A DATABASE ON WORLD INFRASTRUCTURE REGULATION

1st Edition - 2015
Railways

Prepared by
LABORATORIO DI POLITICA DEI TRASPORTI
TRASPOL
RESEARCH CENTER ON TRANSPORT POLICY

Beria Paolo, Laurino Antonio,
Ponti Marco, Ramella Francesco
SPAIN .......................................................... 197
  GENERAL ISSUES ........................................ 197
  REGULATORY ISSUES ................................. 200
  REGULATORY INSTITUTION ......................... 204
  BIBLIOGRAPHICAL REFERENCES .................... 207

SWEDEN ...................................................... 209
  GENERAL ISSUES ........................................ 209
  REGULATORY ISSUES ................................. 211
  REGULATORY INSTITUTION ......................... 215

TURKEY ..................................................... 217
  GENERAL ISSUES ........................................ 217
  REGULATORY ISSUES ................................. 219
  REGULATORY INSTITUTION ......................... 223
  BIBLIOGRAPHICAL REFERENCES .................... 226

UNITED STATES ............................................ 227
  GENERAL ISSUES ........................................ 227
  REGULATORY ISSUES ................................. 230
  REGULATORY INSTITUTION ......................... 237
  BIBLIOGRAPHICAL REFERENCES .................... 240
FOREWORD

A new Special Interest Group on Transport Economic Regulation within the World Conference on Transport Research Society has been launched in 2009. It is an occasion to begin a dialogue involving scholars, regulatory bodies and regulated companies within the transport sector. The SIG aims at:

- creating a worldwide forum of stable relationships and shared elaborations for scholars of the sector, public regulators and regulated firms;
- promoting a better regulation, both in theory and practice.

Along with the collection of bibliography on transport infrastructure regulation the first long term activity promoted by SIG has been the constitution of a database on transport infrastructure regulation. The survey focuses on economic regulation within the transport sector. It considers the four main transport modes (highways, ports, railways, airports).

The survey is structured into three parts:

- general and quantitative aspects of railway infrastructure, including which regulatory mechanisms are used;
- specific regulatory issues, i.e. how regulatory mechanisms work;
- regulatory bodies, i.e. who regulates.

The collection of the information derived primarily from the analysis of existing literature sources. We used institutional data (e.g. governmental websites, national agencies reports, etc) or academic documents. We used the most updated data in order to present the most recent information and scenarios in the regulatory field for each country. In addition, for most of the countries, at the end of the process the data collected have been reviewed by a national expert.

The countries have been selected considering the role and importance of their networks, their economic relevance, their peculiar regulatory features, their geographical location and, in some cases, the availability of information.

We gathered data for the following countries: Australia, Austria, Brazil, Canada, Chile, China, France, Germany, Great Britain, Hungary, Italy, India, Japan, Mexico, Russia, Spain, South Africa, Sweden, Turkey and United States. Therefore, the sample includes the most important countries in terms of economic power, population (55% of the world population) and extension of the networks.
The railways of Mexico began as a series of unconnected concessions built by US, British and French investors beginning in the 1850s. In 1909, the Government acquired a majority control of the concessions and operated the system under the name Ferrocarriles Nacionales de Mexico (FN), but the system suffered during the Civil War that began in 1910. Shortly after the Civil War, the Government began a full nationalization process that was completed in 1937, with FN then having 5 regional divisions. The divisions were finally consolidated into a single entity in 1987. At this point, FN operated as a vertically integrated monolith, with relatively limited intercity passenger services and no commuter services. The prior divisions, though nominally integrated and all using standard gauge, retained separate identities.

