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Item 4 (b) of the provisional agenda

Strategic questions of a horizontal policy nature

United Nations Economic Commission for Europe (UNECE) analytical work on Transport

Note by the secretariat



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Publication "Innovative ways for
Financing Transport Infrastructure" 4(b)

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Figure 1.9 Estimated cost of pre-feasibility and feasibility studies expressed as percentage of project cost

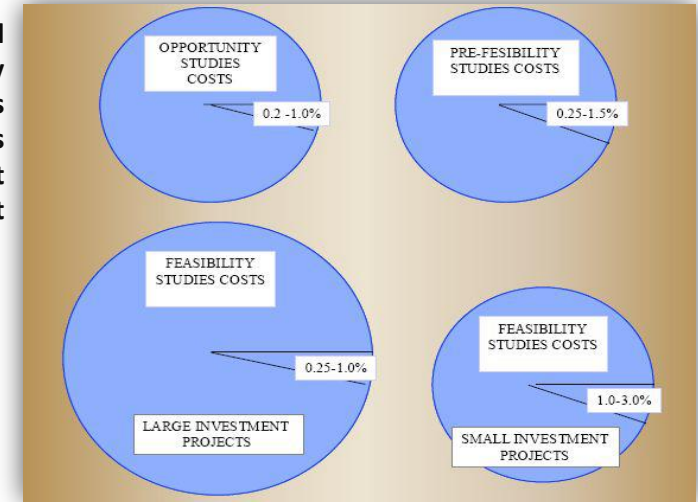


Figure 1.8 Financial proposals and financial decisions supported by pre-feasibility and feasibility study in the cycle of operations.

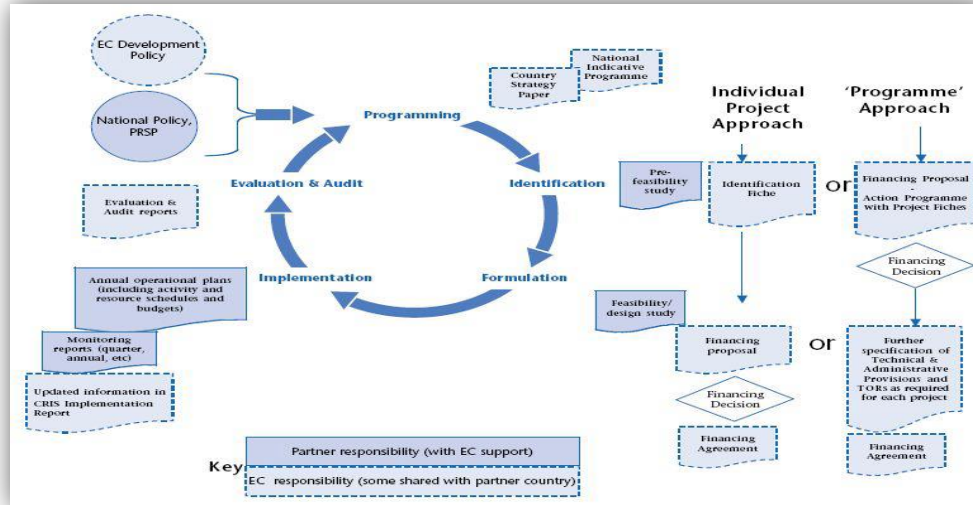


Table 1.5 Shares of revenue from road related taxes and fees in selected European countries in 1998.

Table 2.2. Shares of revenue from road-related taxes and fees in European countries, 1998 (%)

