

How freight can contribute to infrastructure financing

Olivier QUOY
PIARC TC 2.3 Chair
Atlandes CEO





How freight can contribute to infrastructure financing

- Where does the question comes from ?
- Freight is already charged... but does levied money go to infrastructure?
- Illustration 1: Failure of french HGV charging scheme (2008-2015)
- Illustration 2: Abnormal loads or High Capacity Transport
- As a conclusion: few ideas for discussion ...





Where does the question comes from?

- Economy relies on goods transportation
- Efficient transportation needs good infrastructure
- Good infrastructure cost money
- Freight has great and true monetary value, which is different from passenger transportation often valued by questionable time or safety savings

Recent report (May 2024) and dataset on trade cost by country, commodity and mode of

transport

world	transport costs	volume	FOB value	FOB/
	(billion US \$)	(Mt)	(billion US\$)	transport cost
all modes	1 414.34	13 482.42	18 938.15	13.4
road	155.86	2 668.72	5 369.16	34.4
sea	735.65	6 729.52	6 630.37	9.0

• (Road) Freight is the main driver for (road) infrastructure design

UN trade & MINITADE & CONTROLL &





(Road) Freight is already charged ... but does levied money go to infrastructure?

- Specific fees:
 - Energy charges
 - Road charges (tolls)
 - Loading / Unloading fees (ports...)
 - Various Taxes (border crossings, ...)
- General fees:
 - VAT
 - Corporate tax
 - ..
- ⇒Except for tolls, most of the taxes or charges levied on freight goes to general budgets and are not used for infrastructure needs





• Situation:

- need for infrastructure financing
- ...but also argument that road freight does not cover externalities
- case of main european countries setting up road freight specific charges (Germany LKW Maut in 2005)
- ...but already 9000 km of tolled motorways in France

Legal considerations

- Road use charge must be levied on ALL users (trucks and cars) => not possible to target trucks only
- Only Tax can focus on one specific category





• The pay-per-kilometer HGV tax is a key measure from the so-called "Grenelle for the environment", a nation-wide government-initiated forum, concluded in November 2007. It consists in charging, through ETC techniques, trucks traveling the non-conceded State Roads Network (SRN).



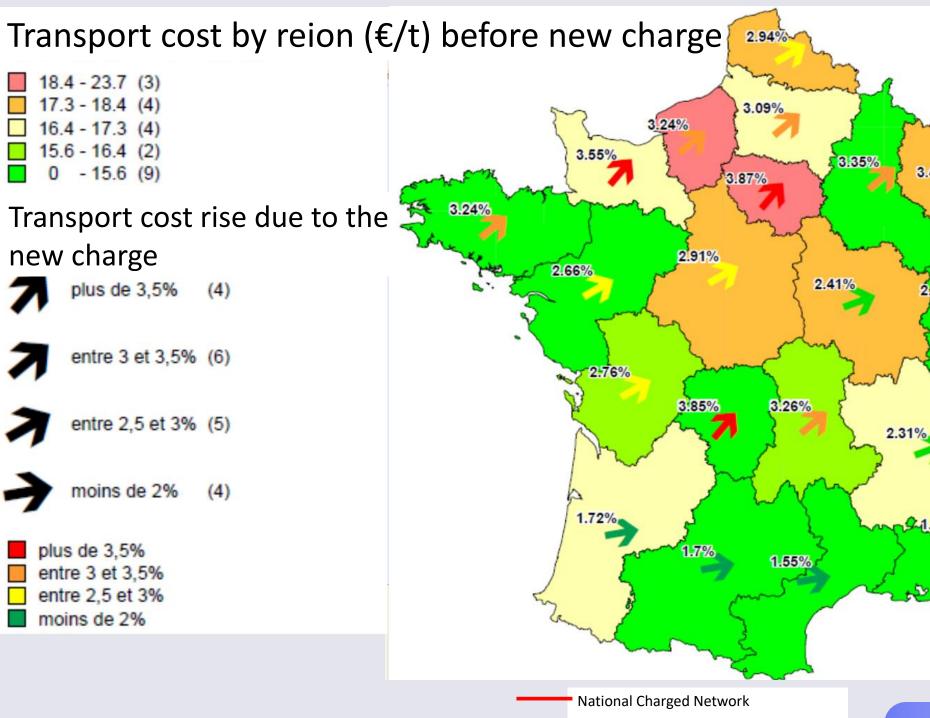
Legally, this charge is a <u>tax</u> under French customs regulations (<u>not</u> a fee for service).

