



# LOGICAL

transnational logistics improvement through cloud computing  
and innovative cooperative business models

## Cloud computing platform in the Bologna hub

LOGICAL Project

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Interporto Bologna SpA

01.01.2012 // presentation title // author



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# Interporto Bologna & LOGICAL



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Interporto Bologna is partner of the LOGICAL project as one of the main logistics hubs in Europe with a clear intermodal - road/rail orientation.

The project aims at fostering interoperability and competitiveness of the service providers by decreasing transaction costs and promoting shared multimodal transport solutions through a transnational cloud platform.

In this context Interporto represents the neutral player able to “talk” with different stakeholders and offer such a kind of tool in order to pursue the project objectives.



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# Interporto Bologna Logistic Hub



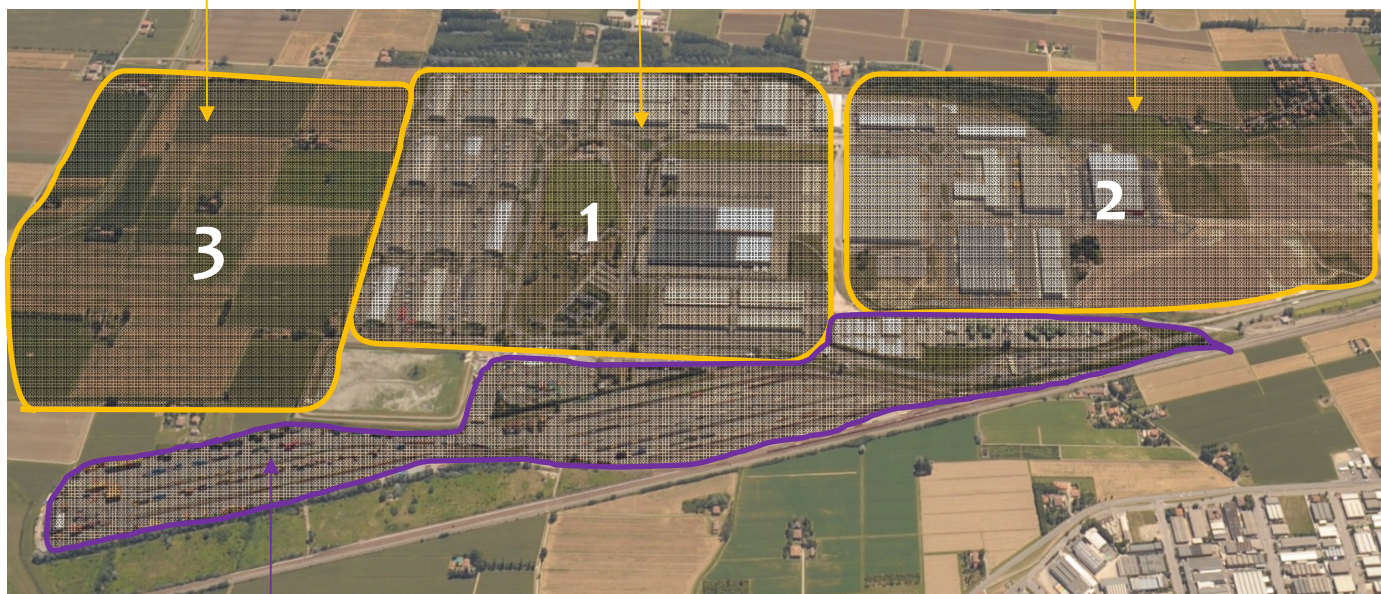
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**3° logistics area**  
1.165.000 m<sup>2</sup>  
Future  
development

