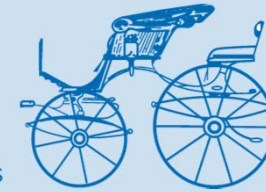


27th May
European University Institute
Florence School of Regulation

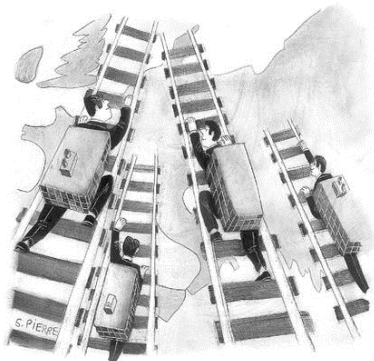
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The Technical Pillar of the 4th Railway Package: Challenges for Standardization and Interoperability

Interoperability, ERTMS, 4th Package,....
What's behind all this?

Towards more European Integration ...



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France



LET : Member of new TRANSFORUM Research Project

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The screenshot shows a web browser window with the URL www.transforum-project.eu. The website header features the TRANSFORUM TRANSPORT 2050 logo and navigation links for DISCLAIMER, CONTACT, and SITEMAP. A main menu includes TRANSFORUM, OUR APPROACH, URBAN MOBILITY, FREIGHT, HIGHSPEED RAIL, ITS, EVENTS, and RESOURCES. The main content area is a large image of a busy train station with a teal circular overlay containing the text: **HIGH-SPEED RAIL IN 2050** and the question **WILL THE MAJORITY OF MEDIUM-DISTANCE PASSENGER TRANSPORT USE RAIL (RATHER THAN PLANES)?**. Below the image is a blue banner with the text: **With the input from stakeholders like you TRANSFORUM will construct a roadmap towards the implementation of the European White Paper on Transport. Let's make it happen!** and a **GET INVOLVED** button. At the bottom, there is a **WELCOME TO TRANSFORUM** section and a search bar labeled "Search the site".

OUTLINE



1) Introduction

Mistrust growing in Europe : High responsibility in succeeding rapidly now

2) A Method : “NUDGE” coming from Behavioral Economics (Thaler & Sunstein, 2008) !

- **ERTMS : finish the work please !**
- **Launch new ideas / projects**

3) Ideas : learning from our common history

4) Ideas and conclusion

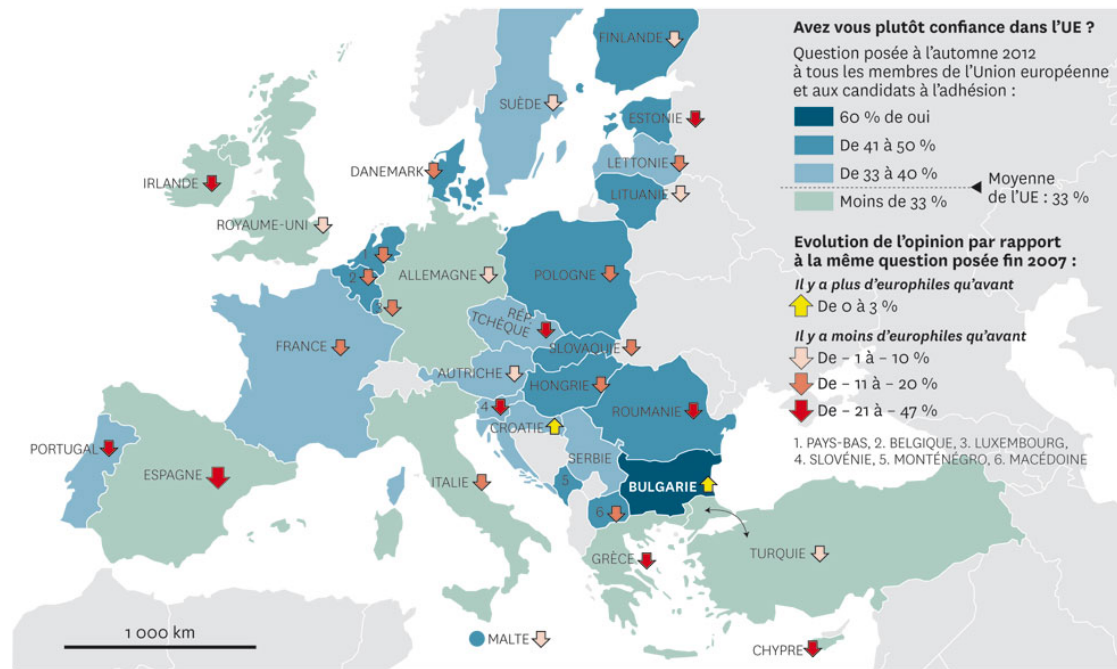


1) The framework :

Mistrust in Europe : high responsibility in front of the world history !