Although the Mexican Government attempted the only Latin American example of a “Contrat Plan” along the lines of the French management system of the 1980s, attempts at restructuring of FN in the early 1990s failed, leading to near-collapse due to inefficiency, trucking competition and political interference. The Government elected to award three major (and a number of minor) 50 years vertically integrated freight concessions, with the concessioning taking place in 1997 and 1998. Inter-city passenger services were closed except for a few tourist-oriented services. In addition to the freight concessions, the Government created a jointly owned and operated common terminal company (Ferrovalle, which is modeled after similar joint terminal companies of the US) in and around Mexico City in which the three large freight concessions own equal shares of 25% and the Government retained a 25% share.

The outcome of the Mexican concessioning is unusual because of the connections with the US and because of the North American Free Trade Agreement (NAFTA) that freed up traffic flows with the US and Canada. As a result, two of the US Class I freight railroads invested in the two large concessions that connect at the US border. One of these concessions is now wholly owned by the Kansas City Southern (KCS) and is called KCS de Mexico. The other is Ferromex, a joint venture of the Union Pacific and Grupo Mexico. Each of these two concessions is closely coordinated with the larger North American systems, with
growing interchange across the border. The third large concession, Sureste, operates mostly South of Mexico City was owned and operated by Mexican interests, but has now been merged with Ferromex. About half of the Mexican railway traffic is international traffic with the US (grains—mainly corn—coming South but also finished automobiles and beer going North). The three freight concessions together own 75% of Ferrovalle, a company that the Government established in order to ensure equal and neutral access by the three concessions to the freight traffic connecting to and from the Mexico City market.

Ferrovalle's costs are managed by the three concessionaires, and Ferrovalle charges each of the concessions for hauling their traffic. Although the freight concessions are vertically integrated, the original terms of the KCS and Ferromex concessions contracts required that, among other trackage rights, the two concessions negotiate and grant trackage rights access for Ferromex to Monterey and for KCS to Guadalajara. The two concessions were unable to agree on terms that were mutually beneficial and the negotiations stalled. Discussions, with intervention of the Federal government trying to enforce the contracts, lasted 12 years. Finally, the parties reached an agreement, but it is not clear whether any significant amount of traffic currently flowing under these rights. When Ferrovalle was established, the Government retained a 25% interest because the Government believed that a future suburban passenger operator might need access to the Ferrovalle system.

Subsequently, in 2005 the Government awarded a concession for the operation of suburban passenger services (Line 1) in the Mexico City metropolitan area (Huehuecotla Buena Vista). For the most part, the Line 1 operations are on separate tracks from the freight operations and the Line 1 trains use electrified facilities and passenger stations that the freight trains do not use, so costs are easily separated. Although quality of service is good, demand has been below expectations. The Government is considering advertising for another suburban concession (Line 2) but the terms of the concession are not yet defined.

Source: Thompson, 2012

2G. Services management model

- Direct State provision by national agency
- Direct provision by Local or Regional agency
- Public company
- Private company
- Mixed company (Ferrovalle, other minor concessions)

3G. Total network length [route km, whole country] [km]

- Ferromex and Ferrosur: 8913 km
- KCS de Mex: 4,283 km
- Coahuila – Durango: 974 km
- Chiapa Mayab (currently closed): 1,550 km
- Ferrovalle (joint term.): 297 km
- Tijuana – Tecate: 71 km
Whole country: 14.268 km

State governments of Baja California and Aguascalientes also kept control of some minor passenger lines assigned to them between 2000 and 2001 (Campos and Jimenez, 2003)

4G. **Number of network operators**

Five concessions (one large) and one jointly owned terminal company

Source: Thompson, 2012

5G. **Number of services operators**

Five

Source: Thompson, 2012

6G. **Types of network operators**

- only one national operator
- one national operator plus local public or private ones
- [ ] many operators
- [ ] other

7G. **Duration of the concessions**

Fifty years.

The statute authorizes the SCT to grant concessions to private entities to operate rail lines on terms and conditions established by the SCT, which terms and conditions are set forth in the concession titles. The statute limits the initial terms of such conditions to 50 years, but provides for the possibility of one extension, not to exceed 50 years. Pursuant to this statute, the SCT granted the concessions described in the previous section. Concessions include responsibility for maintenance and future investment.

