MARKETPLACE











Marketplace - 03 and 04 April 2024

As in previous years, the Connecting Europe Days 2024 will host a Marketplace for innovative companies, project promoters and initiatives from the public and private sector across Europe to pitch their projects to a targeted audience.

Each pitch lasts no longer than three minutes, allowing for a quick Q&A by the moderator. The pitch will present a link to the TEN-T (trans-European transport network) policy in the context of a sustainable, smart, inclusive, and resilient European transport system, especially in the areas of digital applications, low-emission mobility, road safety and security, urban mobility and smart cities, artificial intelligence, and others. Check out the programme for timing and presenters.

Programme

https://transport.ec.europa.eu/connectingeuropedays/programme_en



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	9	ESPO Study on the investment pipeline and challenges of European ports
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u C	4	Development of HRS network in the Greek TEN-T highways
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Š	7	SWS Power Solutions make climate-neutral cold chain logistic on rail possible
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	10	Next level security on "Safe and Secure Truck Parking Areas": MacScanners

NAPCORE - the world's largest cooperation of mobility data platforms

The National Access Point Coordination Organisation for Europe (NAPCORE) project was started in 2021 by all EU Member States and is the only pan-European initiative dedicated to mobility data exchange. It is co-financed by the EC's Connecting Europe Facility. NAPCORE has been launched as coordination mechanism to improve interoperability of the National Access Points as backbone of European mobility data exchange. NAPCORE improves the interoperability of mobility data in Europe with mobility data standard harmonisation and alignment. Also, NAPCORE increases access and expands availability to mobility related data by coordinated data access and better harmonisation of the European NAPs, Furthermore, NAPCORE empowers National Access Points and National Bodies by defining and implementing common procedures and strategy, strengthening the position and the role of NAPs, supporting steps towards the creation of Europeanwide solutions to better facilitate the use of ElJ-wide data.



Presenter

Timo Hoffmann Federal Highway Research Institute (BASt), Germany www.bast.de n. **2**

02

Connecting the dots of sustainable mobility ecosystem

Petrol d.d., Ljubljana is the largest Slovenian energy company, the major Slovenian importer, the largest Slovenian company in terms of revenue, one of the largest Slovenian distribution companies and an important regional partner on SEE markets. The Petrol Group's core activities cover the segments of fuel and petroleum products, merchandise and services and energy and solutions. The Petrol Group's core development activity is the introduction of new energy activities and renewable energy generation. The Petrol Group's competitive advantage is the range of comprehensive energy solutions offered to customers.

EU co-funded project Multi-e, where Petrol has the role of a lead partner, entails a range of sustainable innovative solutions in mobility and transport. e.g. car sharing, linked with EV charging infrastructure, new pay systems (subscription, add hoc with APP, payment with credit card on a terminal, etc), multiple use cases the customer has - drive and charge own private car, car sharing, rent a-car, electric bus, variety of EV chargers (AC or DC, in depot or public accessible), as well as CNG charging stations.



Energija za življenje

Presenter

Karina Medved Bregar Petrol d.d., Ljubljana www.petrol.si



Accelerate the hyperloop

Organisation: Hyperloop Development Program

The Hyperloop Development Program aims to prove the feasibility of hyperloop as a fast and energy-efficient transport mode. In our ecosystem and through our research facilities, we test technology to demonstrate that the hyperloop can be operated safely as a new transport mode. Next to innovation, we build and maintain partnerships with the public sector to give insight in the benefits of hyperloop for society at large.

Summary of pitch: 'Accelerate the hyperloop'

- → Hyperloop is a combination of existing technologies: maglev train + low pressure technology.
- → Hyperloop makes a positive impact, as it offers high transport capacity, low energy use, and limited land use.
- The Hyperloop Development Program is an international ecosystem of partners working on the technology and future deployment of the hyperloop as a new transport mode.
- → Join us with your know-how and be on top of a new development in the transport sector.
- → Together we can accelerate the realisation of hyperloop.



hyperloop development program

Presenter:

Jan Willem Visser Hyperloop Development Program, Netherlands www.hyperloopdevelopmentprogram.com

04

Women In Rail Award Announcement: 2024 edition call for applications

Europe's Rail, together ERA, CER, UNIFE and ALE, will take the opportunity of the mile stone event of InnoTrans, International Trade Fair for Transport Technology in Berlin to award the Women in Rail Prize to three nominees. The award will recognize an outstanding work led by an individual, a company or an organization that is moving the railway industry forward by putting women at the center of the stage. With women representing only around 20% of the workforce, recognizing that empowerment, leadership, research and innovation in the Railway Sector are powerful levers to bridge the gender gap, will help pave the way to bring more women into a mainly male dominated sector. The award winners will be offered continued support through high-level networking opportunities alongside with an increased visibility of their work and achievements in the rail sector.



Presenter:

Rana Maatoug Europe's Rail Joint Undertaking (EU-Rail), Belgium rail-research.europa.eu



Decarbonising the maritime transport and ports



With 50 years' experience, Enagás is an international leader in the development, operation and maintenance of energy infrastructure.

Enagás has been certified by the European Commission as an independent Transmission System Operator (TSO) since August 2012. This certification guarantees the independence of the Spanish gas transmission network from gas producers and shippers.

Enagás is committed to achieving carbon neutrality by 2040. To this end, we have outlined a decarbonisation pathway with emission reduction targets aligned with the 1.5°C temperature increase scenario.