**1° logistics area**  
1.380.000 m<sup>2</sup>  
Couriers and standard  
warehouses

**2° logistics area**  
986.000 m<sup>2</sup>  
International  
companies  
Contract logistics



**Rail terminal  
facilities**  
665.000 m<sup>2</sup>

**TOTAL FENCED AREA**  
4.194.000 m<sup>2</sup>

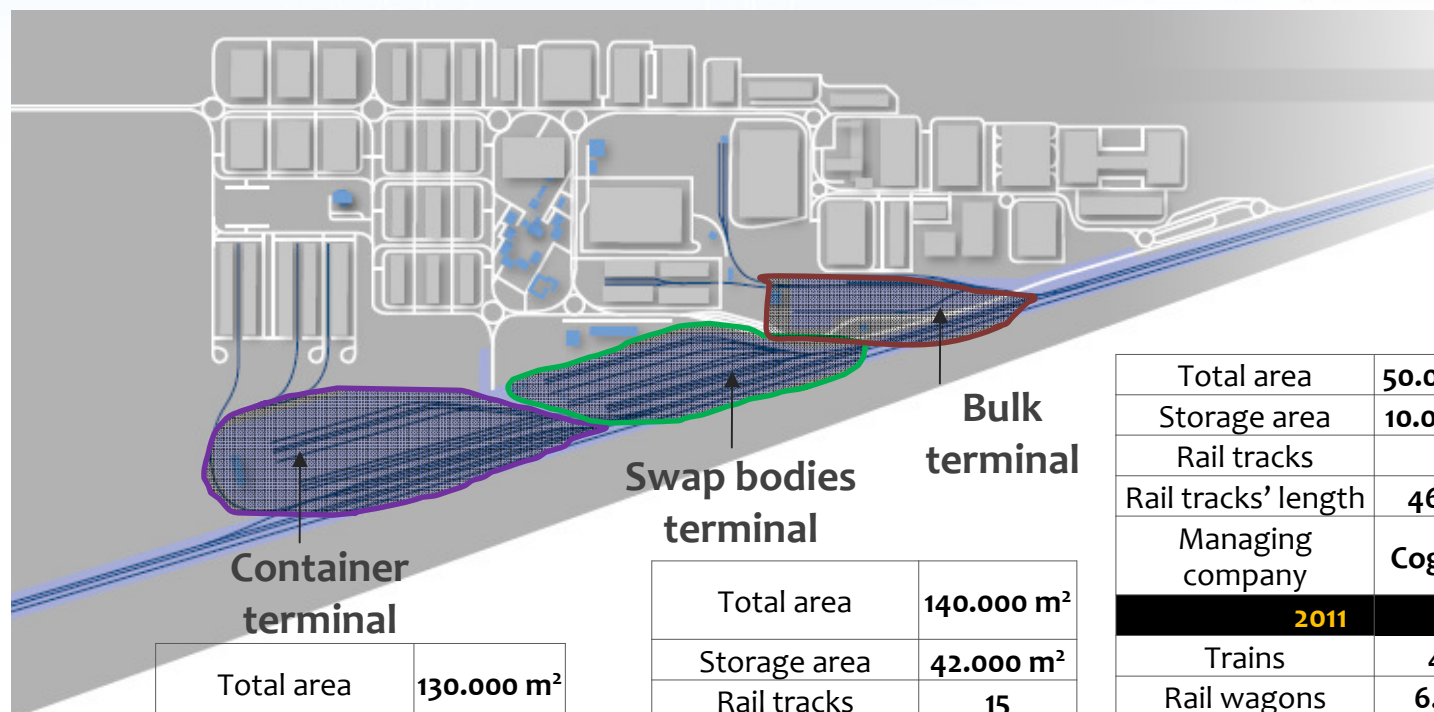


# Intermodal Facilities



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Total area	130.000 m <sup>2</sup>
Storage area	38.000 m <sup>2</sup>
Rail tracks	5
Rail tracks' length	600 m
Managing company	Terminali Italia
<b>2011</b>	
Trains	1.316
Rail wagons	21.091
ITU	44.320
TON	754.773
TEU	70.912

Total area	140.000 m <sup>2</sup>
Storage area	42.000 m <sup>2</sup>
Rail tracks	15
Rail tracks' length	550 m
Managing company	Terminali Italia
<b>2011</b>	
Trains	3.036
Rail wagons	29.375
ITU	35.273
TON	804.408
TEU	74.073

