

#### Integrating Danube Region into Smart & Sustainable Multi-modal & Intermodal Transport Chains

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## 1 Description of the Output [Application Form]

#### Event's purpose, goals, and objectives

In total three Workshops on Container Liner Services were designed and executed, one workshop each by MPAC in Constanta (Online), one by FTTE in Belgrade (Online), and one by MPAC in Constanta. These workshops constitute 0.T1.4. The workshops reunited PPs, ASPs, and external stakeholders and were organized with the purpose to identify interested companies to revive and develop the Container Liner Services on the Danube River. With this occasion the reports of the previous stakeholder meetings and the draft of 0.T1.5. - Policy recommendations for Container Liner Services on the Danube River (report) were presented and further discussed. The target audience were the stakeholders interested in further elaborating Business Cases which would bring together specialized concepts and policy recommendations, highlighting the necessary activities in order to initiate and support the development of container liner services. Besides the specialized project partners who brought in their expertise in IWT activities (port authorities, ship owners, port operators, consultancy companies), researchers (maritime and transport universities), representatives of business support organizations (chambers of commerce & industry) and policy decision-makers (transport ministries) also contributed. On these occasions, the Stakeholders Reference Group was initiated and expanded.

#### • **Event's main topics** (as per the agenda)

The 1st Workshop on Container Liner Services aimed to identify interested companies to revive and develop the Container Liner Services on the Danube River. The Stakeholders Reference Group was initiated. The topics covered points of view and presentation of both public entities and private stakeholders and operators having relevant experience in the field of Danube container transport.

# Event's policy context (Contribution to EUSDR actions and/or targets etc., national, EU policies etc.)

WP T1 aims to provide a substantial knowledge basis regarding ongoing and future transport corridor developments in the Danube region as well as regarding their potential connections to transport corridors and networks in the Black Sea region.

The analyses and assessments carried out in this work package shall identify gaps in corridor planning and transport infrastructure of the DR. They also will deliver recommendations on how the Danube ports could gain importance through increased cargo flows thus creating economic prosperity in the DR as well as on the commercial and socio-economic impact on insufficient waterway maintenance.





Dedicated investigations will be carried out regarding the opportunities and potential threats for Container liner services which are considered as a pre-condition to develop container transport on the Danube of significance.

#### Event's expected outcome

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The events' expected outcome is the elaboration of Business Cases which will bring together specialized concepts and policy recommendations, highlighting the necessary activities in order to initiate and support the development of container liner services. The Stakeholders Reference Group was also initiated and further consolidated.

#### Target audience

The target audience of the workshops was comprised of: stakeholders interested in further elaborate Business Cases which will bring together specialized concepts and policy recommendations, highlighting the necessary activities in order to initiate and support the development of container liner services, specialized project partners who will bring in their expertise in IWT activities (port authorities, ship owners, port operators, consultancy companies), researchers (maritime and transport universities), representatives of business support organizations (chambers of commerce & industry) and policy decision-makers (transport ministries).

<u>Event's type</u> (conference, workshop, etc)

Workshops

Event's format: Virtual Event, In-person, Hybrid

**Online events** 

• <u>**Contributing deliverables to the Output</u>** (relationship with any project deliverable</u>

leading to the output)

The reports of the previous stakeholder meetings and the draft of O.T1.5. – Policy recommendations for Container Liner Services on the Danube River (report) were presented and discussed.



