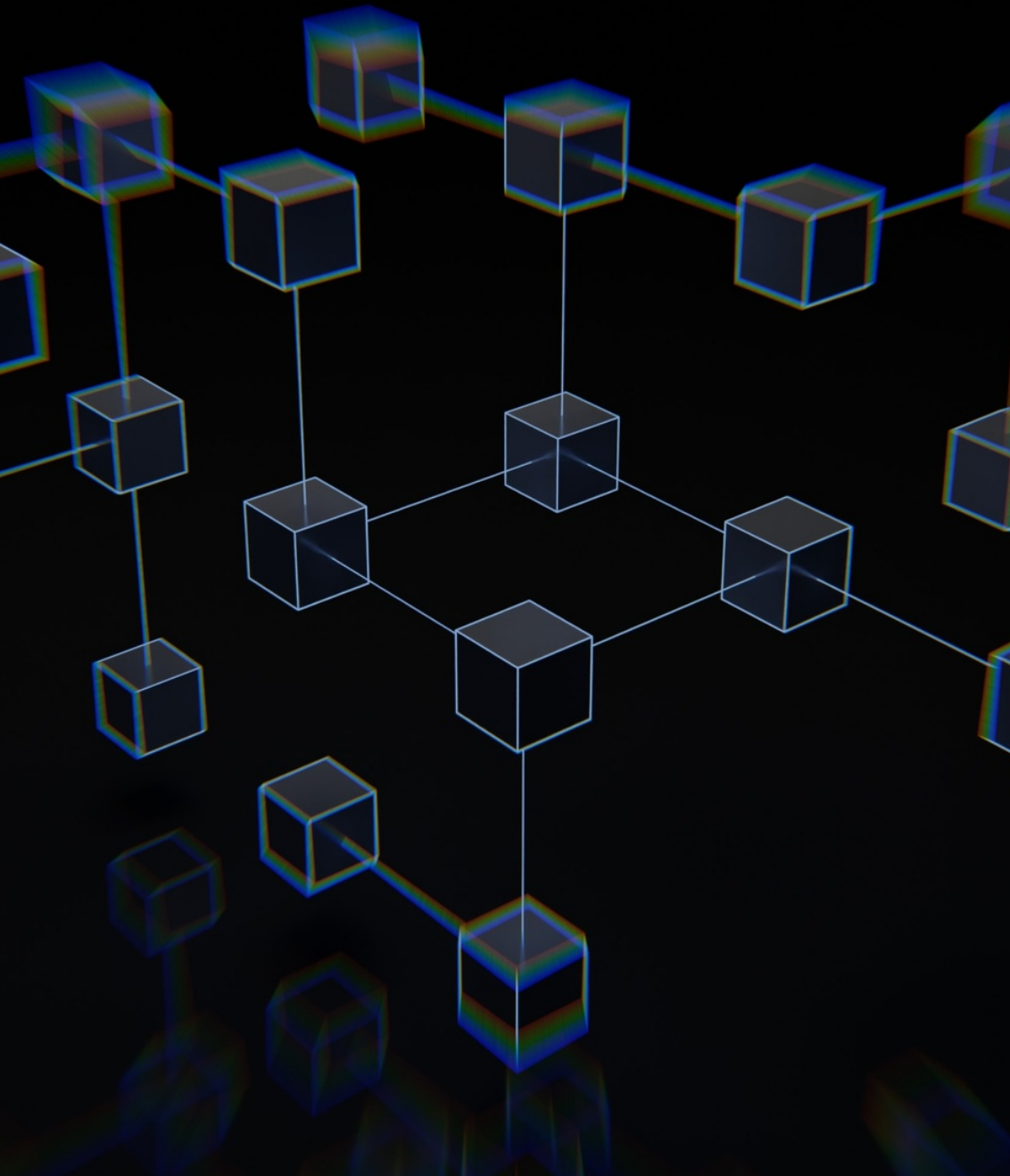


BRIE

Blockchain Registry
for Import-Export



BRIE

A blockchain-based solution to track and optimize international trade logistics

PROJECT OBJECTIVES: The BRIE Project intends to develop the technological core of an **innovative distributed data clean room** to allow all import-export stakeholders to **track the flows of goods, update documentation, and create new synergies** for the management, storage and transit of goods in Europe, while at the same time **mitigating bureaucratic and customs burdens**.

