

DIGSEA FINAL PUBLICATION

2023

DIGitalisation of multimodal
transport in the Adriatic SEA





Interreg
Italy - Croatia
DIGSEA

European Regional Development Fund



EUROPEAN UNION



Port Network Authority
of the Eastern Adriatic Sea
Ports of Trieste and Monfalcone



CFI



Central Adriatic
Ports Authority

Ports of Pesaro, Falconara, Ancona, S. Benedetto, Pescara, Ortona, Vasto

RAM S.p.a.

Logistica · Infrastrutture · Trasporti



University of Rijeka
FACULTY OF MARITIME STUDIES



Klaster
intermodalnog
prijevoza



PROJECT PARTNERS



PROJECT DURATION

01/04/2022 – 30/06/2023



ERDF

509.515,50



TOTAL BUDGET

599.430,00

www.programming14-20.italy-croatia.eu/digsea

DIGSEA project is co-funded under the Interreg V-A Italy-Croatia
CBC Programme 2014-2020

PROJECT OBJECTIVES

DIGSEA consolidates technical knowledge on ICT applied to multimodal freight transport covering the whole supply chain to make it more efficient and environmentally sustainable

Maritime transport is the most sustainable way of transporting goods, but the fragmentation of the supply chain hinders the potential it offers. DIGSEA project clusters the technical knowledge of several Interreg IT-HR 2014-2020 projects that deals with ICT applied to maritime and multimodal transport. The collected knowledge is consolidated in a single sea-port-hinterland-logistics approach, covering the whole supply chain.

This way, the experiences and expertise of the current programming period serves as a basis for the new one, ensuring their long-term sustainability and replicability. The mission of the project is to transfer knowledge and raise the awareness of the use of ICT as a powerful and efficient tool to improve the efficiency and consequently, the environmental performance of ports and the whole supply chain.

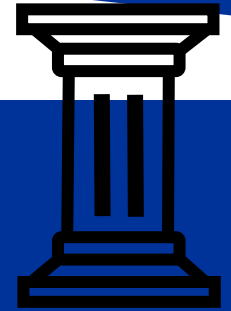
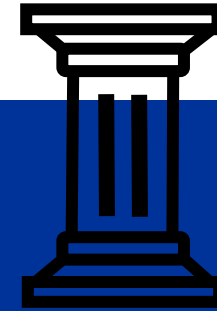


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PROJECT PILLARS

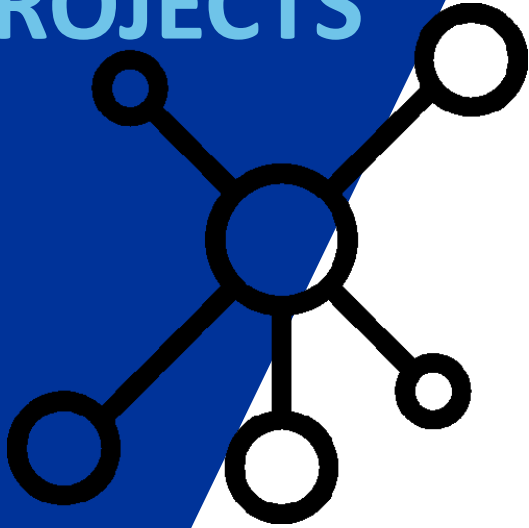
- 1) CONSOLIDATION OF TECHNICAL KNOWLEDGE ON ICT
- 2) CONTRIBUTION TO THE DEVELOPMENT OF THE IT-HR 2021-2027 PROGRAMMING PERIOD
- 3) TRANSFER OF COLLECTED KNOWLEDGE AT REGIONAL, NATIONAL AND TRANSNATIONAL LEVEL

CROSS BORDER IMPACT

Cross-border cooperation is crucial in the implementation of project activities since Italy and Croatia face a lack of information exchange on a supply chain as a whole.



CLUSTERED PROJECTS



DIGSEA project **clusters technical knowledge** developed by **4 Interreg IT-HR 2014-2020 projects**: **PROMARES, TRANSPGOOD, DigLogs** and **INTESA**. The common approach of those four projects is the focus on ICT applied to maritime and multimodal freight transport. DIGSEA project is maximizing the experiences and results of previous projects consolidating the technical documents and analyses, increasing the knowledge base in this domain covering the whole supply chain. In doing so, DIGSEA will lay out the knowledge base for continuing working in this topic - how IT tools can make ports and multimodal transport more efficient while reducing its environmental impact, as addressed by SO 3.2.

PROMARES - enhanced the transport planning competences by means of an in-depth cross-border study analysing each territory in detail, a dedicated training seminar and the elaboration of a cross-border action plan, tested through pilot actions.