## 2 Target Groups

#### 2.1 Event #1: 1<sup>st</sup> workshop on Container Liner Services

_		Number of Participants
1.	Business support organization	3
2.	Higher education and research	8
3.	Infrastructure and (public) service provider	-
4.	International organization under international law	13
5.	Local public authority	13
6.	National public authority	15
7.	Other – IWT and port operators	-
8.	SME – private port operators and SMEs	22

#### **2.2 Event #2:** 2<sup>nd</sup> workshop on Container Liner Services

		Number of Participants
1.	Business support organization	12
2.	Higher education and research	15
3.	Infrastructure and (public) service provider	9
4.	International organization under international law	8
5.	Local public authority	3
6.	National public authority	7
7.	Other – IWT and port operators	21
8.	SME – private port operators and SMEs	7

## **2.3 Event #3:** 3<sup>rd</sup> workshop on Container Liner Services

		Number of Participants
1.	Business support organization	4
2.	Higher education and research	4
3.	Infrastructure and (public) service provider	4
4.	International organization under international law	9
5.	Local public authority	16
6.	National public authority	2
7.	Other – IWT and port operators	10
8.	SME – private port operators and SMEs	-

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## **3** Conclusions & Lessons Learnt

### **3.1 Event #1:** 1<sup>st</sup> workshop on Container Liner Services

 Post-event reports (Summary of the main results, conclusions, recommendations, and lessons learnt)

The 74 participants represent important organizations (public institutions, authorities, private companies, associations, universities, research organizations, etc), providing useful information based on their various areas of expertise.

This first event was an important step towards the revival of Danube container transport. The purpose of Dionysus is to reunite relevant decision-makers who influence inland waterway transportation and to build the foundation of a stakeholder reference group, where people from EU organizations, private companies or all those involved in the academic fields can discuss the problems they identify in practice but most importantly, to provide solutions. While designing plans for the future, previous experiences and mistakes should be used as lessons. Moreover, the fast evolution of digitalization, the increasing trend of using clean transport ways and availability of EU funding schemes must be used as engines for keeping Danube a desirable transport alternative.

It was stated that the most important output of the project will consist in the elaboration of a large number of port development plans, which will consequently be used by project partners for preparing quality investment projects in order to obtain EU funding. These investment projects will have a significant impact on the regional economic development of the port hinterland, making Dionysus a key instrument for reaching the EU's strategy regarding the Danube river.

Mrs. Desiree Oen, senior expert in DG MOVE and adviser to Karla Peijs, European coordinator of the Rhine-Danube TEN-T Corridor, expressed her congratulations to the entire Consortium for initiating such an ambitious project for the Rhine – Danube Corridor, emphasizing the importance of well-developed ports as modal points of intermodal logistic chains, playing a key role in facilitating a sustainable transport growth in the Danube Region. Mrs. Oen underlined the importance of port development as a catalyst to stimulate economic development and to create employment for both maritime and inland ports, making it essential to ensure available adequate infrastructure is the Rhine – Danube ports. Port developments plans are highly awaited and they will stand as an important corner stone in the development of sustainable logistic chains in the Danube Region and further in Europe.

"We need to create a real dialogue and not a competition" is the message from Desiree Oen, who highlighted the European Commission's constant efforts to support transport on the Danube, a priority being the fairway maintenance works on the inland waterway, customs



formalities and digitalization. She also highlighted the importance of developing the Danube ports in terms of infrastructure, but also the need of an adequate fleet, which can be achieved by using dedicated financing instruments in the next period for the development of this waterway, all these measures being a support for the transport of containers. The need to invest in the entire navigation system of the Danube is vital, mentioned Ms. Oen expressing her conviction that the Dionysus project will be a real support for the sustainable development of transport on the Danube by creating an open dialogue environment, but also through the analysis and studies resulting under this project.

Mr. Manfred Seitz, General Director of Danube Commission mentioned that when dealing with development issues related to transport on the Danube several exciting questions arise. One is why are there so few containers being transported on the Danube although the worldwide container volume has grown extremely in the last decades. The second question is how can container transport on the Danube be developed and moreover, transformed into an economic success. The answers to these questions will be investigated within Dionysus, through concepts and analysis and by facilitating cooperation between stakeholders having economic interest but also economic power and market capability to make container transport at a larger scale, going beyond niche markets.

