BSR WIDE IWT RESPONSIBILITY STRUCTURES

ANALYSIS AND RECOMMENDATIONS FOR MORE EFFICIENT IWT STRUCTURES

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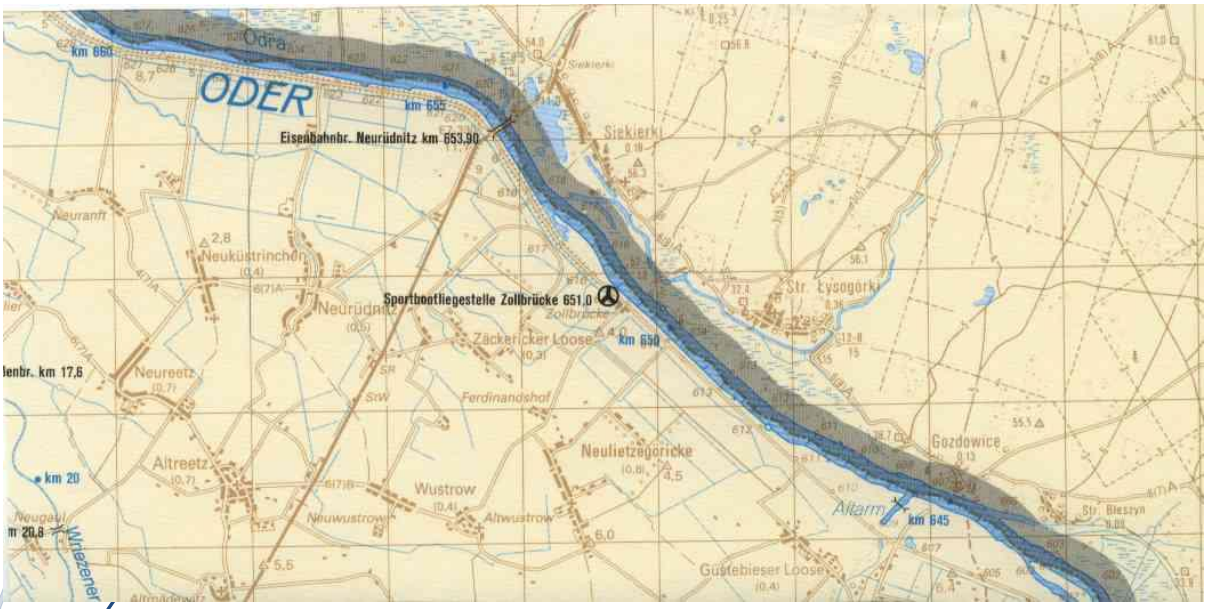

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1 INTRODUCTION

The EMMA application define that the target group of activity 3.1 output are politicians and administrations responsible for IWT matters in the BSR (regional, national, BSR level). It is planned to give them information and arguments to start changes in their administration and political environment. The EMMA project sees a mayor chance to develop IWT in BSR when the responsible administration concentrate and support any progress in IWT transport as much as possible even it is not initiated by themselves. EMMA partners are willing and able to start these progresses in the BSR country in initiate the needed start for the next steps. Administrations are responsible for the infrastructure and the regulation of IWT. An EMMA initiative can besides help to deliver political support and financial contribution for the realization of relevant projects. Therefore also IWT lobby organizations using the information for further improving their lobby work will be addressed by activity 3.1.

The main output is an analysis and recommendation report in Germany, Poland, Sweden, Finland and Lithuania with a section about BSR/EU level. The reports will be in English and relevant sections translated for national discussions and meetings.

The report will be especially used as input for the roundtables with experts in the BSR in WP5. It contains an analysis of existing IWT responsibility structures in respective administration as well as gives recommendations how to improve these structures. This should be helpful for the administrations to accommodate the IWT development in the next decades to meet the policy objectives.

2 IWT RESPONSIBILITY STRUCTURES IN ADMINISTRATRIONS (COUNTRY REPORTS)

EMMA from the very beginning planned to analyse the IWT responsibility structure in each EMMA country. Therefore a wide range has to be achieving from the inland waterway administration probably over 100 years as well for Sweden where up to now no explicit inland waterway administration exists before EMMA started. Poland is having an experienced IWT administration but had been in the shadow over the last 25 years in Polish transport policy. Finland and Lithuania are facing more or less the problem that IWT exists but is governed as part of the maritime administration.

The situations are different and different administrative structure exists due to historical development, former political decisions and political priority of IWT. Therefore the EMMA partner analysed any country by themselves and compare and conclude the situation to find those aspects that are helpful for the BSR itself. This means that EMMA partner did look for the keystones that hinder or foster IWT and solutions in IWT responsibility that came up especially in the last years or during the EMMA approach.

In the next chapters the different country reports are presented.

2.1 RESPONSIBLITY REPORT GERMANY

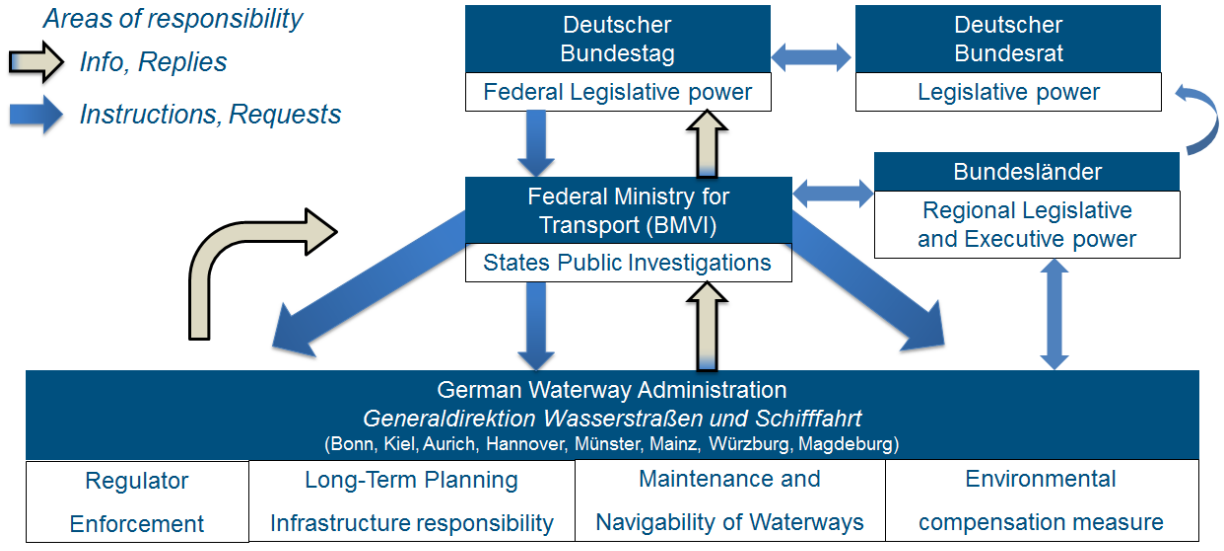
Germany has a large network of navigable waterways and more inland ports than any other EU country. The waterway transport in Germany is very important for the industry and has a long tradition. Therefore a strong waterway administration as well as fine-tuned German regulation on waterway transport exists. The following chapter is showing the responsibilities in German inland waterway transport and inland waterway management.

2.1.1 GERMAN IWT RESPONSIBILITIES

2.1.1.1 GENERAL OVERVIEW ON GERMAN IWT RESPONSIBILITIES

German IWT and IWW have a clear structure. German waterways are in full ownership of the German Federal Government so the German Federal Ministry of Transport (BMVI) is fully responsible for the waterways in Germany. This means that the waterway administration is under the guidance of the Federal Ministry in charge of all aspects of waterway management as well as waterway transport on these waterways. This includes any infrastructure planning (rivers, locks, canals etc., maintenance and also environmental measures). Inland navigation and its obligations are managed by the waterway administration. As an example EMMA partner choose the project W37 from the German Transport Plan which is developing the Havel-Oder-Waterway for larger vessels in the future.

The following graphic is showing the general and simplified process of IWT responsibility in German and the involved parties form the legislative side.



The inland waterways administration is managing of course several other regulation aspects like environmental and cooperate therefore with other administration especially those in the German Bundesländer. These cooperation's are not free of conflicts mainly urged by the different focus here the availability of inland navigation on one side and supporting of good nature on the other side.

The legislative institutions in Germany the Deutscher Bundestag on federal level and the Deutscher Bundesrat on regional level cooperating in the legislation process e.g. on law and other regulations. These legislative processes are of importance because especially rivers have natural influence on the landside beside the river which is in responsibility of the regions (Bundesländer). Other stakeholders like industry associations as well as NGO are involved in the legislative processes via their right for recommendations and on hearings with these stakeholders. Most of them take these rights seriously so the recommendation process is also for the involved parties on the governmental side very vital.

Stakeholders like the Federation of German Inland Ports (BÖB) as well as BUND (Friends of the Earth Germany) recommend very often for regulations by the German government. The relationship to the government can be very stressed on these topics. Even if they not directly negotiate industry representatives and NGO point out very often their disagreements via the media.

2.1.1.2 STAKEHOLDERS AND THEIR RESPONSIBILITIES IN IWT IN GERMANY

The different levels of responsibilities in German waterway transport and waterway management have historical and political reasons. The organisation of German legislative started 300 years ago in Preußen was also the first administration for waterway building was established. The following table is given an overview of the responsibilities at these levels, naming concrete aspects and showing success and problems linked to these aspects. On 3 different levels local, regional and national the involved parties have the ability as well as obligation to manage the relevant processes of IWT in Germany. In the rows success and problems several outcomes are marked that can be seen as very representative for the common situation in Germany.

From the EMMA point of view as a transnational EU project with the focus on developing inland navigation EMMA partner understand success as an outcome that is supportive for inland navigation in German and in Europe. It can be understood that a success here means plans; concepts and projects that are not only decided but being minimum first steps for a realisation. For Germany this is a financial decision by the German Bundestag and/or a concrete report to the Bundestag about the implementation.

A problem then result in deficits for the theses plans, concepts and projects e.g. a missing of an implementation steps or any circumstances that hinder the implementation. This can be a negative vote by the German Bundesrat, a lawsuit or the mind change by political stakeholders.

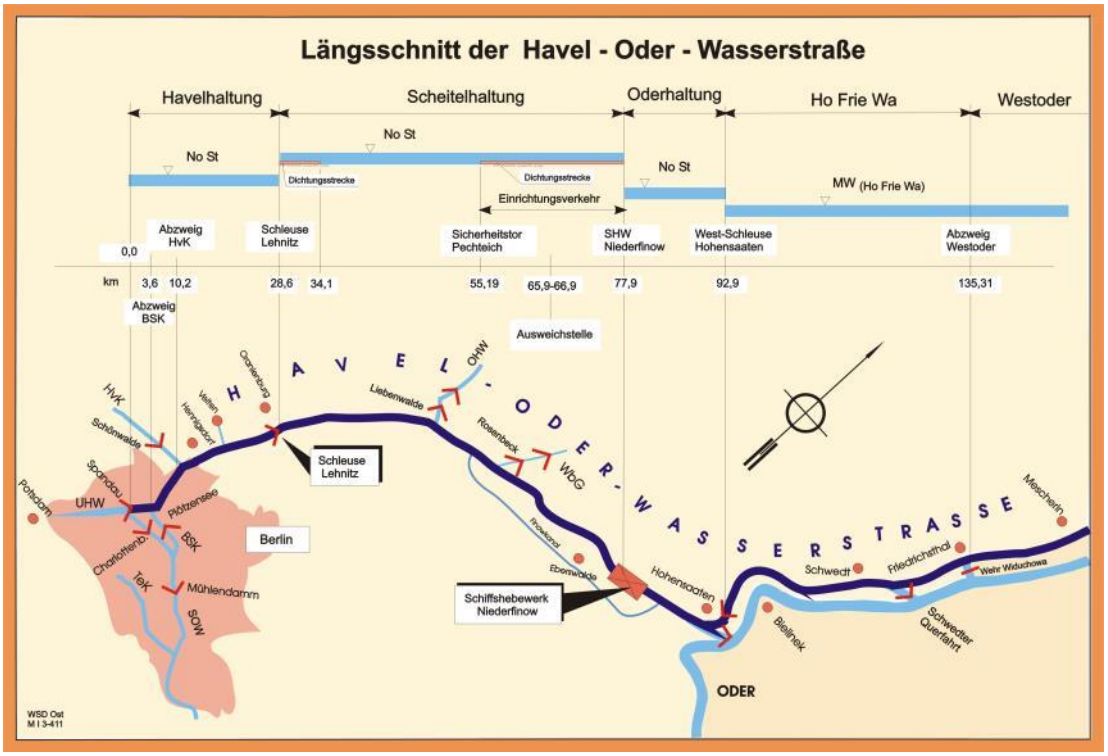
institution	levels			success	problems
	local	regional	national		
Federal Ministry of Transport (BMVI)			Regulation on waterway transport Legal framework waterway transport Implementation of EU water policy Implementation of Natura 2000 National infrastructure plan National transport plan Waterway administration reform National port strategy Diverse studies and research	National transport plan 2030 develop most of all important waterways Waterway Administration Reform 2013 AIS Regulation 2017 Joint Elbe Concept 2017 National port strategy 2016 IHATEC 2016 Engines funding continue up to 2018	Unclarified status of unimportant waterways Exclusion of several waterway improvement from national transport plan Digitalization planning not finished Studies on ports not accepted by ports