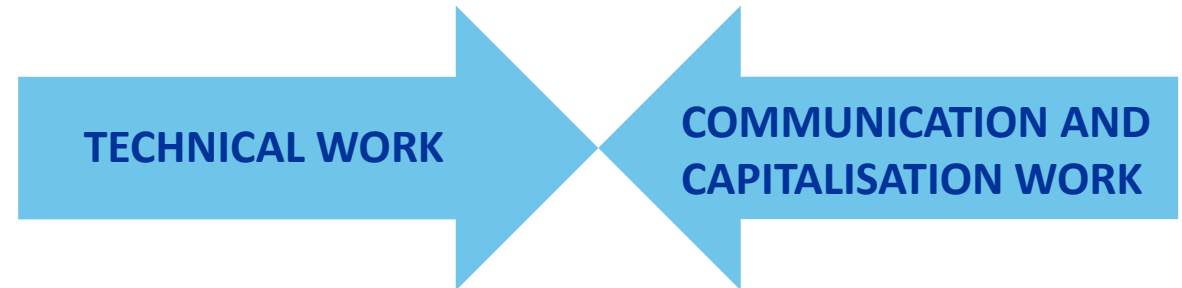
TRANSPGOOD – developed a set of innovative ICT tools that assists users in finding the best solution of transport services offer and ensure monitoring of transport logistics and environmental performances demonstrating concrete benefits in transport and logistics implementations.

DigLogs – created the technological solutions, models and plans to establish the most advanced digitalised logistic processes for multimodal freight transport and passengers' services in the Italy-Croatia area.

INTESA – established a network among the National Maritime Administrations of Italy and Croatia and main port authorities of the Adriatic sea with the scope of harmonizing and optimizing the procedures of the complete maritime transport process in order to make port and maritime transport system more efficient and safe.

DIGSEA APPROACH

DIGSEA partners built up project to easily transferrable and replicable by other ports and intermodal logistic nodes not only in Italy and Croatia but also outside the Programme Area, since they contain measures that would tackle the same problem – i.e. how to make maritime and multimodal transport more efficient through the application of ICTs – which is common with any other port or railroad terminal. All project results are available and shared on the project [website](#) and disseminated at different EU-relevant events and transport fairs.



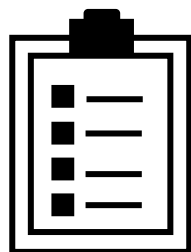
DIGSEA RESULTS

1 CROSS-BORDER INVENTORY OF PROJECTS' RESULTS



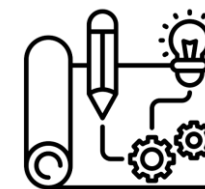
1 TRANSNATIONAL INVENTORY OF PROJECTS' RESULTS

1 BEST PRACTICE ANALYSIS



1 CROSS-BORDER TRAINING CURRICULUM ON ICT APPLICATION IN THE FREIGHT TRANSPORT SECTOR

1 EXPLOITATION PLAN



PROJECT IDEAS FOR THE 2021-2027 PROGRAMMING PERIOD

3

EUSAIR FLAGSHIP PAPER

1

STUDY VISITS TO ITALIAN AND CROATIAN PORTS ALSO RECORDED IN VIDEOS

5



SHORT VIDEOS

3

PARTICIPATION IN RELEVANT EU EVENTS

15

PORT STUDY VISITS



BARI



Autorità di Sistema Portuale
del Mare Adriatico Meridionale
Bari, Brindisi, Manfredonia, Barletta, Monopoli

ZADAR



RAVENNA



Autorità di Sistema Portuale
del Mare Adriatico centro settentrionale
PORT OF RAVENNA

VENICE



North Adriatic Sea
Port Authority
Ports of Venice and Chioggia

SPLIT



Study visit videos are available on our [YouTube page](#)





Port Network Authority of the Eastern Adriatic Sea visited Bari on March 2nd 2023

Mr. Stefano Bevilacqua presented DIGSEA project results during the EFINTIS project final event. Projects have a common background and are focusing on ICT solutions for the logistic sector.



Mr. Ugo Patroni Griffi and Mr. Stefano Bevilacqua

“We need to network and to exchange good practices. We can improve only if we move jointly. The knowledge is valuable.”



Intermodal Transport Cluster visited Zadar on April 27th 2023

Mr. Marijan Cukrov presented DIGSEA project results during the SUSPORT project local event. Projects have a common background and are focusing on port efficiency and environmental sustainability.



Mr. Željko Knežević

“Digitalization, sustainable development and safety issues are the main topics that the ports are focused on in the last period. We consider that digitalization is a crucial tool to optimize all the operational port procedures and ensure a reduction of time and costs.”