Total area	50.000 m <sup>2</sup>
Storage area	10.000 m <sup>2</sup>
Rail tracks	3
Rail tracks' length	460 m
Managing company	Cogefrin
<b>2011</b>	
Trains	416
Rail wagons	6.657
ITU	9.733
TON	185.757
TEU	12.652

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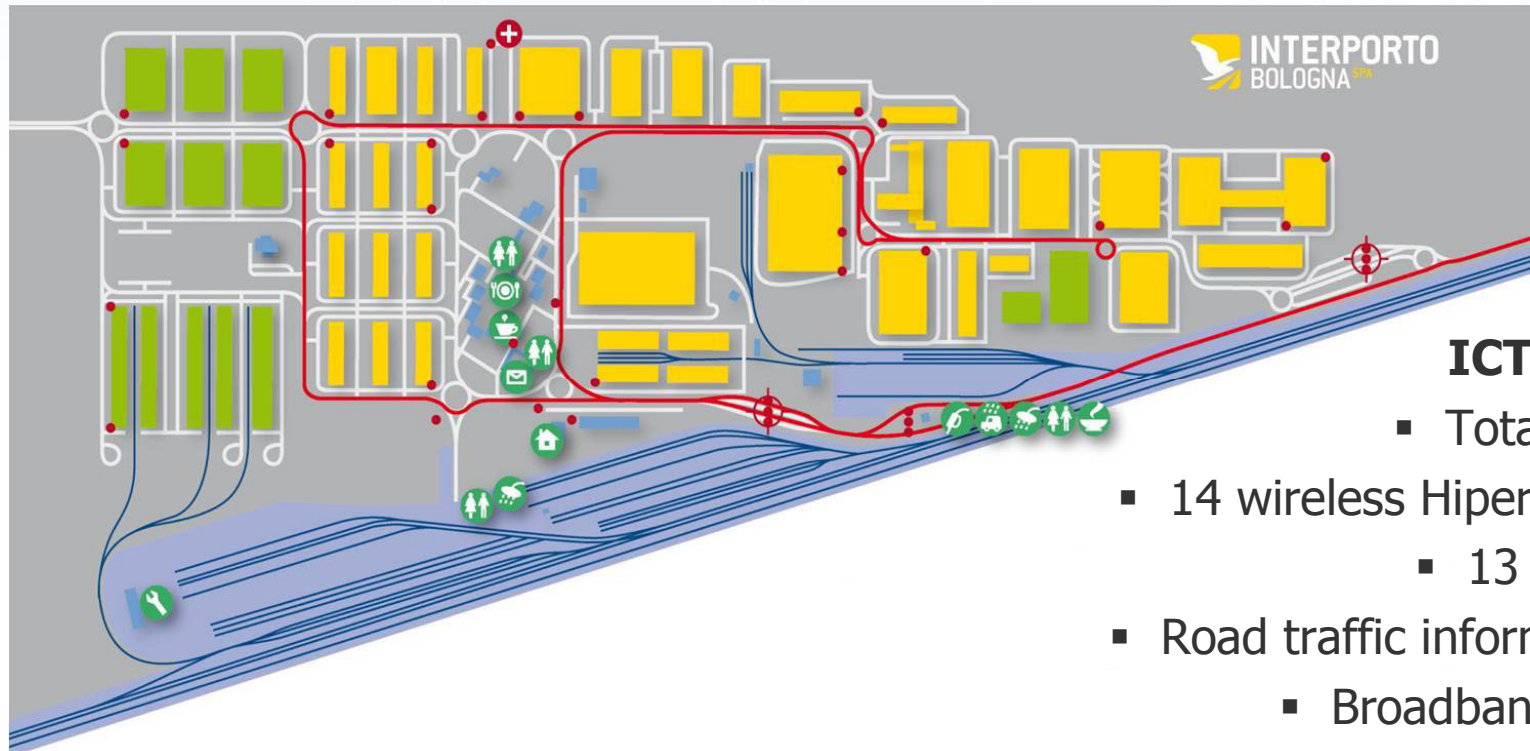