| Country | Vignettes | Tolls | Fuel Tax | Vehicle Tax | Sale or Registration Fee | Other | Insurance | Road Revenues as % of GDP |
|---------------|-----------|-------|----------|-------------|--------------------------|-------|-----------|---------------------------|
| Austria | 6 | 5 | 60 | 19 | 9 | 0 | 0 | 3 |
| Belgium | 2 | 0 | 57 | 20 | 5 | 1 | 14 | 3 |
| Denmark | 0 | 1 | 26 | 16 | 53 | 0 | 4 | 3 |
| Finland | 0 | 0 | 60 | 28 | 12 | 0 | 0 | 3 |
| France | 0 | 15 | 67 | 18 | 0 | 0 | 0 | 3 |
| Germany | 1 | 0 | 78 | 21 | 0 | 0 | 0 | 2 |
| Great Britain | 0 | 1 | 80 | 19 | 0 | 0 | 0 | 4 |
| Greece | 0 | 26 | 54 | 5 | 14 | 0 | 0 | 5 |
| Hungary | 0 | 8 | 84 | 2 | 0 | 5 | 0 | 4 |
| Ireland | 0 | 1 | 51 | 16 | 32 | 0 | 0 | 3 |
| Italy | 0 | 8 | 75 | 14 | 0 | 0 | 3 | 4 |
| Luxembourg | 1 | 0 | 90 | 7 | 0 | 0 | 2 | 2 |
| Netherlands | 1 | 0 | 53 | 20 | 26 | 0 | 0 | 3 |
| Portugal | 1 | 9 | 61 | 27 | 0 | 2 | 0 | 4 |
| Spain | 0 | 8 | 73 | 11 | 8 | 0 | 0 | 3 |
| Switzerland | 6 | 0 | 67 | 24 | 0 | 3 | 0 | 2 |
| Sweden | 1 | 0 | 82 | 16 | 1 | 0 | 0 | 2 |
| Average Share | 1 | 5 | 66 | 17 | 9 | 1 | 1 | 3 |

Source: The Unite Project, EC (Compiled in Lindberg and Nilsson, 2005).
 Note: These numbers emanate from Unite, a project funded by the European Commission. Much effort was spent on eliminating the measurement problems mentioned in the main text.

- 2.4.1. Types and Examples of Rail PPPs
- 2.4.2. Best Practice
- 2.5.1. Ensure PPP policy and legislation is robust and consistent with other policies
- 2.5.2. Prepare an evidence-based delivery plan
- 2.5.3. Obtain formal support for the structure and policy from potential lenders
- 2.5.4. Ensure that there is political and civil service support
- 2.5.5. Develop a focused specialist office to manage the programme
- 2.5.6. Establish a suite of standard procurement protocols and documentation
- 2.6.1. Carry out transparent business case assessments for each project
- 2.6.2. Ensure the programme will enable competitive project financing
- 2.6.3. Develop a standardised ‘shadow’ cost model against which to compare value
- 2.6.4. Offer robust payment security that guarantees investment return and debt repayment

Analysis of contractual structures for procurement of net phase two

| Contractual Structure | Description | Advantages | Disadvantages |
|---|---|---|---|
| Option 1 - Design, Build, Finance, Operate and Maintain (DBFO) <i>Example - Line One</i> | Under this option a single concessionaire would be appointed as the sole point of accountability for all aspects of the project, including design, build, funding, operation, maintenance and integration with the existing Line One. The concessionaire would be paid by reference to service based outputs, such as timetable and ride quality and not by reference to availability of infrastructure. DBFO is the basis of Line One. There is a single point of accountability for all services and all key risks are transferred (although it is recognised that in today's market, better value for money may be achieved if certain risks are shared between the public and private sectors). | <ul style="list-style-type: none"> • Integration risk is fully transferred. NET Phase Two differs from tramway refurbishment or entirely new systems because of the requirement to integrate Phase Two with Line One, both in terms of the minimisation of disruption to Line One services and inter-operability of infrastructure and vehicles. • This structure incentivises whole life costing more than any other, as the concessionaire is responsible for all aspects of the project from design through to operation, for the duration of the contract period. • The payment mechanism provides greater incentive than under any other procurement option to achieve passenger focused outputs (e.g service frequency and ride quality). • This structure does not require upfront public sector capital funding and therefore should be more affordable. • Potential to achieve off balance sheet treatment. | <ul style="list-style-type: none"> • The experience from Leeds Supertram and the South Hampshire Rapid Transit has shown that long-term revenue risk transfer may be unattractive to funders. However, this can be mitigated through the use of a revenue share mechanism (if required) or appropriate ratios between debt service, unitary charge and farebox revenue. Furthermore, there is a degree of certainty in respect of patronage figures as a result of performance data from Line One. |