Our sustainability roadmap is based on:

- → Decarbonisation of the company's infrastructure
- → Decarbonisation of the gas sector
- → Offsetting of residual emissions

In 2015, the innovative CORE LNGas hive project was launched with the aim of developing LNG as a marine fuel in Spain and Portugal, for which different work packages were carried out (feasibility studies, cross-

cutting studies and pilot projects). In this way, the project made it possible to deploy LNG as a marine fuel through an efficient and safe logistics chain, enabling all companies in the sector to make progress in decarbonisation both directly and indirectly through innovation.

In 2018 and until today, as a continuation of the initial project, LNGHIVE2 was developed as a roll-out of the initial one, allowing the deployment of demand projects (conversion vessels to LNG) and supply projects (supply vessels of different capacities).

The Keys aspects of strategy:

- → total investment budget of €242m, of which €58m is subsidised by CINEA.
- 49 partners (ports, industrial partners, shipping companies and public administration)
- → 43 initiatives developed

Presenter:

Enrique Olarte Enagás, Spain www.enagas.es

05

The Scandria®Alliance – Territorial Cooperation from Scandinavia to the Adriatic Sea

The Scandria®Alliance is a unique cooperation platform for cities and regions along the ScanMed corridor. Our joint vision is to connect regions, communities and economies through clean and smart transportation. Strengthening the shortest geographical connection between Scandinavia and the Adriatic Sea as a spatial development and transport axis, the members of the Scandria®Alliance collaborate on climate-smart multimodal transport connectivity at the interface to sustainable regional development.

In this marketplace pitch, you will learn about current initiatives of the Scandria®Alliance and possibilities to get involved.



Presenter:

Tommi Vollmann Joint Spatial Planning Department Berlin-Brandenburg, Germany gl.berlin-brandenburg.de



Re-Imagine and Re-engineer a sustainable future with Green IT: Sustainable by and with software!

Ab Ovo offers IT solutions that reduce carbon emissions and promote sustainability. Our mission is to improve the operational processes, to support the sustainability targets and enhance the profitability of our customers with more efficient resource usage and streamlined processes.

Our IT solutions not only facilitate a significant reduction in carbon emissions for our customers but also embody sustainability as a core principle. The Eco Logic Platform and DELMIA Quintiq Platform are two examples of our commitment to environmentally conscious technologies.

The Eco Logic Platform is the first sustainable coding platform in the world. We are able to rapidly develop enterprise applications and our platform measures and improves continuously the energy consumption of the software.

DELMIA Quintiq is one of the leading software solutions in Supply Chain Planning and Optimization. It provides companies with end-to-end supply chain modeling solutions to align operational and business objectives. With this solution, we contribute towards the reduction of the carbon footprint of the operations at our customers.



Presenter:

Daan van Boven Ab Ovo Nederland B.V., Netherlands www.ab-ovo.com

08

Hynamics Hydrogen Mobility Project: Deployment of a multipurpose renewable HRS network for mobility

Hynamics is the EDF subsidiary dedicated to the production and distribution of renewable/low-carbon hydrogen from water electrolysis to support the decarbonisation of industry and the development of zero-emission mobility. With a strategy based on hydrogen production close to customers, Hynamics develops and offers turnkey solutions to mobility providers operating heavy-duty fleets, trains and ships and to industries where hydrogen can reduce hard-to-abate emissions.

Hynamics covers the entire value chain in France, UK and Germany as an investor, designer and manufacturer, as well as an operator for the maintenance of infrastructure, and distinguishes itself in the hydrogen market with

- Operational capacity to finance, build and maintain large-scale infrastructure for mobility and industry, with incremental scale-ups to meet growing demand.
- → A territorial organisation to support ecosystems and impacts.
- → R&D activities, in-house or in collaboration with EDF R&D/EIFER Institute or industrial partners



Presenter:

Julie Gouzil
Hynamics, France
www.hynamics.com





West Railway - Cities, municipalities and State joint project

West Railway Ltd

The project company West Railway Ltd was established under the name Turku One Hour Train Ltd in December 2020. The company was set up to produce railway plans for the Espoo–Salo direct railway line and the Salo–Turku double-track railway line and to construct the new rail line. In addition to the State of Finland, the shareholders of the company are the cities of Turku, Espoo, Helsinki, Salo, Lohja, Vihti and Kirkkonummi.

Pitch

The connection will improve the reliability of travel and provide new opportunities for mobility, growth and development. Project enables also the development of local traffic in new municipalities both in Uusimaa and in Southwest Finland. The new rail link makes it possible to open 15 new stations for commuter train service between Helsinki and Turku. The rail connection will therefore provide new opportunities to use a commuter train for half a million Finns. Project company approach will allow stakeholders closer involvement to build new rail.

WEST RAILWAY

Presenter:

Pekka Ottavainen West Railway Ltd; Finland www.lansirata.fi D. 10

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Supply Chain Valley

Supply Chain Valley (SCV) is a collaboration between businesses, knowledge institutions, public authorities and the environment: the 'Quattro Helix'.

This is a Euroregional initiative aimed at companies involved in the manufacturing industry and agrofood and logistics sectors located in the province of Limburg region and the Euregion. Supply Chain Valley, which is organised, funded and managed by the business community, is located in the heart of Venlo, strengthening the region as a supply chain and logistics hub for Northern Europe.

The supply chain connects the logistics and agro-food sectors and manufacturing industry within the region. All relevant organisations working in supply chain management, logistics and mobility collaborate as part of Supply Chain Valley, leaving plenty of room for their own activities. Collaboration makes us stronger in terms of thinking and implementation capacity.