The consortium

moveax | Applied Innovation.
Now.

MOVEAX SRL

Main tasks: Project analysis, service design, solutions' development, validation and institutional communication, general coordination



chainside

CHAINSIDE SRL

Main tasks: Solution development, blockchain expertise, validation

Project partners

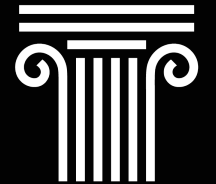


SAPIENZA
UNIVERSITÀ DI ROMA

SAPIENZA UNIVERSITÀ DI ROMA

Main tasks: Development of the blockchain solution for confidential exchange and selective access to data published on the platform; support for the development of activities.

LUISS



CYBER 4.0 - UNIVERSITA' LUISS GUIDO CARLI

Main tasks: Analysis of the regulatory and market context; stakeholder engagement; use case definition; validation and communication.

The workplan

Analysis of the relevant regulations
Analysis of functional and non-functional requirements of the system

Registry building on Blockchain
Enabling the communication and data management system

WP1 - STATE OF THE ART ANALYSIS AND SYSTEM REQUIREMENTS

WP2 - INFRASTRUCTURE DESIGN AND USER EXPERIENCE OF THE SERVICE

WP3 - PLATFORM'S DEVELOPMENT

WP4 - VALIDATION, SECURITY TESTING AND DISSEMINATION

Study of user flows and user experience using the solution

Definition of the infrastructural details of the solution

Validation of the technological solution on a real use case

Infrastructure and software security testing

Features of the system

```
15:53 .  
15:53 ..  
2015 bin -> usr/bin  
09:31 boot  
15:50 dev  
09:32 etc  
15:52 home  
2015 lib -> usr/lib  
2015 lib64 -> usr/lib  
Jul 10:01 lost+found  
Aug 22:45 mnt  
Sep 2015 opt  
Sep 15:52 private -> /home/eni  
Sep 08:15 proc  
Aug 15:37 root  
Sep 15:50 run  
Sep 2015/sbin -> usr/bin  
Sep 15:51 srv  
Sep 15:45 sys  
Aug 15:39 tmp  
Jul 10:25 usr  
var  
21. Sep 15:52
```

