

# **AN ALTERNATIVE REGULATORY APPROACH FOR LONG-DISTANCE PASSENGER RAIL SERVICES: AN EXPLORATIVE ANALYSIS WITH A FOCUS ON GERMANY**

**THREDBO 2019 Conference, Singapore**

*Andreas Knorr and Alexander Eisenkopf*

# Introduction

- Railway sector is among the most intensely regulated industries
- However, effective competition has not materialized in most countries (at least) for *long-distance passenger services*
- Germany is a case in point
- Aim of this paper is to propose an alternative/complementary regulatory regime which may help to massively reduce existing entry barriers
- Our proposal is based on a different concept of what constitutes the critical rail infrastructure to which access is needed to ensure competitive market processes

# A multi-level approach to railway regulation

- Transport services = multi-level production process
- Railways were traditionally organized as vertically integrated companies across all the levels of the value added chain
  - Level 1: Infrastructure and network services (natural monopoly)
  - Level 2: Coordination of network access and utilization
  - Level 3: Transport services (passengers and freight, no natural monopoly)
- Vertical unbundling of all other transport modes (except for the centrally planned economies)
  - State provision of infrastructure
  - Private or public enterprise provision of transport services

# A multi-level approach to railway regulation

- EU deregulation (from 1991):
  - Gradual approach to increase the efficiency and the intermodal competitiveness of the railways
  - Ongoing: implementation of the 4th rail package
  - EU law does not require ownership unbundling of infrastructure provision and train operating services but only accounting unbundling and rules to ensure non-discriminatory infrastructure access
  - Emergence of two alternative regulatory approaches (based on *Demsetz*' seminal 1968 paper)
    - Competition *in* the market
    - Competition *for* the market

# The German railway system I

- Key event: *Rail Structure Reform* of 1994
  - *Deutsche Bahn AG* replaces *Deutsche Bundesbahn* (West Germany) and *Deutsche Reichsbahn* (East Germany)
  - Full debt relief (67bn DM → 34bn €)
  - Organisational unbundling, although all units remain controlled by *Deutsche Bahn's* holding
  - Failed: (at least partial) privatization of *Deutsche Bahn AG*
  - Regulatory framework for competition
    - Freight: Competition *in* the market
    - Long-distance passenger services (>50km or >1 hour): Competition *in* the market
    - Regional train services (<50km or <1 hour): Competition *for* the market

# The German railway system II

- Current market shares of Deutsche Bahn AG (in ton and passenger kilometers, respectively):
  - Freight: 53 per cent
  - Regional services: 74 per cent
  - Long-distance services: “Significantly below one per cent)  
(Source: *Bundesnetzagentur* 2018, p. 22)
- Newcomers (to long-distance segment) complain about systematic discrimination (e.g. track access, track charges, directory services, ticket distribution system)
  - Partly confirmed in decisions by the Germany antitrust and regulatory authorities
  - *Monopolies and Mergers Commission* continues to criticize the effectiveness of the regulatory framework and lack of intra-modal competition

# A radical alternative – regulated access to the incumbent's seat inventory I

- The broader context:
  - Effective competition requires, *ceteris paribus*, competitors to offer a critical mass of long-distance seat capacity (e.g. due to network externalities)
  - The current regulatory regime of open access has systematically failed to assist competitors in building this critical mass on their own due to high entry barriers (e.g. capital requirements for specific investments in rolling stock etc.)
  - Situation is compounded by:
    - rolling stock producers massive order backlog and their close relations with incumbents (EU is a de facto closed shop to the detriment of Chinese, Japanese and Korean rolling stock companies)
    - increasing shortage of train drivers
    - intense intermodal competition (LCC, intercity buses)

# A radical alternative – regulated access to the incumbent's seat inventory II

- The proposal:
  - Regulated access to the incumbent's seat inventory  
(= in our view the de facto the main monopolistic bottleneck)
  - Could be implemented in two variants:
    - Variant 1: Regulator guarantees competitors a certain percentage of seat on specific trains at non-discriminatory conditions (e.g. costs per seat)
    - Variant 2: Exclusive access to a certain number of carriages
  - In both variants, competitors would be allowed to resell this capacity directly or via intermediaries
  - Variant 2 might allow for in-service innovations if carriages is used over extended periods by a competitor

# A radical alternative – regulated access to the incumbent's seat inventory III

## ● Advantages:

- Most existing entry barriers (see above) would be eliminated or at least massively reduced
- Information asymmetries for the regulator are reduced to the sheer minimum (i.e. cost per available seat)
- Average capacity utilization for *Deutsche Bahn AG*'s long-distance trains currently stands at 55.1 per cent despite massive recent low fare offers to fend off intermodal competitors (LCC and intercity buses)
- Practical examples for this approach already exist:
  - Airlines: Codesharing and blocked space agreements
  - Cross-border railway services
  - Rail & Fly tickets offered by *Deutsche Bahn AG* to airlines
  - *Deutsche Bahn AG*'s arrangement with *Lufthansa* for select high-speed rail services to/from *Frankfurt Airport*

# A radical alternative – regulated access to the incumbent's seat inventory III

- Advantages (cont'd):
  - Market access would be open not only for railway operators but also for newcomers (e.g. large travel agencies and retailers, booking.com, google.com, Eventim or Ticketmaster) which may also buy and market their own seat inventories (instead of only serving as another distribution arm for *Deutsche Bahn AG*)
- (Potential) limitations:
  - The “Friday/Sunday/Holiday“-problem: Peak vs. off-peak hours → could be treated like codesharing agreements among airlines and Rail & Fly tickets etc., however
  - Approach would only contribute to improve the utilization of existing capacities but does not offer direct incentives to create additional capacities

# Thank you for your attention, comments and questions are very welcome!

Contacts: [knorr@uni-speyer.de](mailto:knorr@uni-speyer.de); [alexander.eisenkopf@zu.de](mailto:alexander.eisenkopf@zu.de)