Source: Allen, 2001

8G. **Total passenger demand [whole country]**

91 million pax-km; 0.3 million pax.

9G. **Total freight demand [whole country]**

68.185 million tons-km; 99 million ton.

Source: Thompson, 2012
REGULATORY ISSUES

1R. How are the concessions (and their renewals) awarded?

☑ Tendering
☑ Direct negotiation (Ferrovalle)
☐ Other
☐ No concessions

Source: Allen, 2001

2R. Regulatory mechanism

In 1995, Mexico enacted a statute for the regulation of rail service, Ley Reglamentaria Del Servicio Ferroviario. The statute gives primary regulatory responsibility to the Secretaria de Communicaciones y Transportes (“SCT”). Certain responsibilities concerning rates and competitive issues are also given to the Comision Federal de Competencia (“CFC”). The statute limits foreign investment in Mexican railroad companies to 49 percent unless a greater investment is specifically authorized by the Foreign Investment Commission. In May 1996, the Mexican Congress passed a resolution recommending that such authorizations be granted in all cases except for routes in Baja California and the Southeastern route. Article 43 of the statute provides that concessionaires have an obligation to provide rail service to isolated communities that have no other means of transportation on terms and conditions establish in the concession title. In such cases, the statute provides that the government will provide a direct subsidy to the concessionaire. Pursuant to the statute, in 1996 SCT promulgated regulations implementing the statutory directives in greater detail. The provisions regarding economic regulations are similar in many ways to the economic regulation of railroads in the United States. The matters governed by the regulations include rates, discontinuance or service and access.

Articles 170 through 175 of the regulations govern rates. As in the United States, they provide that rates are determined in the first instance by the concessionaires. They require that the rates "will be applied in a non-discriminatory way and shall be the same for users in the same conditions." The regulations also establish a tariff system. They require that carriers "register" their "maximum" rates with SCT ten days before they go into effect, and they provide: "There can only be applied the rates being registered." Despite the requirement that rates be non-discriminatory and registered with the SCT and that only the registered rates are to applied (what used to be termed the "filed rate doctrine" in the United States), Mexican law permits confidential transportation contracts at rates less than the registered maximum. The rates registered shall be the maximum fee to be charged, and according to them the concessionaires and permit holders will be able to structure promotions and to give discounts to the users in equal circumstances, in an equative and non discriminatory way, attending to the specific characteristics of each service, according to the classifications established in the regulations.

The regulations also establish a procedure for protesting registered rates and for asking SCT to establish a "rate basis" -- presumably, a new maximum rate for the movement. Before new rates can be prescribed, the protestant must show, and SCT must conclude, "that there exists no effective competition" for the movement to which the protested rate applies. In considering that issue, SCT must request the opinion of the CFC, but SCT is
apparently not bound to follow the CFC’s opinion. If SCT does conclude there is no effective competition for the movement, it will prescribe a "rate basis."

Echoing the methodologies adopted by the Interstate Commerce Commission and Surface Transportation Board in the United States, Article 175 provides: "When fixing rates, the Ministry will establish a methodology that will consider the competitive rate that an efficient shipper would charge for the same service. In the preparation of such a methodology, the Ministry will request the opinion of the Federal Competition Commission." The regulations indicate that, in deciding whether there is effective competition, SCT and CFC are to consider the existence and feasibility of alternative transportation. They do not indicate whether geographic or product competition would be a relevant consideration, although that is an issue that has been very contentious in the United States. The regulations also authorize SCT to establish rates for the concessionaires' obligatory service to isolated communities, required by Article 43 of the statute. In fixing such rates, SCT is to consider any subsidies provided by the government for the service. Neither the statute nor the regulations provide for the awarding of reparations to shippers who have paid rates determined to be excessive. By U.S. standards, the time frames established by the regulations for resolving rate complaints are speedy. In the most protracted case, SCT has little more than six months to resolve a rate complaint after it is filed, and if SCT fails to meet the deadlines, "the request that began the procedure will be considered denied."