A dashboard for data visualisation

A dashboard that allows the quick visualisation of all data in the ecosystem

Pratiche totali

160.093.123

Anno precedente: 168.328.923 ▼ -9%

Pratiche chiuse con successo

101.938.889

Anno precedente: 92.192.445 ↗ +24%

Merce trasportata

2.394.983t

Anno precedente: 1.837.128t ↗ +17%

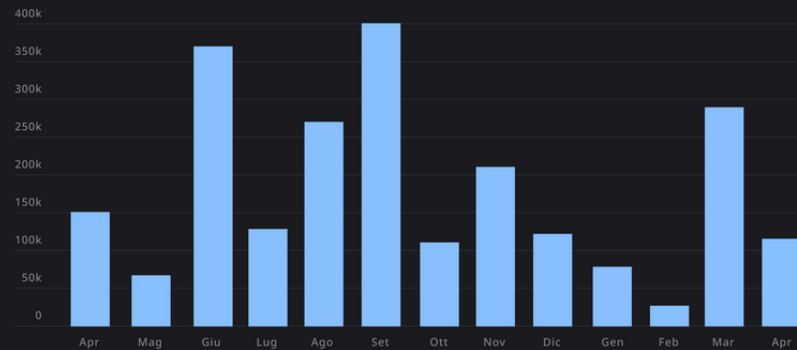
Durata media pratica

67 giorni

Anno precedente: 54 giorni ↗ +12%

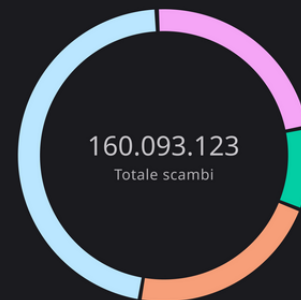
Andamento scambi commerciali

Ultimo aggiornamento: 17 Apr 2022



Tipologia di merci sul totale di scambi

Ultimo aggiornamento: 17 Apr 2023

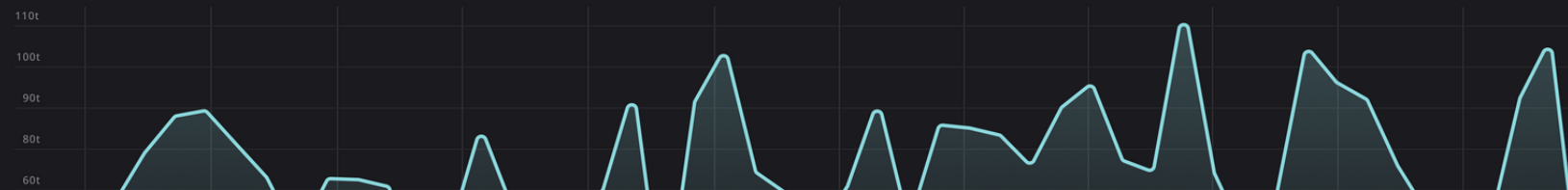


Tipologia merci % scambio ↕

- Elettronica e informatica 23
- Minerali, metalli e chimici 6
- Prodotti chimici 27
- Articoli misti 44

Quantità merce trasportata

Ultimo aggiornamento: 17 Apr 2023



The dashboard provides a comprehensive view of the exchanges and practices registered on the portal.

Users will be able to change the default view to highlight data of particular interest to them



JD

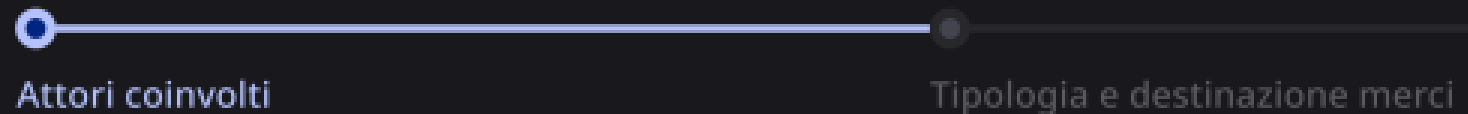
Creation of a new freight transit file

Through the creation of new files possible to initiate a new import declaration, including all that information that will be critical to the exchange.

The use case selected for BRIE is the intra-community movement of goods under the so-called **Regime 42**

Today, difficult tracking between multiple European countries leads to abuse of the 42 scheme, with **major VAT evasion**

Nuova pratica del Regime 42



Attori coinvolti

Le invitiamo gentilmente a inserire i dati relativi alle parti dello scambio commerciale

a. Dati dell'impresa residente nell'Unione Europea che importa merci da Paesi terzi nel quadro del re

Denominazione sociale dell'impresa

Tenneco Srl

Certification and non-repudiation of information

Certainty of the source and veracity of the data

Lista pratiche + CREA NUOVA PRATICA

Intervallo: Ultime 2 settimane (3 Apr 2023 - 17 Apr 2023) Stato pratica: Tutti gli stati Create da: Tutti

Id pratica	Creata da	Cessionario	Tipologia merci	Fase	Stato
37657 <small>Creata il 11 Apr 2023</small>	Marathon Petroleum SA <small>Spagna</small>	Parker-Hannifin GmbH <small>Germania</small>	Minerali, metalli e chimici <small>27101975; 27101976; 2710197</small>	Trasporto merci <small>Fase 1 di 4</small>	IN ATTESA
37658 <small>Creata il 11 Apr 2023</small>	Tenneco Srl <small>Italia</small>	Wayfair Ltd <small>Lituania</small>	Elettronica e Informatica <small>8708999790; 8708999791; ...</small>	Creazione pratica <small>Fase 1 di 4</small>	AZIONE RICHIESTA
37659 <small>Creata il 11 Apr 2023</small>	Tenneco Srl <small>Italia</small>	Hess Sarl <small>Francia</small>	Articoli misti <small>27101975;27101976;271019...</small>	Arrivo merci <small>Fase 2 di 4</small>	AZIONE RICHIESTA
37660 <small>Creata il 11 Apr 2023</small>	Hentorikh GmbH <small>Paesi Bassi</small>	Tenneco Srl <small>Italia</small>	Prodotti chimici <small>27101975; 27101976; 27101...</small>	Trasporto merci <small>Fase 3 di 4</small>	IN ATTESA
37661 <small>Creata il 11 Apr 2023</small>	Tenneco Srl <small>Italia</small>	Parker-Hannifin GmbH <small>Germania</small>	Elettronica e Informatica <small>27101975; 27101976; 2710197</small>	Creazione pratica <small>Fase 1 di 4</small>	AZIONE RICHIESTA
37662 <small>Creata il 11 Apr 2023</small>	Tenneco Srl <small>Italia</small>	Parker-Hannifin GmbH <small>Germania</small>	Altre categorie <small>47101975</small>	Chiusura pratica <small>Fase 4 di 4</small>	PRATICA CHIUSA
37663 <small>Creata il 11 Apr 2023</small>	Tenneco Srl <small>Italia</small>	Hentorikh GmbH <small>Paesi Bassi</small>	Elettronica e Informatica <small>27101975; 27101976; 27101...</small>	Chiusura pratica <small>Fase 4 di 4</small>	PRATICA CHIUSA
37664	Tenneco Srl	Marathon Petroleum SA	Attrezz. per trasporto	Chiusura pratica	