La confiance dans l'Union européenne en chute libre



Time to move

Time to suggest new good ideas !

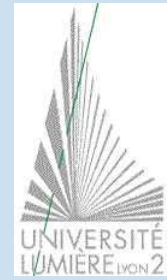
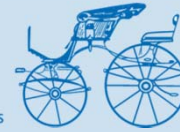
Time for large projects : Railway network integration

(ERTMS : finish the work Please !) and joint train stations !

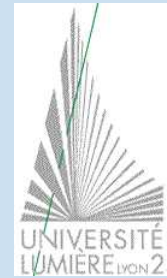
1) The framework

Mistrust in Europe : high responsibility in front of world history !

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1) We have already our goals : the White Paper 1993, 2001, 2011



Remember : the „Longue Marche“ of Transport Policy in the European Union

1993 :

- „growth, competitiveness and employment“ : good idea of the TEN

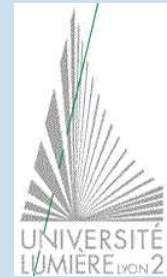
2001 :

- Remove barriers to mobility of people and goods along with maintaining a high level of security
- Reinforce competitiveness of the EU economy and strengthen the European interior great market
- Balance globalization and become a partner
- Take into account climate change and greenhouse effects

2011

- Allow a majority of passenger travel by train until 2030 (medium range)
- RTE-T to be finished by 2030 with high quality of services, ERTMS migration
- Airport integrated in multimodal transport networks
- World leader for European networks in terms of security

2) I suggest a method : « NUDGE ! »



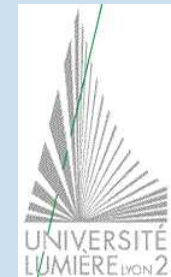
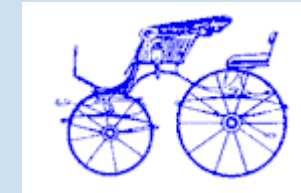
Coming from Behavioral Economics : « Nudge », Richard Thaler and Cass Sunstein , 2008 ; D. Kahneman (2010)

- Change slowly the environment of the people to show them the good way to decide / to behave. Liberal paternalism !
- Soft change on change in the “infostructures” (Curien, 2001) – unknown to the people - to help people to move in the good way : more integration
- Example : Carbon footprint (French Environmental Regulation) can be considered as a « Nudge measure »