So far (2001), there seem not to have been any formal protests of registered rates that have resulted in a formal prescription of rates by SCT. There have been a number of complaints, either to SCT or the concessionaires, that have either been dismissed or have resulted in a negotiated adjustment of the registered rates. This is probably in large part a reflection of the fact that most rail traffic in Mexico is highly competitive with trucks and other transportation modes. Railroad movements in Mexico are generally much shorter than in the United States, and there is relatively little coal transportation, which, in the United States, is a key rail transportation commodity and the one that has given rise to most rail rate complaints. As noted, confidential transportation contracts are permitted so long as the rate is below the registered rate, and such contracts are common. The regulations require that all rates, presumably including those contained in contracts, must be nondiscriminatory and made available to all "users in equal circumstances." It is not clear, however, how one shipper can determine whether a railroad has offered him the same rate as the railroad is providing to another similarly situated shipper in a contract if the contract terms may be kept confidential.

**Discontinuance of Service**

The regulations distinguish between temporary and permanent "interruption" of rail services — what in the U.S. should be termed a "discontinuance" of service. The regulations permit temporary interruptions without the prior authority of SCT, but only for reasons beyond the concessionaire’s control. In such cases, the concessionaire must notify SCT within 24 hours of the interruption and what measures it is taking to restore service. Concessionaires cannot permanently discontinue service without prior authorization of SCT. The concessionaire must show that the discontinuance is not contrary to provisions of the concession title and will not "affect communities which are isolated and which do not have any other alternative means of public transportation." SCT is required to resolve all discontinuance applications within 30 days of filing. If it grants the application, SCT is directed to grant a concession to any other party willing to provide the discontinued service, and the discontinuing concessionaire is required to grant trackage or haulage rights needed by the new concessionaire to render the service.

**Source:** Allen, 2001
3R. Is there vertical separation between network and services?
- Complete
- Yes, but not in the property
- Ongoing
- ✔ No separation (except for passenger services in the Mexico city area)
- Other

4R. Is the access to the network open for freight services?
The concession titles issued by the SCT generally grant the concessionaire exclusive operating rights over the lines involved in the concession. In some cases, however, the title grants the concessionaire trackage rights over specified lines of other concessionaires, for which the tenant carriers must pay the other concessionaire compensation determined by the SCT. The law and regulations also allow concessionaires to provide agreement trackage rights and haulage rights to each other by agreement that are different from those specified in the concession titles, in which case, the rights established by the agreements will control.

Beyond rights granted in the concession title or by mutual agreement, however, SCT appears to have no general authority to grant (or impose) additional trackage or haulage rights to (or on) concessionaires during the terms of the concession. The only other specific obligation the regulations impose regarding trackage rights is the obligation of concessionaires to give other concessionaires access to repair shops on the first concessionaire’s system.

The regulations require connecting railroads to interchange cars with each other, and provides: "[SCT] will determine the interconnection points and distances, where the interchange of railway equipment will take place." Whether or to what extent SCT can require reciprocal switching and can establish switching charges is less clear. As noted earlier, switching and other services in the Mexico City Valley is provided by a neutral switching carrier, TFMV.

Source: Allen, 2001

5R. Is the access to the network open for passenger services?
No significant passenger services: intercity passenger services were closed in 1997 except for a few tourist-oriented services. Mandated access for suburban passenger services in the Mexico area (Ferrovallón).

Source: Thompson, 2012
6R. Is the national network geographically divided?

☐ No: there is one single national network operator

☐ No: there is one single national operator, plus some local secondary networks operators

☐ Yes: the main national network is functionally divided into zones managed by the same network operator

☑ Yes: the main national network is divided and managed by different network operators

☐ Other

7R. In particular, is the network division based on some economic/regulatory consideration?

