RAIL
LIBERALIZATION AND REGULATION
Structure

- **Setting the stage: railway institutions**
  - the structure of railways
  - finances and (subsequent) policy interventions
  - ways to liberalize railways
  - the European «model»
- EU/EC railway liberalization
- What is being regulated
- Regulators
- How to think regulation
- Liberalization and performance
Disclaimer

- My expertise: de- and re-regulation of all the network industries (Communications, energy, transport, water, postal services)
- Focus mainly on Europe, especially in the context of the Florence School of Regulation
The structure of railways

- Rolling stock ownership and maintenance
- Sales and distribution
- Train operations

Train Operating Company (TOC)

- Network capacity planning and investment decisions
- Network construction and maintenance
- Network access and slot allocation

Infrastructure Manager (IM)

Suppliers

Customer

Station
Finances and (subsequent) policy interventions

**Infrastructure**
- Network development
  - (Public) investments
    - Policy
- Network maintenance
  - Subsidies
    - Policy
  - Track access charges
    - Regulation

**Transport**
- Cargo
  - Concessions
    - Administration
- Long-distance person transport
  - Concession(s)
    - Administration
- Agglomeration transport
  - Tendering procedures
    - Regutalation
  - Subsidies
    - Policy
Ways to liberalize railways

- Competition between networks
  - Comparison
  - Confrontation

- Competition in/for the market
  - Integrated transport - infrastructure
  - Separation transport - infrastructure

- Urban and agglomeration transport
  - No separation
  - Accounting separation
  - Total separation

- Contestable historical operator
  - Separation of the historical operator

- Germany
- Netherlands
- Sweden
- UK

Source: SNCF, 2011
The European «model»

Competitiveness of Europe

Internal market

Operator
Operator
Operator

National infrastructure

National infrastructure

National infrastructure

European infrastructure

Unbundling

«Regulatory Europe»

Consumer protection

Competition
State aid

Third part access

Efficiency
Interconnection
Interoperability
Capacity management

Security of supply

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EU/EC railway liberalization

- **Goal:** competitiveness of rail vis-à-vis other transport modes
- **Means:** access competition
- **Tools:**
  - technical harmonizations
  - transparency, non-discrimination
  - investments

1. **1st Package**
   - Directive 91/440

2. **2nd Package**
   - White Book

3. **3rd Package (+ PSO Directive 1370)**
   - RECAST

4. **4th Package**
   - A Single European Transport Area

**Timeline:**
- 1991
- 2001
- 2004
- 2007
- 2012/3

- **Goal:** a common approach to safety and interoperability → European agency
- **Means:** accelerate opening of the freight market

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EU/EC railway liberalization II

- Management independence
- Accounting unbundling
- Financial restructuring
- Access for freight (corridors)

1st Railway Package (2001)
- Independence of the IM; accounting unbundling
- Track allocation rules, unbundling
- Opening of freight market (freight networks)
- Independent Regulatory Authority

2nd Railway Package (2004)
- Full opening of freight market (2007)
- Interoperability rules
- Harmonization of safety rules
- European Railway Agency

3rd Railway Package (2007)
- Opening of international passenger transport market, incl. cabotage (2010)
- Certification of drivers
- Passenger rights
- [PSO tendering (1370)]
EU/EC railway liberalization: the 4th Railway Package

- Interoperability
- Safety
- Strengthening of ERA

Opening of national passenger transport market (access) by 2019
- Rules for infrastructure governance and infrastructure management
- Transparency of financial flows in integrated companies (unbundling)
- PSO tendering

→ Separation into two packages?

Not contentious

Competitive tendering; «economic equilibrium test»

Strengthening of regulators and ENRRB

Reciprocity

Bundling profitable and non-profitable lines
Mandatory tendering transition period (2022)
Access to rolling stock
EU/EC railway liberalization: forthcoming challenges

- Corridors
- Access to service facilities
- Regulatory bodies’ organization, resources and functions
- Investments in infrastructures
- Overall financing of operations
What is being «regulated»

**Infrastructure**

- Network development policy
- Network development
- Network maintenance
- Public investments
- Subsidies
- Rules for track access charges
- Supervision of...
  - Non-discrimination
  - Efficient network development

**Transport**

- Priority rules
- Timetable policies
- Cargo
- Concessions
- Concession(s)
- Long-distance person transport
- Tendering procedures
- Subsidies
- Agglomeration transport
- Supervision of...
  - slot allocation
  - tendering
  - priority rules
Regulators

- European Railway Agency (ERA) (safety and interoperability)
- 4th Package
- RECAST
- White Book
- 3rd Package (+ PSO Directive 1370)
- European Network of Rail Regulatory Bodies (ENRRB)
- Independent / National Regulatory Authorities (IRAs/NRAs) (economic regulation)
- 2nd Package
- 1st Package
- White Book
- Directive 91/440
- 1991
- 2001
- 2004
- 2007
- 2012/3

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Regulators II

• Big differences in the remit and powers (ex-officio, sanctions, etc.) of the different regulatory bodies
• Independence an issue; related to type of organization; appointment mechanisms; regulatory culture
• Questions about the (narrow) focus of regulators, mainly recommending regulators to take a systemic and a longer-term view (Florence Forum, 2010)
## How to think regulation

<table>
<thead>
<tr>
<th>Structure of historical operator</th>
<th>Type and scope of desired competition</th>
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<tbody>
<tr>
<td>Complete separation</td>
<td>Franchising</td>
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<td>Intra-modal competition (access)</td>
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<tr>
<td></td>
<td>Inter-modal competition</td>
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<td>Complete separation</td>
<td>UK</td>
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<td>Holding company</td>
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Rail performance

The level of market liberalization does not in itself determine performance; other factors must also be at play: → financing.

But some countries that are less liberalized also perform well (CH, F, SF).

Countries with high liberalization also perform well.
Driver: public cost

Performance correlates with public cost:
- public contribution (recurring subsidies for operations and infra maintenance)
- public investments (6yr annual average)

The higher the public cost the better the performance
Tier 1 countries (except A) are above average
Backup

- Intensity of use (33%)
  - Passenger.km/inh
  - Ton.km/inh
- Quality of service (33%)
  - Punctuality (Reg.)
  - Punctuality (LD)
- Safety (33%)
  - % HSR
  - Price
  - Accidents/tr.km
  - Fatalities/tr.km

**Passenger.km/inh**: The number of passengers multiplied by the number of kilometers traveled, divided by the country's population

**Ton.km/inh**: Tons of goods multiplied by the number of kilometers traveled, divided by the country's population

**Punctuality (Reg.)**: Punctuality of regional trains, computed as percentage of regional trains with less than a five-minute delay

**Punctuality (LD)**: Punctuality of long-distance trains, computed as a percentage of long-distance trains with less than a 15-minute delay

**% HSR**: Percentage of “high-speed rail,” computed as HSR’s share of long-distance traffic (measured in passenger.km)

**Price**: Average fare, measured in euros per passenger.km

**Tr.km**: The number of trains multiplied by the number of kilometers travelled