Presenter:

Peter Pardoel Supply Chain Valley, Netherlands www.supplychainvalley.com

Atlante and the EU empowering together Zero-Emissions Driving

Atlante, a company of NHOA Group, is developing the largest fast and ultra-fast charging network in Southern Europe, 100% enabled by renewables, and enhanced by energy storage and on-site photovoltaic. It aims to install in Italy, France, Spain and Portugal 5,000 fast and ultra-fast points of charge by 2025, and over 35,000 by 2030, thus enabling people to move freely and more sustainably.

With the European Union support, Atlante is also committed to implementing a 24/7 public fast charging network, catering to light and heavy electric vehicles along Italy, France, Spain, and Portugal's TEN-T corridors. Thousands of charging points from 150kW to 350kW, controlled through Atlante's proprietary Energy Management System, will ensure a fast and smooth charging experience. Atlante's Projects underscore an unwavering commitment towards zero-emissions driving, in line with the Green Deal.



Presenter:

Francesco Causa Atlante S.r.l. (Italy) www.atlante.energy D. 12

02

Scaling up micromobility from city to FUA with multimodal hubs, data and integrated governance.

"SCALE-UP is a EU-funded Innovation Action, running until May 2025. It involves 3 Urban Nodes on the TEN-T network & of different background / characteristics and connecting to different TEN-T corridors (Antwerp - i) NorthSea-Baltic & ii) Rhine-Alpine & iii) NorthSea-Mediterranean, Madrid - i) Mediterranean & ii) Atlantic, Turku - i) Scandinavian-Mediterranean).

Upscaling mobility successfully across different levels of governance (including municipalities, functional urban areas, regional councils all the way up to national strategies and the European TEN-T network) is one of the key challenge of our time. How can cities or regions consider the TEN-T dimension in their local measures & share their knowledge and best practices in a simple & effective way? The SCALE-UP project has been working for 3 years on finding answers and sharing best practices."



Presenter:

Michiel Penne Stad Antwerpen / Smart Ways to Antwerp, Belgium www.scale-up-project.eu

Assistance and autonomous railway vehicles in urban and mainline environments

Rail is a hidden champion in green mobility, but needs automation to reach its full potential. OTIV teaches railway vehicles to drive autonomously, using a unique step-wise approach towards full automation. We go from driver assistance system over tele-operation, towards full autonomy. We offer these solutions for urban environments (trams) and mainline railsharing best practices."

OTIV driver assistance systems and remote operation solutions are live on sites across Europe. We are collaborating on the fully autonomous solution with a number of leading players.



Presenter:

Sam de Smet OTIV BV, Belgium www.otiv.ai_

04

Travel anywhere, anytime, using any mode of transport in compliance with EU regulation.



Thanks to the European regulatory framework on data, the value related to acts, facts, information and compilations thereof finds its way to the entities that have relations to that data. Data spaces architectures revolve around interoperability, trust, and value creation. The trust component is a combination of control and accountability. On the one hand data processing requires consent by the data owner, and on the other access and use of that data needs to be traceable in order to establish that it was processed and provided in just cause. The 'platform' in this sense is not the market place itself. It acts on behalf of entities that want to interact, by holding their data or providing access to this data.

The fairsfair foundation contributes to the trusted exchange by providing policy engines. These engines support the exchange of data, only for and during the data processing activity as agreed by parties. It caters to data governance and user privacy in data exchanges, as such, or within the context of a transaction (services/goods for payment). The basis of the reciprocal consent is the transaction process: a sequence of activities that each require usage and access policies in order

to maintain control over the minimally required data which is needed to fulfil the activity.

The decentralised 'transaction broker' under the 'fairsfair'-label is an open source service for trusted data sharing allowing multiple organisations to collaborate on value adding services offered to natural persons and amongst legal entities. Its compliance with the European values, the data strategy and its supporting regulation, a.o. GDPR and DGA, fills a niche in the data spaces reference architecture. Referral to fairsfair certified decentralised transaction brokers in tenders enables authorities to ensure their citizens with full control over data and identity, and assuring a level playing field for market actors, pro-actively.

Presenter:

Ferdinand Burgersdijk fairsfair foundation, Netherlands www.fairsfair.org

ReNEW: Resilience-centric Smart, Green, Networked EU Inland Waterways.

RENEW

ReNEW is a 3-year long project funded by Horizon Europe supporting the transition of Inland Waterways Transport (IWT) to smart, green, sustainable & climateresilient sector.

By capitalising on cooperation opportunities with ongoing projects and initiatives, ReNEW project plays a key role in promoting economic growth and minimising the negative impact on the environment and degradation of ecosystems.

With 24 partners from 11 countries, ReNEW will deliver:

- An interdisciplinary IWT Resilience and Sustainability decision-support framework
- → Targeted innovative infrastructure resilience and sustainability solutions
- → A Green Resilient IWT Dataspace and generic Digital Twin
- → Four real-life Living Labs, including Ghent and Douro waterways

The four Living Labs are focused on complementary aspects of Green Resilient IWT, ensuring the required interrelations towards achieving innovation synergies and creating a comprehensive contextual approach towards a resilient and thriving IWT future.

About the PITCH

As climate change severely affects the performance of Inland Waterways Transport (IWT) operations, the priority is to create and test new solutions for climateneutral and climate-resilient IWT.

To address the challenges of IWT's historical passive and conservative posture towards progress in adopting innovation, as well as a reluctance to digitalise "best practices", it is necessary to incentivise innovations across the dimensions outlined above and provide robust validation of how and where innovation can support the transition to a sustainable, resilient, highefficiency IWT system.

Nik Delmeire, ReNEW project coordinator and Senior Advisor of the European IWT platform will show how the ReNEW project will address the above mentioned challenges and promote economic growth of IWT while minimising the negative impact on the environment and degradation of ecosystems.