Pratiche per pagina: 20 | 1 - 20 di 156 pratiche | 1 di 12 pagine

The accessibility and transparency of data is guaranteed for all users of the system. The data is managed via IPFS, adding an extra element of security and reliability to the system.

All documents related to a case can be consulted.

Availability and verification of the documentation

Access to the documents attached to the practices allows to visualize the successful notarization on the blockchain and to verify all the information reported associated with each phase of the exchange.

One of the most innovative elements of BRIE is the adoption of a blockchain-based access control system.

The system allows to set access policies to determine which user can access which information. The system makes use of attribute-based encryption and smart contracts to execute policies automatically.

Lista pratiche > Id 37657 - Elettronica e Informatica

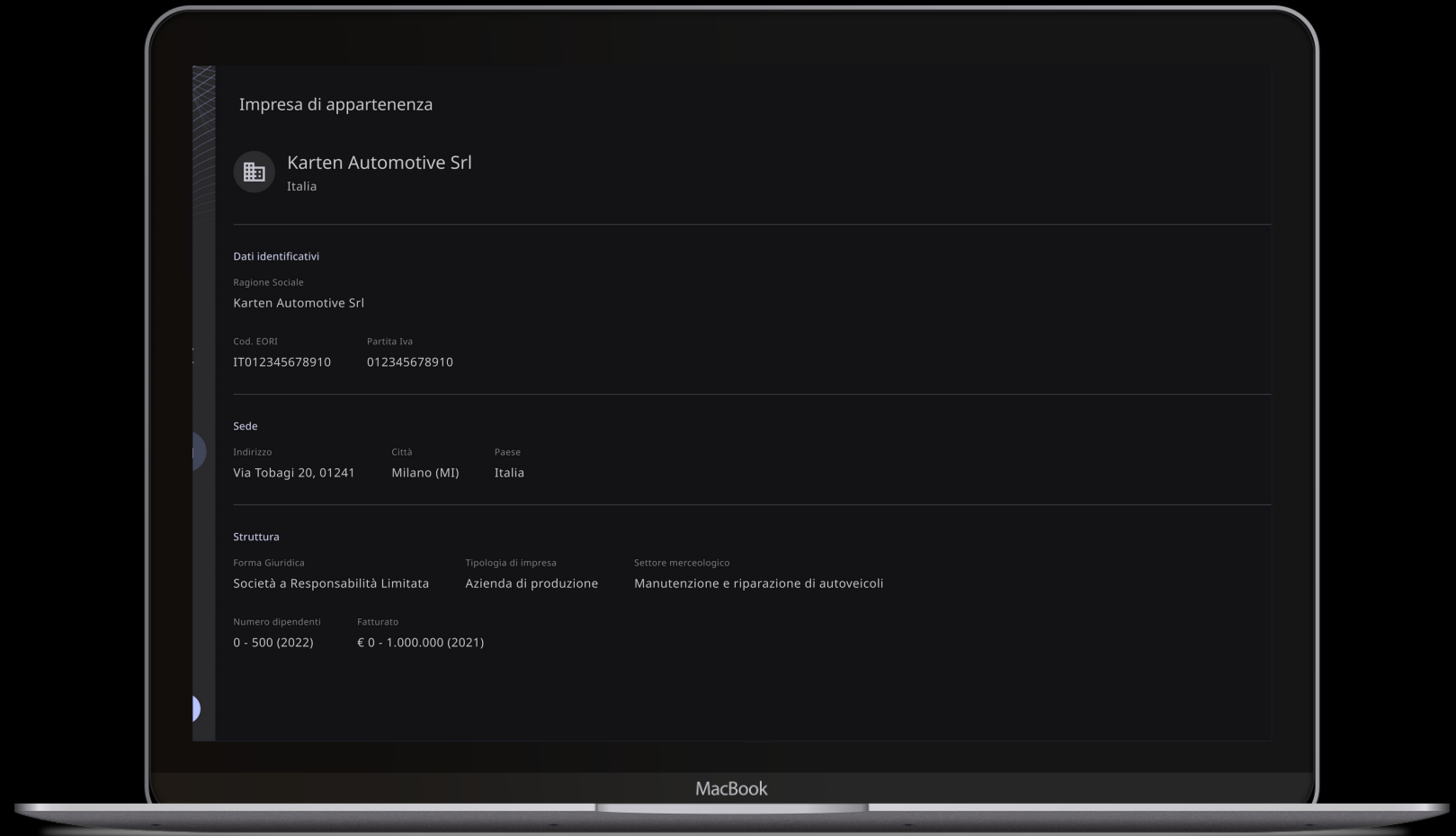
Informazioni Azione richiesta ● **Documenti**

