

Appendix 1-D:

International Tolling Experience

This appendix describes legislation in selected countries on the toll rate structure, and its adjustment mechanism, for highways built, maintained or operated by private investors

1. Brazil

In 1995 the Central Government of Brazil enacted a general law on concessions (Law No. 8.987 of 13 February 1995)¹, with a subsequent law enacted shortly thereafter (Law No. 9.074 of 7 July 1995)² to deal with some specific issues not covered under the first law.

These 2 laws, taken together, are the main body of legislation pertaining to concessions in Brazil at the central level. They provide very little in terms of guidance as to the level of tolls and other charges which can be levied by a concessionaire. Article 9 of Law No. 8.987 merely states that the applicable tariffs shall be those proposed by the concessionaire in his bid for the award of the concession. The concession agreement can however provide for a readjustment mechanism with respect to those tariffs in order to ensure that the financial-economic equilibrium of the concession³ is maintained.

However there are also sector-specific concession laws and regulations which supplement Law No. 8.987 and Law No. 9.074. In the highway sector, the key text is Decree No. 94.002 of 4 February 1987⁴. Article 4 of this Decree provides (liberally translated) that:

(1) The concession agreement referred to in the previous articles (...) shall set out objective norms and criteria for the fixing and readjustment of toll tariffs, with the aim of:

I - guaranteeing a fair return on the capital invested in the construction of the road and other federal road works;

II - allowing the improvement and expansion of the facilities associated with the operation of the road;

III - ensuring the financial-economic equilibrium of the project covered by the concession agreement.

(2) The capital invested by the concessionary company shall be repaid:

¹ Available online at: www.planalto.gov.br/ccivil_03/Leis/L8987cons.htm.

² Available online at: www.planalto.gov.br/ccivil_03/Leis/L9074cons.htm.

³ "Financial-economic equilibrium of the concession" means generally "the upholding of a targeted profitability (e.g. rate of return) on the part of the conceding party for the benefit of the concessionaire." See World Bank's *Highways Toolkit* at: http://rru.worldbank.org/Documents/Toolkits/Highways/3_public/37/37_.htm.

⁴ Available online at: www.antt.gov.br/legislacao/Concessoes/Rodoviaria/index.asp.

I – by the value of the tolls collected on the federal road, object of the concession; and

II – by any rent or charges collected with respect to service, recreational or rest areas forming part of the federal road being concessioned.

The website of the Brazilian Land Transport Agency contains copies of all the concession agreements signed between the Brazilian Government and various concessionaires⁵. These documents generally provide for:

- a clearly identified basic tariff (the figure covers the toll to be charged on vehicles for the use of the entire road been concessioned) for a given base year – usually the year in which the concession agreement is signed;
- a table of various classes of vehicles with a multiplier number of the basic tariff for those vehicles (hence, for example, a trailer-truck pays 6 times the basic tariff); and
- an annual readjustment clause based on a pre-determined mathematical formulae based on various price indexes linked to road construction and maintenance costs.

2. Canada (Ontario)

There is only one privately-operated toll road in Canada, located in the province of Ontario. This toll road (“Highway 407”) is governed by a special law of the provincial legislature.⁶ The *Highway 407 Act, 1998* contains a number of provisions on tolls, the most important of these being sections 13 and 14 which provide:

13.(1) A toll and any related fee and interest payable under this Act for the operation of a vehicle on Highway 407 shall be paid to the owner by,

- (a) if a toll device⁷ is not affixed to the vehicle, the person in whose name the plate portion of the vehicle permit is issued;
- (b) if a toll device is affixed to the vehicle, the person to whom the toll device is registered.

14. (1) Subject to subsection (2) the owner may,

⁵ For the full text of these contracts see: www.antt.gov.br/concessaorod/concessionariasrod.asp.

⁶ *Highway 407 Act, 1998*. Statutes of Ontario 1998, chapter 28. Available online at: www.e-laws.gov.on.ca. In 2001 this Act was followed by the *Highway 407 East Completion Act, 2001* (Statutes of Ontario 2001, Chapter 23) which covers an extension to Highway 407.

