

UIRNet S.p.A.

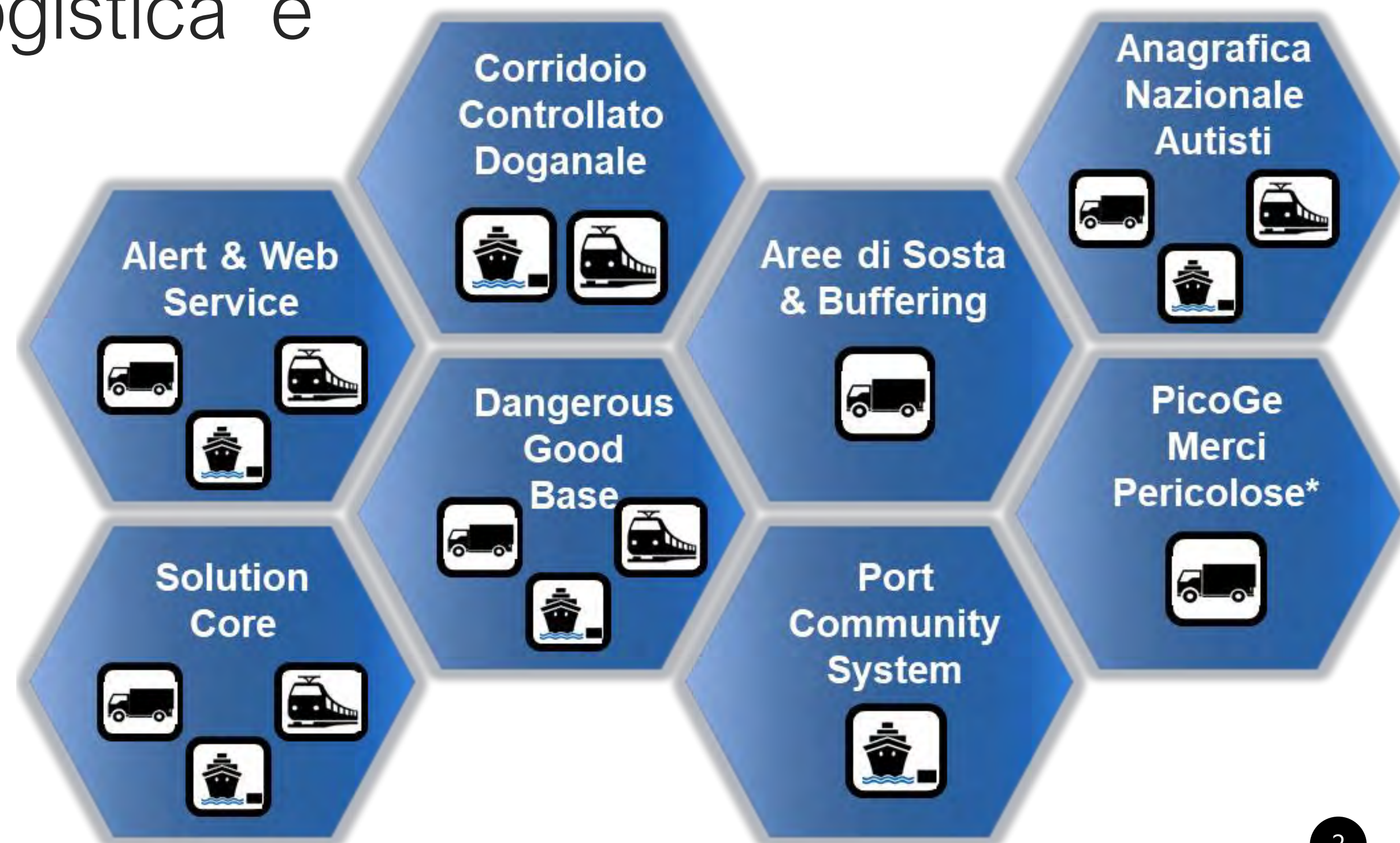
SISTEMA NAZIONALE DELLA LOGISTICA INTEGRATA E INTERMODALITA'

Piattaforma Logistica Nazionale Digitale

Le dimensioni dell'intervento

Cosa è la PLN Digitale

- La PLN è un sistema tecnologico-telematico ITS concepito per concentrare dati ed erogare servizi di sistema a tutti gli operatori e stakeholder della logistica e dei trasporti
- L'obiettivo principale della PLN è quello di migliorare l'efficienza e la sicurezza del sistema logistico nazionale favorendo in primo luogo l'interconnessione dei nodi di interscambio modale, rendendoli "smart" attraverso la modulazione dei flussi di merci sulla rete e dei servizi logistici



