ANNEX C—RAIL INFRASTRUCTURE ACCESS PRICING

Introduction

229. The governments of the Western Balkans region have recently passed railway laws that create the legal possibility for multiple carriers operating over shared infrastructure. As the governments set up agencies to implement the new railway laws, they will soon face the practical problems of how to price use of the railway infrastructure.

230. This problem has been faced by railways and governments in many countries in the European Union, the Former Soviet Union, Australia and the United States. There are as many access pricing methodologies as there are countries, perhaps more.[118] Nonetheless, certain broadly accepted principles can be articulated that serve as a foundation for any infrastructure methodology. These principles are discussed below.

231. In addition, much of the existing and potential traffic for the Western Balkans railways is international. To be able to link their railways into the European rail network, they will need access pricing that is compatible with EU standards and structured to encourage international movement.

What Costs Should Be Considered in Setting Access Charges?

232. The universe of costs that should be considered in setting access charges should be limited to the costs of an efficient network. Charges should not reflect costs of lines that that carry little traffic or for excess track in stations and yards. Similarly, users should not be charged for construction or maintenance of infrastructure to a higher standard than needed to meet traffic demand. Further, users should not be charged for inefficiencies in operation that are government-induced, such as requirements to employ more staff than needed to operate safely.

233. Infrastructure charges do provide pricing signals about how much capacity to demand/supply (see discussion below). However, they are not an efficient means for

[118] In the United States, for example, freight and commuter access on freight railway infrastructure is based on full costs, but intercity passenger carrier access on freight railway infrastructure is based on marginal cost.

accomplishing network rationalization. A network study, such as the one Serbian Railway recently undertook is the appropriate approach to this pressing problem.

What Costs Should Be Charged to Users?

234. In theory, the users of railway infrastructure should be faced with a charge that is equal to at least the marginal social cost that their trip imposes on society, If applied consistently across all modes, it is also asserted to ensure a socially optimal distribution of traffic on all modes, as it would fully reflect the externalities, the social and environmental costs that are currently not considered in the decisions of users in their choice of mode. Although, in practice, the introduction of such a charging system, based on the marginal social costs of use, for all modes, given the difficulties of identifying and quantifying the extent of the social and environmental costs even in the EU15 countries, may be an objective for the medium to long term.

235. In the short to medium term, a pricing system for infrastructure charges that reflects at least the marginal cost of each trip on the rail infrastructure is asserted to result in the most efficient level of traffic on the network. Track renewals should be included in such costs because they are caused by use, although lumpy and displaced in time from the use that caused them.[119] Evidence suggests that a system based on marginal costs is likely to cover 20%-30% of the total costs of infrastructure provision. This ensures that any traffic that can cover its own direct costs is not precluded from using the infrastructure, as specified in EC.Dir 2001/14.

What Costs Should Be Paid by Government?

236. However, the level of the access charge in each country is a political decision, reflecting the difference between the financial contribution from the respective Government in the form of subsidy and the total cost of infrastructure provision. At a minimum, Government should bear the fixed costs of any rail lines that it requires to be kept open for social or strategic reasons, even though they do not have enough traffic to be financially viable. Government should also pay for any inefficiency imposed on the railway (such as excess labor) for social reasons.

237. Where budgets are constrained, an individual governments may choose to recover a greater proportion of the fixed costs from users, and the level of cost recovery in neighboring countries runs at an average of 60 percent of total costs[120]. But the policy choice is also constrained by markets: If the access charge exceeds marginal costs by more than the market will bear, it may drive users—and any contribution they make to fixed costs—off the network.

[119] European Conference of Ministers of Transport Council of Ministers, *Railway Reform and Charges for the Use of Infrastructure* (April 29, 2005), p. 13.
[120] As some examples, Bulgaria 60%, Romania 50%+, Hungary 80% etc (see Workshop on Track Access Charges, 2005).

238. Many of the cost of providing infrastructure are fixed in the short term, but variable in the long term as capacity is replaced or expanded. Charging short run marginal cost gives users the correct pricing signal for optimal use of existing capacity. Charging higher, long run marginal cost gives the correct pricing signal to users to demand appropriate quantity of capacity and to infrastructure managers to expand/contract capacity appropriately. In determining whether to charge users for some of the cost of providing capacity, governments should consider what pricing signal this will send and whether it is an appropriate pricing signal, given their capacity situation.

How Should Access Prices Be Structured?

239. Marginal costs should be charged to users in a way that reflects cost causality, is readily measurable and straightforward to administer. Many railways use gross ton-km as the basis for charging variable costs. If needed, the gross ton-km can be factored to reflect cost differentiation. For example, if a certain types of trains have a higher axle weight or higher speed, so that each gross ton-km of those trains wears the track more than a gross ton-km of other trains, the gross ton-km of the higher cost trains can be factored up.

240. The determination of costs and the basis for charging should be transparent. We caution against manipulating the calculation of marginal costs or the basis for charging so as to favor passenger services and cross subsidize them from freight. Attempting to hide passenger deficits by burying their costs in the freight charges will only discourage potentially profitable freight customers from using rail.[121]

241. How to charge users for any fixed costs is much less clear cut. Typically, the basis for charging is a compromise between competing goals, including:

- Provide incentive (or minimizes the disincentive) to make optimal use of existing capacity,
- Provide incentive (or minimizes the disincentive) to demand/supply optimal level of capacity,
- Encourage competition,
- Encourage international movement of goods and people.
- Provide infrastructure manager with predictable and adequate revenue,
- Straightforward to administer.
- Prevent discrimination between users.

242. A variety of methods are used to charge fixed costs to users. In general, we recommend a variable basis such as train-km rather than fixed fee because a fixed fee acts as a barrier to entry to small operators and a barrier to movement across national

[121] "The current practice – of low tariffs for passenger services, effectively cross-subsidised by freight – will significantly hold back the development of the international (and domestic) rail market. Community of European Railways, *Responding to the ECMT Report on Rail Track Access Charges in Europe* (June 2005), p. 7.

boundaries. The exception to this is when a line has a single or very dominant user, e.g. a suburban passenger service or one industrial user. In such a case, the infrastructure manager may charge the fixed cost of the line to the single/dominant user on a fixed basis.

243. Continuity, predictability and transparency are important in setting access prices. Railway operators must make long term investments in rolling stock and contract commitments to customers. Infrastructure managers must make long term investments in track and facilities. "Frequent changes of calculations, which often involve changes of levels of charges" are detrimental to business models and markets."[122]

What Does EU and International Trade Require?

244. The EU directs members to charge users for marginal costs. Fixed costs may be paid by government or charged to users. If charged to users, a variety of charging basis may be used. However, the charges must not discriminate between like customers. In particular, international traffic should not be charged higher rates than domestic traffic.

245. To encourage international rail movements—one of the main purposes of the EU's infrastructure separation requirements—the structure of access prices needs to be similar in all the countries of the region. The absolute level of charges does not need to be the same, but they should be simple and the relative proportions charged to use and to capacity should be similar. "These charges need not be uniform in level but must be consistent in structure and should be based on a set of simple factors of use…"[123]

246. To encourage international rail movements, infrastructure managers should meet regularly to discuss pricing and the division of revenue.

[122] Workshop on Track Access Charges, *Summary and Main Conclusions* (Brussels, 8 June 2005), p. 2.
[123] European Conference of Ministers of Transport Council of Ministers, *Railway Reform and Charges for the Use of Infrastructure* (April 29, 2005), p. 74.