Presenter:

Nik Delmeire

European Inland Waterway Transport Platform, Belgium www.inlandwaterwaytransport.eu

06

Acceptance enhancement and cost balancing of highly automated mobility solutions in Germany

"EasyMile provides software and complete solutions for driverless goods and passenger transport. We integrate our industry-leading software into vehicles produced by top-tier manufacturers, to provide a complete solution. Our prioritized approach focuses on use cases with real commercial value. No new infrastructure is needed. These include towing heavy parts on manufacturing sites, transporting luggage in busy airport environments, moving containers at ports, and innovating public transport options.

Together with market-leading partners, we are developing important building blocks for the mobility of the future as part of funding projects. This also includes the KelRide project, in which we use real world operations to enhance public acceptance and the proliferation of highly automated mobility solutions, and address societal and operational aspects of the technology. The KelRide project utilises the real life on-

demand L3 operations in the city of Kelheim to verify requirements from the public transportation view, shape human machine interaction, while specifically taking extended user groups into consideration and optimising operational parameters in order to achieve sustainable costs."



Presenter:

Nathalie Teer EasyMile, Germany www.easymile.com

Update smart green ports project MAGPIE



sMArt Green Ports as Integrated Efficient multimodal hubs

The MAGPIE project wants to "shape the green port of the future". MAGPIE's ambition is to force a breakthrough in the supply and use of green energy carriers in transport to, from and within ports. We will create energy efficiencies and support developments that make green-energy carriers available to users. By demonstrating and implementing smart solutions in the realm of digitalization and automation, we will facilitate and contribute to the decarbonization of port-related transport.

Seaports and inland ports will play a major role in boosting the use of cleaner technologies, green energy carriers and logistics concepts in maritime transport, port operations and hinterland transport (road, rail, barge, and pipeline) to reduce GHG emissions.

The Port of Rotterdam, the largest seaport in Europe with many transport connections for all modes of transport, is frontrunner in the energy transition and has the vision to become a zero-emission port by 2050. Together with the fellow ports HAROPA, Sines and

DeltaPort (which is an inland port) the Port of Rotterdam supports the European Green Deal sustainability goals.

Our project is carried out under the framework of call H2020-LC-GD-2020 entitled "Building a low-carbon, climate resilient future: Research and innovation in support of the European Green Deal". This call is placed under the responsibility of the fund Horizon 2020.

Granted public funding total amounts to 25 million €, for a period comprised between 1st October 2021 and 30th September 2026.

The MAGPIE consortium collaborates a lot with its sister project PIONEERS, which is led by the Port of Antwerp and has benefitted from the same grant from the EU Commission.

Presenter:

Arne-Jan Polman MAGPIE, The Netherlands magpie-ports.eu



USER-CHI project - for a user-centric charging infrastructure

Eurocities, the network of major European cities, is managing the implementation, replication and dissemination of the USER-CHI project. USER-CHI project is demonstrating user-centric charging infrastructure in 7 European cities along the TEN-T network. The pitch will focus on the interoperability platform and the INCAR app. This innovative solution is currently transforming the EV charging landscape by offering an unprecedented level of convenience and accessibility to EV, e-bike, and scooter users. Our user-centric platform simplifies the process of charging, booking, and parking, making sustainable transportation not only viable but also highly attractive for urban dwellers.

At the heart of USER-CHI is a commitment to placing users first. We believe that by understanding and addressing the real-world needs of EV users, we can significantly accelerate the shift towards more sustainable modes of transportation. Our approach has already demonstrated considerable benefits, with users experiencing enhanced ease of use and accessibility to charging infrastructure.

As we approach the conclusion of our project in July 2024, we're excited to share the significant impacts and successes of our efforts. The USER-CHI project stands as a testament to the potential of user-centric innovation in driving the transition to greener mobility solutions.



Presenter:

Marion Pignel Eurocities, Belgium eurocities.eu D. **19**

09

CONNECTOR - Connecting North Netherlands on Green Corridors for European Transport

Organisation

Port of Zwolle is the logistics gateway for the center of the Netherlands. Multimodally connected to the seaports of Rotterdam, Amsterdam, and Antwerp and with excellent connections towards northeastern Europe. Port of Zwolle is more than the joint port authority of the Zwolle, Meppel and Kampen municipalities. It is a physical transport hub where interests of entrepreneurs, education and government are represented.

Pitch

Six northern Dutch Provinces are developing a comprehensive infrastructure vision named Green Corridor Nord-East. The GCNE region contains several important urban nodes (smart cities) and vital transport hubs.

Main objective for 2035 is to strengthen their position. A joint program is developed for improving the waterway, rail and road transport modes. Efficient and safe logistics are essential for sustainable growth and competitiveness. A joint CEF application for the first 3 major projects is submitted: Ports of Zwolle, Smallingerland and Lelystad.



Presenter:

René Schelwald Port of Zwolle, Netherlands www.portofzwolle.nl

Securing CEF investments from risks of disrupted Rail supply chain

The pitch covers the key topics addressed by the "LEADER 2030" project, meaning "Learnings for European Autonomy to Deliver Europe's Rail in 2030"

PITCH

Raise audience's awareness on:

- → the magnitude of disruptions and risks affecting the supplies for producing both standard/stateof-the-art and innovative solutions to transform the European Railway System according to the plans (e.g. ERTMS, Autonomous Trains, DAC, Hydrogen, etc.) – hence also suitable to impact CEF investments and national ones
- → the existence of the project "LEADER 2030", which taking in everything from Geology to Geopolitics to Climate Change aims to give an ultimate answer to the key question: "will there be enough raw materials and components to deliver EU with the innovations targeted by 2030 to radically transform the European Railway System? And if not, what are the strategic options the EU and the European industries can have to increase autonomy and reduce vulnerability of European supplies in such a key industrial ecosystem?"