Manfred Seitz mentioned that, although a number of projects/studies have already been carried out on how to improve container transport on the Danube, it is now more necessary than ever for this topic to be brought to everyone's attention again, given the need for economic integration of the Danube region, the continuation of the process of expanding global logistics chains to all modes of transport, the continuous growth of the container market, transport connections dedicated to containers that can be made through the Port of Constanta in the Black Sea region and towards Asia, the growing interest of logistics companies in developing river ports, the European Commission's Green Deal policy that makes it necessary to include the Danube as a way of transport which contributes to reduced environmental pressure.

Presentations were also given by university representatives and also from the business environment.

Presentations by private companies interested in the development of container transportation on Danube River showed that today's main barriers and challenges for the container liner services on Danube. It was explained that the main barriers in today's Danube traffic are Danube's infrastructure (water levels and navigability) and Danube ports (quays, equipment, connections to hinterland). It was underlined the necessary investments for the majority of ports in the lower Danube, such as: quays platforms and supra-structural works; dredging works in the ports; specialized equipment for container operations; road and rail connection. Regarding a long-term strategy a 5 points plan was presented, including investment programs in new river vessels with low drafts, investments in port infrastructure, supra-structure and equipment and market analysis – proximity to market and efficiency.

Some companies stressed on the idea that they will never give up developing container transport on Danube, discovering in practice that one of the ways to achieve that is by using big capacity and low draft vessels.

Input provided to various project activities, deliverables, or policy initiatives (national, EU, regional level) in line with the topics discussed and conclusions delivered by participants

Stakeholders Reference Group was initiated and in the next period of the project expanded.

By the presence of relevant representatives of the European Commission organisms and Danube Commission, the information disseminated within this event reached the targeted environments of European policy influence factors. The results will contribute to 0.T1.5 – Policy recommendations of Container Liner Services.

Follow-up measures and activities

There were organized some meetings with private operators in order to further discuss the problematic of container liner initiation. The Stakeholder database was further extended.

• Any other relevant information

#### **3.2 Event #2:** 2nd workshop on Container Liner Services

• Post-event reports (Summary of the main results, conclusions, recommendations, and lessons learnt)

The 82 participants representing important organisations (public institutions, authorities, private companies, associations, universities, research organisations, etc) took part to the Workshop and provided useful information based on their various areas of expertise.

Thus, representatives of shipping companies, ports, agencies, state authorities, and the academic community need to take them into account and to find ways to overcome them, if the container traffic on the Danube is to be further increased. Prof. Maraš mentioned that the workshop ambition was to provide a chance to stakeholders from the Danube region to familiarize themselves with the experiences of other regions in the COB development.

In that context, he particularly welcomed the participants from the Rhine Commission, Empyria STM, Argentina and Department of Inland Waterway Transport, General Department of Waterway-Maritime Transport and Port, Ministry of Public Works and Transport, Cambodia who were invited and accepted to give presentations about COB developments on the Rhine River, Parana – Paraguay Waterway and Mekong River. Prof. Maraš also highlighted that innovative barge technologies should contribute largely to launching and improving container liner services on the Danube River. Therefore, workshop participants were in



position to listen about most recent advances in the inland waterway transport from invited speakers from TU Delft, University of Belgrade – Faculty of Mechanical Engineering, Expertiseand Innovation Centre Barging (EICB) and Mercurius Shipping Group. It was particularly underlined that the workshop approach was defined so as to enable workshop participants to acknowledge key success factors for container barging and get new ideas on how to initiate these services on the Danube River.

Mr. Alexandru Craciun, head of Governmental Affairs, DP World, pointed out that the purpose of the DP World is to enable smarter trade and create a better future for everyone. He explained that DP World has two mainline and six feeder services calling at their container terminal in the Port of Constanta. Even though there were some attempts, so far we have not experienced consistent development of the COB on the Danube River.