No.

8R. Is the yardstick competition/benchmarking regulation applied?

No.

9R. Is the access to the stations and terminals open to any operator?

☐ Yes

☑ No

☐ Other

The three freight concessions together own 75% of Ferrovalle, a company that the Government established in order to ensure equal and neutral access by the three concessions to the freight traffic connecting to and from the Mexico City market. Ferrovalle’s costs are managed by the three concessionaire s, and Ferrovalle charges each of the concessions for hauling their traffic.

10R. Pricing method

☐ Construction and operating costs

☐ Construction and operating costs, with subsidies for the investments

☐ Operating costs only

☑ Other

Concessionaires have an obligation to provide rail service to isolated communities that have no other means of transportation on terms and conditions establish in the concession title. In such cases, the statute provides that the government will provide a direct subsidy to the concessionaire.
11R. Are some external costs included in the tariffs?
No.

12R. Presence of competition (on or for the market) for passengers services
☐ Effective competition among competitors
☐ Competition limited on a few services
☐ Competition possible but not present
☑ No significant competition
☐ Statutory monopoly

No significant passenger services: Intercity passenger services were closed in 1997 except for a few tourist-oriented services.

13R. Presence of competition (on or for the market) for freight services
☐ Effective competition among competitors
☐ Competition limited on a few services
☐ Competition possible but not present (too small markets or competition expected for the future)
☑ No significant competition
☐ Statutory monopoly

14R. Strength of the actual regulatory framework
None.

15R. Problems of the actual regulatory framework
• No independent regulator.
• There have been cases of difficulties of access. The DGTTFM (Dirección General de Tarifas, Transporte Ferroviario y Multimodal), was created within the Secretariat of Communications and Transport (SCT) to serve as the regulatory agency. The DGTTFM’s authority to regulate railway tariffs is sharply limited. The concessionaires can set their own tariffs, subject to the provision that the tariffs are filed with the SCT and applied on a non-discriminatory basis. The DGTTFM can intervene only if it determines that a shipper has no effective alternative to the railroad that serves it, including other railways, other modes of transport and other routes.

Source: Gomez-Ibáñez and De Rus (2006)
REGULATORY INSTITUTION

11. Is the regulatory Institution

☐ Independent

☒ Governmental (part of a Ministry)

☐ Part of the network operator

☐ No Regulatory Institution

☐ Other

The statute gives primary regulatory responsibility to the Secretaría de Comunicaciones y Transportes ("SCT"). Certain responsibilities concerning rates and competitive issues are also given to the Comisión Federal de Competencia ("CFC"). The DGTFM (Dirección General de Tarifas, Transporte Ferroviario y Multimodal) was created within the Secretariat of Communications and Transport (SCT) to serve as the regulatory agency. It monitors the concessionaires' compliance with technical and quality regulations and acts as arbitrator in the case of conflicts between concessionaires. The concessionaires can set their own tariffs, subject to the provision that the tariffs are filed with the SCT and applied on a non-discriminatory basis. The DGTFM can intervene only if it determines that a shipper has no effective alternative to the railroad that serves it, including other railways, other modes of transport and other routes.

Source: Gomez-Ibanez and De Rus (2006)

21. Is the regulatory Institution

☐ Mode specific

☒ All transport modes

☐ Multi-sectoral

☐ No Regulatory Institution

☐ Other

31. Is the regulatory legislation

☒ Already established

☐ In progress

☐ Other
41. The regulatory Institution

- Sets the value of price (max)

- Collects tolls

- Decides the investments

- Is responsible for the safety aspects

- Has a function of settle the conflicts

- Benchmarking / Yardstick competition

- Awards the concessions

- Other

The statute and regulations give SCT general authority to regulate the safety of track and equipment. SCT is required to resolve all discontinuance applications.

Source: Allen, 2001

51. Staffing level of the regulator

[Information not available]
BIBLIOGRAPHICAL REFERENCES