⁷ The 407 uses a system of cameras and transponders to toll vehicles automatically. There are no toll booths. A radio antenna detects when a vehicle with a transponder has entered and exited the highway, calculating the toll rate. For vehicles without a transponder, an automatic number plate recognition system is used. Monthly statements are mailed to users. (See generally: www.407etr.com.)

- (a) establish, collect and enforce payment of tolls with respect to the operation of any vehicle or class of vehicles on Highway 407;
- (b) establish, collect and enforce administration fees based on such criteria as the owner considers appropriate, and fees to commence or appeal any dispute proceedings;
- (c) establish interest rates to be charged on unpaid tolls and fees, and collect interest charged at those rates;
- (d) exempt any vehicle or class of vehicles from the application of section 13;
- (e) establish terms and conditions for the registration and distribution of toll devices;
- (f) require security for the provision of any toll devices; and
- (g) determine the methods of payment of tolls, fees and interest.

(2) The owner's powers set out in subsection (1) shall only be exercised in accordance with the terms and conditions set forth in an agreement to be entered into between the Minister for Privatization and the owner.

(3) Tolls, fees and interest collected by or on behalf of the owner are the property of the owner.

The 99-year long "Highway 407 Concession and Ground-Lease"⁸, between the Government of Ontario and the concessionaire, grants the concessionaire with almost unlimited control of the highway and its tolls. Provisions on tolls are found at section 2.2 of Schedule 22 of the Agreement. That section repeats verbatim what is said in section 14(1) of the *Highway 407 Act, 1998* (quoted in full above) and then merely prohibits the concessionaire from charging a toll on "vehicles used in fire fighting or law enforcement or bearing diplomatic license plates or in respect of ambulances."

The concessionaire's current tariff is based on⁹:

- time of day;
- vehicle class;
- distance traveled; and
- correct mounting and use of a valid transponder.

⁸ The entire text of the Agreement is available online at: www.407etr.com/investors/sale_agreement.asp.

⁹ See: www.407etr.com/tolls/tolls.asp.

Increases to the tolls set out in the tariff can be made by the concessionaire at any time, subject only to the increases being publicized fourteen (14) days in advance of their coming into effect.

3. France

The key provision which sets up toll roads in France is found at article L122-4 of the *Road Infrastructure Code*¹⁰. Article L 122-4 (liberally translated) provides that:

The use of highways is free in principle.

However the Government may, by decree, create a toll for the use of an highway in view of covering, partially or in full, any expense incurred in the construction, operation, maintenance, planning or extension of the highway.

In the event the highway is granted in concession, the toll covers also the cost of the capital invested by the concessionaire.

The concession agreement, and the service rules¹¹ affixed to it, stipulate the duties of the concessionaire, in return of which he is authorized to collect tolls. The Government approves those documents by decree.

Article 1 of Decree No. 95-81 of 24 January 1995 on highway tolls¹² provides additional details on the subject. It reads (liberally translated) as follows:

The highway toll tariff is set on a yearly basis by the concessionary company.

The service rules of the concessionary company referred to in article L122-4 of the *Road Infrastructure Code* shall provide for the manner of setting tariffs for tolls, in particular how to calculate an average tariff by kilometer to be used as a basis for all tariffs and which takes into account the structure of the network, the cost of operations, the financial obligations of the company and the possibility of variations¹³ in this average tariff by kilometer.

A separate contract, limited to five years, but renewable, between the State and the concessionary company sets how the toll tariffs will evolve within that five-year period.

¹⁰ *Code de la voirie routière*. Available online at: www.legifrance.gouv.fr.

¹¹ In French, "cahier des charges."

¹² Available online at: www.legifrance.gouv.fr.

¹³ An example of what are "variations" in this context can be found on the website of one of France's concessionary company (www.sanef.com/autoroute/tarif-peage-autoroutier.htm): on certain days, at certain hours of those days, in specified directions, and for some classes of vehicles the toll tariff increases by 25% or decreases by a similar amount.

4. India

At the central level, the *National Highways Act, 1956*¹⁴ provides the legal basis for both the collection of tolls on national highways and for private sector participation in their construction and maintenance.