So, the liner services which exist in the maritime legs and calling at their terminal in the Constanta Port have not been replicated, in any measure, at the river legs. Mr. Craciun pointed out the DP World posses perfect conditions for handling river barges at the terminal. Therefore, the problem related to the lack of container services on the Danube does not stem from the maritime transport aspects. Mr. Craciun raised the issue of customer expectations from the Danube transportation. According to him, customers would like to see reliability, transparency, visibility and efficiency. Today, contrary to other transport modes, Danube container transport can offer to the customers uncertainty, lack of transparency and long transit times. First condition for liner service to work is predictability – the foundation the concept of liner services has been built. So far, predictability issues have been related to the improper infrastructure maintenance on the Danube.

Experiences of inland waterway improvement from other world parts were presented.

Mr. Ariel Savarese began his speech by presenting natural inland waterways in South America. He explained the benefits of the Parana – Paraguay waterway compared to other rivers and introduced important container ports. Container transportation experienced very significant growth during recent years i.e. 50% growth from 2011 to 2018.

Mr. Savarese presented several inland shipping companies like CMP, Nevemar, Panchita. Although the container movement is very small in comparison to other countries in the region, the experienced growth has shown that this waterway has great potential. Predictions for the future are a normalization of operations after COVID-19 and the historical low water level 2020/2021, the introduction of Bolivia as a new stakeholder and user of the waterway and Montevideo is going to have a port with 50 feet draft.

Ms. Lisotihny Chin from the Ministry of Public Works and Transport in Cambodia presented International Port Development in Cambodia on the Mekong River which is the 12th longest river in the world and the 7th longest in Asia. The Mekong flows through six countries: China, Myanmar, Thailand, Laos, Cambodia, and Vietnam. Ms. Chin explained that ships can't operate along the entire length of the river. He presented the Phnom Penh Autonomous Port – PPAP as the largest river port operator and the second-largest international container terminal port in Cambodia with accessibility to vessels from the South China Sea through Vietnam. According to Ms. Chin, PPAP operates four terminals with significant growth of container



traffic. The PPAP has several challenges like the quality of the port's infrastructure and port services, lack of Laws and Regulations, and the Port has faced with many issues arising out of the technical problems with the equipment, deficiency in information systems, etc.

Mr. Chin presented two activities for improving port operations. The first one is related to the port to the ship direction and includes dredging and maintenance program, aids to navigation, AIS, pilotage service, better arrangement of tug assistance, barge formation and berth allocation improvement. The second set of activities refer to port to the customers relations and includes expansion of port infrastructure, improvement of TOS, the establishment of SEZ and Cold/Dry warehouses, improvement of container liner service, etc. In conclusion, Mr. Chin explained PPAP cooperation needs and joint actions.

Administrator for Statistics and Market Observation Dr. Robert Kriedel from Central Commission for the Navigation of the Rhine began his speech by explaining why container transport has struggled with growth path last several years. Dr. Kriedel pointed to the highest intensity of TEU containers on this river and showed container transport volume depending on the observed sector. He showed the difference between the movement of containers upstream and downstream, as well as the countries of TEUs loading and unloading.

Observing the upstream and downstream movements on the Lower, Middle, and Upper Rhine of full and empty containers Dr. Kriedel represented the status of container transportation on this river.

Dr. Kriedel's drawn several conclusions in addition to the fact that container transport is in competition with the railway and explained that a longer-term outlook points out to a structural slowdown in the world trade growth, which would affect long-distance container transport on the Rhine.

Prof. Dr. Bart Wiegmans gave a presentation about performance of intermodal inland waterway transport, i.e. modeling conditions influencing its competitiveness. As the introduction prof. Wiegmans explained the differences between costs of road-only and intermodal transport using a transport cost model and scenarios. He explained the base case for sailing IWW.

Prof. Dr. Bart Wiegmans showed cost competitiveness of intermodal barge transport in single trips for sailing, handling, and haulage; cost competitiveness of intermodal barge transport in roundtrips, and impact of terminal size on the cost competitiveness of intermodal barge transport where the one of several important conclusions is motivation to promote intermodal transport. Prof. Wiegmans explained that important influence in this research had the cost of pre-and end-haulage, roundtrips, use of FEUs (instead of TEUs), examination of impact of larger vessels, handling costs, and drop & pick operations.