Mr. Andrea Minardi



Central Adriatic Ports Authority visited Ravenna on June 1st 2023

Ms. Elena Montironi presented DIGSEA project results to employees and stakeholders of Ravenna Port Authority. She focused on presenting project outputs and pointing out synergies and complementarities.

“The Port of Ravenna Authority is deeply involved in developing new ICT infrastructure and ICT tools to improve the effectiveness of port operations and efficiency. European funds play an important role developing such tools.”



Intermodal Logistics Training Consortium visited the Port of Venice on 15th June 2023

In this occasion the main results of DIGSEA project have been presented and three experts of the Port of Venice (Alvise Zerbinati, Francesco Zanon, Mauro Marchiori) have been interviewed about the digitalization issues related to the logistics processes.



Mr. Francesco Zanon

“In Italy, we are 25th out of 27 EU countries in terms of human capital related to digitisation. We have software, we have connectivity, we have everything we need, but what we lack is training and a culture of digitalisation within companies. We need training, we need a culture within companies to ensure that digitisation is not just the use of software but becomes part of the business processes with which we operate on a daily basis in ports”



Port of Ploče Authority visited Split on June 15th 2023.

Mr. Darko Plečaš presented DIGSEA project results to employees and stakeholders of Port of Split Authority. The main focus was on importance of ICT for safety, security and efficiency in port operations.



“Since 2008 Split Port Authority is involved in various EU projects with aim of improving port business and sustainability of port operations. We are aware of sustainable development of the port and of digitalization which will improve our services.”



PROJECT VIDEO PILLS



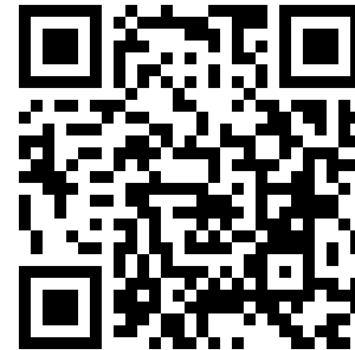
1ST



2ND



3RD



Project video pills are short videos created by our partner RAM - Logistica Infrastrutture e Trasporti Spa. The goal of the videos is to bring the project outputs closer to general populace.



First video explains project background and expected results while showing why partners cooperation is needed.

Second video pill is focused more on partners technical works and results, explaining what has been achieved.



Third and last video pill showcase project's contribution to EUSAIR and new IT-HR Programming period while pointing out project's sustainability and replicability.



DIGSEA EVENTS



**KICK OFF
CONFERENCE**

**PROJECT
EVENTS**

**EU RELEVANT
EVENTS**

**FINAL
CONFERENCE**

KICK OFF CONFERENCE

"Green and Smart Ports in the Adriatic-Ionian Region. The contribution of the European territorial cooperation between Italy, Croatia and Slovenia"

This is the title of the conference organized by the Port Network Authority of the Eastern Adriatic Sea in cooperation with the Friuli Venezia Giulia Region and under the auspices of the European Macro-Strategy for the Adriatic-Ionian Region (EUSAIR) that was held on 8 June 2022 at the MIB - Trieste School of Management.

The aim of the meeting was to systematise best practices among the partners of the three countries in the environmental field and to foster an integrated and sustainable approach to solving shared problems. In recent years, the ports of Italy, Slovenia and Croatia have been working together to improve their decarbonisation and digitalisation capacities through a number of EU-funded projects.

This was also an official kick-off of the DIGSEA project considering the similar scope – digitalisation of the port and logistics operations, and the fact that the DIGSEA project clusters the technical knowledge developed by PROMARES, INTESA, DigLogs and TRANSPGOOD.



PROJECT EVENTS

19/05/2022 NEWBRAIN PLUS Ancona

The workshop aimed at the sharing of project ideas on the field of transport and logistics between the NEWBRAIN PLUS project partners and the technical stakeholders involved by each partner organization. The discussion among the participants was very intense, and several common points of discussion were highlighted that can be summarized with the following keywords: Environment, Resilience, Interoperability, Optimization, Communication and Valorisation.



12/05/2022 BLUEAIR Online

The cross-fertilization workshop identified the most important challenges for a sustainable blue growth represented mainly by the high costs associated with the necessary technological development and the resistance to change in the sector's practices/procedures.



24-26/10/2022 InnovaMare Roadshow Rijeka

In the wake of European authorities' appreciation, Italian and Croatian partners in Rijeka were keen to highlight crucial sea-saving and market-oriented innovations in order to leverage new potential partners (public sector, scientific world and SMEs) ready to engage in transferring knowledge and jointly develop new project concept, since a "zero-pollution" long-term strategy to implement the Blue Economy in the Adriatic Region is just around the corner.