ORGANISATION

"ERCI-European Railway Clusters Initiative" is the European meta-cluster of the railway sector. It gathers 17 cluster organisations from 16 countries in Europe and represents 2.000+ companies of the Value Chain as well as academia and research organisations.



Presenter:

Veronica Elena Bocci ERCI - European Railway Clusters Initiative, Italy eurailclusters.com

E-mobilty: Future Vision

Multiple projects in Europe are deploying recharging Infrastructure for Electric Vehicle across, co-funded with grants from EU's Connecting Europe Facility / AFIF programme.

In order to meet the AFIR (Alternative Fuel Infrastructure Regulation) goals, and further decarbonise road transport in Europe, much more has to be done.

New innovative solutions for electrifying road transport in Europe will be needed in future:

- 1. From charging stations to charging hubs
- 2. From charging electric cars to charging trucks
- 3. Much higher charging speeds, towards Megawatt Charging Systems (MCS)
- 4. Innovative charging solutions (inductive charging, battery swap, automated charging)
- 5. Synergies between transport and energy (battery storage, new dedicated energy grids, on site renewable generation)

Ardan is involved in more than 15 AFIF / CEF projects combining EU grants and loans for deploying 1,000's of public accessible recharging points for electric vehicles across 23 EU Member States with Europe's leading energy companies, OEM's / car manufactures, CPO's (Charge Point Operators), municipalities, etc. The presentation will share our Future Vision for taking E-Mobility to the next steps and towards a Greener Europe.



Presenter:

Amit Yudan Ardan GmbH, Austria <u>ardan.at</u>

02

ORCA: a resource orchestrating solution for the transport industry developed by Telcotrend

Telcotrend, a rapidly expanding software company introducing ORCA, our software solution for capacity planning, shift and duty management of human resources and physical assets, integrating timetables, technical maintenance and HR systems. Coordinating vehicles, production lines and various assets with real-time data and automation support becomes effortless. ORCA can dispatch, manage and communicate with personnel, assign them to work locations, down to the very minute.

ORCA is for companies looking to improve capacity planning and staff orchestration for rapidly changing workloads.

ORCA is for railways, airports, transport and any other companies with staff capacity planning and optimization challenges.

ORCA is the effective tool for the digitalization journey of transport companies maintaining the commitment and convenience of their staff.

Further information: https://telcotrend.hu/en/orca/



Presenter:

Eszter Jacobs Telcotrend, Hungary telcotrend.hu/en



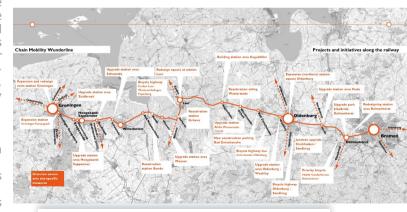
Wunderline: More than a railway connection - Chain Mobility

The Wunderline partners aim to establish a seamless door-to-door experience that encourages passengers to use the train more frequently. Effective transportation requires interconnectivity between various modes such as trains, buses, bikes and so on. Stations should be easily accessible with amenities like catering, (bike) parking spaces, shelter and information. The State of Lower Saxony, the province of Groningen, Free Hanseatic City of Bremen and over twenty Dutch and German municipalities along the railway line as well as several public transport organisations work together in the Chain Mobility Network. This regional bottomup initiative makes the Wunderline unique in Europe, especially in the context of railway, regional connectivity and mobility!

Initiatives include:

- → Improving public transport connections to and from the train stations
- → Strengthening routes and services for (e-) bikes around train stations
- Creating safe and comfortable station environments





Presenter:

Thiis Zondag Provincie Groningen, Netherlands wunderline.eu

n. **24**

04

LIFE GREEN VULCAN: Decarbonising Automotive With Recycled Rubber

ive



BRIDGESTONE

















Presenter:

Francesco Di Pierro INNOVANDO SRL, Italy innovandotech.com

technology to obtain high-quality rubber from End-of-Life Tyres (ELTs) that does not compromise performance when implemented on new, sustainable products.

An innovative mix of Natural Rubber/Styrene-Butadiene Rubber (NR/SBR) devulcanized masterbatch with nanofillers, ELT receivered, has been transformed into now

"Life Green Vulcan has successfully tested an innovative

Rubber (NR/SBR) devulcanized masterbatch with nanofillers, ELT-recovered, has been transformed into new products and used as a substitute for raw rubber, both in automotive technical components (spring pads) and in new tyre production (as PCR tyre tread), enabling significant CO2 reduction and saving of virgin rubber.

Innovando provides solutions for physical and digital management of waste and end-of-life products for circular transition of industrial supply chains.

The company has 4 Business Units: EPR (systems for Extended Producer Responsibility), Take-Back (solutions for the collection of post-consumer products), Waste Management (industrial waste management), Alternative Fuels (supply of alternative fuels)."

D. **25**

05

Remote navigation in the Belgian river zone

Novandi is a family-owned Liege-based company specialising in freight, handling and multimodal logistics. Through its subsidiaries, the company manages several multimodal platforms, freight transport, ship navigation, etc., particularly between Liège and Antwerp.

Novandi has teamed up with Seafar to develop a remote river navigation technology to solve some of the current challenges facing the inland waterway sector. The project Tercofin-Seafar enhance the capacity of the existing intermodal infrastructures in the Port of Liège and improve drastically their connections to the ports of the north range, alongside the inland waterway network in Wallonia, cross-border with Germany, Europe and the global markets (China), promoting the environmentally friendly modes of transport.