The topic of the second presentation of Prof. Wiegmans was Evaluation of Potentially Successful Barge Innovations where the focus of work was to examine to what extent increased barge transport offers an alternative for road transport. According to the professor's opinion, it is very important to find new markets and new products that can be introduced. He presented barge innovations such as double-hull barges, ICT, Fuel cell, electric



barge motor, catalyst, and filter systems, Z-drive, Advising, Air lubricated barges fast barges, etc.

Prof. Wiegmans told that the most promising innovations for a successful broad-based market introduction are the catalyst and filter systems, Z-drive, Tempomaat, air-lubricated barges, model shift scans, dedicated barges, and sea-river transport, and that is very important for barge transport to create new markets and new products to stay competitive with road transport.

Prof. Dr. Igor Bačkalov from the Faculty of Mechanical Engineering, University of Belgrade begins his speech by explaining inland container vessels that have very specific design futures. According to prof. Bačkalov such vessel should operate in low water periods. Prof. Bačkalov showed a convoy of partially unmanned or periodically unmanned following vessels remotely controlled from the fully manned leading vessel and explained the design of the VT ships (objectives, challenges, approach, and results). As the design results, he presented five container RoRo vessels: NOVIMAR Class Va inland container Ro-Ro vessel – regular draught, NOVIMAR Class Va inland container Ro-Ro vessel – regular draught, double-end access version), NOVIMAR Class III inland container Ro-Ro vessel, NOVIMAR seariver container Ro-Ro vessel.

Mr. Erwin van den Linden presented the project NOVIMOVE related to novel inland waterway transport concepts for moving freight effectively. He explained that IWT is a major key-holder for unlocking congestion in seaports, terminals, road networks, and access to urban areas besides being a main factor in reducing CO2 emissions in transport and that potential is not yet fully exploited. Overview of key NOVIMOVE results includes enhanced IWT freight throughput performance with respect to 2010 for the Rhine-Alpine route and innovative vessel concepts and operations. According to Mr. Linden's presentation, a dynamic scheduling system for bridges and locks will be in use by 2026.

Dr. Cornelis van Dorsser, independent consultant at Trends & Transport, shows the effect of ship dimensions on the capacity of inland ships. He explained the importance of volume, deadweight, and stability of the vessel.

Dr. Cornelis van Drosser explained the principles of static vessel stability, and the effect of stability on container loading capacity as well. According to this presentation, containers can be stacked approximately as high as they can be stacked in width – but not always full on the top layer. Conclusions on vessel capacity for heavy bulk cargoes tend to be constrained by the deadweight of the barge that scales with the product of the length, beam, and draft on the vessel, and lighter more voluminous cargoes tend to scale with the length and the square of the beam – explained Dr. Cornelis.



• Input provided to various project activities, deliverables, or policy initiatives (national, EU, regional level) in line with the topics discussed and conclusions delivered by participants The

Problematic of initiation of new container liner service was presented at European but also regional, worldwide level. Stakeholders Reference Group was initiated and in the next period of the project expanded. The results will contribute to O.T1.5 – Policy recommendations of Container Liner Services.

Follow-up measures and activities

The Stakeholder database was further extended. The results will contribute to 0.T1.5 – Policy recommendations of Container Liner Services. Information will be disseminated to port communities

• Any other relevant information.

#### **3.3 Event #3:** 3<sup>rd</sup> workshop on Container Liner Services

• Post-event reports (Summary of the main results, conclusions, recommendations, and lessons learnt)

The 50 participants who attended the 3rd Workshop on Container Liner Services represented important organisations (public institutions, authorities, private companies, associations, universities, research organisations, etc), providing useful information based on their various areas of expertise.

The purpose was that actors to the same table would succeed to emphasise the main problems that each part of the container transport on Danube mechanism is dealing with.

