DITECFER

DISTRICTFORRAILTECHNOLOGIES
HIGHSPEEDSAFETY&SECURITY

WHAT THE CORE ASPECTS OF RAIL BUSINESS ARE WHERE PERFORMANCE NEEDS TO BE IMPROVED?
HOW TO CREATE RIGHT INCENTIVES?
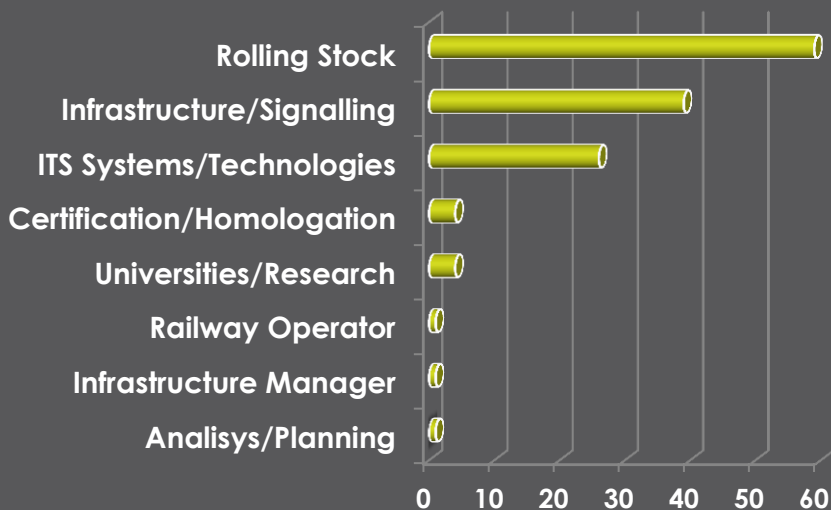
RAIL CLUSTERS POINT OF VIEW

VERONICA ELENA BOCCI | *DITECFER COORDINATOR*

DITECFER

Tuscany

✓ 125 Enterprises

✓ 4 Universities + CNR-National Research Council

✓ Laboratories specialised in the Railway sector

- Rolling Stock Certification and Homologation
- Acoustic
- Dynamic Modelling and Mechatronics (MDM Lab)
- Formal Methods and Tools Laboratory (FMT)
- Human Interfaces in Information Systems (HIIS)
- Mechanics of Materials and Structures (MMS)
- Signals and Images (SI)
- Wireless Networks (WN)
- SW Engineering and Dependable Computing Lab. (SEDC)
- System and Software Evaluation Center (SSE)
- ELEcTronics for Real-Time Applications (ELETTRA)
- Integration of Information Systems
- Perceptual Robotics (PERCRO)
- Real Time Systems Laboratory (RETIS)
- Communication (TECIP)

Rolling Stock
Infrastructure/Signalling
ITS Systems/Technologies
Certification/Homologation
Universities/Research
Railway Operator
Infrastructure Manager
Analisys/Planning

0   10   20   30   40   50   60

ENTERPRISES' DIMENSION IN OUR CLUSTER

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9%

91%

■ Large Enterprises
■ SMEs

« **SMEs** represent **90%** of all businesses in the **EU**. They are the backbone of its economy. They generate 2 out of every 3 jobs. »

(Commission Recommendation of 6 May 2003 concerning the definition of SME – Background)

