



# INVITATION

# **ACCELERATION EVENT**

# THE BLOCKCHAIN MADE EASY FOR SMEs AND EUROPEAN VALUE CHAINS

ERCI 1st Joint Task Forces "Cybersecurity in Railways" and "Multimodal Logistics" meeting

BLOCKCHAIN-ENABLED RAILWAY AND MULTIMODALITY APPLICATIONS TO BOOST EUROPEAN INDUSTRIAL VALUE CHAINS

USE-CASES FOR OPERATIONS, BUSINESS MODELS, SAFETY AND CYBERSECURITY

Marina di Carrara-Carrara, Tuscany, Italy | 20-22 June 2022

Dear Sirs,

We are delighted to invite you to participate in the 1<sup>st</sup> joint meeting of the Task Forces of ERCI-European Railway Clusters Initiative (the network of 15 Railway Clusters in Europe) **to address – in Italy but with European dimension – a 'very hot' topic**: the Blockchain technology, representing a very important driver for innovation and performance, yet still needing to be known by wider audiences in its actual potentialities – and not only for cryptocurrencies.

Indeed, Blockchain is a **key technology for the Railway and Multimodality sectors**, as it introduces a new modality to approach processes based on data immutability. This untaps a very wide and varied potential of applications enabling benefits in terms of performance, safety, security, sustainability, operations, business models.

The full understanding of the technology and the identification of use-cases where it can deploy its benefits for each organization become, therefore, fundamental. Last but not the least, also UITP (Union Internationale des Transports Publics) has meant to give its contribution adopting in April 2022 the Report "Distributed Ledger Technology in Public Transport. Use Cases for Blockchain".

The event is therefore conceived as 'acceleration event' to understand the technology and its potential application. For this reason, the aim is to **introduce and understand the technology as such and what revolves around it** - so as to acquire fundamental knowledge - and then to apply it to the railway and multimodal sectors both with presentations on **current use-cases** (Day #1, 20 June), and – through brainstorming, presentations, pitches, group work and networking - identifying

In the framework of the EU projects















**new use-cases** suitable to help companies and value chains increase performances, sustainability, quality etc. of key industrial processes (Day #2, 21 June).

Finally, Day #3 is dedicated to our European partners.

## **Invited Speakers** include:

- European Commission
- FSI-Italian State Railways
- Italian Ministry for Infrastructures and Sustainable Mobility / ENISA TRANSSEC Expert Group
- ISO/TC 307
- Deutsche Bahn
- CHAISE, the Blueprint Alliance of the EU for the development of Skills for Blockchain
- Organisations from the Railway Value Chain, the Multimodality Value Chain, Ports.

## **Target-participants** of the event include (but are not limited to):

- Organisations of the Rail Value Chain
- Railway Infrastructure Managers and Railway Transport Operators both for Passengers and Freigth
- Ports
- Freight Terminals
- Railway Clusters
- Clusters operating in sectors interested to increase the functioning and performance of their Value Chain
- Universities, Research Centres, Technology Centres
- Incubators, Accelerators, Digital Innovation Hubs

# 5 June

Registration by 23 May is mandatory: https://forms.gle/pdbyKnTcdZkoBXCR9

#### Best regards

Veronica Elena Bocci Coordinator of DITECFER and STARS and EXXTRA projects

Vice-president ERCI

Ignasi Gómez-Belinchón CEO In-Move by Railgrup

Leader ERCI WG4 Task Forces















DAY #1 - 20 JUNE 2022 (10.00 - 18.00)

# **INTRODUCTORY PART | SETTING THE SCENE**

#### **Topic covered:**

- Intro to the STARS and EXXTRA projects and to ERCI Task Forces
- Cybersecurity in Railways: What has been achieved? What Remains to Be Done? What Role Expected from the Value Chain?
- Railway Freight and Multimodal Logistics: How to Tackle Gaps from a Value Chain Perspective?
- KEY-NOTE SPEECH: Building EU Leadership in Blockchain Technology: The European Commission's Blockchain Strategy
- Discovering the Blockchain Technology: its fundamentals
- Standardisation of Blockchain in ISO/TC 307

#### FOCUS PART 1 | THE BLOCKCHAIN TECHNOLOGY IN RAILWAY AND MULTIMODAL LOGISTICS: USE CASES

#### **Topic covered:**

- Blockchain for Better Railway Services
- Blockchain for Increased Cybersecurity of Railway Signalling
- Blockchain for Increased Safety in Track Construction
- Blockchain for Track & Trace in Multimodal Logistics
- Blockchain for Faster & Leaner Logistics
- Blockchain for Port Logistics Operations
- Helping Blockchain adoption by European SMEs Operating in the Rail and Multimodality Sectors:
   the STARS Blockchain network

### FOCUS PART 2 | BARRIERS AND CHALLENGES SURROUNDING BLOCKCHAIN, AND HOW TO TACKLE THEM

#### **Topics covered:**

- Skills and Organisational Capabilities in Blockchain Adopters
- Energy Consumption of Blockchain
- Blockchain Interoperability
- Smart Contracts

Coffee corner and Lunch buffet during the day

Networking Aperitif Time at the end of the event















# DAY #2 - 21 JUNE 2022 (10.00 - 18.00)

#### LOOKING FOR NEW USE CASES IN THE RAILWAY AND MULTIMODAL LOGISTICS AND THE ROLE OF SMEs

#### **Activities covered:**

- Recap of Day-1: Key Learnings and Inspirations
- Working & Networking with Railway and Multimodal Logistics Stakeholders:
  - Presentations from Stakeholders of potential new use-cases suitable to be enabled by Blockchain & Pitches of Ideas
  - Plenary Discussions
  - Brainstorming and Working Groups
  - Networking

#### **Topics covered (not exhaustive list):**

- Blockchain for Cybersecurity
- Blockchain for Adding Value to "Made In" Products
- Blockchain for Fighting Counterfeit Goods/Components
- Blockchain for Tracking and Tracing Materials Used in Manufacturing Processes, supporting Sustainability and Circular Value Chains
- Blockchain for Tracking and Tracing Quality and/or Sustainability of Products
- Blockchain for Supply Chain Management
- Blockchain for Tracking and Tracing Inspections and Maintenance Services (of Railway Fleets, of Machineries, etc.)
- Blockchain for Autonomous Driving and DAC-Digital Automatic Coupling of Railway Freight Cars
- Untap Potentials from Integrating Technologies:
  - Blockchain and Additive Manufacturing
  - o Blockchain and Artificial Intelligence
  - o Blockchain and Digital Twin

Coffee corner and lunch buffet during the day















(for European partners)

DAY #3 - 22 JUNE 2022 (9.30 - 17.30)

## "FROM CAVE TO PORT" - VISIT ON THE FIELD AROUND BLOCKCHAIN APPLICATIONS

#### **Activities covered:**

- Visit on the field along the Carrara Marble supply chain, to follow the process from sourcing to port shipping at Marina di Carrara Port of the first Tuscan sector having applied the Blockchain technology from which the STARS Blockchain network has been derived.
- Presentations and discussions concerning the added value of the Blockchain technology in the different segments of the value and supply chain from sourcing the material, to manufacturing, up to final delivery to destination (e.g. from proof of origin to easier and faster logistics, etc.)
- Visit to the Marble Caves with the Jeeps
- Visit to the Port of Marina di Carrara

*Lunch during the visits* 