Costi vs Benefici 1/3

La logistica italiana ha **dimensioni imponenti**:

- ✓ In Italia vale 110,8 miliardi di Euro, pari al **7% del PIL nazionale**
- ✓ Coinvolge 1,13 milioni di occupati (quasi il **5% del totale**)

...e grandi sofferenze:

- ✓ Il **sistema portuale perde**, ogni anno, circa **900.000 contenitori** che scelgono la strada del Nord Europa per arrivare in Italia (un contenitore con merce di valore medio-basso comporta introiti diretti fiscali per circa **7.200 euro**).
- ✓ L'**export italiano vale 450 Mld euro** (2017) ed è in continua crescita. La nostra inefficienza logistica grava sui **costi per un 11% in più** rispetto alla media europea. Recuperare il gap con la Germania è stimato valere circa 65 Mld in più di esportazioni.

La PLN Digitale è costata finora 49 mln di euro (di cui 8 in autofinanziamento)

La costruzione di un km di autostrada costa 32 mln euro (media Italia)

Costi vs Benefici 2/3

La PLN Digitale offre alla logistica servizi di coordinamento e di organizzazione delle operazioni al fine di limitare le inefficienze, e cioè le rendite di posizione parassitarie.



Senza realizzare nuove infrastrutture fisiche!

(*)

Secondo uno studio condotto da «Ambrosetti The European House» nel 2017, la PLN può **recuperare 17 Mld** di euro di mancati introiti per inefficienze.

➤ Un miliardo di euro in più nell'economia comporta la creazione di **14.000 posti di lavoro** (Banca Mondiale).

Il recupero di quote di importazione transistanti oggi per i porti del Nord Europa è cruciale: una nave di medie dimensioni (10.000 TEU) può generare **introiti fiscali diretti per decine di milioni**, tra i **27-39 Mln per la logistica, 68-99 Mln per l'intero sistema economico**.

I dati raccolti possono supportare la governance strategica** (vedi slide nr.9) del MIT

*Risparmio di risorse pubbliche, di tempo, di consumo del territorio

**Sinamolo e Drive Belt nelle attività in corso

Costi vs Benefici 3/3



Il PCS Genova è entrato nella gestione UIRNet nel 2017 ed è in corso una grande sfida organizzativa e tecnologica...

**Opportunità: crescere di 400.000 – 2.000.000 TEU nei prossimi anni
(target: 2022)**

Con la **condivisione** della comunità portuale:

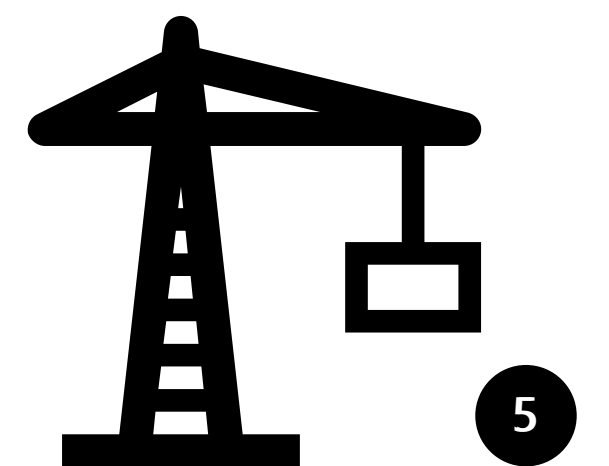
- **Avviata l'integrazione dei sistemi informativi** di Genova e Savona
- Avviato lo sviluppo della **evoluzione del PCS** di Genova, ormai in via di obsolescenza
- Prossima informatizzazione dei varchi del Bacino di Sampierdarena

Ancora di più!