Kahneman D., « Thinking, fast and slow », 2011

Nicolas Curien, „Economie des Réseaux“, Repères, La Découverte, 2001

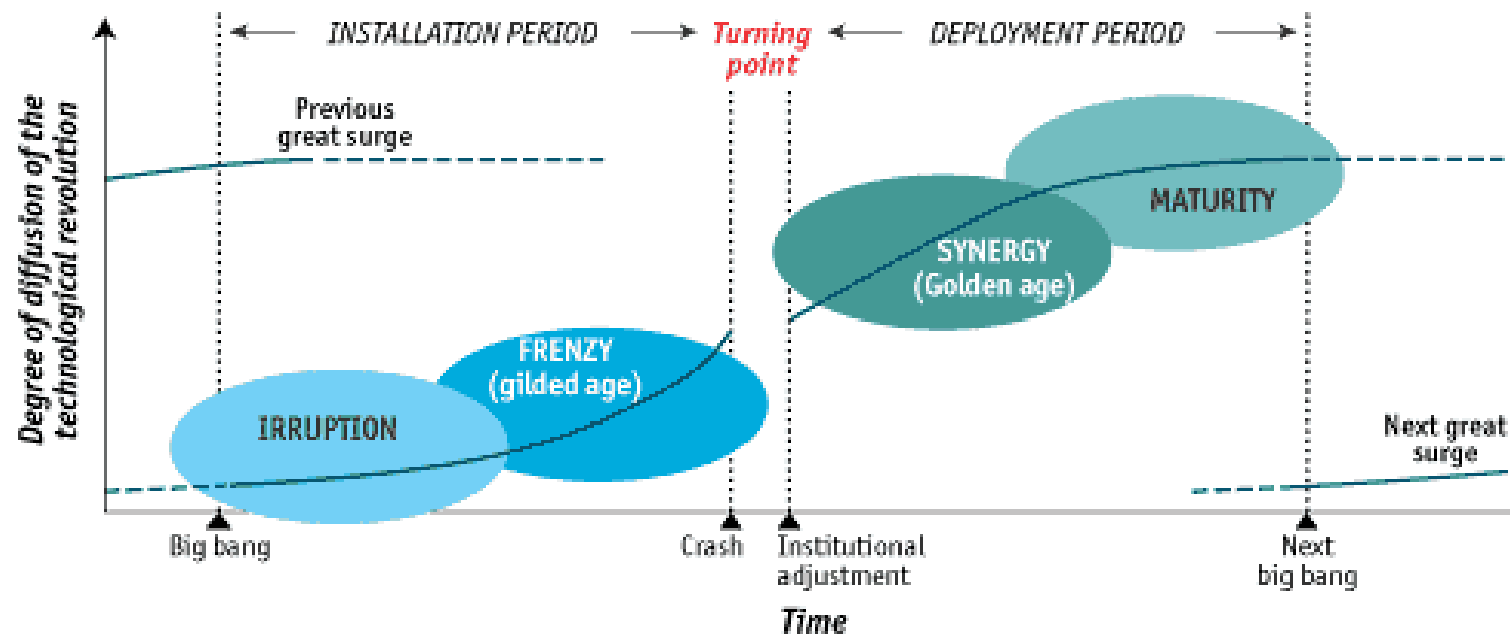
2) ERTMS : Institutional adjustment, support from all members and confidence needed : very important for success !



2

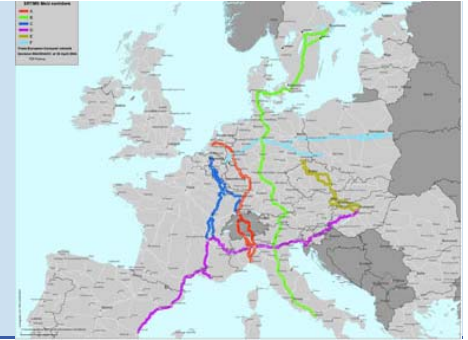
The life and times of a technology

Recurring phases of each great surge



Source: Carlota Perez

2) ERTMS : finish the work please !



ERTMS : radical innovation : critical mass achieved or not ? [Yes in small networks] but NO in the E.U. : please finish the work !

Complexity of network innovation at European Level : it needs political support, especially if competition is the driving motor because of its cost-killing function

Auto reinforcement forces : from negative feedback toward positive feedback (Shapiro & Varian, 1998)

Increase traffic capacity and REDUCE CONGESTION : cost less than a new infrastructure : good opportunity to improve services and competition at this time of constraint in public finance

Good point : subsidy for Infrastructure Manager up to 50 % of the costs.

What is needed : encouraging migration toward ERTMS : 4th package : lower price for rail slot allocation for trains operators using ERTMS : GOOD !

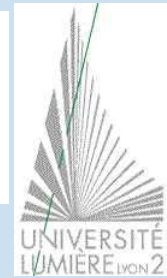
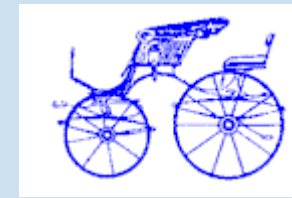
BUT Impossibility of the EC to subsidize Transport Operator for the implementation of ERTMS : maybe change this !