Remote ship management has the aim to improve the competitiveness of inland waterways services by reducing operational bottlenecks and therefore open the access to new remote markets alongside the river Maas in the Walloon Region of Belgium.



Presenter:

Cyrielle Böttcher NOVANDI, Belgium www.novandi.be n **26**

06

KEYSTONE: Simplifying cross-border logistics compliance.

The goal of KEYSTONE is to support the development of a sustainable, efficient, and safe transport system, allowing enforcement authorities to access data for the purpose of checking compliance with rules applied in the transport of goods and passengers. Standardised digital solutions will be developed, to be used from several realities to standardize the transport system and develop a seamless, interoperable, and intermodal digital transport ecosystem that can be replicated at European level. The project aims to implement a broader EU vision and and in order to achieve the ambitious goal, the following objectives are met:

Tailor standardised digital solutions from several existing use cases to the transport system.

- → Demonstrate the validity of a proposed web app solution via 2 real-world pilots.
- → Develop a seamless, interoperable and intermodal digital transport ecosystem for replication.
- Define API standard for data and information sharing between operators and authorities.
- Respect & integrate reduction of costs and CO2 footprint, increase the consolidation of data and safety conditions and foster the acceptance of CCAM technologies further.

Description of AETHON:

AETHON, an engineering firm, based in Athens, Greece, pioneering Research-Development-Innovation (RDI) projects in Smart Cities, Mobility, Energy, and Logistics, boasts a rich portfolio in transport sustainability. With a deep understanding of cutting-edge technologies, AETHON excels in Data Science, AI, Transport, Mobility, Logistics, Sustainability, and Project Management.





Presenter:

Zoi Petrakou AETHON Engineering Single Member P.C., Greece aethon.gr

GREATER4H

GREATER4H consists of rolling out 14 publicly accessible hydrogen refueling stations within the STRING megaregion. As a result the CEF-funded project will help accelerate the decarbonisation of the EU transport sector by developing hydrogen infrastructure along the Scandinavian–Mediterranean TEN-T network in line with the EU Hydrogen Strategy that calls for a rapid decarbonisation of road transport in Europe.

GREATER4H is a public-private partnership between local and regional governments and three private hydrogen companies; Everfuel, Hynion, and GP Joule. The three companies will be implementing 4 HRS in Germany, 4 HRS in Denmark and 4 HRS in Sweden. The 14 stations will be placed in locations that secure a maximum distance of 150 km between stations on average. The stations will be 24/7 accessible with 350 and 700 bar dispensers open to the public.



Presenter:

Marie Fløystad Dahl STRING Megaregion, Denmark stringmegaregion.org



eFTI4EU – the first project making the eFTI regulation real

Pitch

The eFTI4EU Project is co-financed by European Commission (CEF) and the aim of the eFTI4EU is to put eFTI Regulation (Regulation EU No 2020/1056 on electronic Freight Transport Information) into practice. The project has 23 partners from 9 Member States -Estonia, Portugal, Finland, Lithuania, Germany, France, Italy, Austria and Belgium, Observers are from Spain, Ireland and the Netherlands. The goal of this project is to develop and test the eFTI Gate reference model, fostering harmonisation of eFTI development and ensuring the interoperability, with the aim to present 9 eFTI Gates ready for operational transfer in 2026 with tangible technical implementation specifications for all Member States. eFTI4EU's mission is to encourage Member States to work together to develop a wellharmonised and interoperable European-wide eFTI exchange environment. Additionally, we are dedicated to foster a solid understanding of how eFTI platforms can best function to benefit economic operators.

Organisation

The Ministry of Climate of Estonia is focusing on green transition with the focus on climate goals and climate adaptation, balancing a broad range of diverse topics related to biodiversity, energy, mobility and transport, construction, housing, maritime affairs and much more. Green shift and climate policy, including carbon markets and green technologies, are at the centre of the Ministry's activities.





Presenter:

Eva Killar eFTI4EU, Ministry of Climate of Estonia, Estonia kliimaministeerium.ee

ESPO Study on the investment pipeline and challenges of European ports

ESPO is happy to display the first results of its new study on "The investments needs and financing challenge of European ports". This study provides a renewed and detailed overview of the investment needs of European ports for the period 2024-2034. With this new study, ESPO is updating the previous edition of the Port Investments Study (from 2018), after which the investment needs of ports will have considerably changed – particularly in light of the Green Deal, the Fit for 55 legislation and the ongoing conflicts in the world. The new study will provide an overview of the investment pipelines of Europe's ports, specified in both investment categories and budgets.



Presenter:

Isabelle Ryckbost European Sea Ports Organisation (ESPO), Belgium espo.be

10 Towards autonomous industrial and shunting operations

OTIV is dedicated to enhancing rail safety and efficiency through the development of assistance, remote control, and autonomous systems. Our focus lies in enhancing vehicle intelligence, reducing reliance on infrastructure. This approach enables us to tackle complex environments for freight trains, including ports, industrial sites, and last-mile operations, where existing processes present the greatest challenges, impeding rail from realising its full potential.

Since we teach to drive autonomously, we start with assistance systems, allowing us to already work with leading players in the industry such as DB Cargo, Fret SNCF, ArcelorMittal, BASF and Lineas among others, already improving the safety and efficiency of their rail operations.