Progetto OBOR-BEI(*): +2 Mln
TEU

(Investimento privato/pubblico: 60 Mln euro)

(*) Appendice 1



National Logistics Platform

Public IT Services to enhance intermodal transport

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UIRNet Spa, Italy

Managing complexity

Context and background of the main idea

WAY of EXAMPLE and NOT LIMITED



UIRNet spa

A company to accomplish the mission

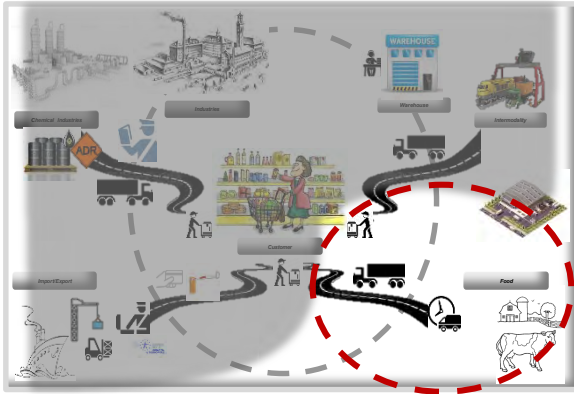
- UIRNet, governed by public law, has been established in 2005 as a joint stock company, it is the single implementing body of the **Ministry of Infrastructures and Transports** (MIT) for building and managing the platform for the national logistics network
- UIRNet is a **public interest** company
- **Neutral role** respect all the actors and processes of the **logistics system**
- UIRNet designed and implemented the **Piattaforma Logistica Nazionale** (PLN, from its Italian initials or National Logistics Platform) **to provide IT services to all logistics operators and all logistics nodes**, becoming the interconnection and overseeing platform of data and processes relating thereto



What's the best way to fill our shelf?

Smart Dating in Logistics Nodes

Matching leaving and arriving goods



- **As an airport knows exactly which planes are coming so nodes can know which trucks are arriving!**
- **To organize manpower and resources**
- **To increase security**



Solution Core

A management system of the digital drivers registry capable of providing real-time information necessary to enable access at facilities equipped with a gate



Booking

The Module allows booking of a number of services available for NLP users

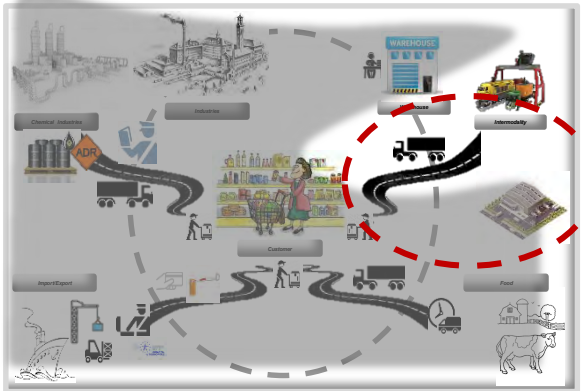


Control Tower

The module allows logistics players, such as nodes, companies, to have accurate info close to real time regarding vehicles on the road which are on the way

In behalf of road hauliers

Easy to use and to access tool for truck companies



- **To enlarge the system to all actors, Small and Medium Enterprises too**
- **To increase the efficiency and productivity of the road transport**
- **To increase the security of drivers and trucks**



SmarTruck

The module allows carriers to easily schedule travel and to monitor the operational situation



Infologicistic

Real-time information about the situation on the main national roads, with evidence of possible crossing times in the critical areas

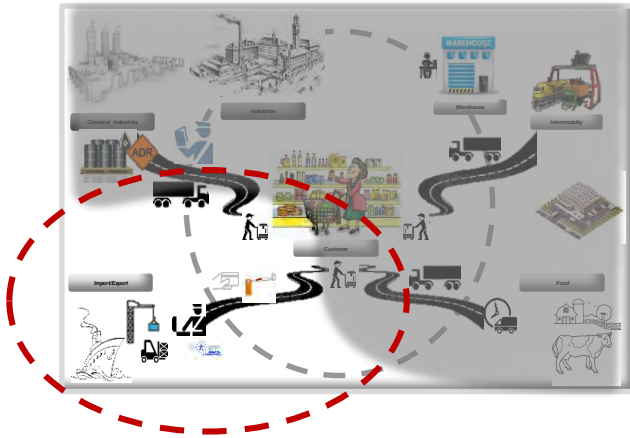


Parking & Buffering

Parking areas management services, able to allow the planning of ordinary parking/stops as well as the management of buffering areas in case of negative events that may preclude the operation of the node

Port Community System Module

Sea side – Land side intermodality



- **To integrate the system between dry ports and ports**
- **To speed up import practices**
- **To manage process and actors of complex port systems**
- **To increase efficiency and security in controls**



PCS

Application Framework able to evolve and integrate information components already operating in the reference port in a more connected system