PROJECT EVENTS

02/03/2023

EFINTIS Final Event Bari

The event was the final conference of the project EFINTIS “Enhancing efficiency of the intermodal transport flows by improved ICT systems”. The objective of the event was to showcase the EFINTIS project, its pilot actions and the role of digitalization in the port communities. During event, the most recent trends in port development highlighting the added value of the outputs realised by DIGSEA were presented, as to foster digitalisation in the port and maritime sector and promote cross-fertilisation between the projects.



05/04/2023

InnovaMare Roadshow Rijeka

Career Day is an important event that has yielded significant outcomes and provided valuable takeaways for students as they prepare for their future careers. Introducing DIGSEA to employers and professionals from various sub-sectors of the maritime industry has raised the awareness that the use of ICT can be a powerful and efficient tool to improve the cooperation in the whole supply chain, streamlining transport flows across different modes.



15-16/03/2023

MERIDIAN SC Ghent

The event promoted a fruitful discussion among stakeholders on the importance of ICT tools in the logistic sector. It was a great opportunity to exchange information and knowledge about ICT management of traffic and digital traffic data.

The conference stressed the importance of sharing, capitalizing and implementing ICT tools to promote multimodality.



PROJECT EVENTS



06-07/06/2023

SUSPORT LOCAL EVENT Dubrovnik

The exchange of partners experiences, challenges, priorities of the project activities and support in the SUSPORT communication process. Debate in thematic sessions which will help the SUSPORT and DIGSEA projects to create synergies to better encourage collaboration between a wide range of stakeholders and target groups.

25/05/2023

SUSPORT LOCAL EVENT Ploče

Local event aimed at presenting local community with partner's experiences, challenges, priorities of the project activities. It was a good opportunity to create synergies between different EU projects and to raise the awareness of the use of ICT as a powerful and efficient tool to improve the efficiency and consequently the environmental performance of ports and the whole supply chain.



EU RELEVANT EVENTS

EU RELEVANT EVENTS



10-11/11/2022 BILOG 2022 Piacenza

The event analysed both the regional and the European dimension, improving the knowledge about EU Transport Policies and related investments in maritime, ports and logistics, and highlighting the need for a stronger cooperation between all the players to achieve the overall aim to decarbonise transport and was also an excellent cross-fertilization opportunity between different European projects.



19/05/2022

European Maritime Day 2022 Ravenna

The cross-fertilization workshop highlighted the most important challenges that ports are facing to minimize the environmental impact of their activities, sharing best practices and innovative solutions that can be adopted in ports. The event witnessed the important role of EU funds in promoting a greener world.



08 -11/03/2023

Let Expo 2023 Verona

The participation to Let Expo ensured that the project's activities and results were communicated and transferred to stakeholders as to engage them and raise the awareness of the use of ICT as a powerful and efficient tool to improve the efficiency and consequently the environmental performance of ports and the whole supply chain.

EU RELEVANT EVENTS



09-12/05/2023

Transport Logistic fair Munich

The event promoted a fruitful discussion among stakeholders and policy makers on the importance of ICT tools in the logistic sector, underlining the importance of sharing, capitalizing and implementing ICT tools to promote multimodality.

04 – 05/05/2023
**Adriatic Sea Forum
Dubrovnik**

The event promoted a fruitful discussion among different stakeholders on the importance of ICT tools in the maritime sector. The conference stressed the importance of sharing, capitalizing and implementing ICT tools to promote cruise and ferry traffic growth.



FINAL CONFERENCE

FINAL CONFERENCE

"Green and Smart Ports in the Adriatic-Ionian Region. The decarbonisation and digitalisation of ports and freight transport: the contribution of European territorial cooperation"

This is the title of the conference organized by the Port Network Authority of the Eastern Adriatic Sea in cooperation with the Friuli Venezia Giulia Region and under the auspices of the European Macro-Strategy for the Adriatic-Ionian Region (EUSAIR) that was held on 21st June 2023.

Over the past few years, the ports of Italy, Slovenia and Croatia have been cooperating to improve their environmental performance and efficiency through telematic solutions, both within the North Adriatic Port Association (NAPA) and in the framework of several projects co-financed by European funds and led by the Port of Trieste.

During the conference, the main results of projects "DIGSEA - Digitisation of Multimodal Transport in the Adriatic Sea" and "SUSPORT - SUsustainable PORTs" (Interreg Italy Croatia), "ACCESSMILE - Improving the accessibility of the last best for rural and peripheral areas to the main TEN-T nodes in Central Europe through ICT" (Interreg Central Europe) were illustrated. The knowledge developed within the framework of these projects, together with that of the broader project "EALING - European flagship action for cold ironing in ports" (CEF Programme), was pooled by bringing together the experiences of more than thirty ports, freight villages and logistics operators from eleven European countries.



Contact information

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For more information, visit our webpage or social media accounts:



YouTube



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