

EULYNX

European Initiative Linking Interlocking Systems

EULYNX

Nick Bel

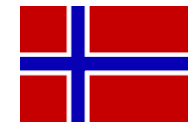
Paris, October 8th, 2014



EULYNX: General Information

EULYNX: European Initiative Linking Interlocking Subsystems

- An initiative of European **infrastructure managers** with the main goal to develop and implement **standardised interfaces** for **signalling systems**
- Start of EULYNX was 2014 and the estimated duration is 3 years
- The initiative is **open** to all interested **infrastructure managers**
- The partners bring in **real implementation** projects and finance their own activities



Norway, JBV



Germany, DB



Belgium, Infrabel



Finland, FTA



Netherlands, PR



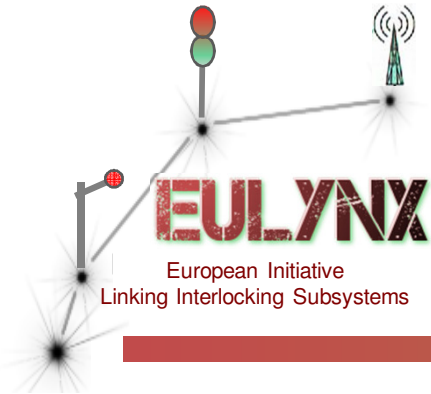
France, SNCF



Luxemburg, SNCFL



Great Britain, NR



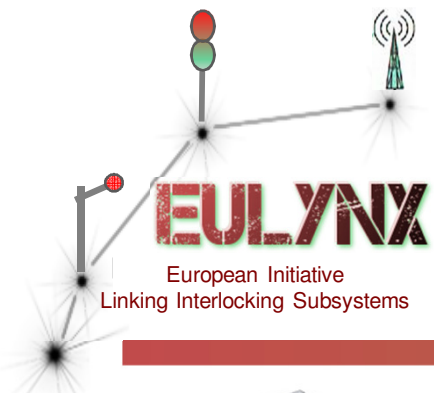
Cluster Projects

The structure of EULYNX provides the framework **for thematic sub-projects (cluster-projects)** which are the basis to achieve one of the main goals of the project (**standardized systems and interfaces**).

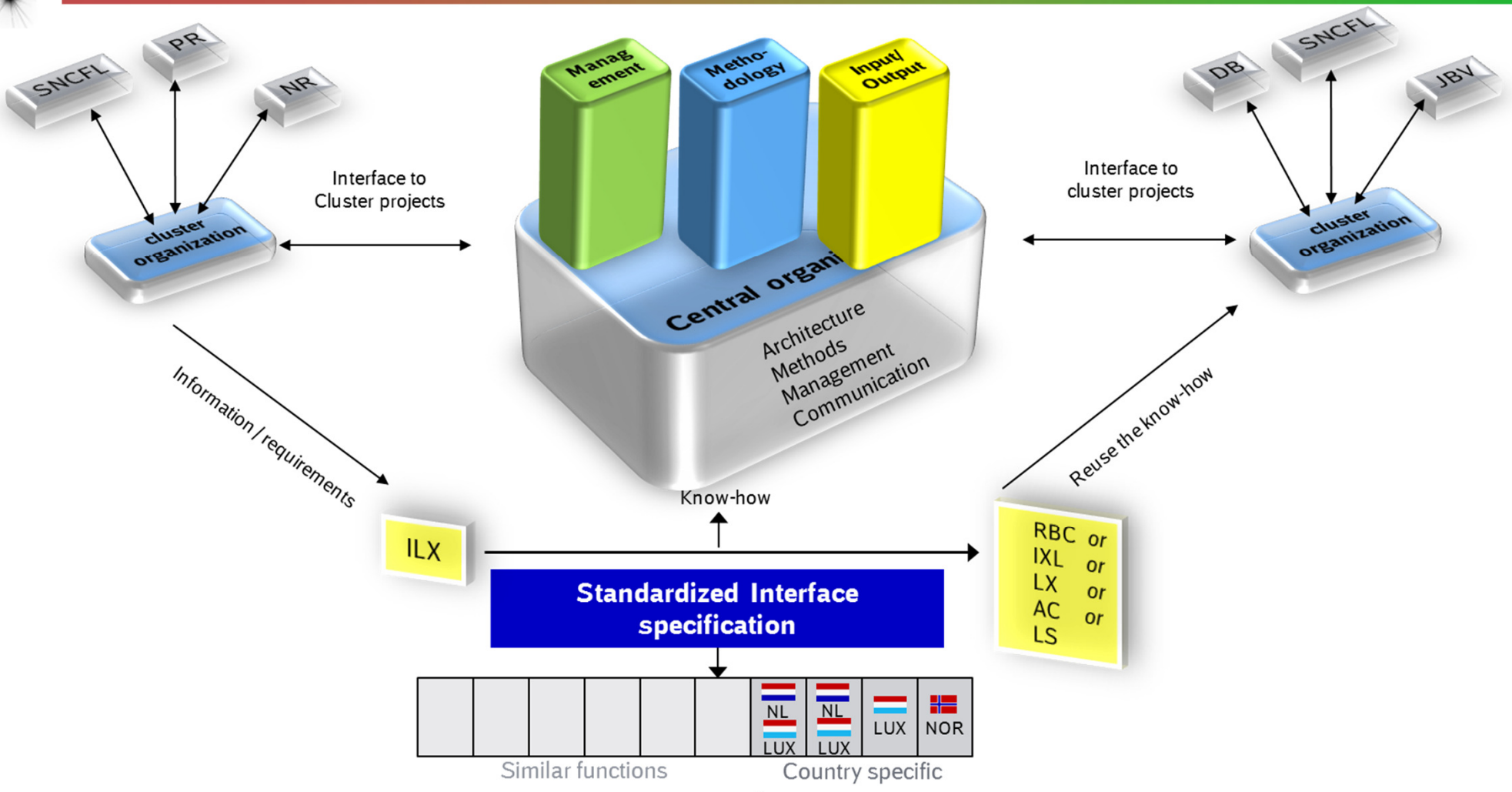
- A **cluster project** is formed by a number of **infrastructure companies** each of them running one or more projects in their network to **implement a commonly standardized interface**