35%

9%

12%

44%
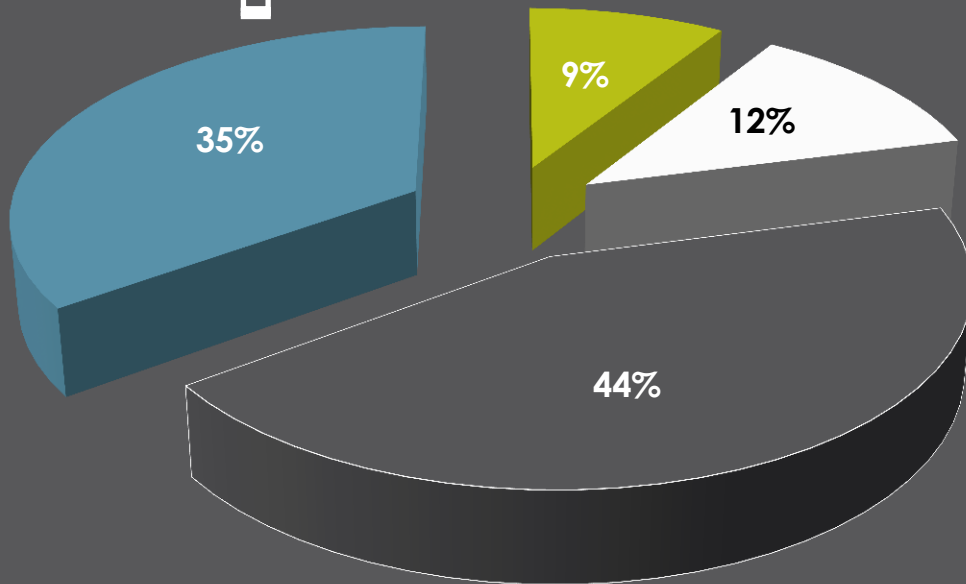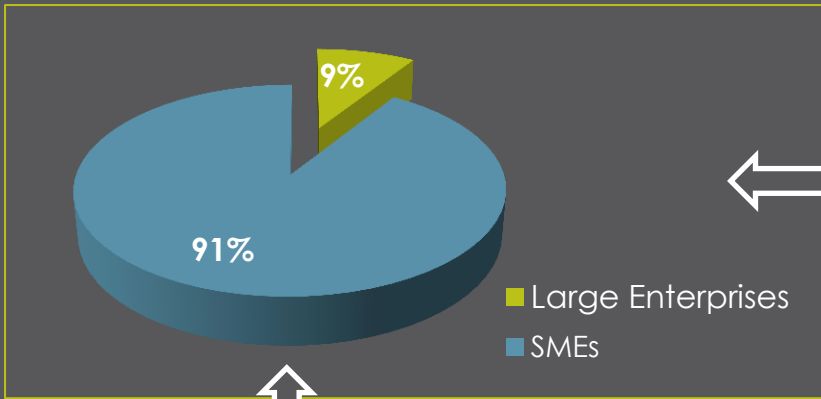
WE ARE ON AVERAGE

■ **Large Enterprises (> 250 empl.)**

■ **Medium Enterprises (< 250 empl.)**

□ **Small Enterprises (< 50 empl.)**

■ **Micro Enterprises (< 10 empl.)**

(A, D, E, F, I, PL, SW, UK)

~ 100 Large Enterprises
> 1,000 SMEs

1 seat in ERRAC as SMEs
through the Cluster *iTrans*

...R&D for real markets

European Strategic Cluster Partnerships – Going International (ESCP-4i) Charter

We, the undersigned, have agreed to establish a **European Strategic Cluster Partnership – Going International (ESCP-4i)** called, **PERES – Promoting European Rail Excellence outside EU** upon the invitation of the European Commission's Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROWTH).

We, hereby, commit to work on a joint cooperation agenda with the aim to support the internationalisation of our SME members towards third countries beyond Europe and thereby, to contribute to the European Commission's objectives to boost growth, jobs and investment in Europe.

	2030	2050
Reliability	No target	+100%
Capacity	No target	+100%
Accessibility	No target	No target
Maintainablity	No target	-50%
Interoperability / Standardisation	No target	No target
Intermodality	+30%	+50%
Safety	No target	No target
Security	No target	No target

The Railway sector is affording several **competitive and societal challenges** at European and International level

EU and **ERRAC** have defined the targets to be reached by 2030 and 2050 by the Rail industry

	2030	2050
Energy efficiency	+30%	+50%
Noise, Vibrations	-5/10 Db	-100%
CO_2	-50%	-100%
Nox, PM10	-40%	-100%
Waste management	+15%	No target
Electromagnetic emissions	No target	No target

✓ Too "bottom up" is *chaos*

✓ Meaningful

✓ Consistent

✓ Comparable

✓ Reliable

✓ Really useful, not just "more bureaucracy"

Our small lesson (1):

Like for Railway Operators / Infrastructure Managers, also from our Companies' point of view KPIs can be both an internal and external "tool": to measure and to better communicate to Customers the "Value" of the systems we develop.

Since contributing to the achievement of RO/IMs' KPIs, the KPIs applying to Technical Systems developers/manufacturers should be in line with them.

Our small lesson (2):

For SMEs, most of them having not a recognizable "brand", having its systems "assessed" (benchmark to come?) through common KPIs could be a concrete help when presenting to the market.

Therefore we are in favor of a shared EU KPIs platform helping to use the same "language" when assessing efficiency and effectiveness of Rail services and products at EU level.