Presenter:

Guillaume Hendrickx OTIV BV, Belgium otiv.ai o. **31**

01

TEN-T & EuroVelo, the European cycle route network: opportunities for synergies

TEN-T infrastructure can be both an opportunity and a threat for active mobility. Leveraging synergies during planning can reduce the barrier effects of transport infrastructure on cycling continuity, with limited additional costs supporting active mobility as a ripple effect. ECF has identified 7,861 locations where EuroVelo routes run along or across roads, railways or inland waterways of the TEN-T Network, with a total length of nearly 10,000 km. These figures show the enormous potential of synergies between EuroVelo and TEN-T.

EuroVelo, the European cycle route network, is an initiative of the European Cyclists' Federation. Launched in 1997, it spans 92,000 km of long-distance cycle routes across 38 countries. As of 2023, 66% of the network is developed and 37% signposted with EuroVelo signs in 24 countries. Its development leads to safe and continuous cycle routes and forms a backbone for national and regional cycle networks.





Presenter:

Agathe Daudibon
European Cyclists' Federation (ECF), Belgium
www.ecf.com

n. **32**

02

Maximize the use of photovoltaic energy in electric transport of people and goods.

Electric mobility is set to become the dominant form of transport. While being efficient, electric mobility faces challenges, notably the availability of recharge infrastructure, network congestion and CO2 emissions related to electricity generation.

Using photovoltaic energy (PV) in transport increases the use of renewable energy, further reduces emissions, while allowing for charging infrastructure savings. This project is a contribution to the International Energy Agency's PVPS Task 17 "PV in Transport". Its mission is to be ahead of the curve, and to pave the way for solar electric mobility adoption by providing answers to scientific questions on PV charging infrastructure and Integration of PV to vehicles.

Is it efficient, is it economic, will it save money, will it be convenient and provide for more comfort, what are its environmental advantages?

Are participating: The Technical University of Compiegne, the national institute for solar energy CEA-IN-ES, SAP Labs and Planair. The project is subsidized by ADEME, the French Agency for Ecological Transition.





Presenter:

Manuela Sechilariu

ADEME: The French Agency for Ecological Transition,

France ademe.fr



03

EIT Urban Mobility - De-risking mobility innovation for impact and scale





Co-funded by the European Union

Since 2019, EIT Urban Mobility, an ecosystem co funded by the European Union through the European Institute of Innovation and Technology has been hard at work to facilitate cooperation between universities, solutions providers, and the public sector through three main activities:

- → Training professionals and students
- → Testing then commercialising innovative mobility solutions
- Supporting start-ups through access to grants and equity investments.

Some of our work so far include:

- → The livingLAPT project where we tested Estonianmade autonomous shuttles in 5 cities across Europe and 2400 people have experienced these shuttles in Prague only.
- → We supported Zeabus which is powering the world's first autonomous urban electric passenger ferry, launched in Stockholm as part of the public transport offer: no emissions or noise, shortening travel times.

→ Elonroad: Swedish startup developing charging infrastructure to autocharge all types of parked or driving electric vehicles: limits the demand of batteries, increase vehicles' range.

Education and capacity building:

→ We provide trainings – so far we trained 15 000 professionals. Example > safe and qualitative cycling infrastructure for transport for Malta who like many other countries, will benefit from national funding for bike lanes.

This year through our annual call opening on 2/04 we will put forward 8 million euros to tackle the biggest challenges cities face: public transport, urban logistics and electrification of transport in cities.

Presenter:

Luana Bidasca EIT Urban Mobility, Belgium eiturbanmobility.eu



p. **34**

Development of HRS network in the Greek TEN-T highways

Driving growth and change across a diverse, multienergy portfolio, with a strong focus on alternative energy & fuels, Motor Oil Group is leading the energy transition through the implementation of an ambitious investment program.

In this context, Avin Oil (Motor Oil Group company) is developing the first two HRS in Greece with the support of CEF-T program. This is only the beginning in the plan for the establishment of a HRS network in the Greek TEN-T highway.

Motor Oil Group has 92 individual companies, branches in 8 different countries and supports the economy with exports to over 75 countries, thousands of employees, and continuous new investments. With activities in the refining of crude oil and the marketing of petroleum products, as well as in LPG, electricity and gas trading and renewable energy.

AVIN OIL, one of the leading brands in the Greek oil market, started operating in 1977. Continuing a constantly dynamic growth path, it currently employs over 200 people, has privately owned oil storage facilities in Agioi Theodoroi, Corinth and operates more than 500 retail stations throughout Greece.



Presenter:

Konstantinos Chatzifotis Motor Oil (Hellas) Corinth Refineries S.A., Greece moh.gr



05

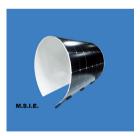
LOW-EMISSION MOBILITY 100 % reduction Co2 emissions of stationary energy caused by trucks, bus,...

Using solar energy in transportation limit the destruction of fossils. This without shifting the problems of the reduction of Co2 emissions to others.

Better using renewable energy on a small part of a vehicle and reducing 100 % of the Co2. Then using conventional energy on bigger part of a vehicle not even reducing 20 % Co2.

That is why our concepts are focused on 10 % of the fuel consume by vehicles, feeding the 100 % of the stationary energy at several types of transportations. Approximal 10 % of the fuel of trucks, buses, etc.. are not to drive but to power the electronic devices on board.

Causing from 4,5 Ton, over 6 Ton up to 30 Ton Co2 emissions per year. Those are easy to reduce by using renewable energy with conscience for our planet. Shifting the problems to others as electric centrale does not solve the problem of the Co2 emissions it is simply continuous the conventional energy true other channels. Small but beautiful is our drive instead of big misleading continuo with conventional energy. Therefore, we provide concepts of stationary energy & decarbonisation to reduce Co2.