			R&D funding for Ports Funding for new engines for vessels		
Federal Ministry of Environment			Regulation of water management Regulation of Urban planning Regulation of safety of nature Implementation of EU water policy Implementation of Natura 2000	Joint Elbe Concept 2017 Regulation of flood prevention 2017 Urban planning regulation 2017	Implementation Natura 2000 open Implementation EU water policy open
German Bundestag and Bundesrat			Regulation on waterway transport, inland navigation, urban planning, spatial planning, National infrastructure plan, waterway administration reform, financial support of funding scheme	National transport plan 2030 Joint Elbe Concept 2017 AIS Regulation 2017 Regulation of flood prevention 2017 Urban planning regulation 2017 IHATEC 2016 Engines funding continue up to 2018	
German Waterway Administration (WSV)		Water management Waterways' security Investments' implementation and maintenance Assurance of safety in inland water transport Ship's inspections and legal proceedings in case of shipping accidents Supervision of the shipping legal provisions' observance, freight documents	Supervision over Regional Water Management Authority R&D on waterway management and water management IT and Technology standardization for waterway management e.g. digitalization Legal issues	Waterway administration works quite efficient Digitalization projects started	Waterway Administration Reform 2013 not fully implemented Staff planning not yet realized Water management

Ministry for transport in the Bundesländer		Regional Port and Inland Navigation Concepts Port provisions Investment in Port infrastructure Port regulation Port fees		Support for Inland Navigation and Ports Port Infrastructure investment funding (not in each Bundesländer)	Regional Port and Inland Navigation Concepts not in every region Investment in Port infrastructure not in every region
Ministry for environment in the Bundesländer		Spatial and Urban Planning Concepts Regional water regulation Nature safety plans CDNI Implementation		Financial Support for reducing emission of inland navigation	Urban and spatial planning hindering port development Nature safety plans not fully implemented
Local self-government municipality	Spatial and Urban Planning Investment in port infrastructure			Support for Inland Navigation and Ports	Negative Urban Planning
Port Authority and Operator of Terminals in Ports	No regulation competences butInfluence via their shareholders (municipalities and federal states) as well as lobby organisations			Investment in port infrastructure Port image campaign	Limited development area Limited political support in very urbanized cities Emission of inland navigation

The German Federal Government as the responsible body took the opportunity to set up future milestones for the German waterways. The National Infrastructure Plan and the waterway administration reform should make German waterways reliable to use for the future. Therefore the Government concentrate their engagement at the mostly used waterways especially the Rhine and the Middleland-Canal. This prioritization was discussed intensively with the parliament and the Bundesländer. At the end the planning will involve also not so much used waterways better.

The National Transport Plan is the most important infrastructure implementation agenda. The plan used a detailed infrastructure report e.g. on the waterways which showed clearly how much the waterway infrastructure especially locks and bridge are in bad or very bad conditions. The plan focuses on the bottlenecks and gives them a qualitative bonus when analyzing the need for the project by a benefit-cost analysis. The plan differentiates between very urgent and urgent projects and involves the status quo of the infrastructure too. The part waterways of the National Transport Plan were made concrete when setting a law on the extensions of waterways based on the very urgent and urgent waterway projects. The National Transport Plan was widely discussed with stakeholder, had a public consultation and was discussed and finally decided by the German Bundestag. The plan uses scientific knowledge and expertise, reviewed and adapted before analyzing the proposed projects (by Bundesländer, stakeholder and private persons); every project was deeply evaluated and calculated on its benefit-cost-ratio. Some problems came up when evaluating those projects were existing locks have to be substituted by a larger one. The benefit-cost-ratio was here under 1 so the German government involved also qualitative bottlenecks in their analyses.



The EMMA partner chooses project W37 as very representative project for the EMMA content and EMMA objectives. The Havel-Oder-Waterway (W37) is part of the National Infrastructure Plan is for mostly the whole distance from Berlin to the Oder River. It includes the Spandau-Havel-Canal, followed by the Oder-Havel-Canal, the Schwedter Querfahrt and the Hohensaaten-Friedrichsthaler-Waterway. The main objective of the project is to enhance the waterway from waterclass IV to Va meaning that vessel up to 135 m can you this waterway in the future. Therefore several dredging for the 2,80 m draught vessel as well as bridge extensions up to 5,25 m have to be done. Up to 500 Mio € are planned to be invested for the project.

The project was proposed by … The evaluation by the Federal Ministry was quite positive the benefit-cost-ratio is with 2.2 much better than other projects. Besides that it was marked as qualitative bottleneck and therefore ranked as urgent but not very urgent. W37 has maybe not the priority than other project. Decision by the German Bundestag to support other project of the plan like the Elbe-Lateral-Canal and the Elbe-Lübbeck-Canal with staff resources shows this. EMMA can help to prioritize Havel-Oder-Waterway project to be realized as soon as possible to improve inland navigation between Germany and Poland, to Schwedt and Szczecin and therefore to the Baltic Sea (Sweden, Lithuania and Finland).

Open questions are leaving for the Elbe and other parts of East-German waterways e.g. the Oder River not part of the National Transport Plan. As the waterway administration is still operating in East Germany the Joint Elbe Concept (Act. 3.2) is here showing possible ways to envelope these waterways beside the mayor planning. The political and administrational involvement of the regions (Bundesländer) is therefore of most importance also to synchronize with federal planning. By supporting the Havel-Oder-Waterway and learning from the Joint Elbe Concept EMMA can provide first steps for a Oder-River-Concept as bi-national process and project.

2.1.1.3 THE AIS REGULATION AS AN EXAMPLE FOR A REGULATION PROCESS

For a better understanding of the described general IWT responsibilities and the processes the AIS regulation in Germany was reviewed by the EMMA partner. First an overview is showing again the several levels involved in this regulation.

Who?	What?	Success and Problems	Intervention	Intervention Scheme
EU DG Move	Not involved but RIS regulation as umbrella	-	Via EFIP	
European Parliament	Not involved	-	Via EFIP	
Federal Ministry of Transport (BMVI)	Law and Regulation on AIS Binnenschifffahrtsaufgabengesetz Binnenschifffahrtsstraßen-Ordnung	Proposal for regulation on AIS Intra-ministerial consolidation Federal Government Hearing of accredited associations and market representatives Decision by cabinet	Informal Informal Direct	Informal consultation Informal consultation Recommendation Direct consultation
German Bundestag	Law and Regulation on AIS+ Binnenschifffahrtsaufgabengesetz	Consultation in Committees	Direct	Via members of Bundestag
German Bundesrat	Binnenschifffahrtsaufgabengesetz	Consultation in Committees Reject special part in regulation Law in Force	Direct	Via Bundesländer
Waterway Administration (WSV)	Law and Regulation on AIS Binnenschifffahrtsaufgabengesetz	Procurement for investments Planning of technology implementation	Direct Direct	Via Ports Direct consultation

		Building transponder station for AIS Delivering maps for navigation using AIS Interfaces for data exchange with market users Using AIS for general obligations of waterway management Review of regulation		
Muncipality Community	Law and Regulation on AIS Binnenschifffahrtsaufgabengesetz	Not involved		
Inland Port	Law and Regulation on AIS Binnenschifffahrtsaufgabengesetz	Using AIS for logistic business ETA/RTA	Direct	Via Ports
Sales and Operation	Law and Regulation on AIS Binnenschifffahrtsaufgabengesetz	Using AIS for logistic business ETA/RTA	Indirect	Via Ports

Explanation

After a long time of passivity by Germany the Federal Transport Ministry started to implement AIS/RIS as a main backbone of digitalization of inland waterway transport. Therefore the waterway administration leaded by the Federal Transport Ministry installed at all main waterway transponder and repeater for AIS. In parallel data management by the waterway administration was tested in Koblenz to prepare the implementation of using AIS for waterway management by the waterway administration in all parts of Germany at all departments of the waterway administration.

As is was not allowed by the German regulation to use AIS data by the waterway administration and by third parties the German government started to change the German regulation this way. In the legal process of discussion this regulation approach in the Government with stakeholders and the Bundesländer the regulation was hardly discussed.

One side the vessel operator argues to save data protection by not allowing forwarding any AIS data to third parties. Other stakeholders are seeing the need of using AIS data for logistic management to give inland navigation an advantage in the competition with forwarder and railway operator.

At the end the Federal Transport Ministry made a compromise by allowing the waterway administration to forward the AIS data to third parties like inland ports but delete them after the end of transport.

The regulation was reject in the German Bundesrat because a too hard punishment for those third parties not deleting the data immediately. The Federal Ministry made clear the in proceeding the regulation flexibility is foreseen.

When the law comes in force the waterway administration will start the roll-out of the data management into its departments, so first result can be seen in the end of 2017.

This then enables the Waterway Administration also to interchange data with neighbor states and to use the data for a more flexible management of inland shipping on rivers with draught restriction in times of low water e.g. on the Elbe River. EMMA partners are in dialogue with Federal Ministry to support this as it is implemented in the TEN-T project COMEX.

The waterway administration will develop access for third parties to use AIS data for the management of logistic transport via data link.

2.1.1.4 RECOMMENDATION ON GERMAN IWT RESPONSIBILITIES

German responsibilities on IWT have many historical backgrounds and are growing over decades. The system is working quite efficient and besides a short period of sceptic in the last legislation when a reform of the waterway administration was discussed the political responsible stakeholder wants to enhance the opportunities for waterway transport in Germany. Even if the greater influence in overall Germany policy is limited the inland navigation and inland ports does have support by the waterway administration as well as German legislative and executive bodies on many of the their topics and related fields. The importance of inland waterway transport for a greening of freight transport is and was a vital aspect of every federal government and many regional governments. Therefore responsibilities on IWT are in general clear but may have to be adapted to new aspects e.g. emission policy.

Looking at the concrete political measures and actions the overview also shows that high priority issues can be seen a success at the end even when the process itself and the conflicts arises in between. The analyses of EMMA partners urge therefore the direct and high prioritized support of responsible deciders in the administration as well as in the parliaments. The National Transport Plan as such a positive example was highly controversial discusses and was full of weaknesses in between the process. At the end the deciders found a smart solution also for problems that arise and therefore give the inland navigation, inland ports and the related industry a good perspective for the future. Even if still limited resources in the administration hindering a fast implementation the project defined will realized.

For other important fields of IWT the less strong support by the deciders maybe a reason for ineffective and discouraged regulation like the AIS. This is another kind of bottleneck caused by differences between stakeholders, unclear sometimes concept less and backward oriented strategies that result in dissent between these stakeholders.

The Joint Elbe Concept at the end can guide all involved parties like politicians, administration and stakeholder to overcome barriers and strongly concentrate on sustainable solutions for complex problems and complicated processes.

2.1.2 RECOMMENDATION FOR EMMA

German Waterway Administration is not comparable with those in other EMMA countries. From an outside view the responsibilities scheme is quite complex and detailed. This based on historical development and must in general mean no disadvantage. When political will and administrational efficiency comes together the chances that a reformed German waterway administration better enable IWT is very good. For this actions and initiatives from other stakeholder may needed several times.

The dualism of strong waterway administration and political will to develop inland navigation as well as the problems with the administrational tradition when realizing this is the major problem in Germany today. As an evolutional process new forms of cooperation of stakeholders e.g. industry and NGO can help to overcome barriers that typically slowdown the implementation of needed projects. For other EMMA countries the described dualism is maybe less problematic then it looks. New stakeholder involvements as well as dialogues between them can produce public awareness and therefore political interested as well as support where it is not today. Political decider need clear and simplified outcomes: what is the problems and how it can be solved?

The results of the analyses of German IWT responsibilities can be helpful for those waterways that are not set as very high priority but necessary for the network of waterway in Europe. Waterway transport needs a network without bottlenecks. So less important waterways have a critical function and a strong need to be in best conditions. This can be the learning task for EMMA to concentrate on strategies to foster inland waterway development up to a reliable and sustainable point of no return. Therefore stakeholders that lobby for IWT as well as strategies for a stronger lobby are necessary.