# IT infrastructure



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## ICT FACILITIES

- Totally wired area
- 14 wireless HiperLAN antennas
  - 13 km optic fiber
- Road traffic information system
  - Broadband connectivity
    - Optic fiber rental
- Centralized system for security, burglar and fire alarm
- Mail and information services, access to community databases



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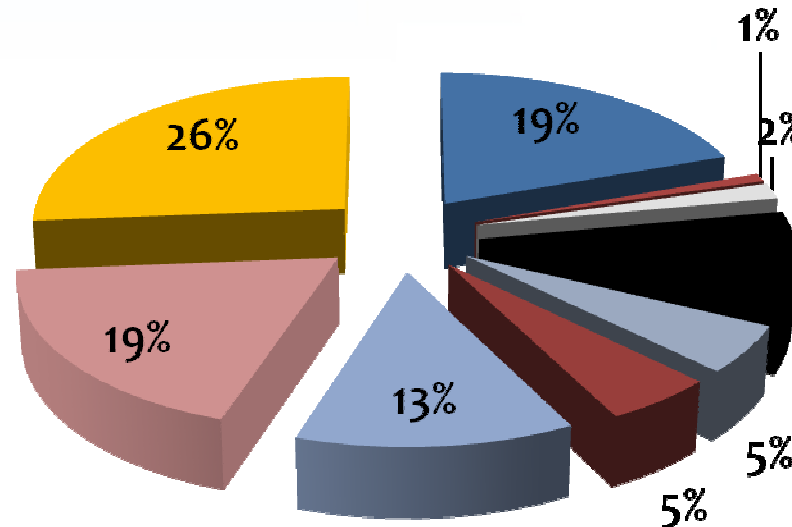
# Interporto Community



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- Freight forwarders
- Shipping agencies
- Customs and inspection bodies
- Road transport operators
- Railway companies
- Intermodal operators
- Couriers
- Logistics operators
- Other



- **118** national and international transport and logistics companies
- **2.500** employees



# Interporto Community



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## Railway companies

GTS

ISC

SERFER

TRENITALIA CARGO

OCEANO GATE



# Survey within the Community



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Investigation towards IT capacity and Cloud attitude of the IPBO community has been performed.

Contacted companies were chosen based on:

- **Small-medium size:** in line with LOGICAL focus to strengthen SMEs' competitiveness
- **Local companies** or focus on business activity and IT systems @ IPBO
- Degree of **collaboration**/share data

## INTERVIEWED COMPANIES:

- Transport & Logistics Service Providers
- TOs
- National & International Freight Forwarders

