports of Stockholm
Deutsche Binnenreederei AG	Reederei Ed Line GmbH
East West Transport Corridor Association	Regional Water Management Authority Gdansk
Elbe Alliance Reg. Asso.	Saimaa Ports Joensuu
European Barge Union (EBU)	School of Business and Management of Technology of the Belarussian State University
European River-Sea-Transport Union Reg. Asso.	Shortsea Promotion Center Finland
Federal Ministry for Transport and Digital Infrastructure	ShortSeaShipping Inland Waterway Promotion Center
Finnish Transport Agency	SIEMENS AG WP ON LOG LS
Flanders Institute for Mobility	Süderelbe AG
Hamburg Port Authority	Swedish Shipowners' Association
Häme Chamber of Commerce	Swedish Transport Agency
HTAG Häfen und Transport AG	Verein zur Förderung des Stromgebietes Oder/Havel e.V.
Inland Navigation Europe	VT Shipping Company
Lithuanian Intermodal Transport Technology Platform (LITTP)	Walter Lauk Ewerföhreerei Ltd.
Lithuanian Maritime Safety Administration	Weitblick - Transport Infrastructure, Business and Logistics Association
LUTRA Lager Umschlag Transport Mittelbrandenburgische Hafengesellschaft mbH	Zegluga Bydgoska Sp. z.o.o.
Ministry of Economics, Transport and Innovation of the Free and Hanseatic City of Hamburg	<i>We would appreciate your involvement too! Contact us!</i>