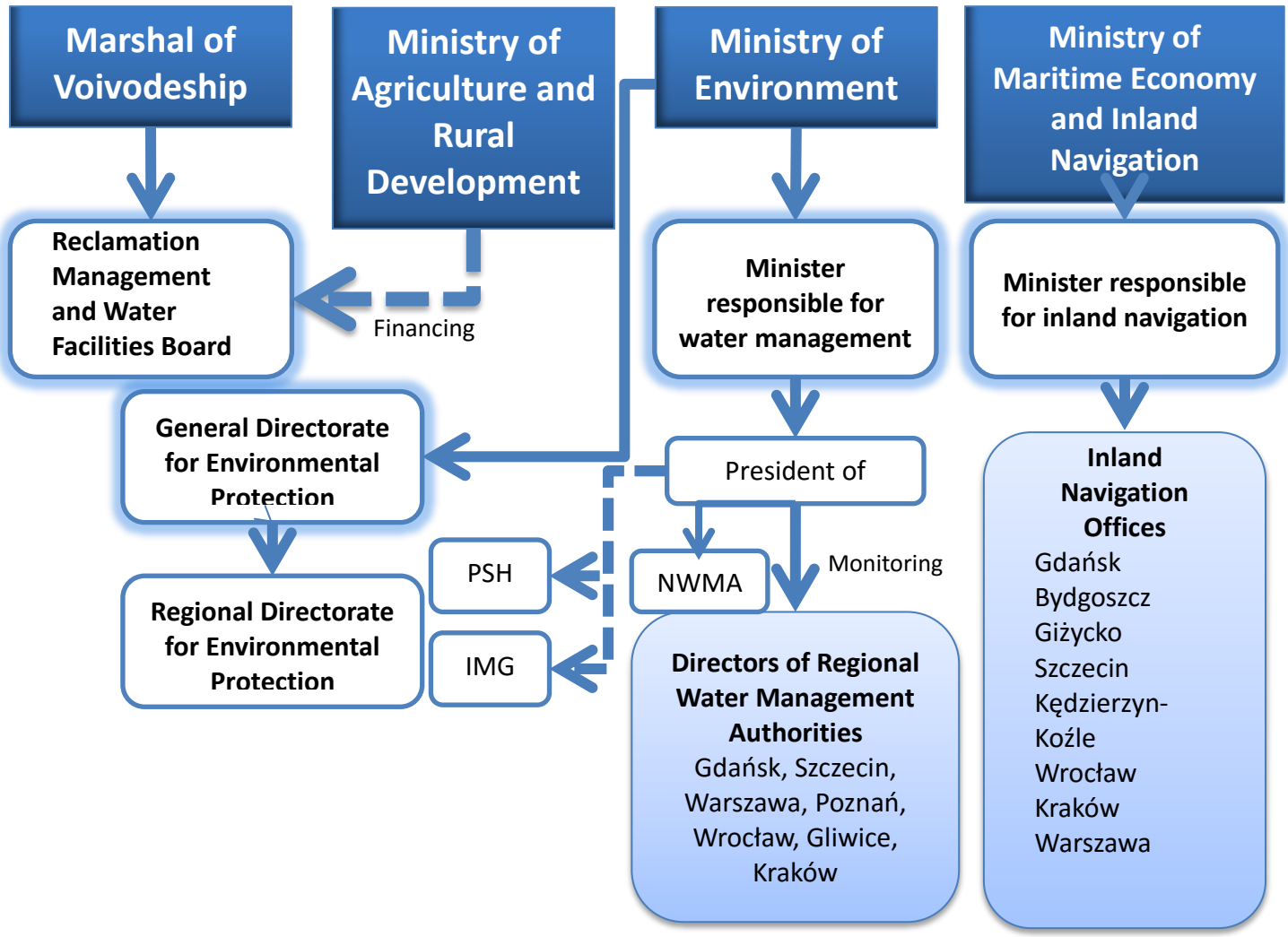
2.2 RESPONSIBLITY REPORT POLAND

Poland, for many years has not been using the transport potential of its rivers effectively. The total length of inland waterways network in Poland constitutes 3655 km, including navigable rivers – 2417 km, canals – 336 km and navigable lakes – 259 km. In 2015 only 214 km of inland waterways could be classified as international ones (class IV and V).

Nowadays the share of water transport in comparison to the total freight in Poland is marginal and constitutes 0,4%. The main reason is very poor quality of fairways and low navigable parameters that are not adjusted to the present transport demands. Moreover the situation is much varied due to complicated structure of water management and inland navigation. The competences and budget of particular institutions may significantly impact on crucial and strategic investments on Polish rivers.

2.2.1 POLISH IWT RESPONSIBILITIES

The structure of water management and inland navigation in Poland illustrates the chart below.



2.2.1.1 GENERAL OVERVIEW ON POLISH IWT RESPONSIBILITIES

The responsibility for inland waterways and inland navigation take two key ministries: Maritime Economy and Inland Navigation and Environment. The first one is responsible for inland waterway development policy creation. Within the Ministry the office responsible for inland navigation deals with the following tasks: functioning and development of inland waterways in terms of inland navigation, water traffic within the inland navigation, transport of people and goods by inland navigation means, building or modernisation of inland waterways, international cooperation on border waters. The administrative authority of inland navigation are: the ministry in charge of transport as the main body of inland navigation and directors of inland navigation offices, as field unit of IW administration.

The water management unit of the governmental administration is in charge of the Ministry of Environment. The issues concerning managing and use of waters are supervised by the President of National Water Management Authority.

2.2.1.2 STAKEHOLDERS AND THEIR RESPONSIBILITIES IN IWT IN POLAND

institution	levels			success	problems
	local	regional	national		
Ministry for Maritime Transport and Inland Navigation			regulation, legal framework	Assumptions for the inland waterways development plans in Poland (2016-2020) with 2030 perspective; establishing the Steering Committee for inland waterways investments	Missing budget. Lack of competence for water management. Strong ecological lobby blocking economic stimulation of the rivers.
Ministry of Environment			Water management policymaking, including maintenance of waterway.	Preparation of draft water law.	Lack of competence regarding inland waterway transport. Problems with interpretation of EU law, which hinder the investments.
Parliament			Approval of strategic documents submitted by different ministries	Parliamentary group for best use of the rivers' potential	

National Water Management Authority			Supervision over Regional Water Management Authority	Acceptance of water management plans and flood risk management plans; actions towards revitalization of inland waterways.	The documents lack reference to many aspects of water management. Lack of funds for investments.
Regional Water Management Authority		Water management, waterways' security, the investments' implementation and maintenance		Acceptance of water management plans and flood risk management plans in river basins.	The documents lack reference to many aspects of water management. Lack of funds for investments.
Inland Navigation Office		Assurance of safety in inland water transport, ship's inspections and legal proceedings in case of shipping accidents, supervision of the shipping legal provisions' observance, freight documents, maintenance of Polish inland navigation ships' register		Reinforcement of the role and significance of water transport.	Lack of competence regarding waterways management. Lack of funds.

Port Authority	No significant impact on inland water transport: the only task regards management, maintenance and giving access to infrastructure.				Small share of inland waterway transport in cargo handling in ports.
Local self-government	Riverbank infrastructure, lobbying, information and promotion, implementation of transnational projects, shipping staff education.			Modern touristic ports and marinas, increase of the society's awareness regarding the significance of inland water transport	High maintanance costs, lack of competence regarding development of inland water transport, the potential employees cannot find jobs in their country.

2.2.2 RECOMMENDATION ON POLISH IWT RESPONSIBILITIES

- the bottle-necks need the fastest possible identification and elimination, especially on the waterways of the international significance,

- the need for legal changes related to water management so as the inland waterways suitable for transport are within the competence of the Ministry of Transport, instead of Ministry for Maritime Transport and Inland Navigation,

- drawing up an integrated, long-term program of development of the inland waterways and inland navigation in Poland. The program should integrate the competences of both ministries, define the way of fulfilment of the obligations related to AGN agreement as well as define the budget and the units responsible for the program's implementation,

- increase of the amount of funds dedicated to water management and inland navigation in the governmental sector, especially for inland waterways maintenance,

- enhancement of the cooperation between the ministries, especially with the ministry of regional development in order to obtain EU funding for implementation of the strategic investments on inland waterways. There is also a need to specify the strategic investments eligible for EU funding.

- starting actions towards inclusion of the Polish inland waterways in the Trans-European Transport Network TEN-T.

2.2.3 RECOMMENDATION FOR EMMA

Preparing recommendations for the European Commission in order to increase the funds dedicated to the development of the infrastructure of the inland water transport and the inland waterways.

2.3 RESPONSIBLITY REPORT FINLAND

Finland - a country of thousands of lakes. In Finland there are about 8,300 km of coastal routes maintained for general waterborne traffic and 8,000 km of inland waterways, i.e. altogether 16,200 km. About 4000 km of these fairways are in commercial use.

20 000 km of public mapped fairways are recorded on maps. There are about 34 000 maritime aids to navigation, including lighthouses, buoys signs and leading beacons, of which 2/3 are maintained by the Finnish Transport Agency. All together we have 31 lock canals and 8 locks at the Saimaa canal.

The deep fairways in the Lake Saimaa area are totally 772 km long. There are approximately 1 200 vessel calls in the lake area per year. There is also floating of raw timber as a transport mode in the lake area.

Most of the lake areas are well used for leisure and private purposes. We have around 9 inland ports for cargo traffic. The inland port network is well equipped and developed in the areas were the industry is active or the tourism is important.

In Finland we don´t have a separate organization for the inland waterway administration even though inland waterway network is an important part of our transport system. The questions related to inland waterways and the development, are handled at the Ministry of Transport and Communications and at the Finnish Transport Agency under the Ministry. The following chapter is showing the responsibilities in Finland inland waterway transport and inland waterway management.

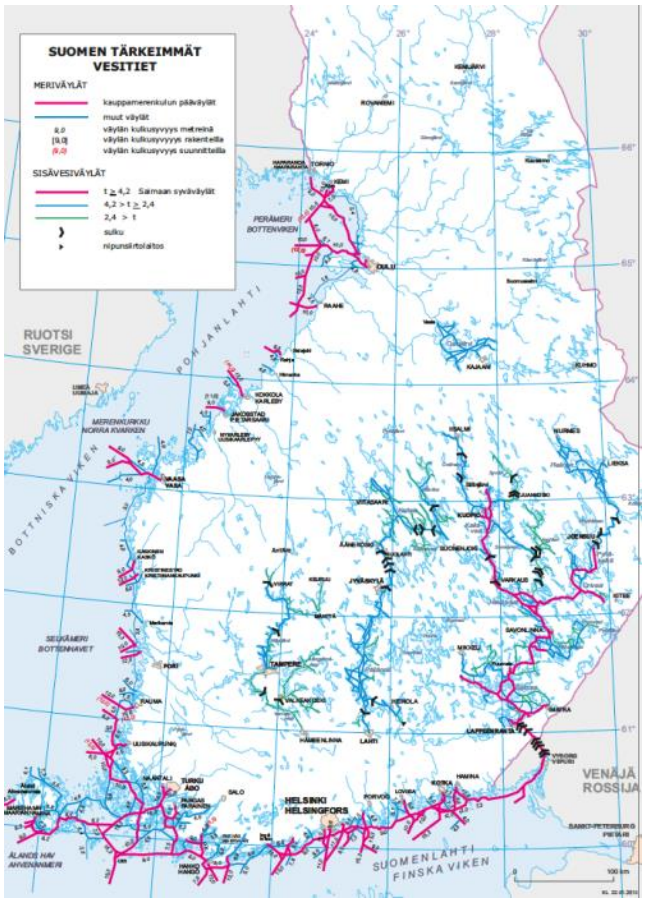
2.3.1 FINLAND IWT RESPONSIBILITIES

2.3.1.1 GENERAL OVERVIEW ON FINLAND IWT RESPONSIBILITIES

The port areas are normally owned and managed by the local communities. They also have the responsibility to main and develop the fairways.

Finland IWT and IWW related issues are the responsibility of the Finnish Transport Agency (FTA) under the Ministry of Transport and Communications.

Most of the maintenance and development of the Finnish waterway network as a part of the transport system is carried out by the Finnish Transport Agency. The FTA is responsible for waterways and canals, including all aspects of waterway management as well as waterway transport. These tasks consist of infrastructure planning, development, construction, improvements, maintenance and also environmental measures of lakes, rivers, locks, canals etc. FTA management takes into account both merchant shipping and other waterway needs. The main emphasis is on maintaining the fairway. Coastal merchant shipping fairways and icebreaking costs are covered by fairway charges.



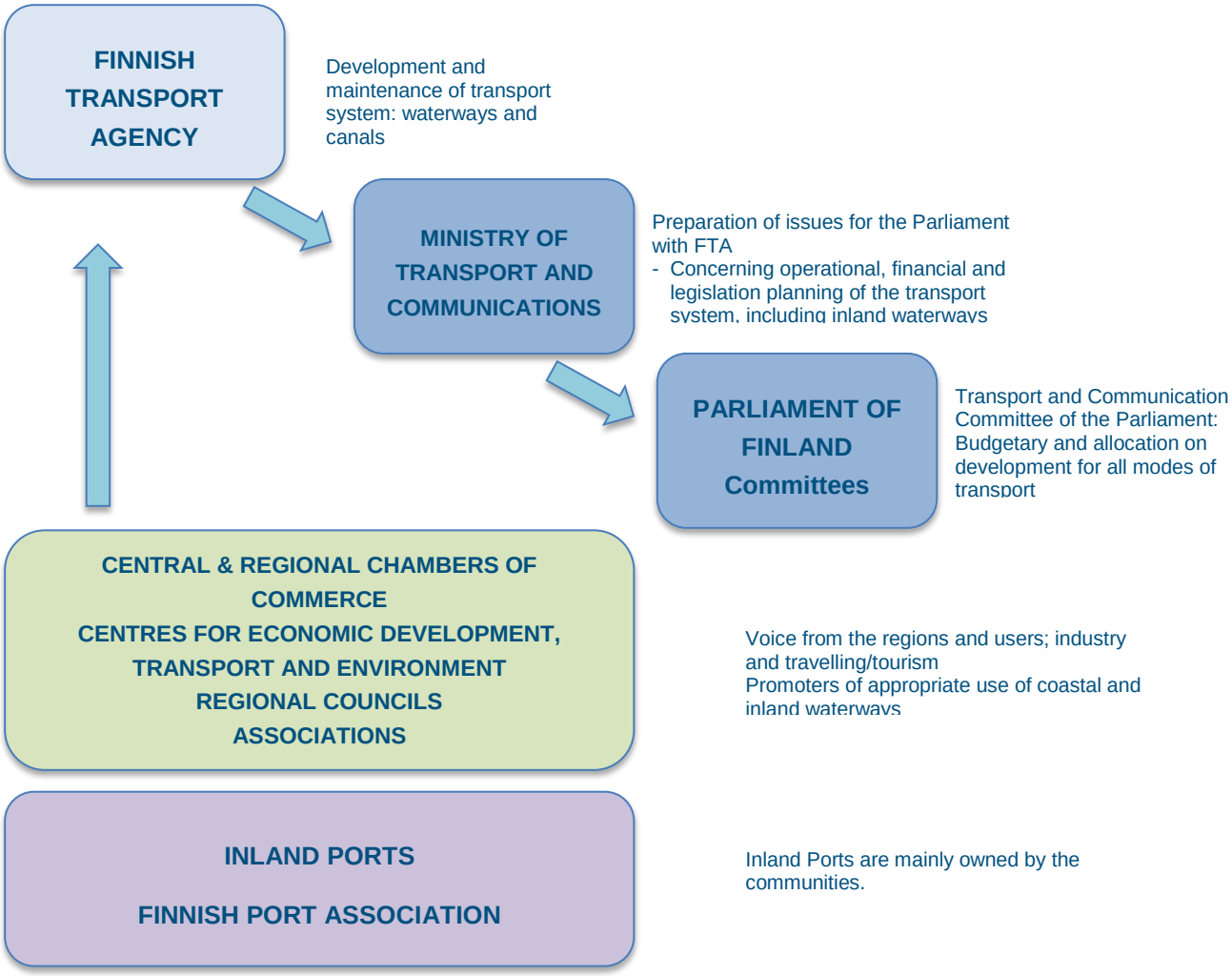
Picture: The Most important waterways in Finland costal and inland fairways. Finnish Transport Agency 2015

Maintenance of waterways includes the maintenance of marine safety equipment and their repair, renovation and construction measures. In addition, the maintenance of waterways includes fairway maintenance and maintenance of fairways design and surveys. The Finnish Transport Agency has around 25,000 safety vessels for about 16,000 km long waterborne sea and lake areas.