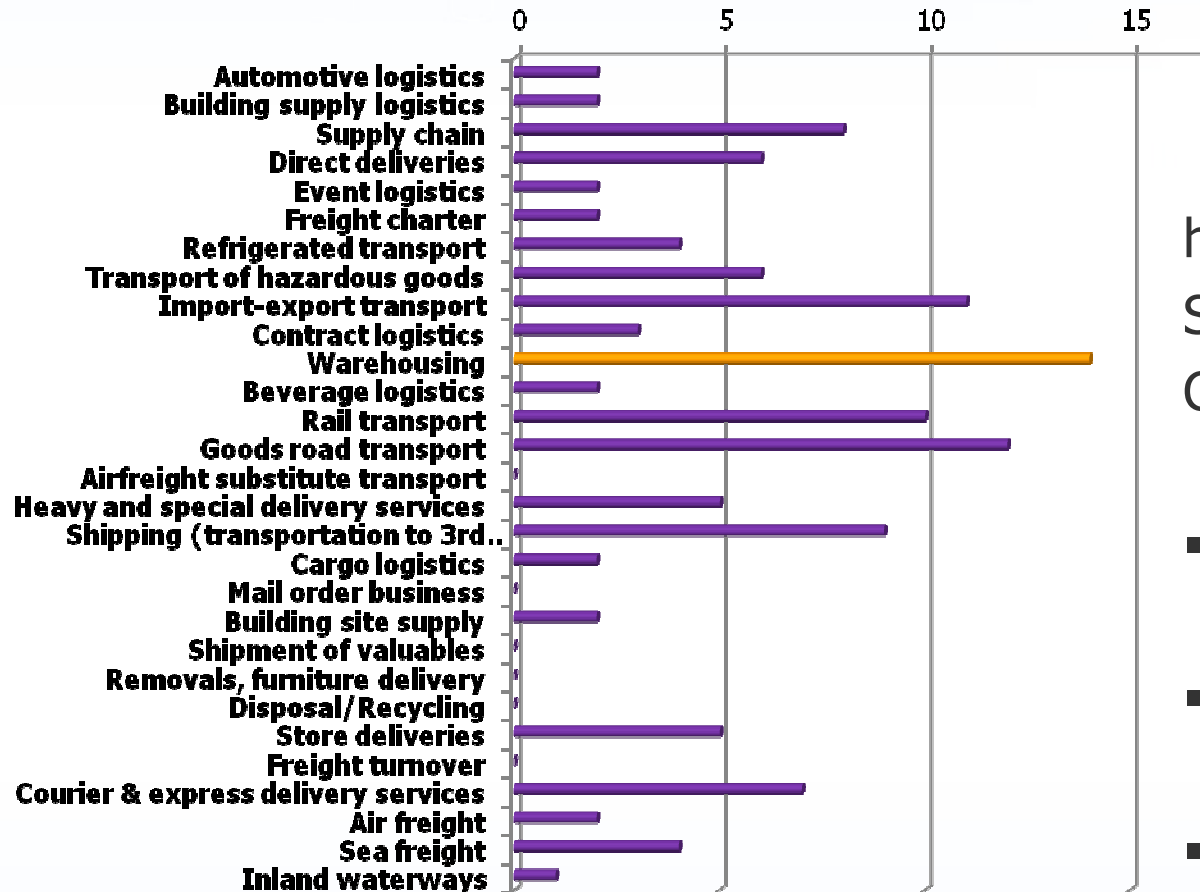


# Survey within the Community



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The most common Logistics Services offered by the Community are:

- Warehousing
- Goods road transport
- Import-Export
- Rail transport

# Survey within the Community



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the more used IT platforms typology are:

- Financial accounting
- Business intelligence
- CRM
- Tracking & Tracing
- Order management
- Warehouse management

professional IT solutions  
customized to specific  
business needs

in-house developed  
solutions (with support of  
external IT developers)



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# Cloud Attitude and Benefits



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## What the Community thinks:

- Positive IT attitude, limited knowledge (especially in Cloud Computing!).
  - Cautious approach on future plans to use Cloud Computing
- |   |   |
|---|---|
| Costs reduction                         | Available IT resources in the cloud                           |
| Better service                          | Greater transparency in handling data                         |
| Data accessibility & security           | Higher quality in logistics services                          |
| More flexibility in logistics standards | Simplified communication with customers and business partners |



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## MAIN AREAS OF INTEREST

- ❖ Share data and information within the company and with business partners
  - ❖ Acquire new IT skills with less investments
  - ❖ New tools for cargo monitoring
- ❖ Centralized servers to reduce costs and achieve better data security
- ❖ Facilitation of real time communication and information exchange



# IPBO platform



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## The Philosophy:

- Freight transport system into equilibrium, through **open solutions for leading and following service providers.**
- **Efficient electronic transactions** of service providers and customers, SMEs and champions, private and public sectors etc.
- Provision of **high quality services at low cost.**
- **Flexibility** through modular structure for:
  - ❖ single coordinating party
  - ❖ subsets for SME oriented transport business niches.

*→ Interporto as manager of the Bologna logistics hub Community, represents the neutral party able to offer a Cloud Solution to its users.*

# IPBO platform



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The challenge:

- Separate business interests, corresponding partnerships and collaborative models.
- Two parallel and complementary functional paths and corresponding ICT platforms:
  - ✓ Collaborations and interactions of the transport service providers responsible for the management of equipment and infrastructure.
  - ✓ Effective management of cargo in terms of transport chain planning and control.