It was stressed out the idea that the present climate of great uncertainty has huge implications, the economic consequences will be felt mainly as a rise in commodity prices, which will fuel the already existing inflationary pressures; net importers of energy & food products will be particularly affected, with the spectre of major supply disruptions in the event of an even greater escalation of the conflict. The drop in demand from Europe will also hamper global trade, and consequently the transport on Danube.

Regarding the Danube transport development, this critic situation may be an opportunity, unfortunately without having an estimation yet to what extent; Constanta Port is already attracting a consistent share of goods to be transported to the rest of Europe, being preferred within the Black Sea area. The tremendous increase of traffic in Constanta, due to the geopolitical circumstances, could give a push also to the other modes of transport, even if we are talking about rail, roads and inland transportation. Inland and rail are already first priorities for the investments, in the context of the European Green policy.

All the stakeholders should pledge to transform the Danube River in a successful Green Corridor. The shipping industry emits an estimated 1 billion metric tons of carbon dioxide



each year. On its current trajectory, maritime trade is projected to grow by as much as 130% by 2050 over today's trade volume. The world cannot stop the climate crisis without urgent action to decarbonize international shipping this decade. By building out zero-emission maritime "corridors," major trade partners can catalyse land-side investments needed in clean energy and zero-emission electro-fuel infrastructure at ports. The current lack of fairway maintenance on the Danube resulting in unreliable and unpredictable navigation is a pressing issue for the inland waterway sector and the industry using it. The failure of some countries to honor their commitment to maintain the Danube threatens the safe and cost-efficient navigability of the river with disastrous consequences for the sector and affected industry. The containerized transport on Danube is affected by this reality, but these times of change could be the urge that Danube transportation needs.

Special attention was given to the process of identifying and quantifying new markets dedicated to waterway transport. Containers represent a major market on Rhine Corridor, but in the Danube region it is almost inexistent. Within the Dionysus Project the scope to overcome the difficulties of bringing the container business in the Danube area has been analysed through studies, interviews, outcomes and outputs.

The need to stimulate the transport of containers on the Danube. Mr. Turi Fiorito given as an example CCNR Annual Report 2021, in which it is presented statistically: "In this case that 99.99% of all container transport performance (TKM) on European inland waterways occurs in the six Rhine countries (the Netherlands, Belgium, Germany, France, Switzerland, Luxembourg). On the Danube, container transport is still almost non-existent".

The development of container transport on the Danube would produce positive, long-term effects.

Actions needed were presented, which could be implemented to increase the level of container transport on the Danube, such as: investments in fairway improvement, the existence of adequate port infrastructure so as to handle the demand, improving rail connections, providing a proper business model development.

Ms. Bettina Matzner, representing Via Donau – Austrian Waterway Management and Development Company, made a presentation about opportunities and advantages of development Danube container transport, considering the fact that Danube is the larger river in Europe, passes through 10 countries, connect 19 countries and 83 million people.

Regarding logistics, Ms. Bettina Matzner considered necessary to increase the competitiveness of inland navigation in logistic network. Referring to transport volumes by commodity groups on the Danube, the percentage is low. Mrs. Bettina Matzner mentioned some initiatives which should be taken into account, such as: evaluating the potential for promising cargo types, enhancing cooperation between the relevant market actors, organizing expert working groups focusing on dedicated product groups on national level.

Ms. Matzner offered valuable information regarding the advantages of containerised transport on the Danube; for ex. Rhine-Main-Danube connection provides a transport axis from major European seaports (ARA, Black Sea) to the hinterland; the capacity of inland



vessels and their multifunctionality are perfectly suited to smooth peaks; container optimized vessels offers high efficiency; good environmental performance and low transport costs, empty containers included; heavy containers can be easily transported; numerous container terminals are located along the Danube.

Mr. Horst Schindler, representing DTP MA/JS, had a presentation about programming period 2021-2027, starting with the characteristics of DTP. Mr. Schindler identified the priority objectives such us:

A smarter Danube Region, by enhancing innovation and technologies transfer in Danube region; development of schills for advancing smart specialisation strategies, industrial transformation and transition towards industry 4.0 including cross sectorial collaborations.