Section 7 of the *National Highways Act, 1956*¹⁵ provides that:

- (1) The Central Government may, by notification in the Official Gazette, levy fees at such rates as may be laid down by rules made in this behalf for services or benefits rendered in relation to the use of sections of national highways.
- (2) Such fees when so levied shall be collected in accordance with the rules made under this Act.

Section 8-A, added in 1995, then gives the Central Government the power to enter into agreements with private parties for the development and maintenance of national highways:

- (1) Notwithstanding anything contained in this Act, the Central Government may enter into an agreement with any person in relation to the development and maintenance of the whole or any part of a national highway.
- (2) Notwithstanding anything contained in section 7, the person referred to in subsection (1) is entitled to collect and retain fees at such rate, for services or benefits rendered by him as the Central Government may, by notification in the Official Gazette, specify having regard to the expenditure involved in building, maintenance, management and operation of the whole or part of such national highway, interest on the capital invested, reasonable return, the volume of traffic and the period of such agreement.

The *National Highways (Collection of Fees by Any Person for the Use of Section of National Highways/Permanent Bridge/Temporary Bridge on National Highway) Rules, 1997* implement Section 8-A of the Act. Rule 3 of these 1997 Rules somewhat confuses things by providing that the rates of the fees (i.e. tolls) shall be agreed upon by the State and the concessionaire and then by providing that the State shall decide on and publish those rates:

Rule 3 – Agreement and rate of fee

- (1) The Central Government may enter into an agreement with any person in relation to development and maintenance of the whole or any part of a national highway/permanent bridge/temporary bridge on national highway as it may decide, whereby the person may be permitted to invest his own

¹⁴ Act No. 48 of 1956, as amended. Available online at: www.nhai.org/act1956.htm.

¹⁵ Available online at: www.nhai.org/rules1997.htm.

funds for the development/maintenance of a section of national highway/permanent bridge/temporary bridge and to collect and retain the fees at agreed rates from different categories of mechanical vehicles for an agreed period for the use of the facilities thus created, subject to the terms and conditions of the agreement and these rules.

(2) The rates of fees and the period of collection shall be decided and shall be specified by notification in the Official Gazette by the Central Government having regard to the expenditure involved in building, maintenance, management and operation of the whole or part of such section, interest on the capital invested, reasonable return, the volume of traffic and the period of such agreement.

However, if one looks at one of the Model Concession Agreements posted on the website of the National Highways Authority of India,¹⁶ in practice this discrepancy is resolved by the Government agreeing to publish only the rate of fees already agreed upon by the parties in the concession agreement itself. Clause 4.1 of the Model Concession Agreement reads, in part, as follows:

4.1 Levy, Collection and appropriation of Fee

(a) Subject to the provisions of this Agreement, the Concessionaire shall during Operations Period be entitled to levy, demand and collect Fee in accordance with the Fee Notification¹² and to appropriate the same.

(b) GOI undertakes to publish the Fee Notification as per Schedule 'F' within 180 days from the Scheduled Project Commencement Date.

Clause 4.2 then goes on to provide for the following readjustment mechanism:

4.2 Revision of Fee

In the event of extension in Concession Period in accordance with provisions of this Agreement, GOI shall issue revised Fee Notification(s) taking into account increase in Fee @ 10% every two years.

5. Philippines

The Philippines has a comprehensive concession law¹⁷ with detailed Implementing Rules and Regulations. Section 12.15.2(a) of these Implementing Rules and Regulations provide that:

The tolls, fees, charges and rentals that a project proponent may generally charge for the use of the facility shall be those incorporated in the contract

¹⁶ See *Model Concession Agreement for Small Road Projects* at: www.nhai.org.

¹⁷ An Act Authorizing the Financing, Construction, Operation and Maintenance of Infrastructure Projects by the Private Sector and Other Purposes, Act No. 6957, as amended by Act No. 7718. (Available online at: www.botcenter.gov.ph/botlaw/index.htm.)

and, if required by existing laws, approved by the appropriate government regulatory bodies. The proposed tolls, fees, and charges shall be considered by the Agency¹⁸ or LGU¹⁹ in the evaluation of the bid, taking into account the reasonableness thereof to the end-users of the facility.