The Finnish Transport Agency also publishes statistics on waterborne traffic including the Saimaa Canal leading to the sea from Lake Saimaa and other state channels, domestic waterborne traffic and foreign maritime traffic statistics.

The inland waterway ports in the Lake Saimaa area are mainly owned by the local communities and they have the responsibility to invest in the infrastructure and develop the maritime business. There are also some privately owned (company owned) ports, where the investments are done by the local industries.

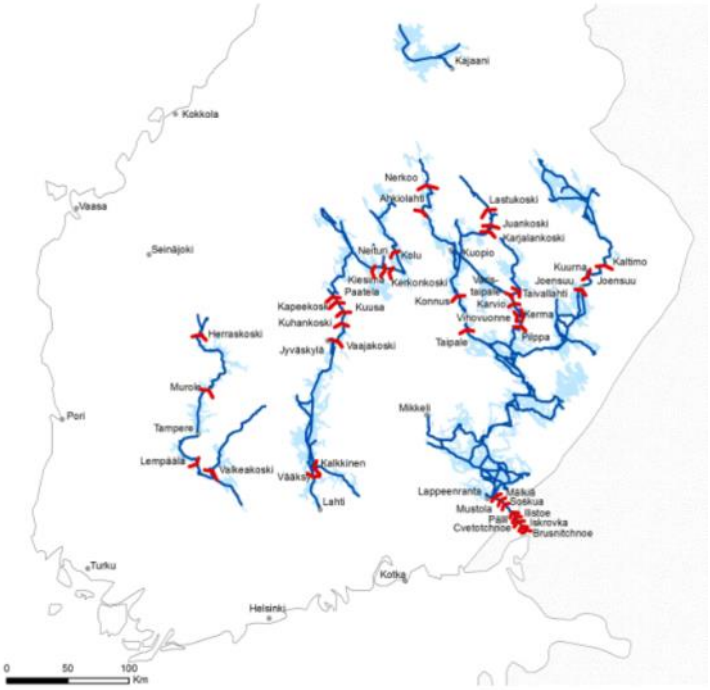
The following graphic is showing the general and simplified process of IWT responsibility in Finland.



The Finnish Transport Agency is managing the whole transport system of Finland and following closely the regulative organisation and aspects from the EU and closely co-operates with the Finnish Transport Safety Agency and inland waterway related associations.

The Parliament of Finland enacts legislation. The task of the Transport and Communications Committee at the Parliament is to deal with matters that concern road, rail, air and water traffic, navigation, transport law as well as working time regulations in the transport sector. The Committee hears experts and obtains information from other sources. After hearings the committee conducts a preparatory debate and then the committee secretary drafts a report or statement. In its report a committee presents its views on a matter together with grounds and recommends what course of action Parliament should take.

Ministry of Transport and Communications of Finland´s one of the main responsibilities is law drafting. The focus in law drafting is mainly on the implementation of EU legislation. Government proposals drafted at the Ministry are discussed at government plenary sessions. The Finnish Transport Agency works closely with the Ministry of Transport and Communications in legislation planning.



Inland Waterway Network and Locks in Finland

2.3.1.2 STAKEHOLDERS AND THEIR RESPONSIBILITIES IN IWT IN FINLAND

The following table shows an overview of the different stakeholders and responsibilities in inland waterway transport in Finland. We have named concrete aspects and showing success and problems linked to these aspects. On 3 different levels local, regional and national the involved parties have the ability as well as obligation to manage the relevant processes of IWT in Finland. In the rows success and problems several outcomes are marked that can be seen as very representative for the common situation in Finland. A problem then result in deficits for the theses plans, concepts and projects e.g. a missing of an implementation steps or any circumstances that hinder the implementation.

From the EMMA point of view as a transnational EU project with the focus on developing inland navigation EMMA partner understand success as an outcome that is supportive for inland navigation in Finland and in Europe. It can be understood that a success here means plans; concepts and projects that are not only decided but being minimum first steps for a realisation and implementation.

Institution	Levels			Success	Problems
	Local	Regional	National		
Transport and Communications Committee at the Parliament of Finland (TCCP)			Matters that concern water traffic, navigation, transport law, working time regulations and traffic safety Conducts a preparatory debate and drafts a report or statement – recommendations to the Parliament Monitors EU legislative initiatives	Handles all transport modes – has on overall understanding about the whole transport system of Finland	Handles all transport modes Inland waterway transport is not considered that important and is not in the top of the list The awareness of Inland waterway potential might not be that good Lacking with communication from the IWT side
Ministry of Environament (ME)			Land use and building is regulated by legislation and steered by the authorities Government Programme to develop the energy efficiency of land use and building The shore area strategy secures the	Working together towards a sustainable future – Ministry of the Environment strategy 2020 ERA17 – For an Energy-Smart Built Environment 2017 Development overview of the regional structure and traffic system 2050	

			health of shore areas and natural diversity The overview of regional structure and traffic forms a national vision for a regional structure and traffic system that will be set as a long-term target. International cooperation on land use and building (European Union and Baltic Sea Region)		
Ministry of Trasnport and Communications (MTC)			Provision of safe and secure transport and communications connections and services. The focus in law drafting is mainly on the implementation of EU legislation. Preparation of decrees in the transport and communications sectors. National-level preparations and follow-up of transport and communications matters. Guides and supervises the operation of its agencies and monitors their development: the Finnish Transport Agency and the Transport Safety Agency.	The Ministry has two publication series: the Publications series and the Programmes and strategies series. Examples: Robots on land, in water and in the air. Promoting intelligent automation in transport services Finland's maritime strategy 2014–2022 Finland State of Logistics 2012 Transport Revolution - international perspectives Baltic Sea Maritime Safety Programme	There is no inland waterway department, section or unit at the Ministry Saimaa Canal office, under the Ministry is handling IWW issues, but only what comes to the Saimaa Canal area More communication is needed in order to increase the awareness of IWW potential
Finnish Transport Agency (FTA)			An expert organization: roads, railways and waterways and for the overall development of Finland's transport system. (Departments / Units) Operates under the jurisdiction of the Ministry of Transport and Communications.	Executing entity in the transport sector The maintenance of waterways covers the servicing of maritime aids to navigation, as well as their repair, rehabilitation and construction. Fairway maintenance: checking and repairing all buoys and signs Maritime traffic control, hydrography (nautical charts), official duties related	

			Mission is to enable smooth, efficient and safe travel and transport. Responsible for most of Finland's waterways and canals. The maintenance and development of waterways and canals taking into account of the navigation needs of merchant shipping and other waterborne traffic. The co-operation with the International Maritime Organization IMO, the European Maritime Safety Agency EMSA; the International Hydrographic Organization IHO, and the International Association of Marine Aids to Navigation and Lighthouse Authorities IALA.	to winter navigation, and infrastructure maintenance. Vessel Traffic Services (VTS) to merchant vessels and maintains the safety radio communications. GOFREP system in the Gulf of Finland, which is a mandatory ship reporting system covering the international sea areas of the Gulf of Finland and Finland's national waters outside of our VTS areas. Provides radio navigation services, maintains the port traffic data system PortNet and is responsible for the national AIS base station network. Information on the Saimaa Canal locks and Navigation at the Saimaa area	
Finnish Transport Safety Agency (FTSA)			Develops the safety of the transport system, Promotes environmentally friendly transport solutions and Is responsible for transport system regulatory duties.	Issue permits, regulations, approvals and decisions and prepares legal rules regarding the transport sector. Arranges examinations, handles transport sector taxation and registration, and provides reliable information services. Oversees the transport market as well as compliance with rules and regulations governing the transport system.	
Centres for Economic Development, Transport and Environment (CEDTE)		Responsible for the regional implementation and development tasks of the central government - including Transport and Infrastructure		Promotion of the good condition and usability of waterways by providing expert assistance, by participating in project planning and implementation in co-operation with municipalities, other authorities and the parties. Supervision and steering of regulation of inland waterways in accordance with the objectives set out for the use of waterways and the state of the	

				environment. Responsible also for dam safety. Authority in granting EU funding and in driving regional development.	
Regional Councils (RC)		Regional development Regional land use planning		Responsible for the EU's Structural Fund programmes and their implementation	
Port Authorities and Operators of Terminals in Ports	No regulation competences but Influence via their shareholders as well as lobby organizations			Investment in port infrastructure Port image campaign	Limited development area Limited political support in very urbanized cities Emission of inland navigation
Finnish Waterway Association (FWA)			Promotion, development and appropriate use of waterway traffic and transport as well as its operating conditions in both the coast and inland waters of Finland. General industry lobbying.	Promotes the Finnish waterway network status and capacity enhancement, so that the water traffic and transport will remain competitive Contributes to the development of water transport equipment and stock as well as implementation of new innovations Ensures that decision makers are well aware of the measures required for promotion of water traffic and transportation in Finland Co-operation and EU funded projects	Not very well known and small in resources.
Advisory Committee of Saimaa Canal (Ministry of Transport and Communications)		Saimaa canal development		Inland waterway strategy 2015 and concrete Action Plan Action Plan concerning the freight traffic at the Saimaa canal 2015-2035 Action Plan concerning the passenger traffic at the Saimaa canal 2015-2035	

Finland's maritime strategy for 2014–2022 commissioned by the Ministry of Transport and Communications provides an overall view that serves Finland's economy, business life and employment and takes account of the new environmental norms. The strategy analyses the changes that have taken place in the past years and the future challenges. It also outlines a vision for 2030 and identifies measures that are required in meeting them. A key aim in the strategy is to ensure that Finland´s maritime transport and maritime industries can operate effectively and that the competitiveness of the national economy and environmental and safety issues are taken extensively into account. A vision for 2030 is “A prosperous Finland – efficient sea routes”.

Extract from the Finland's maritime strategy for 2014–2022 on inland waterways

The development opportunities for Finland’s inland waterway transport are principally in the Saimaa Canal and Vuoksi waterway. In other waters the development potential is mainly in passenger traffic and recreational boating. The vessel traffic using the Saimaa Canal and Vuoksi waterway is important for industrial activity in the region especially in regard to international cargoes. The potential for inland waterway transport has not yet been fully utilised, but the role of waterborne transport will be emphasised in the future as environmental requirements grow and people become more aware of environmental issues.

Enabling year-round navigation of the Saimaa Canal would be a key factor for encouraging inland waterway transport and movements from Saimaa to destinations in Europe. Maintenance of the canal and fairway network can be improved through small but innovative solutions that would improve their usability and reliability during the current navigability period. However, year-round navigability would require investment of approximately EUR 30 million and would also increase the canal’s annual maintenance and up- keep costs (including icebreaking) by about EUR 3-4 million, which cannot be regarded as feasible in view of the current or projected traffic volumes. The future development needs should nevertheless be re-evaluated at a later stage if substantial changes occur in traffic volumes. The aim should nonetheless be to ensure that the navigability season is as long as possible.

Saimaa has no regular goods services. Only a very small proportion of the traffic using the Saimaa Canal is domestic – about three per cent. The average age of vessels in inland waterways traffic is very high. Moreover, investment in new vessels is extremely difficult because of the shortened navigability period.

There is a general lack of awareness, especially abroad, concerning Finland's waterways tourism and the possibilities it offers. Strengthening the inland waterways passenger potential will require investment in marketing and awareness rising.

The Inland Waterway Strategy was drafted in 2015 and the main elements are summarized in the table below.

	Infrastructure	Service offering	Industry and trade	Legislation and politics
Constraints	Limited sailling season	Difficulties of combining different shippers volumes to same sailings	Strategic decisions for logistics of the industries	Pilotage and its production, illogical issues in the fairway due legislation
Threats	Safeguarding of the financing of the Saimaa Canal and maintenance of the fairways	Low profitability of the shipping companies, limited possibilities for new investments in vessels	Closing down of the production in Lake Saimaa area	Future environmental requirements (ex. BWM)
Possibilities	Innovative solutions (example. Heating of the locks and bubble production)	Sulphur Directive (1.1.2015) improves the competitiveness of Saimaa vessel traffic	Environmental friendly transport mode, increased understanding by the shippers	Implementation of new fairway due legislation in Saimaa Lake area

The constraints of the Lake Saimaa and Saimaa Chanel are summarized in the table below.