Checked Customs Corridor

Service that allows the transport of goods subject to customs restrictions through pre-defined paths by Custom Agency



Booking

The Module allows booking of a number of services available for PLN users

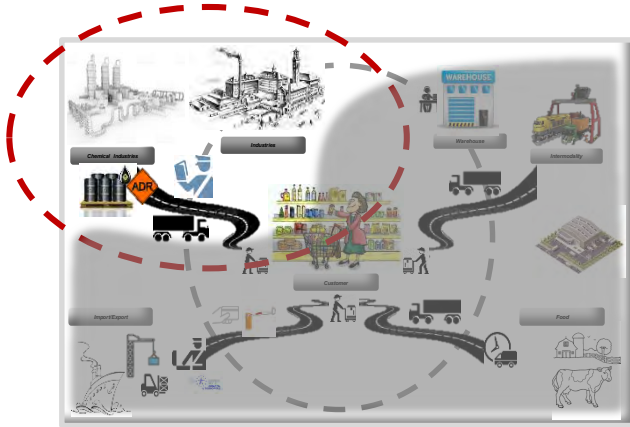


Control Tower

The module allows logistics players, such as nodes, companies, MTOs, shipping agents, to have accurate info (close to real time) regarding vehicles on the way towards them

DG Base Module

Safety & Security in dangerous goods management



- **to evaluate the risk associated** (based on the application of models for calculating risk)
- **to plan road trips** (including calculating safer routes depending on local risk maps)
- **To increase real time control** by means of track & tracing, cameras, on field controls



Dangerous Good
Transport

Service concerning the management of the transport of dangerous goods



Mobile App

APP to facilitate roadside checks (for specific use by bodies responsible for monitoring)



Control Room

Land observation system for detecting the movement of dangerous goods and/or vehicles.

Knowledge is never enough...

Business intelligence on wide scale



- *To make available and usable logistics data collected from various information sources*

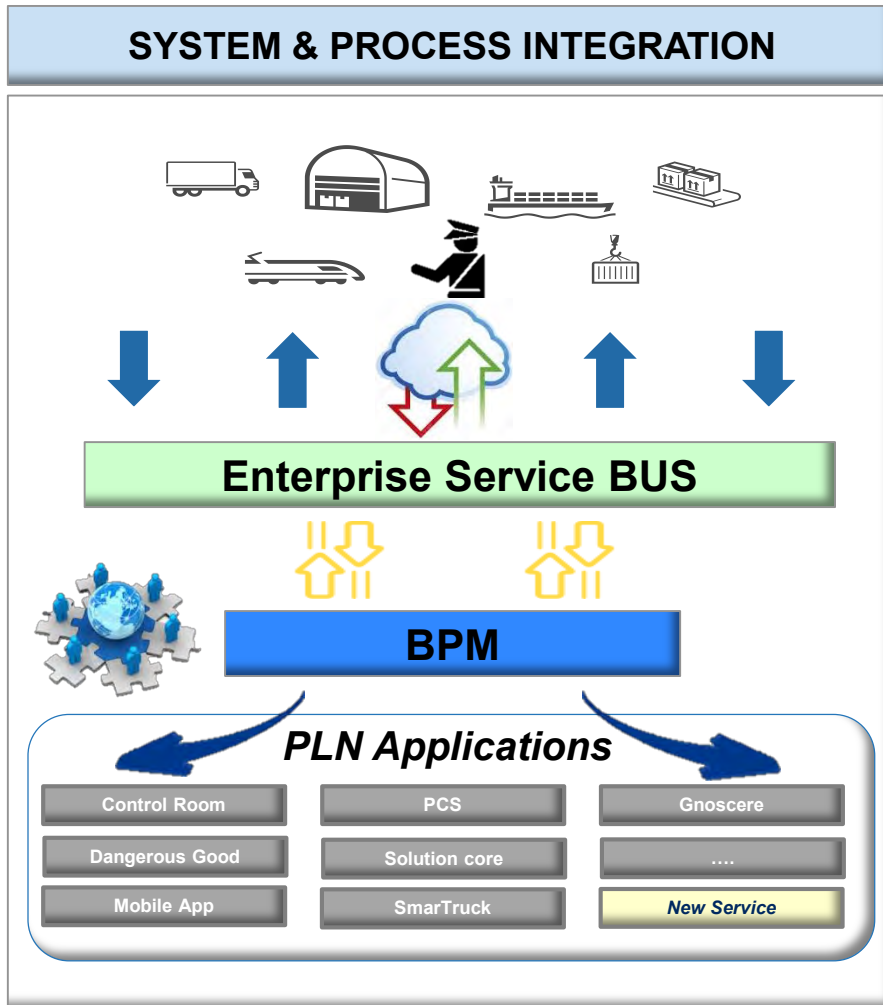


Gnoscere

Business intelligence service which aims to examine logistics dynamics in order to assist in drawing up territorial development plans, identify behaviours, check situations, investigate abuses and evasions to the rules

More services? New needs?