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# IPBO platform



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The web based solution of IPBO that consists of two elements:

- An **Administrative platform** that provides the infrastructure for security, building of the business collaborations and management of applications and systems.
- A **Logistics platform** that provides a set of applications for the planning and management of multimodal transport.



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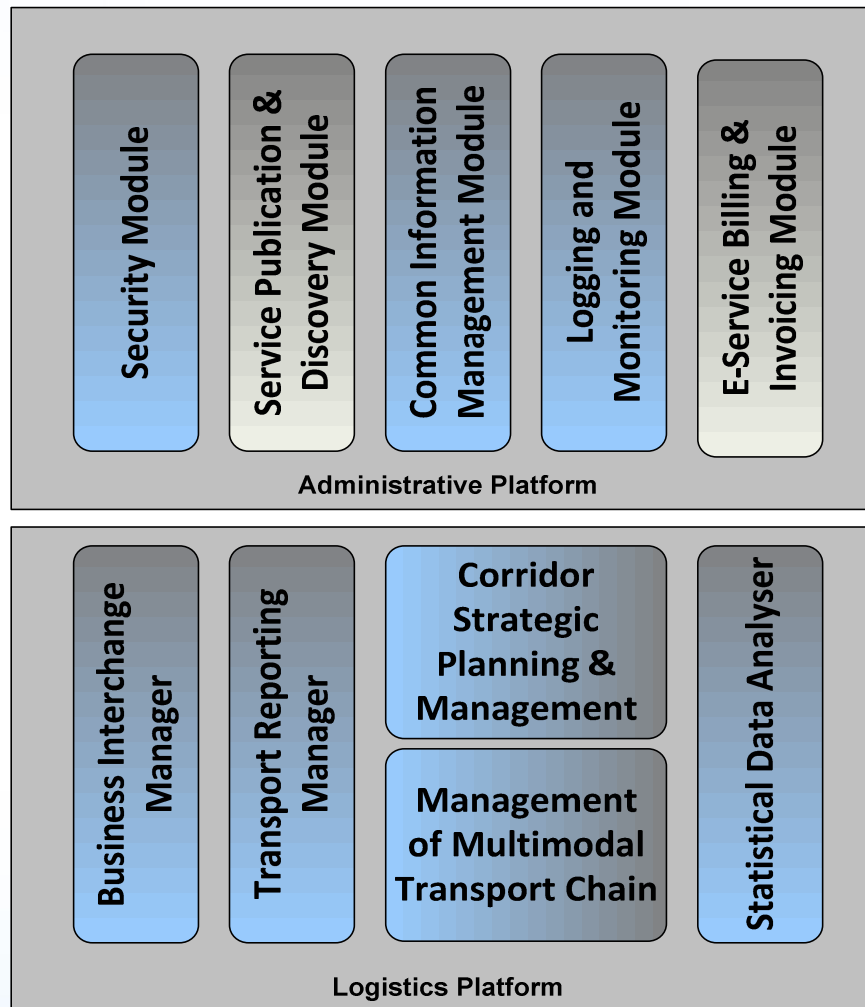
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# IPBO platform



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The IPBO **Logistics platform** consists of two interoperable applications:

- A corridor design and monitoring application (**Corridor Strategic Planning and Management - CoSPaM**) facilitates the promotion/publishing of transport providers' services, design of incremental and collaborative operations as well as transport monitoring and control along established multimodal corridors.
- A management application for transport chains (**Management of Multimodal Transport Chains – M2TC**) fully integrated with the multimodal corridor application facilitates the effective planning and control of D2D freight transport chains by the cargo responsible bodies (freight integrators).