Infrastructure constraints	Service offering constraints	Industry and trade constraints	Legislation and politics constraints
Traffic stop for three winter months	No liner traffic	Nine months traffic period	Pilotage (price, exceptions and language)
Nine months traffic season lead cargo volumes to sea ports for three months	Vessel size	Balance between export and import is important	Implementation of the fairway due law
Constraints of the Canal and Saimaa fairways	No container transports (container transports increase in other traffic areas)		Unpredictability of the Russian authorities
Fairways to some ports do not have enough draft for some passenger vessels	Limited access of suitable ice class vessels at the beginning and at the end of sailing season		Missing of joint, strategic target setting for the local governments
Icebreaking			

The threats are summarized in the table below

Infrastructure threats	Service offering threats	Industry and trade threats	Legislation and politics threats
Icebreaking (including bay of Vyborg)	Old tonnage in Lake Saimaa traffic	Pessimistic view for the future for the Saimaa area industries, specially for new investments	Changes in the cost structure of piloting services
Port authorities' ability to invest	Port operators' ability to invest in the future	Industries not willing to make long term contracts	Marpol Annex V – washing waters from the cargo holds
	Unbalance between export and import and unpredictable quick variations	Positive and potential possibilities of inland waterways have not been identified	New regulations stipulated by the Finnish and Russian authorities
		Capacity constraints of the road and rail network limit the local industrial development	The Government subsides road and rail transports more than the inland waterway transports
		Road and rail transports are use more and more for transportation for Saimaa area to sea ports	Cancellation of the visa free tourist trips

The opportunities are summarized in the table below.

Infrastructure possibilities	Service offering possibilities	Industry and trade possibilities	Legislation and politics possibilities
Good maintenance of the faorways and of the canal	Joint management for the Lake ports and for the canal. One port with several berths.	Development of intra Saimaa vessel traffic	New solutions for pilotage
Development of winter traffic	Development of EEDIT and other environmental regulations	Development of new businesses for Saimaa ports	Russian membership in WTO opens possibilities to new logistics solutions
Moving cargo from road to water transports	More vessels available at Saimaa Lake after 1st January 2015	New bioenergy and mining industry products	Opening of Russian waterways to Western fleet
Inland waterway traffic is safe	The port operators in the Lake district have high efficiency in port operations	Container feeder from Saimaa ports to sea ports in Finland	Implementation of the EU white book to Saimaa area waterway traffic
“Waterways forever”		Strategic co-operation between the shippers	More flexible regulations in the passenger traffic
		Stuffing of overseas containers, new business models	

There are several studies on inland waterways to be conducted under EMMA project according to the approved project plan, which give an overall understanding about the inland waterways in participating countries. Despite of those already identified studies, the aim is to conduct a Cost Benefit Analyses (CBA) at the Saimaa Lake and Canal. The analyses will consist of comparison of different transport mode on a defined route as per today and also in the situation, if the planned for the Saimaa area improvements would have been accomplished. The analyses will include: Transshipment costs both distance based (fuel costs and other distance based costs such as maintenance etc.) and time based, including wages, maintenance, insurance, capital costs etc., loading and unloading costs, emissions and influence on surroundings, Infrastructure costs ("wear and tear"), accidents costs, socio-economic costs and also fairway dues.

The Lake Saimaa is used for industrial purposes. The other inland water fairways and areas, like Vanajavesi, Päijänne and Inari are very important and in great use what comes to tourism and leisure. Water Tourism is a vital and growing business for several cities and counties in Finland. The busiest fairway is the Vääksy canal. The busiest inland ports for water tourism are Tampere, Kuopio, Jyväskylä, Lahti, Lappeenranta and Savonlinna.

2.3.1.3 THE SAFETY OF SHIPPING - SYSTEMS USED IN FINLAND

The purpose of maritime and inland traffic monitoring is to enhance the safety of shipping, improve efficiency and prevent adverse environmental effects from shipping. The Finnish Transport Agency maintains a VTS system, the Gulf of Finland mandatory ship reporting system (GOFREP), and the national maritime transport information management system (Portnet), which is part of the EU's maritime data management system SafeSeaNet.

The VTS authority is also responsible for surveillance of compliance with the routing systems in international waters adjacent to the VTS area.

Vessel Traffic Services can prevent accidents very effectively. Vessel Traffic Services is recognised internationally as being an important part of the transport logistics chain, and it is constantly being developed with this in mind. It also promotes safe and efficient shipping and has a significant role in preventing environmental damage.

Using SafeSeaNet, Member States exchange information on the port visits, locations and dangerous cargoes of vessels travelling in the EU area, and on any accidents or dangerous situations encountered by vessels. SafeSeaNet is also used to exchange information obtained via national networks of land-based stations forming part of ships' automatic identification systems (AIS) and via the systems of VTS centres. The IBnet system connected with winter navigation control and the next generation IBnext system are being developed within the EU-funded WINMOS joint project on winter navigation in collaboration with the Swedish authorities.

In Finland the vessel traffic services (VTS services) are operated by the Finnish Transport Agency. The sea areas at the Finnish coast are divided into six VTS areas. These are Bothnia VTS, West Coast VTS, Archipelago VTS, Hanko VTS, Helsinki VTS and Kotka VTS. In addition, Saimaa VTS operates in the Lake Saimaa region. Along the coast VTS services are provided 24 h/day throughout the year.

Saimaa VTS does not operate off-season in the Saimaa Canal. Information about the start and end of the traffic season is given separately. Saimaa VTS Area covers the deep channels of the Lake Saimaa area, but the Saimaa Canal is not included in the VTS Area.

There is no RIS application on the Lake Saimaa area. There is a VTS application, which is controlling the traffic and also VHS channel 9.

2.3.1.4 RECOMMENDATION ON FINLAND IWT RESPONSIBILITIES

Finnish Transport Agency under the Ministry of Transport and Communications is responsible on development and maintenance of inland waterways in Finland.

The inland waterways should be seen as an equal way and possibility of transporting goods comparing to the other transport modes. The fairways should be developed in those areas where the use of inland waterways is reasonable and serves the industry, tourism and the region. The administrative side, including FTA and the regional administrations/councils as well as the industry, ports and operators need to be gathered in to the same table to discuss and to agree on development steps. The development of inland waterways in Finland needs commitments from all parties involved. There is unused capacity and there is also a will.

The analyses within EMMA project will provide valuable information in order to address and approach the regional and administrative decision makers as well as the members of the parliament.

Due to sometimes quite harsh ice conditions the navigation period is relatively short at the Saimaa lake and canal, 9 months only. Prolonging the navigation period would support the industry better and they would be more willing to shift into the IWT. Icebreaker assistance is given to vessels, which meet the traffic restrictions issued, by the Finnish Transport Agency for vessels calling at the relevant port. Icebreaking services include the assistance of vessels in ice and the related towing. FTA has plans to have new ice-breakers for the Saimaa area to assist the vessels. The reliability and smooth operation of winter navigation are extremely important.

Finland's remote location in relation to the EU internal market and the relatively thin traffic flows mean additional logistics costs. The Saimaa lake area is part of Trans-European Transport Network (TEN–T) but the Saimaa canal as an exceptional area for it has been rented from the Russian Federation is not part.

Some facts about the IWT in Finland

- Political environment is developing more favorable towards IWT
- Long-term regional strategic development is on-going
- There is a risk that within 10 years our roads and railroads will be congested
- New investments especially on wood industry at the Saimaa area are growing
- In general waterways are environmentally friendlier mode for transporting
- The regulations set by the EU demands lowering the emissions
- Short navigation period disturbs industrial use of IWT
- Lake Saimaa is an isolated IWW system, for the Saimaa canal not a part of core TEN-T network.

These challenges arising in exceptional circumstances must be brought up not only at the domestic forums but also at the international forums and for EU bodies in order to improve the understanding outside Finland.

The IWT system in Finland is not well known in Europe. This is also a challenge, which needs to be tackled. Comprehensive marketing of IWT system and the services in Finland including both the industry and tourism would be necessary.

2.4 EXCEPTIONAL LAKE SAIMAA AND SAIMAA CANAL – INVESTMENTS AND FUTURE GROWTH

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Some facts about the Saimaa Canal

- 42,9 km long fairway of which 23,3 is on the Finnish territory
- 19,6 km is on the Russian territory and leased until 2060.
- Canal is 50-60 m wide
- Total lift from Gulf of Finland to Lake Saimaa is 75,7 m
- Saimaa Canal has 8 locks, with lift from 5,5 up to 12,4 m
- In 2015 about 1,32 million tons of cargo went through Saimaa Canal
- 95% of the cargo is international cargo transport
- Main cargo: timber, wood chips, crude minerals, chemicals, fertilizers, paper and cardboard
- Vessel size at the moment 82,0 x 12,6 x 4,35 m
- Vessel fleet for serving Saimaa are is getting old

The Canal needs to be renovated

Cargo traffic in the Saimaa Canal and in the Lake Saimaa area has been decreasing during the last years. Industries located in the Lake Saimaa area, are currently investing in new production capacities and this will lead to increased transport volumes during coming 3 – 4 years. At the same time, it is obvious that the transports from Russian inland waterway areas to Lake Saimaa area will be increasing, especially to local forest industries. Finnish Transport Agency has already started a development, investment programme in order to safeguard the competitiveness of the Saimaa Canal cargo traffic. The strategic target of the investment program is to upgrade the operational assets and infrastructural facilities for the future growth of cargo traffic in the Saimaa Canal.

Saimaa Canal has been in use for more than 160 years and a new leasing contract for the land areas was signed four years ago. Current contract between Russian and Finnish governments will be in use still for 46 years. The positive signals from Finnish industries located in the Lake Saimaa area and the

contract for the use of Saimaa Canal for 50 years opens new possibilities to develop inland waterway transports via Saimaa Canal to European destinations.

Approximately 30 different organizations (local industries, shipping companies, port operators, national and local authorities) were interviewed during summer 2016. The results have later on been communicated the national authorities, who have started several investment and development projects for Saimaa Canal and Lake Saimaa area.

The interview results can be summarized in six different categories

1) Ice breaking in the Lake Saimaa area

Current Lake Saimaa cargo traffic requires powerful ice breaking capacity every winter, especially at the end of the annual sailing season. Finnish Transport Agency has started the process for making delivery contracts for three new icebreakers. The idea is to have powerful tugboats, which will be equipped with an ice-breaking bow with own engine. There is an option for a fourth unit is the cargo volumes will increase. The new icebreaking concept will be in use at the end of 2018 and beginning of year 2019.

2) Maintenance of the locks

It is strategically very important to maintain the Canal technically. The Finnish Government has allocated via Finnish Transport Agency funds for replacing the lower locks of each of the loch chambers in the Canal. The replacement of the first lock is currently ongoing. The replacement of the lower locks will take four years. Total investment for the lower locks is approximately 9 million euros.

3) Higher water level in the Canal

The Saimax size vessels have a load capacity of 2 500 tons but in many cases the vessels cannot utilize full load capacity as the draught in the Canal does not allow this. The Finnish Transport Agency has completed a study for increasing the water level with 10 cm. This would improve the load capacity of the vessels by 200 – 300 tones. Some parts of the walls of the Canal have to be strengthened and this would cost approximately 5 million euros. There are also some legislative demands for getting the water level 10 cm higher. The decision for getting 10 cm more water to the Canal will be taken later on this summer.

4) Longer lock chambers

Pre planning for making all Saimaa Canal lock chambers 10 – 12 meters longer has been started in February 2017. The strategic target is to make the lock chambers longer so that the vessels' load capacity can be increased from 2 500 tons up to 3 300 – 3 500 tons. This would lower the transport costs for the industries in the future. The pre planning will be ready at the end of year 2017. At the same time preliminary investments will be calculated. A rough estimate, based on current understanding, is approximately 50 million euros. The pre planning includes also first ideas how the traffic can be managed during the construction time, which is preliminarily planned for years 2019 – 2021.

5) Traffic season, 11 moths in the Saimaa Canal and 12 months in the Lake Saimaa area

The biggest wish for developing the Lake Saimaa cargo traffic is prolonging the sailing season. This wish comes from the local industries. 12 months sailing season can be achieved in the Lake area with

the assistance of the new icebreakers. There are strong signals that the Lake Saimaa internal transport volumes will be increasing, especially for the forest industries. 11 months sailing season for the Canal can be organized due to the new locks and hopefully longer lock chambers. New technical innovations are studied in order to produce warm water, which will keep the Canal itself open. One month is required, also in the future, for the technical maintenance of the Canal.

6) Lobby work on political level

Plenty of lobby work in the political organizations will be required before the proposed investments can be completed. Many, very important investment decisions have already been taken and these decisions speed up the development. It is very important to invite the Russian authorities and universities, especially Makarov University, to join the development in order to increase the use of inland waterways.

2.4.1 RECOMMENDATION FOR EMMA

The Finnish Inland Waterways System is quite unique compared to the IWT systems in other EMMA countries.

There is a very positive feeling for developing the Lake Saimaa and Saimaa Canal cargo traffic. The industries are making new investments, which will create new transport volumes. At the same time, the environmental understanding in the industries is increasing, and thus increasing transport volumes in the inland waterways.