Strengthen RailNetEurope : “one-stop-shop” : one desk for slot allocation (ex: Corridor 2)

Attractiveness of Europe



3) Learning from the history of Europe : “best practices” (1)
Germany unification through rail network integration in the XIXth century (thanks to Friedrich List and his famous map : see below)

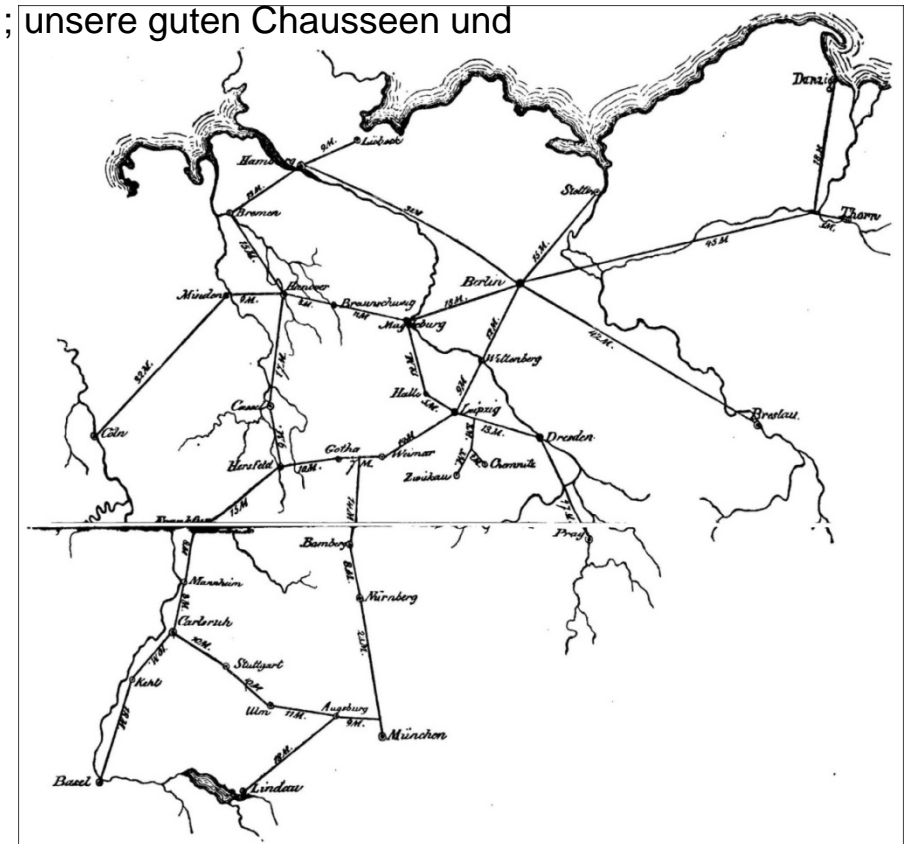


J.W. GOETHE : 1828 : Rail will unify Germany (to sum up!) => same idea for Europe now !

„Mir ist nicht bange, dass Deutschland nichts eins werde ; unsere guten Chaussees und künftige Eisenbahnen werden schon das ihrige tun !“
J.W. Goethe, Deutsches Technikmuseum, Berlin



F. List

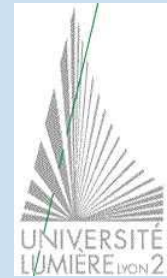
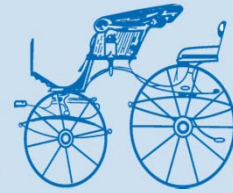


3) Learning from the history of Europe : “best practices” (2)

Germany unification through common train stations (Leipzig, finished 1915 : common symmetric giant train station between Kingdom of Prussia and Kingdom of Saxony : help to unify Germany at the end of XIXth century) :

why not the same between member states of the E.U. today ?

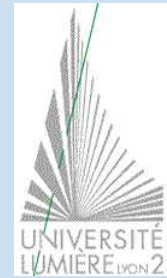
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Leipzig Train Station
An example of interconnections
and interoperability between
Prussia rail network and Saxony Rail
network end of the XIXth century



4) Learning for Europe : large common interconnections train stations **between Member States of the European Union** following the example of the history of the Leipzig train station : see map below with ideas of interconnecting train stations...



Ideas :
Connecting national networks
In joint train stations
⇒ Technical but also intercultural interoperability needed !