Chapter 3 Electronic Tolls

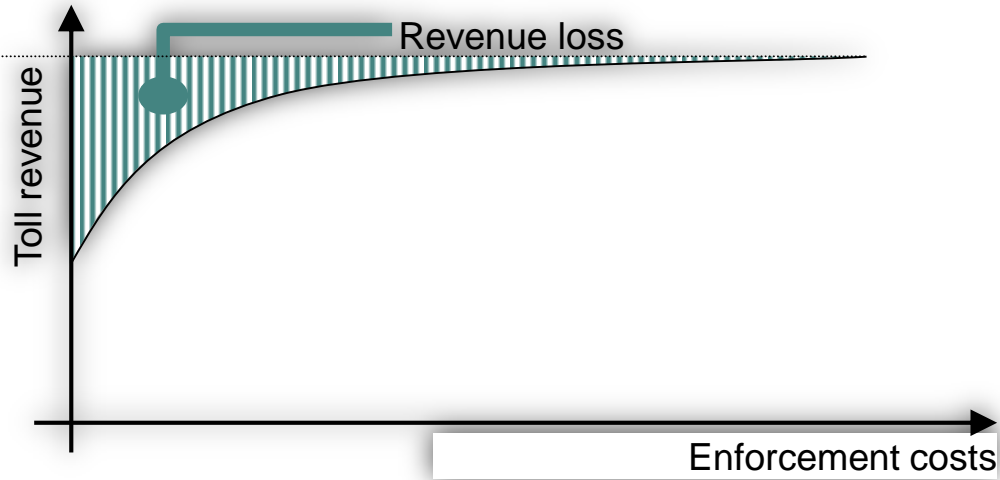


Figure 3.1: Ratio of enforcement costs to collection of toll revenue

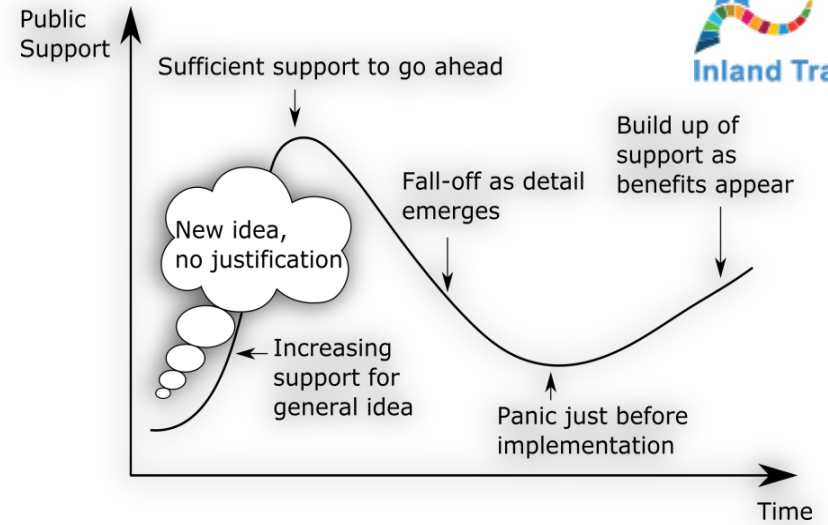


Figure 3.2: Public acceptance for the introduction of toll collection systems

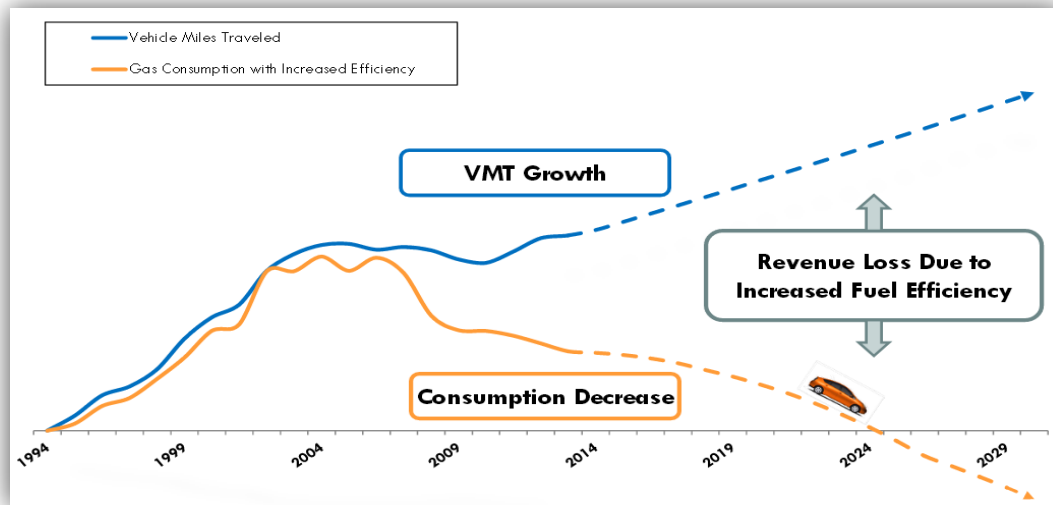


Figure 3: Vehicle miles travelled vs. gas consumption

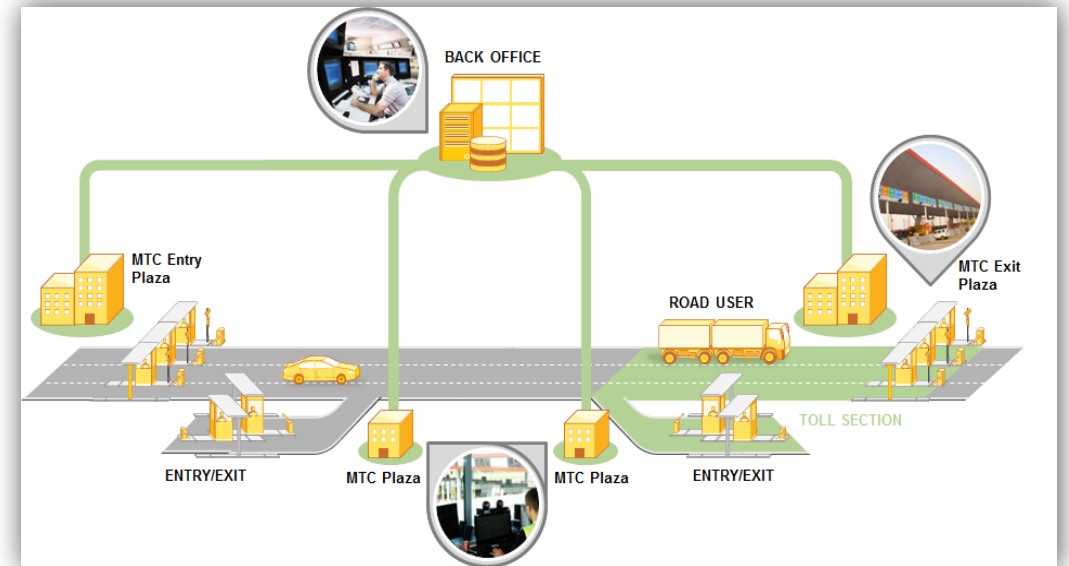


Figure 7: System architecture of manual toll collection system

Chapter 4 Land Value Tax (LVT)

The advantages of Land Value Tax

- A natural source of public revenue
- A stronger economy
- Marginal areas revitalized
- A more efficient land market
- Less urban sprawl
- Less bureaucracy
- No avoidance or evasion
- An end to boom slump cycles
- Impossible to pass on in higher prices, lower wages or higher rents
- An established and proven system

CANARY WHARF in London's disused Docklands in the 1980s



Over 60,000 workers are able to access these offices every day because of the public investment in new roads, the Jubilee Line Extension and the Docklands Light Railway. The drop in value of this land would be huge, if this massive public investment in transport infrastructure had not been provided, and less than 6,000 people were able to access the site daily. The London Underground Jubilee Line extension, which cost taxpayers £3.5 billion, could have been financed in this way. At the time, it was estimated that as a result of the extension, land values in the vicinity of just two of the stations, Canary Wharf and Southwark, increased by £2.8 billion, and, over the whole extension, by some £13 billion. In other words, had LVT already been established, the public as a whole would have been the beneficiaries from the higher land values created, instead of the private owners of land in those areas, who had contributed nothing to the project.



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-  Inclusive International Legal Architecture
-  Effective Public Administration
-  International Cooperation
-  Innovative Financing
-  New Technologies
-  Social Responsibility

enablers

objectives

- Seamless B / C
- Facilitated international transport
- Reduced GHG emissions
- Reduced air / noise pollution
- Increased P.T. Mobility Choices
- Zero traffic fatalities and injuries
- Efficient transport services
- Enjoyable walking and cycling

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