Stronger co-operation is needed including the political will, administrational support in resources and financing and involvement of the industry in order to conduct the needed improvements and enable more efficient use of IWT.

The age of the Saimax size vessels is the biggest challenge for the future. The ship owners are not willing to invest in new tonnage because the industries want to make short transport contracts.

The information gathered within EMMA about the IWT systems in partnering countries will give an excellent opportunity to learn via best practices and furthermore strengthen the co-operation what comes to developing the transport and logistics using inland waterways as part of the whole chain.

The results of the analyses of Finnish IWT conducted within EMMA will give information, which can be presented to the decision-makers and also in marketing the services. Stronger lobbing for IWT is general is necessary.

Furthermore, the Russian and Finnish authorities, including universities, should develop a joint agenda for promoting and developing the inland waterway traffic and thus opening new possibilities for inland waterway traffic.

Sources:

- Finnish Transport Agency
- The Ministry of Transport and Communications of Finland
- Finnish Transport Safety Agency
- Statistics Finland

2.5 RESPONSIBLITY REPORT LITHUANIA

Lithuania has relatively short navigable waterways and just few inland ports. Despite the fact of having long traditions and deep roots the inland waterway transport in Lithuania is not important for the industry, because of the competition with railway and road transport. The main administrative unit is Lithuania Inland Waterways Administration (LIWWA) acting on the basis of Lithuanian legislative system on regulation of waterway transport. The following chapter describes waterway transport and waterway management in Lithuania.

2.5.1 LITHUANIA IWT RESPONSIBILITIES

2.5.1.1 GENERAL OVERVIEW ON LITHUANIA IWT RESPONSIBILITIES

Lithuania IWT and IWW have a clear structure. Lithuania inland waterways are in full ownership of the Ministry of Transport and Communications, which is fully responsible for the waterways in Lithuania. This means that the Waterway Administration is under the guidance of the Ministry of Transport and Communications in charge of all aspects of waterway management as well as waterway transport on these waterways. This includes any infrastructure planning (rivers, canals etc.), maintenance and also environmental and shipping safety measures. Inland navigation and its obligations are managed by the Lithuania Inland Waterway Administration.

The legislative institutions in Lithuania on state level and in the legislation process e.g. on law and other regulations. This is important because of the rivers' natural influence on the landside and landscape. These activities are closely connected with the responsibilities carried out by the Ministry of Environment.

Parliament	Government	Ministry of Transport and Communications	Lithuania Safety Shipping Administration	Ministry of Environment	Lithuania Inland Waterways Administration (LIWWA)	LIWWA and Private companies
Strategical decisions (laws)	Coordination and financial (regulations)	Initiator of IWW development	Navigation safety and Technical supervision	Landside and landscape regulation	IWW practical development and maintenance	Practical passenger and cargo transportation by IWW

2.5.1.2 STAKEHOLDERS AND THEIR RESPONSIBILITIES OF THE IWT IN LITHUANIA

The different levels of responsibilities in Lithuania inland waterway transport and waterway management have historical and political reasons. The following table gives an overview of the responsibilities on the political levels, indicating specific aspects and showing advantages and problems linked to these aspects.

Institution	Levels			Success	Problems
	Local	Regional	National		
Ministry of Transport and Communications			Regulation on waterway transport Legal framework on waterway transport Implementation of EU water policy Implementation of Natura 2000 National infrastructure plan National transport plan Waterway administration reform National inland waterways and port strategy Diverse studies and researches R&D funding for Ports and waterways	National transport strategy is to develop most of all important waterways by 2025 Inland Waterway Administration Reform executed in 2000 AIS Regulation 2017 – 2019 development IWW plan for tourism Support for Inland Navigation and Ports Port Infrastructure investment funding	Unclear status of IWW depths, which constantly undergoes the process of sedimentation Exclusion of several waterway improvements from national transport plan Digitalization planning not finished Studies on IWW ports development not confirmed by all ports Unequal investments in Port infrastructure in the regions
Ministry of Environment			Regulation on water management Regulation on Urban planning Regulation on safety of nature Implementation of EU water policy Implementation of Natura 2000	Implementation of Natura 2000 Urban planning regulation	Permissions to increase of depths on IWW by technical constructions Implementation EU water policy under process

Government of Lithuania			Regulation on waterway transport, inland navigation, urban planning, spatial planning, National infrastructure plan, waterway administration reform, financial support of funding scheme	National transport plan 2025 AIS Regulation 2017 - 2019 Urban planning regulation 2017	
Lithuanian Maritime Safety Administration		Waterways' safety and security Assurance of safety in inland water transport Ship's inspections and legal proceedings in case of shipping accidents Supervision of the shipping legal provisions' observance, freight documents	Supervision over Regional Water Management Authority Legal issues	Quite efficient activities	Lithuania Shipping safety Administration (LSSM) Reform 2013 not fully implemented Staff planning not yet realized New reform of the LSSA comming
Local self-government municipality	Spatial and Urban Planning Investment in port infrastructure for the IWW tourism			Support for Inland Navigation and Ports for IWW tourism in municipality areas	Urban Planning having Negative response
Port Authority and Terminal Operators in the Port	No clear legislative regulation tools but Port Companies interesting to use IWW for mass and oversize cargo transportation by IWW			Investments in port infrastructure, construction, usage and development of port infrastructure Maintaining design depths in the port basin and at the berths and piers Safe navigation, Drawing up port strategy projects, master plans of the port and port reserve territories, their implementation, scientific research works Advertising the port; Organizing and carrying out port environment protection	Limited development area Limited political support in very urbanized cities and areas

The Government of Lithuania as the responsible body took the opportunity to set up future milestones for the Lithuania inland waterways. The Lithuania Infrastructure Plan and the Lithuanian Inland Waterway Administration reform should make Lithuania waterways reliable to use for the future. Therefore the Government concentrates on the most used waterways especially the Nemunas and Neris rivers and Kursiu Lagoon. This prioritization was discussed intensively with the Parliament and the Government. At the end the planning will embrace also those waterways that are not explored so far with the aim to use them to the full extent in the future.

Open questions are left for the improvement of the navigation on Nemunas and Neris rivers. As the Lithuania Inland Waterway Administration is still operating these navigable rivers as well as Kursiu Lagoon, it is striving to develop these waterways as well as carrying out the major planning. The most important task to fulfill is to coordinate the national political and administrational levels in enacting national planning, legislating actual documentation and carrying it out.

2.5.1.3 THE AIS - RIS REGULATION

For a better understanding the AIS regulation process in Lithuania is discussed as follows. First an overview showing again the several levels involved in this regulation.

Who?	What?	Success and Problems	Intervention	Intervention Scheme
EU DG Move	Not involved but RIS regulation as umbrella	-	Via EFIP	
European Parliament	Not involved	-	Via EFIP	
Ministry of Transport and Communications	Regulation on AIS - RIS	Proposal for regulation on AIS Hearing of accredited associations and market representatives Decision by cabinet	Informal Informal Direct	Informal consultation Informal consultation Recommendation
Lithuania Parliament	Law on AIS - RIS	Consultation in Committees	Direct	Via members of Parliament
Lithuania Parliament	Corrections in Environmental Law	Consultation in Committees Reject special part in regulation Law in Force	Direct	Via Ministry of Transport and Parliament members
Lithuania Inland Waterway Administration (LIWWA)	Law and Regulation on AIS - RIS	Procurement for investments Planning of technology implementation Building transponder station for AIS - RIS Delivering maps for navigation using AIS - RIS	Direct Direct	Via Ports Direct consultation

		Interfaces for data exchange with market users Using AIS - RIS for general obligations of waterway management Review of regulation		
Municipality Community	Law and Regulation on AIS - RIS fulfil	Not involved		
Inland Waterways Ports	Law and Regulation on AIS – RIS fulfil	Using AIS - RIS for safety and logistic business	Direct	Via Ports
Sales and Operation	Law and Regulation on AIS – RIS fulfil	Using AIS - RIS for logistic business	Indirect	Via Ports

Explanation

After a long time of being passive Lithuanian Ministry of Transport has started to implement AIS/RIS as a main backbone of digitalization of inland waterway transport. Therefore the Lithuania Inland Waterway Administration leaded by the Ministry of Transport installed all main waterway transponder and repeater for AIS - RIS (according EU regulations).

One side the vessel operator argues to save data protection by not allowing forwarding any AIS - RIS data to third parties. Other stakeholders identify the need of using AIS – RIS data for navigational safety and logistics management to give inland navigation an advantage in the competition with forwarder and railway operator.

When the law comes in force the Inland Waterway Administration will start the roll-out of the data management, so first result can be seen by the end of 2019 - 2020.

This then enables the Lithuania Inland Waterway Administration also to interchange data with neighbor states and to use the data for a more flexible management of inland shipping on rivers with draught restriction in times of low water e.g. on the Kursiu buy and Nemunas River.

The Lithuania Inland Waterway Administration will develop access to third parties to use AIS data for the management of logistic transport via data link.

2.5.1.4 RECOMMENDATION ON LITHUANIA IWT RESPONSIBILITIES

Lithuania responsibilities on IWT have many historical backgrounds. The system is working and besides a short period of sceptic the political responsible stakeholder wants to enhance the opportunities for waterway transport in Lithuania. Even if the greater influence in overall Lithuania policy is limited the inland navigation and inland ports does have support by the Lithuania Inland Waterway Administration as well as Lithuania legislative and executive bodies on many fields. The importance of inland waterway transport for a greening of freight transport is and was a vital aspect of every Lithuania Government and many regional Authorities. Therefore responsibilities on IWT are in general clear but may have to be adapted to new aspects e.g. safety and emission policy.

2.5.2 RECOMMENDATION FOR EMMA

Lithuania Inland Waterway Administration is not comparable with those in other EMMA countries. From an outside view the responsibilities scheme is quite complex and detailed. This based on historical development and must in general mean no disadvantage. When political will and administrational efficiency comes together the chances that a reformed Lithuania Inland Waterway better enable IWT. For this actions and initiatives from other stakeholder may be needed and can be helpful for those waterways that are not set as very high priority but necessary for the network of waterway in Europe. This can be the learning task for EMMA.

2.6 RESPONSIBLITY REPORT SWEDEN

The Swedish Inland Waterway (IWW) regulation entered into force on December 16, 2014. At the time of the Swedish entry into the European Union in 1995, Sweden decided not to implement the existing IWW regulations. Instead, what now has become IWW-areas, came to be considered as open sea areas. What can be seen as negative is of course that Sweden has never had any IWW legislation prior to 2015, but on the positive side is the fact that these areas are fully equipped with e.g. AIS transponders, ECDIS and are covered by the Vessel Traffic System (VTS) in operated by the Maritime Administration.

In the following especially the role of the various public, but also private, actors that are involved in the now ongoing development of a competitive IWW system, will be discussed.

2.6.1 THE SWEDISH PLANNING PROCESS – EXAMPLIFIED BY A PERMISSION TO BUILD A LOCK OR DREDGE A FAIRWAY

When working through the following, some of what is mentioned are processes to be done in parallel and to shorten the process this should of course be done. Other steps are clearly dependent on each other – like the start of the actual work. That cannot be done until after a decision by the environmental court has entered into force. Although, the procurement has probably been organised beforehand, but no actual work can be done.

In accordance with the Swedish planning principles, issued by the Transport Administration (Trafikverket), all tentative infrastructure projects must start with a pre-study to determine if a more large-scale measure is really necessary. Alternatively, could this investment be avoided by making adjustments of the existing structures. Which should be seen as a way to avoid a larger investment – or which measure that would be the most appropriate - ”Study for the Selection of Measure”(Åtgärdsvalsstudie):

The basic principle here it to do this according to the methodology of “Analysis in four steps”

1. Re-think! Could transport demands be reduced, moved or transported in another way?

2. Optimize! Can road or rail, or something, be used more efficiently?

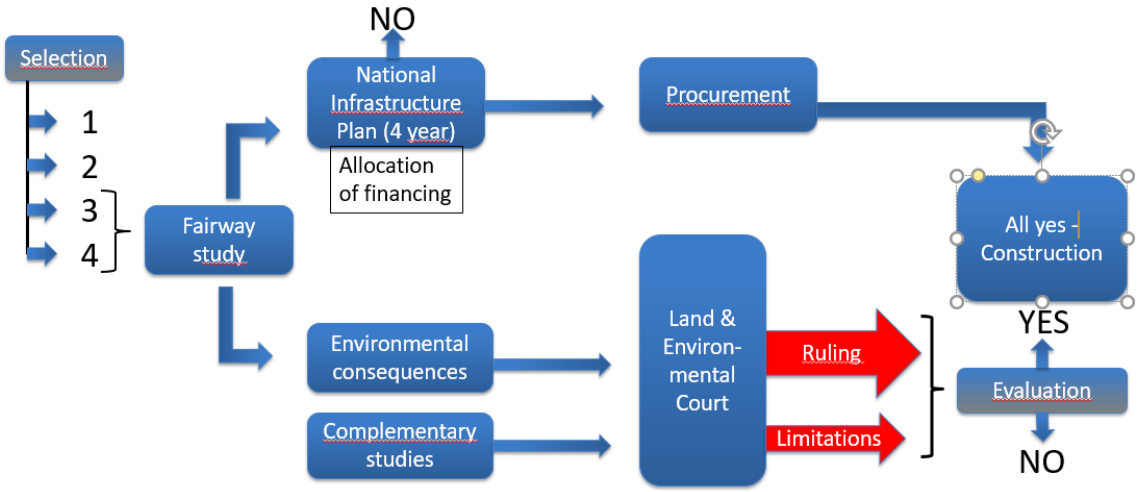
3. Re-build! Could the problem be solved through improvements or other minor adjustments?