Fase pratica: Tutte le fasi Stato documento: Tutti gli stati

Nome	Tipologia	Caricato il	Caricato da	Fase	Stato
Bolla doganale, consegn... <small>PDF</small>	Bolla Doganale <small>9.7 MB</small>	11 Apr 2023 <small>17:22:08</small>	Tenneco Srl <small>Italia</small>	Creazione pratica <small>Fase 1 di 4</small>	NOTARIZZATO
Integrazione - n.1 <small>PDF</small>	Integrazione <small>9.7 MB</small>	12 Apr 2023 <small>17:22:08</small>	Tenneco Srl <small>Italia</small>	Creazione pratica <small>Fase 1 di 4</small>	NON NOTARIZZATO
Integrazione - n.2 <small>JPG</small>	Integrazione <small>9.7 MB</small>	13 Apr 2023 <small>17:22:08</small>	Tenneco Srl <small>Italia</small>	Creazione pratica <small>Fase 1 di 4</small>	NOTARIZZATO
Packing list <small>PDF</small>	Lista di imballaggio <small>9.7 MB</small>	14 Apr 2023 <small>17:22:08</small>	Tenneco Srl <small>Italia</small>	Trasporto merci <small>Fase 2 di 4</small>	NON NOTARIZZATO <small>↓</small>
Documento di Trasporto,... <small>PNG</small>	Documento di Trasporto... <small>9.7 MB</small>	15 Apr 2023 <small>17:22:08</small>	Marathon Petroleum SA <small>Spagna</small>	Trasporto merci <small>Fase 2 di 4</small>	NON NOTARIZZATO
Packing list_2 <small>PNG</small>	Lista di imballaggio <small>9.7 MB</small>	16 Apr 2023 <small>17:22:08</small>	Marathon Petroleum SA <small>Italia</small>	Trasporto merci <small>Fase 2 di 4</small>	NOTARIZZATO

Visibility of the information of the companies involved in the transit

Users can access not only data in regard to the organization to which they belong but also **all the companies involved in each single transit operation.**



IN PERSPECTIVE



BRIE offers the basic technological elements for a Data Clean Room in the import-export sector, for controlled and secure data sharing.

A decentralized data clean room for the exchange of information will facilitate the collaboration between operators and the completion of bureaucratic procedures, optimising control activities by the relevant authorities.

Forgery of documents, fraud and collusion will be increasingly difficult.

The data exchange in real time could lead to the optimization of the use of common logistic resources, allowing a reduction of operating times and costs for the transport of goods.



Thanks!

BRIE - Blockchain Register for Import Export
- is a project co-funded by Cyber 4.0,
according to the provisions of the Decree of
the Minister of Economic Development No.
214 of 12.9.2017, within the framework of the
interventions related to the National Plan
Industry 4.0