Cluster Projects

- | | |
|------------------------------------|----------------|
| ▪ Modelling and Testing | ▪ Rail SCI-PM |
| ▪ Rail SCI-RBC | ▪ Rail SCI-LS |
| ▪ Architecture | ▪ Rail SCI-TDS |
| ▪ Data Preparation Strategy | ▪ Rail SCI-CC |
| ▪ Rail SCI-ILS | ▪ Rail SCI-LX |



Example Standardised interface specifications





EULYNX: added Value

- **Cooperation** project with European **infrastructure managers**
- Common goals
 - significant **cost reduction** by standardization of interlocking
 - standardized **interfaces**
 - **methods** and knowledge
 - **reduction of vendor Lock-in**
- Using results of previous European projects (EURO-INTERLOCKING, INESS)

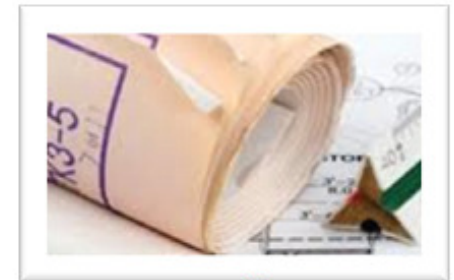
EULYNX will be used in **real projects**



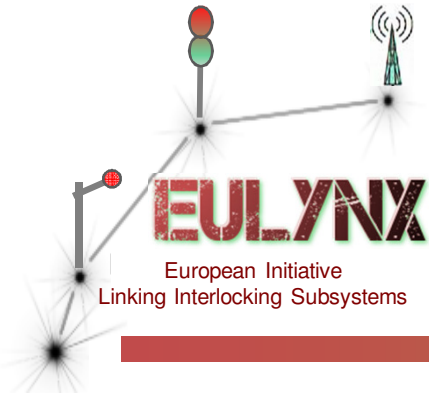
IM Contributions: Issues of ProRail in EULYNX

Main issues ProRail in EULYNX

- **Common system architecture** ERTMS compliant interlocking
- **Data Preparation** for new ERTMS-projects, information management
- Safe and secure technology for **interface** interlocking with adjacent subsystems
- **Information exchange** with colleague infra managers
- **Reduction of life cycle costs:**
 - in CAPEX (development & realization)
 - as well as in OPEX (maintenance, infra-changes and operational costs).



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  name="1402"  
  dir="up" />
```

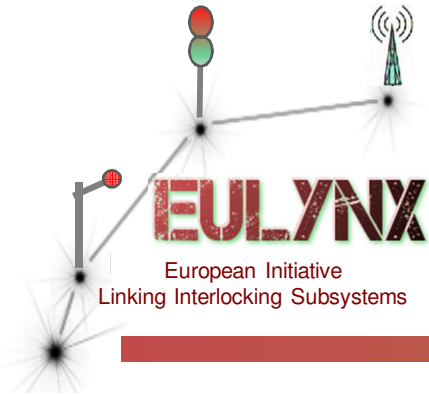


Goals and Benefits

We are facing interesting **replacement** and **renewal** programs.

Lower lifecycle costs per passenger kilometer, reached by the combination of

- **Replacement** of old technology
- In an **open architecture**, exchangeable with more **ERTMS compliant** technology
- Based on **competition** during the whole life cycle
- **Higher performance** on already one of the most dense networks in the world
- In conjunction with **market parties** (both suppliers and certified engineering bureaus)
- **In close cooperation** with colleague Infra Managers



Clusterproject data preparation

Goal of participants in cluster project **data preparation**:

- Define **formal ETCS design process**
 - With use of one **central consistent database**
 - **Accessible** for relevant stakeholders (intern and extern)
 - Assure **safety and security** of design and data
- Need for **ETCS design tools, viewers and validators**
- Adapt a standardized **data format** (XML-based, railML?)
 - **ETCS interlocking compliant**
 - Understandable by **human and computer**
- Question for railML user group:
 - **In what way is the railML development of interest for the EULYNX data preparation cluster project?**



Thank you!

For more information, please contact:

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Or go to:
www.eulynx.eu