4. Build new! If new investment proves to be the only way forward.

The study should aim to come out with a reply to how a problem can be solved using the first two steps, if that is not possible, 3 and 4 should be considered. It might be so that measures of the 1 and 2 kind will still be needed, while the planning process continues towards 3 and 4. The replay of the study should tell why a certain measure is needed.

After having, by way of this initial study, determined that further steps are necessary, there are a number of other steps to follow.

Figure 1 **Simplified example of permit and financing process for larger water-works** (e.g. building of a lock or dredging of a fairway)



The most important is then to do a detailed Fairway Study. Which should must include details about a number of factors, but most important the volumes to be dredged, what kind of material that will be dredged. This is done through sampling and geo-technical surveying, plus a cost estimation when these facts have been established. The outcome will be an arbitrage between factors considering the size of ship to be used, finding areas demanding minimal dredging with the least sensitive infringements on the environment and especially noise and turbidity for those living housing nearby. What must be avoided as far as possible is rocky areas, as costs normally increase by a factor 5 – 10, compared to a soft sea bottom. A study that in addition should give input to the "Description of Environmental Consequences" (Miljökonsekvensbeskrivning - MKB). A most important document when approaching the concerned, out of the five, regional Land and Environmental Courts (Mark- och Miljödomstolen - MMD), requesting a permission. To secure a positive verdict a number of other smaller investigations are also needed.

An important item in the "Description of Environmental Consequences" is to open a dialogue with the concerned community(-ies), especially those living nearby the area where work will be done, and allow for public consultancy periods. It is also important to show that efforts are done to avoid interference on fishing in the area, and that the effects will be as limited, and when possible, avoided. Often also studies related to archelogy (if necessary, or to show that there is no need), marine biology, considerations taken following the public comments, and the handling of the dredged masses. The last point is often critical. If the sediments, as indicated by the samples taken during the pre-study, have indicated any kind of pollution, in any form, limitations in the method that will be allowed to be used during the dredging can be expected. There must also be a time-plan for the work to be done, which must coordinate with the needs for all the different considerations that have been pointed out by the environmental description. In addition, to get an application approved, depending on severity of the side-effects generated, and no matter the project, it is necessary to present a proportionate control program for possible disturbing effects like noise and turbidity. Already when having done, or just

prepared these steps, it can be understood that the methodology must be changed as the restrictions from the court will be punitive, or costs will be far too high. What will be included, in the final application concerning depth of dredging or lock-size, will be an intelligent arbitrage between different factors in the analysis.

What must be included in the Description of Environmental Consequences and what must be included in the application to the Land and Environmental Court – is outlined in the Environmental Law. When taking on a new larger, or principally sensitive case, it has become more or less a rule that the Court visit the area in question and even holds the hearing in a city of the region where the work is to be done.

Practically always, although the verdict from the Environmental Court is positive, if so only in principle, it will include restrictions related to the work. These often adheres factors like allowed work hours, in relation to noise, and time of the year, as regards nearby fish breeding grounds, due to turbidity, and how to handle the dredged material.

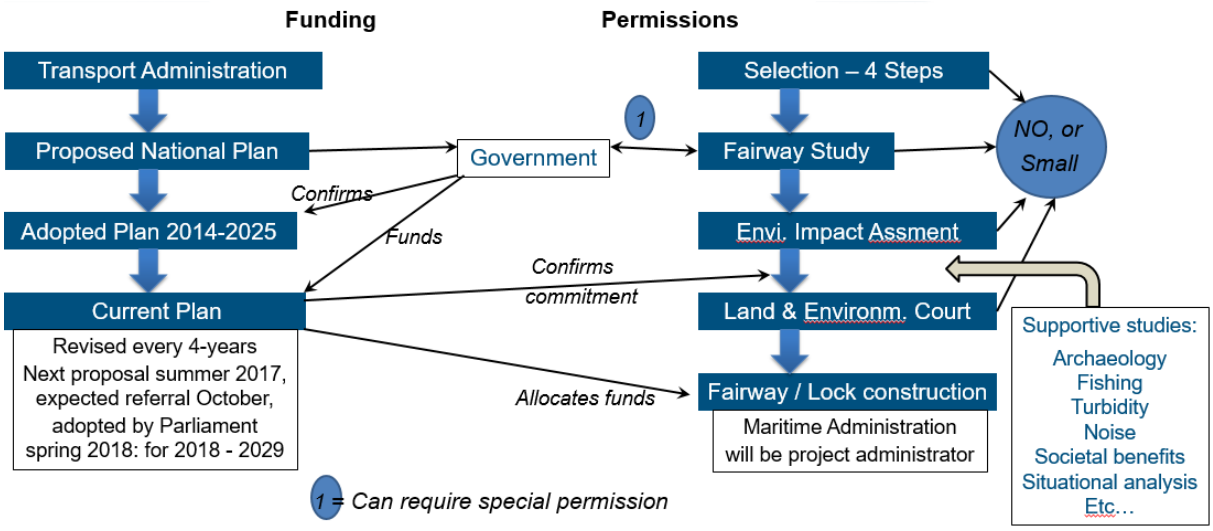
After a (positive)decision from the court, the more detailed work-planning will start, which sometimes has already been started with tendering – but with a clause depending of the decision of the court. To be able to start the process there must be some form of probability that the funding has been secured in the national long-term planning budget – which is done under competition. If not so, and for smaller projects, there is still a possibility that funding can be secured, but facing severe competition, from regional funding reserves. In the case the court decides to deny the project permission, or places restrictions that are seen as punitive or severely restrictive, an appeal might be an alternative. As mentioned, it is not seldom so that property owners in the vicinity of where the work is planned, will appeal a positive verdict – in what might appear as just an attempt to delay the work. If the month for the decision to enter into force is included, any appeal is rarely to be decided by the court in less than six months. I.e., it will generate a delay of at least six months in the workplan for the proposed project.

When it comes to fairways, and changes in classification/rating of fairways, then the Law of Fairways, allows the Maritime Administration to constitute new fairways after permission has been given by the Government – Examination of Permission (Tillåtlighetsprövning). In such an application, an MKB must be included that is a slightly different MKB from the one mentioned to the Environmental Court. This kind of MKB, in addition to the conventional factors, must include a description of the use and function of the few fairway – when ready.

How much time that is needed for the different steps in this process is difficult to tell. So far there has been no new fairway permission given based on the new law. However, it has been estimated from previous handling that it is probably reasonable to calculate 2 – 3 years for this. When possible some steps can be carried out in parallel, while others are dependent on the decisions taken or demands from the Environmental Court. A court that sometimes have less overload and can take on a new application relatively quick. In other cases, it can take six months or more to just open a case, and more than that to get a decision. As mentioned, if an appeal is filed, whatever is the outcome of the verdict, it often means another six months of delay at the court. The process at the Land and Environmental Court for the new lock to Lake Mälaren in Södertälje took about 14 months from handing in all the documentation (about 900 pages, plus additional background reports). The ongoing request for permission to dredge the fairway to the Port of Luleå is has taken 18 months when the verdicts will come in April. That is from the day the application, that included documentation of some 700 pages, plus background reports, was handed in. As in Södertälje, it is probable that, if the court

will grant a building permission, an appeal will be filed by nearby owners, adding more months to the handling time of the process.

Figure 2 Combining the funding process with the permission process



It only complicates the process further that the funding and the control over the national planning process is under the wings of the Transport Administration. Also on the funding side there must be an approval for the plan, and particularly so for all major projects in the plan. All large projects are granted pre-approval by the government, while smaller projects can compete for funding from a smaller, not pre-defined lump-sum, set aside in the plan for regional approval. It is not until the approval is in place for the items in the national plan, and an order for the work has been issued from The Transport Administration, that the procurement can begin and later the work start. As understood from the above there is a considerable coordination effort to be undertaken here to be able to match the accessible funding to a transport demand that is not likely to increase in an exactly linear manner. The first discussions, and investigations with state funding, related to the rebuilding of the lock in Södertälje started more than 20 years ago. The extension work on the lock started in late 2016, and it is now expected to be operational by late 2019.

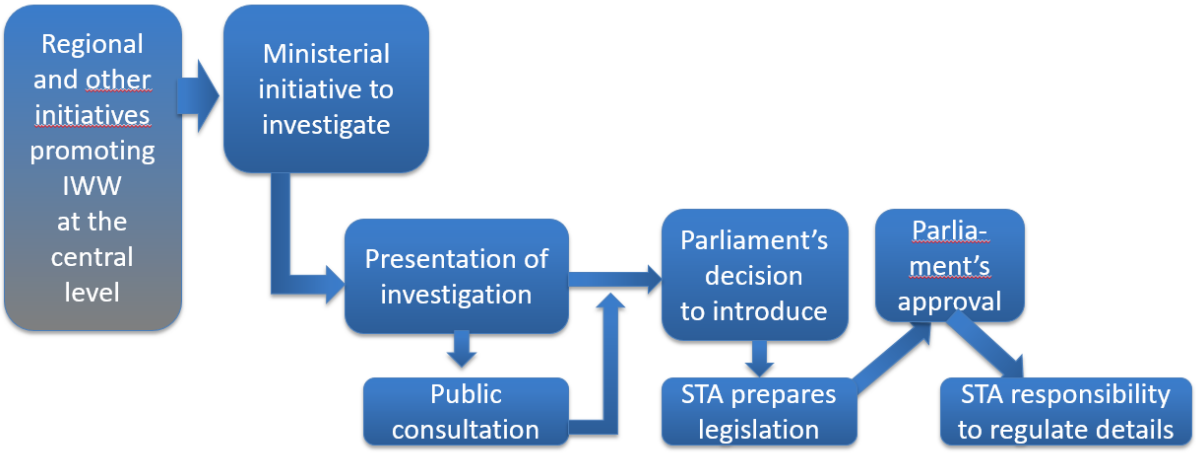
2.6.2 STEP 1 – WHO IN POLITICAL PROCESS – EXAMPLE WITH INTRODUCING IWW IN SWEDEN

The need to introduce IWW regulatory framework were discussed a few times in the years following 1995. The nucleus in the last initiative which led to that, finally, an IWW regulation came in place, was largely organsied by the Region Västra Götaland1. An initiative that made the Ministry of Enterprise and Innovation order a State Public Investigation to oversee what would be the legal as well as practical problems in introducing the EU regulatory framework in this field. An investigation conducted by the former head of the Regulatory Department of the Maritime Administration and long-serving Chairman of the IMO Council, Johan Fransson2. Presented in early 2011, the Investigation came to focus more on the legal side of the necessary changes, than on the practical side of inland navigation.

[1] Which is the official name also in English – e.g. the west Sweden region centred around Göteborg
[2] At the time, what today is the maritime part of the Maritime and Air Department inside the Transport Agency, was organised as a department inside the Maritime Administration.

After the round of public consultation on the conclusions had been reviewed, and incorporated by the Ministry, the Transport Agency was ordered to suggest what necessary changes to existing legislation needed to be done, and to develop new text when that was deemed as necessary. Also this proposal, first presented in 2012, as previously with the Fransson proposal, was from the sector seen as not sufficiently detailed and lacking numerous practical sides outside of legislation. In addition, partly too detailed and in many ways containing a number of Swedish regulatory exceptions, that would become unique for Sweden. The Parliament came to adopt approximately the legislation as suggested, while instructing the Transport Agency to continue to work on the parts that where further regulations were needed.

Figure 3 Simplified version of flow chart for IWW-introduction in Sweden[3]



(STA = Swedish Transport Agency)

As understood from the above the process leading to today's situation, when it comes to Swedish IWW, takes its point of departure in a political process emerging from West Sweden. An initiative that successfully managed to convince the Parliaments Transport Committee about the need to oversee Swedish legislation in this field. Leading to that the Ministry did this, and later ordered the Transport Authority to prepare legislation, that came to be adopted by the Parliament.

Other actors in the process were the Maritime Administration, but an organisation that already carried the responsibility for the waterways, most locks and canals of IMO standards, and where this process led to little change. For County Administrative Boards, Municipalities and ports, together with existing other network organisations, the process led to few changes. Actors that had made their voices heard during the public consultation, that is compulsory for legislative changes, but where many felt that their opinions and suggestions had not been listened to. Practically all, at various stages, called for a legislation that would be better aligned with the corresponding legislation in other EU countries. Not least to make it possible to commence domestic IWW traffic with (second-hand) ships of the kinds used on European rivers. Then also to add ships, and replace ships, from a much larger fleet base,

[3] In the last step, like in the introduction of new legislation, this must be confirmed by the parliament through a bill (Proposition) from the Ministry to the Parliament. When, as in the introduction of IWW-legislation, which must correspond to EU-regulations, the suggested legislation had to be reconfirmed by the EC before it could be introduced in Sweden. In some less formal cases, decisions can be taken by the Minister/Government. Processes that are time consuming; with the IWW legislation it took about 7 years from the first initiative, until introduction.

when demand so require. With the suggested, and now confirmed, legislation, ships adjusted for Swedish IWW must carry extra equipment and need adjustments to be allowed to service in Swedish waters under our IWW-regulations. In addition to the problems caused by ice in winter, which in itself is a complex issue.