Section 12.17 of the same Implementing Rules and Regulations provide for the following adjustment mechanism:

The tolls, fees, rentals and charges may be subject to adjustment during the life of the contract, based on the predetermined formula and official price indices prescribed in the Instructions to Bidders and the approved contract. (...) such formula shall take into account the reasonableness of the same to the end-users by the concerned Agency/LGU. For this purpose, the concerned Agency/LGU may consult with the proper regulatory body or undertake such other activities to ensure the reasonableness of such formula. The monitoring of the consistency of the proposed adjustments of tolls, fees, rentals and charges with the prescribed rate of return, if any, shall be undertaken by the appropriate regulatory body or Implementing Agency/LGU.

Price indices shall be based on the official issuances by the National Statistics Office (NSO), Bangko Sentral ng Pilipinas (BSP) [i.e. the Central Bank of the Philippines], Department of Labor and Employment (DOLE) and other sources authorized by the Agency/LGU concerned prior to bidding.

¹⁸ "Agency/Agencies. – Refers to any department, bureau, office, commission, authority or agency of the national government, including government-owned or -controlled corporations, authorized by law or their respective charters to contract for or undertake infrastructure or development projects." (Section 1.3(b))

¹⁹ "Local Government Units (LGU) – Refer to provincial, city, municipal and/or barangay government entities." (Section 1.3(n))

6. Serbia

Private investment in the road sector is a relatively new phenomenon in Serbia. Serbian legislation in this area is therefore fairly basic, but is generally consistent with what is done elsewhere in the Balkans and in Central Europe with respect to tolls for privately-operated highways.

The recent *Law on Public Roads*²⁰ establishes the 2 key conditions which allow for the existence of privately-operated toll roads, namely:

- the right to collect of tolls on a public road (article 17); and
- explicit recognition that private parties, whether domestic or foreign, may participate in the financing, construction, upgrade, maintenance and management of a public road (article 14).

Article 22 (6) of the *Law on Concessions*²¹ requires that the concession agreement contains provisions relating to the: “criteria for setting the end user price/tariff for products and services.” While no explicit reference is made to a readjustment mechanism, article 22 (11) requires that: “conditions for making amendments” to the concession agreement be included.

Before a concession agreement is signed a concessionaire must be selected. This selection process takes place in Serbia following an “Invitation to Public Tender” in which the Government defines the parameters of the future concession. A recent example of such an invitation provides that:²²

“The sum of the compensation for exploitation of the highway shall be established according to tariffs for relevant categories of vehicles in the Republic of Serbia and shall be harmonized with recommendations of the European Union and the level of tolls in neighboring countries. The level of compensation, the system of tariffs, as well as any change of that system, shall be subject to approval by the Government.”

Some of the European Union’s “recommendations” referred above (Serbia is not a member of the European Union and hence European Union’s mandatory directives do not apply to it) include Directive 99/62/EEC, adopted on 17 June 1999 by the European Parliament and the Council of the European Union. This Directive sets common rules on annual taxes, distance-related tolls and time-

²⁰ Official Gazette of the Republic of Serbia, No. 101/2005.

²¹ Official Gazette of the Republic of Serbia, No. 55/2003. English translation available online at: www.mier.sr.gov.yu/upload/dokumenta/zakoni/ZakoniMIER/LAW%20ON%20CONCESSIONS.pdf

²² “Invitation to Public Tender for Granting Concession for Construction, Exploitation and Maintenance of the Highway Route from Horgos to Pozega” issued by Ministry of Capital Investment. (Online English version at: www.mki.sr.gov.yu/dokumenta/KoncesijaOglasENG.doc.)

based user charges for heavy goods vehicles (above 12 tonnes) for the use of certain infrastructure. It provides in particular that:²³

- Tolls shall be levied according to the distance traveled and the type of vehicle. The weighted averaged tolls should be related to the cost of constructing, operating and developing the road infrastructure. Tolls may be differentiated according to vehicle emission classes and time of the day.
- Both tolls and user charges can only be imposed on users of motorways or multi-lane roads similar to motorways as well as on users of bridges, tunnels and mountain passes.

²³ See summary of Directive 99/62/EEC at:
http://ec.europa.eu/transport/road/legislation/abc/index_en.htm#2.3.1.