Presenter:

Marc Van Ginneken M.S.I.E. / M.S.I.A. (LOGISTICS WALLONIA member), Belgium sunportmsie.eu n. **36**

06

LAURELIN: towards affordable e-fuel through advanced catalysis and reactor technology

The application of e-fuels to be deployed in transport and other energy-intensive sectors is still held back by several factors including its high manufacturing cost. LAURELIN – a Horizon 2020 co-funded research project also supported by the Japan Science and Technology Agency (JST) – is aiming to achieve better selectivity, yield, and energy requirements of e-methanol production through combinations of advanced chemical reactors and tailormade catalysts.

The project has generated several promising results and still has one year to go. With this pitch, the LAURELIN project wishes to make itself (better) known to stakeholders including electricity and hydrogen producers, engine performance engineers, social scientists, press and funding bodies. The consortium members are hoping that this will give occasion for mutual learnings and fruitful exchanges, especially on a possible continuation of the R&D after the end of the project.



Presenter:

Raf Roelant Process Design Center, Netherlands www.process-design-center.com 07

SWS Power Solutions make climate-neutral cold chain logistic on rail possible

Modern logistics requires 24/7 monitoring and the most resource-efficient and cost-effective operations.

In refrigerated logistics, energy efficiency is the key to success. Until now, there has been no solution to these challenges for transport by rail. Driven by the problem of no solution, we have developed the SWS-PowerBox®. A unique, global, and almost maintenance-free system, which enables climate-neutral energy supply of cooling units on rail freight wagons.

The SWS-PowerBox® is an environmentally friendly, self-sufficient energy solution for transporting temperature-sensitive goods by rail, ensuring a seamless cold chain without CO2 emissions.

Our products use the latest battery technology for emission-free operation. Throughout the lifecycle of our components, resource sustainability is a priority.

SWS offers remote monitoring for SWS-PowerBox® units, providing real-time access to data via a QR code or URL.

This system integrates IoT and predictive maintenance, enabling efficient oversight.

It is up to all of us to shape the future. With the SWS-PowerBox®, the shift of climate-neutral refrigerate logistics to rail can now begin worldwide.



Presenter:

Patrick Sluga SWS Power Solutions, Austria sws-ps.com n **38**

08

The MOVE21 approach on how to bridge the gap between the TEN-T and urban nodes dimension

MOVE21 aims at transforming European cities and their surroundings into smart zero emissions nodes for mobility and logistics. The project is coordinated by the City of Oslo.

Among the several barriers identified in the Impact Assessment of the current TEN-T Directive, one of them is the lack of integration of urban nodes in the revised TEN-T Regulation. The MOVE21 Scan-Med Observatory aims to be the starting point of a process that brings together European decision-makers with a large number of cities across Europe.

It is conceived as a peer group and interface between the local and TEN-T level with focus on governance collaboration.

MOVE21 has a long-term vision and sees in the current revision of the TEN-T Directive, and new opportunities for urban nodes. With the entry into force of the revised TEN-T Directive, it is important to ensure a coherent approach at European and Corridor level as the number of local authorities and urban nodes involved will expand considerably.



Presenter:

Raffaele Vergnani POLIS, Belgium polisnetwork.eu p. **39**

09

Leverage the European Skills Year to tackle skills shortage and invest in competition and innovation in the Rail Industry.

Europe's Rail took the opportunity of the European Skill Year to raise awareness among its audience about the lifelong learning approach to adopt in order to build a dynamic career in rail, addressing the skills shortages in the European railway sector for an innovative, competitive and sustainable industry.

Finding the right opportunity to meet with representatives of rail sector at different career levels can be challenging for a wide audience: this serie of videos allows the audience to learn directly from people in the railway sector what are the skills they can develop while working in rail, what skills are necessary to have and what skills are used daily.

These videos provide a gold mine of information from professionals working at different levels of the railway sector, both from policy makers and from industry, through the voice of the founding members, partners and staff of Europe's Rail JU.

Interdisciplinarity is key to bring all the stakeholders of rail around the table: in mobility, lifelong learning and people empowerment can have a direct impact on the green and digital transition. Investing in the right knowledge and competence to address skills shortages in the European railway sector is a joint effort from people and companies.



Presenter:

Eleni Selipa Europe's Rail Joint Undertaking (EU-Rail), Brussels rail-research.europa.eu p. **40**

10

Next level security on "Safe and Secure Truck Parking Areas": MacScanners

In human smuggling and trafficking, climbing into cargo remains the most common modus operandi. Digital contact with the runner is crucial in this process: every (trans)migrant possesses a mobile phone, and all arrangements, from pick-ups to transfers and disembarkation, are coordinated through various contemporary social media platforms such as Messenger, WhatsApp, TikTok, Facebook, Instagram, and more. A (trans)migrant must remain online throughout their entire journey.

During the critical smuggling phase, runners drop off (trans)migrants in the vicinity of parking areas where they can then climb into the cargo for further physical transfer toward their (final) destination. It has been observed that the point of intrusion into cargo is increasingly farther from the final destination due to the unlimited digital connection with the runners in terms of time and space. As a result, the opportunity for inspection and detection occurs almost exclusively at the point of intrusion or in the disembarkation zone itself — at the beginning and end of the illegal route, respectively. The likelihood of being checked by police or customs during the journey is nearly non-existent. The most common scenario remains the accidental discovery by the trucker themselves at their rest or stop location.

Therefore, it is of utmost importance to be able and willing to inspect cargo for human presence at truckers' stop locations, within the trucks, and within the cargo itself by checking for active mobile devices.