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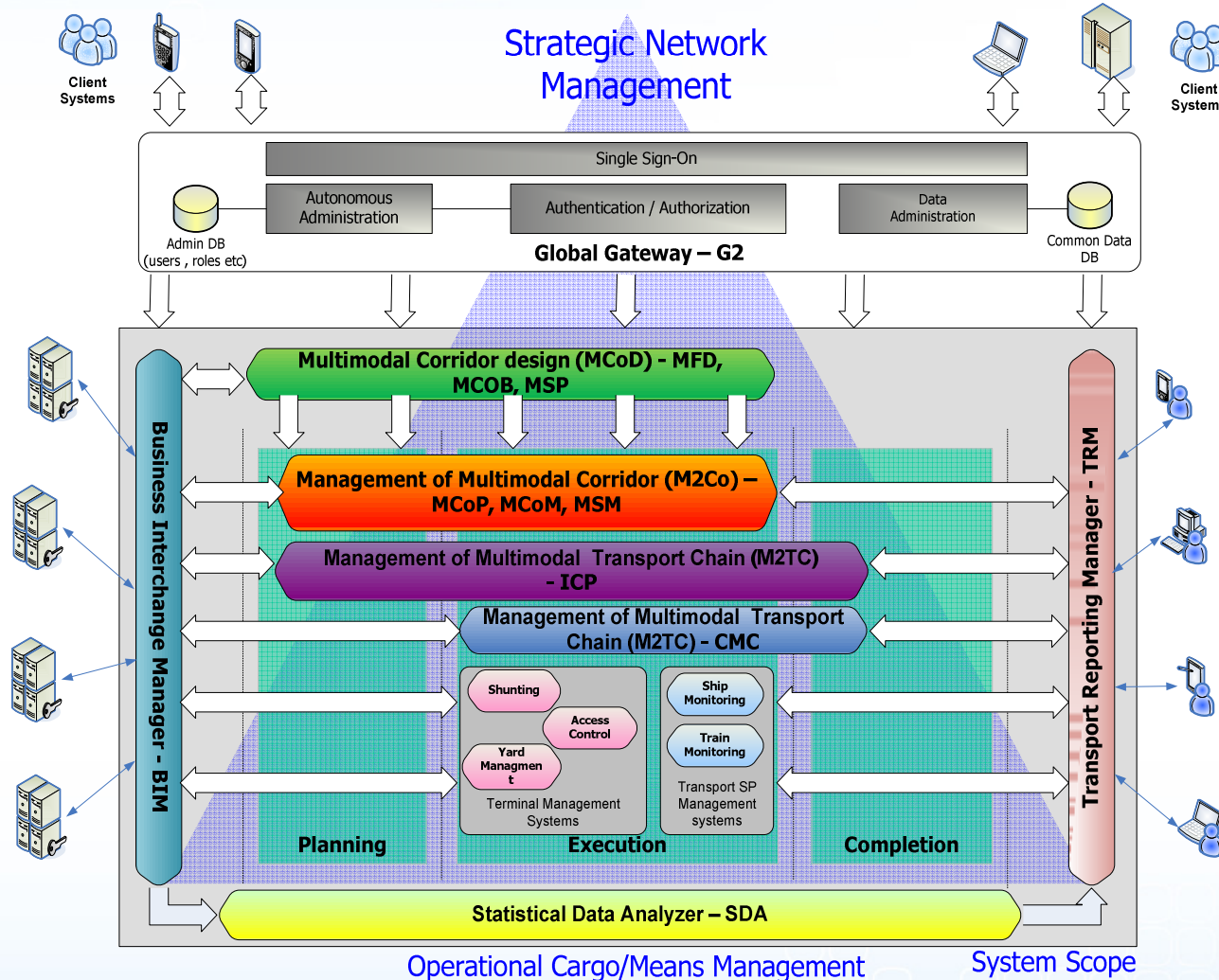


# IPBO platform – Concept



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The main benefits deriving from the platform implementation:

- Enhanced Interoperability between systems and actors
- Expanded capability in building and managing Multimodal chains
- Low costs for it interfaces between systems
- Transnationality thanks also to the interfaces with other Cloud platforms





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*Thank you for attention...*



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