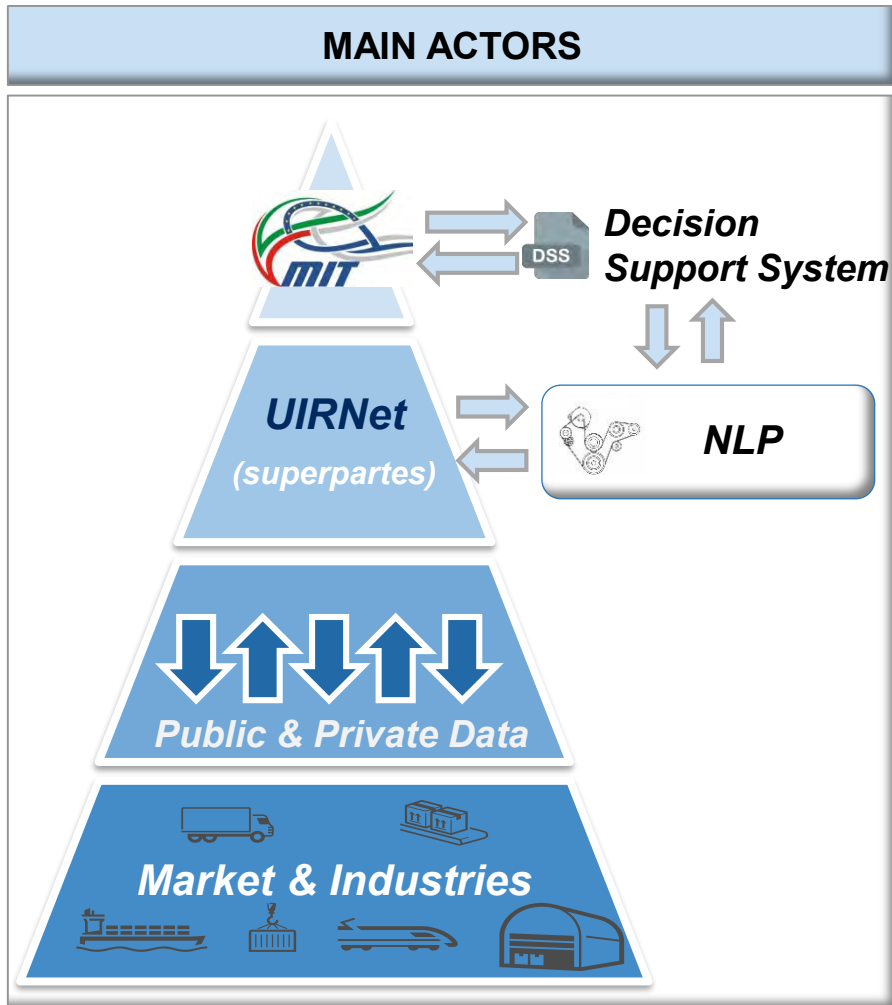
System and process integration



- The **integration layer** is the **key elements of a service oriented architecture** acting as a mediator between the supplier and the customer for a service through Business Process Manager (BPM)
- Among the functions, we highlight the processing and transformation of a message, the routing and conversion of protocols, the Interaction Based on messages, support for heterogeneous environments
- The integration level is an **intermediate level between the customer and the supplier** of the service. In this manner they are decoupled and this decoupling enables the integration of heterogeneous systems for building new solutions

Drive Belt Initiative

Putting together data to feed the Decision Support System



The MIT's strategy implementation requires the setting of an information **network between public and private entities**.

This will allow to use data integrating processes and data relating to the management of goods, and providing an application architecture which coordinates administrative and logistics issues.

Big data intelligence will convoy critical information to **Decision Support System** in force of MIT.

Thank you very much for your attention!
Needs more info?

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