A greener, low carbon Danube Region, by enhancing the integration of renewable energy sources; promoting climate change adaptation capacities in the Danube Region and disaster management on transnational level in relation to environmental risks; sustainable, integrated, transnational water and sediment management in the Danube River Basin ensuring good quality and quantity of waters and sediment balance;

A more social Danube Region, promoting accessible, inclusive and effective labour markets, quality services in education, training and lifelong learning; socio-economic development through heritage, culture and tourism;

A better cooperation governance in the Danube Region, by increasing institutional capacities for territorial and macro-regional governance.

The university representatives underlined few aspects that should be implemented in order to develop container transport on the Danube: becoming a part of the national transport strategy and waterborne transport strategy; necessary clear measures from port authorities, canal administration, service providers; to be included into development strategies of key players. It was stressed the necessity of synergies, new projects on inland water container transport, boost of dedicated political decisions, relevant answer from logistic chain actors.

Mr. Willem Slendebroek, senior expert from Maritime & Transport Business Solutions, started his presentation with the role and benefits of Danube for Constanta Port. The capacity of the river is used to a limited extend, but with more coordination, it can be improved.

Mr. Slendebroek considered that green corridors can benefit the implementation of new initiatives, as predefined routes are determined where initiatives can be launched and case studies to actualize the action plan are needed. At the same time, cooperation across stakeholders is the key (national governments, port authorities, shippers, vessel owners) and, in the same time, pivotal to the successful greening of the Danube IWT operations. Constanta aims to be a facilitator in this process.

Mr. Fabian Zoltan, representing MAHART Container Centre Ltd., began his presentation by providing participants with real-time footage of container handling.

Mr. Zoltan presented statistic data about modal split in Hungary and inland waterway transportation and also identified the solution for bottlenecks within river services:



infrastructure problems – sufficient water level; missing proper port equipment for loading/unloading containers by reliable way; lack of proper vessel – self-ongoing standard Rhine-type vessels is not a reliable option; old/outdated regulations for container transport on Danube; container line services should focus not only containers, but other intermodal units also.

underlined several issues regarding transport of containers: daily evolution of water level allows loading of bigger weight only for short period of time; the containers remained empties must be transported back to ROCND, because an empty container once taken from shipping line incurred a lot of costs.

Mr. Papiniu talked about IHORKS continued effort in developing of several other container services and about their focus to implement a general container line service like Enns – Budapest – Serbian port – ROCND.

During the presentation, Mr. Papiniu presented several pictures of the loading process of inland navigation vessels.

Input provided to various project activities, deliverables, or policy initiatives (national, EU, regional level) in line with the topics discussed and conclusions delivered by participants

Stakeholders Reference Group was expanded.

By the presence of relevant representatives of the European associations& organisations, the information disseminated within this event reached the targeted environments of European policy influence factors. The results will contribute to 0.T1.5 – Policy recommendations of Container Liner Services.

Follow-up measures and activities

The Stakeholder database was further extended. The results will contribute to O.T1.5 – Policy recommendations of Container Liner Services. Information will be disseminated to port communities.

• Any other relevant information



#### **4** Annexes

#### **4.1 Event #1:** 1<sup>st</sup> workshop on Container Liner Services

ZIP file with the following documents/files:

- ✓ Agenda
- ✓ List of Participants
- ✓ Meeting Minutes
- ✓ Presentations
- ✓ Screenshots

#### **4.2 Event #2:** 2<sup>nd</sup> workshop on Container Liner Services

ZIP file with the following documents/files:

- ✓ Agenda
- ✓ List of Participants
- ✓ Meeting Minutes
- ✓ Presentations
- ✓ Screenshots

#### **4.3 Event #3:** 3<sup>rd</sup> workshop on Container Liner Services

ZIP file with the following documents/files:

- ✓ Agenda
- ✓ List of Participants
- ✓ Meeting Minutes
- ✓ Presentations
- ✓ Screenshots