What is currently ongoing in the field of regulations, framing the use of IWW in Sweden, is the lack of regulations that can combine the descriers of the regulating authorities with the need of a functionally acceptable for the shippers. What has been implemented so far, and its usefulness is well understood from examples given, and the fact that after 15 months of regulations in place, not one single IWW vessel has been registered in Sweden. In an attempt to overcome this administrative hurdle, the Transport Agency has initiated a long-discussed project aiming for the possible introduction of new regulations based on a goal-based-approach. Introducing regulations where the applicant must show that his approach, his vessel, his staff, the knowledge in the company, in relation to where and how the company would like to operate, that the permission applied for, can be given. Possibly with some reservations or additional demands, but not being based on strict formal demands. A new way of working, applying functional requirements, that has been announced, and were its first real application with a permission given, can possibly be seen in the second half of 2017.

2.6.3 STEP 2 – WHAT TO DECIDE?

As partly demonstrated under Step 1 above, the initiative to introduce the concept of IWW, in a partly European way, was taken as a result of a political process. A political process that resulted in the investigation initiated by the Ministry, demanding the Transport Agency to draft legislation that was later adopted by the Parliament.

With legislation in place, the detailed regulations have been worked out by the Transport Agency when it comes to e.g. ships specification, need of piloting, qualifications of crew, and work hours. Legislation, that can be expected be applied in a Swedish setting, where it is not expected that many ships, if any, will be “family-operations” in the way many ships are in the European setting.

Ownership in a Swedish IWW sector is instead likely to be the same companies as already own SOLAS ships, but branching-out into IWW. At the same time, the market is not really possible to identify very easily, and as a result, the growth cannot be expected to be very rapid. The marketing of the concept of IWW has for some years not been particularly noticeable, which can be much attributed to the lack of clear legislation. Which is partly still the case, as the first ship has still not been classed according the existing IWW legislation and the new regulations introduced. The marketing done in later years of the “IWW-concept” can be much attributed to the Swedish Maritime Forum and partly the Shipowners organisation.

As it has not been attempted by any owner to register a ship in line with the Swedish IWW legislation, the exact results, and how it will be applied in its details, is not really known.

2.6.4 STEP 3 – SUCCESS AND PROBLEMS THAT FOLLOW

The by far most important for Swedish IWW is that there is legislation in place. It is also something of a success that the Ministry requested the Maritime Administration to do a large study of the possibilities to transfer cargo from the land to sea. A assignment given in January 2016, with its results presented in December 2016. Under the current circumstances, the investigation concluded, the most

noticeable potential for a transfer of cargo from land to sea can be found within short-sea-shipping. Without changes in the balance of national charging for transport in general, the potential for IWW was judged to be limited. The investigation, that had been able to draw on the work done and seminars organised within EMMA, included several recommendations that, for sure, would support the establishment of IWW in Sweden. One important suggestion was the need to name a national coordinator for questions related to IWW. A function that would have an overview of all different on-going activities, and who would be able to connect and support what today appears to be a diverse palette of initiatives in the field of IWW. The official reaction from the Ministry to the recommendations has, at the time of writing (in mid-March 2017), is yet to be presented. That is if what will be presented here as the third success should not be interpreted as such a reaction. In late February, the Ministry instructed the Agency for Transport Analysis (TRAFA) to investigate the potential for the introduction of an ECO-bonus type of system. Partly, this can be seen as a way to make do on the much-discussed transfer of especially long-distance cargo from road and rail to IWW[4]. An investigation to be presented already in late May 2017. What is demanded in the outline is information about to what extent a bonus system could support cargo to move away from the use of congested railways and road to make use of alternative means of transport on water

Lake Vänern, being the biggest lake in Sweden, together with Lake Mälaren, as the third biggest, are both classed as SOLAS and IWW areas. With its large open surface, Vänern has been given partial wave restrictions of Zone 1, while no such limitations apply to Lake Mälaren where the full surface is Zone 35. Seen to the ongoing planning by some companies to introduce IWW as a possible business undertaking, it is a considerable draw-back that the decision when it comes to the reconstruction / new-building of the locks to reach the largest lake, Vänern, is still pending. By June 2017 the Transport Administration will present its much-awaited list of national prioritised larger infrastructure projects. Projects proposed to be subject to state financing during the coming four years, in line with the suggested time-plan. A list, that can be expected to see some minor (politically motivated) changes, and will be finally approved and confirmed by the Parliament in October. The approximate cost for a rebuild and renewal of six somewhat extended locks between Göteborg and Lake Vänern, has been estimated to EUR 3.8 bn. However, this is only one of many (road, rail and fairway) projects on the list, where the total cost several times over exceeds the available funds. If no funding is made available, the existing locks are expected to close by 2030, due to stability considerations. As mentioned, a strong lobbying effort has been put into this, which also other large-scale projects has launched, and the competition among projects for funding is razor-sharp.

In parallel, the construction of a new, and much larger, lock from Södertälje to Lake Mälaren, has received full state funding in the previous plan. Preparatory work started in late 2016, with its inauguration being planned to late 2019, at a cost of EUR 1.7 bn[6].

Lake Mälaren has a major advantage by way of its location in the most densely populated part of the country with about 2 million living in the vicinity of the lake. An area that includes the economically expansive Stockholm Region, with waterways passing through the city and with the city spread out

[4] Eco-bonus was used to make trucks mover over to long-distance ferry traffic in Italy in the early 2000's, with payments made directly to the truck owners – but proved administratively complicated. A similar Norwegian system is about to be introduced, to convince cargo(owners), normally using trucks, to use coastal shipping instead.
[5] Zon 1 – maximum 2.0 meter; Zon 2: maximum 1.2; Zone 3: maximum 0.6; Zon 4: No wind generated waves. All heights are "average wave height between highest and lowest part of the highest 10% of the waves during the measurement period".
[6] The single lock lifts some 60 cm, and will be expanded to 190 m long (135 today), 25 meter wide (19 today) and dredged to allow 7.0 m draught, at average sea level, in the lock and along the fairway in Lake Mälaren.

over several islands. A situation that allow for business opening in the field of IWW. On the other hand Mälaren offers relatively complex fairways, where bridge openings are required to reach the major ports; one for the largest port of Västerås, and one more for the second largest port in the west end of the lake, Köping. While lake Vänern during normal winters have a state ice-breaker stationed in the lake, this is not the case in Mälaren. Here, for 2/3 of all winters there are restrictions in place, for shorter or longer time periods, as to the machine power needed for ships to enter the lake. For 2/3 of the winters during 32 years, a minimum size of 1 300 dwt with Ice Class 1C has been required to maintain uninterrupted traffic to >80%. It must be remembered though, that the ice situation is generally much worse in the western Köping part of the lake than in the more eastern parts of the lake, like in Stockholm.

Also supportive research efforts are ongoing in Sweden about e.g. hull-shapes, load resistance, and ice-breaking capacity for smaller vessels. Especially so as the interest in an increased use of existing waterways for passenger transport has been seen, as a result of a better understanding of the advantages that this could bring on both regional and city level.

2.6.5 STEP 4 – INVOLVING EXPERTISE FOR RISK MANAGEMENT

No Swedish input at this moment!

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EMMA project continuously working together with expert via expert panel. Both expert panel and EMMA team will:

- review steps 1-3,
- Identify risks following bureaucratic and regulatory restraints as well as insufficient interaction,
- Compare risk BSR wide and
- Develop a Risk Warning System as solution for activity 3.2

2.6.6 STEP 5 - OUTCOME

No Swedish input at this moment!

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EMMA team will document all outcomes of step 1-3 as well the risk identified and accomplished in the Risk Warning system. BSR country PP deliver recommendations on national level and together workout learning on BSR level in joint report.

2.7 ANALYSIS OF THE DECISION MAKING PROCESS ON EU LEVEL REGARDING RELEVANT IWT REGULATIONS

This chapter has to be completed by KSTP, originally Activity 3.2.

3 COMPARISON & RECOMMENDATIONS FOR EFFICIENT ADMINISTRATIVE STRUCTURES OF RESPONSIBILITY

In all EMMA countries an Administration responsible and active for IWT exist. EMMA partner achieved a different intense of administrative power and management for IWT. The following part will reflect these matters.

3.1 COMPARISON OF THE OBLIGATIONS OF THE DIFFERENT ADMINISTRATIONS IN THE BSR

In Lithuania IWT has a very low administrative support. It is legally under responsibility of the National Waterway Administration like in Sweden and Finland dominated by maritime issues. Only a few staff members working on IWT, dealing with a very low budget and not national plans for IWT infrastructure.

Finland as a country with many lakes has good opportunities for IWT. The transport ministry as responsible body normally delegates all administrative issues to the transport agency. In the ministry no explicit IWT department exists. Never the less because of existing IWT especially on Saimaa Canal the transport policy do have a IWT strategy establishing and enhancing the IWT on the existing routes. Infrastructure improvement are planned to incorporate larger vessel e.g. used in other European country.

The Finish ports are important for freight transport but not as present as in other European countries. Also the Finish Waterway Association as the lobby fosters IWT, but may not been present in the Finish publicity. As the administrative structure exists the key is therefore in the political responsibility and the implementation of the plans made.

Legally neither IWT regulation nor administration in Sweden exists up to now but it is planned to implement that soon. Today the different administrative levels govern the IWT business a lot. The Swedish transport ministry delegates the IWT issues to the maritime administration and the transport agency. The agency can be seen as the bottleneck that due to missing regulation and legislation may hinder the development of IWT up to now. By starting a dialogue especially of Swedish EMMA partners (PP6,7,8,9,10) the perspective became much more clearly and therefore the future administrative structure can implement the IWT plans and regulations. Therefore the initiative of Viktoria (PP7) for a new framework for IWT is very positive and supported by the Parliament e.g. financial support.

The Polish waterway administration is beside the German the most advanced and developed in BSR. Poland has long tradition in IWT and an extend network of inland waterways. The ministry of transport is responsible for IWT and has IWT department that govern and lead the IWT development. The waterway administration is working with regional inland navigation offices. The new Polish government presented a plan for IWT development that shall overcome the long-time standstill in IWT in Poland and started to foster project all over the country. The government promised to provide the needed financial support and started a dialogue with interested parties. The lack of IWT awareness in Poland may slow down this process as also the waterway administration have to restart they activities improving the infrastructure.

The German waterway administration is compare to the other in BSR the most advance and engaged. Over 10.000 people working for them are managing the biggest inland waterway network in Europe and one of the biggest in the world. The structure is clear and well organized. The administration has full responsibility of the waterways including police rights. The legal and administrative regulations are detailed and approved over the decades. The transport ministry has an own department for waterways and the waterway administration has several agency for special tasks. The administration is accompanied by several lobby organization and included in networks. The national transport plans pre-develop IWT infrastructure and financial support is available and defined by new law. On special projects the dialogue with NGO was started to involve their obligation in major projects.

Starting in 2012 a reform of the German waterway administration was started after years of discussion. The main idea is to restructure the regional departments to make them more efficient. The reform is still in progress and has direct influence on the projects relevant for the EMMA BSR waterways. The key challenge will be to have enough staff resources ready to start, plan and build the relevant projects. As the progress is slow any initiative here is welcome.

3.2 EVLUATION OF COUNTRY ADMINISTRATIVE STRUCTURES AND LESSONS LEARNED OF THE COUNTRY REPORTS

Looking at the different country report on IWT responsibility it becomes very clear that the willingness and fitness of the responsible administration to develop IWT is the main issue. As in Finland and Sweden the Agency dealing only sometimes with IWT it is for progress not as good as having a separate administration for IWT like in Poland and Germany. The Finish and the Lithuanian situation are different as the administrational structure for IWT is weak. What is recommended is a minimum level of administrational responsibility meaning a IWT department of the relevant ministry and/or the transport agency following a concrete plan for IWT in the country. For Germany and Poland the job is to restart the infrastructure development as the main obligation of the waterway administration by supporting with financial opportunities and staff resources.

The right administrative structure is worthless without political support by politicians in the parliament or government. Committee of the parliament have to overlook IWT topics frequently and giving duties to the waterway administration. Concrete projects for further IWT infrastructure development are necessary to align the administration and starting the progress along concrete plans that open all todays question like the realistic standard for IWT infrastructure, environmental friendly enhancement of infrastructure, incorporation of several stakeholder including NGO as well as argumentation for the need for extended infrastructure including moving freight from road to waterways.

EMMA partner found positive and negative examples for the before mentioned approach. In most of the country existing waterway infrastructure becomes old and not more reliable. Too much time was spending to do nothing and permanent investment was missed. Examples for these are the Oder River, the locks to lakes Mälaren and to Saimaa canal. The positive signals are the planned extension for these infrastructure bottlenecks fixed in national plans and agreements.

EMMA defined therefore a power through cooperation as the right way to overcome existing barriers. Stakeholders and administration should jointly work together on these projects and implement the plans of the government. Especially for more public awareness and political support stakeholders can

add administrative work best way. Is most of the EMMA country first mover are helpful. So Avatar and Viktoria are playing this role in Sweden as the Chamber of Commerce can to that in Poland. In Finland and Lithuania University and consultants can in the beginning help the administration to initiate progress from the outside. In Germany a cooperation of several Associations like BÖB and IHK can start initiatives for progress.

4 RECOMMENDATIONS FOR EMMA

The country report and the comparison of IWT responsibility in BSR made very clear that EMMA needs to support first movers for a better IWT in these countries. Luckily these first movers already participating in EMMA or are associated with EMMA project.

The roundtables framework would be then the ideal framework to start several initiatives on country level and collect other supporters. Extend awareness in the media by doing media work is essential to get also politicians interests.