• It aims both at: (1) giving a price signal to the general economy through road freight industry, that will press for lower and better use of roads, and (2) levying new resources for transport infrastructure developments, guided by a clear inter-modal strategy.

The revenue collected on national roads will complete the resources of AFITF (the French financing agency for transport infrastructure).



- 2008: law introduces a new tax on road freight on certain national or local roads
 - Raises territorial inequalities between regions linked to the density of existing toll motorway network and the density of the new charged network
 - Hauliers seek Government help to raise their prices while transport prices are market prices
 - Network definition must address traffic diversion risk
 - Raises the question of the use of the revenue: road? infrastructure ? general budget ?



National road excluded from eco-tax

Proposed Local roads (06/05/2010)

Tolled roads



- Political choices are made:
 - Reducing the network (2013, 2014)
 - Designing a regulatory process to impose a fixed price rise of the transport price which remain a market price
 - Sending revenue to alternative modes of transport (rail), with a focus on transit in

urban context



La date approche et le doute s'installe

After full completion of the project on the ground (150 gantries for automatic
enforcement, approx 30 000 trucks running with OBU,...), project is cancelled in
2015 after several demonstrations



- Few thoughts to share...
- When charging professionnals (hauliers, shippers), the use of the revenue must be seen as useful: it must help financing infrastructure enhancement (and more specifically for small local truck companies ensure good road maintenance), and not be « lost » elsewhere...
- For this reason, tolls are interesting tools
- Geography has to be taken into account
- It is not possible to look for changing behavior (road charge as an **incentive** for modal shift) and on the same time to design **countermeasures** to reduce or even delete economic effects





Illustration 2: abnormal loads or high capacity transport

- Truck load directly influences road design but also maintenance costs
- Several studies show the link between load / overload (abnormal loads or illegal loads) and pavement wear and tear (see Equitable Permit fee for overweight trucks, Texas, US or Estimating the road wear cost of heavy vehicles on a road network, CSIR 2018...)
- Authorising high capacity transport (EMS in Europe, B-double or B-triple in south America) raise question of infrastructure upgrading or strengthening

 A trial will not help funding <> larger authorization with fees and investments on infrastructure: tradeoff to be found to share added value of higher loads





Illustration 3: truck dedicated infrastructure

- 1996 USA launch a wide program: « the potential for freight productivity improvements along urban corridors » aiming at exploring advantages of providing « reserved capacity » for trucks instead of setting « restrictions » or « bans ».
- In the late 1990s and early 2000s, several states conducted studies and a few projects arose, in particular in California with SR-60 (finally open in May 2022) and I-710 projects. But, like in France, when the "starting point" is a network already existing and well designed, it is difficult to advocate and fund new infrastructure.







Illustration 3: truck dedicated infrastructure

- An alternative vision to classic enlargement: A63 case in France
- Road safety issue on a 2x2 non tolled motorway
 - High accident rate due to traffic level and mix of trucks and cars
 - Reliability (in case of accidents, lanes are blocked and traffic has no easy diversion,
- Need for funding: the State promotes a toll motorway
- No toll for private cars (no public acceptance)...
- Failure of truck charging project in 2015...
- ... let's go out of the box...





As a conclusion, few ideas for discussion...

- The question of toll acceptance (for passenger cars) joint with those of tax acceptance (when aiming at freight) should advocate for reconsidering road use charge
 - When a road use charge cannot be vehicle selective if all vehicles are using the road, instead of considering designing a tax for freight, the question of making road vehicle selective can be examined
 - Truck dedicated (tolled) infrastructure for instance could be a new way of financing infrastructure enhancement
 - High Capacity Transport and abnormal loads permitting may be regarded as fund raising opportunities
- Freight brings and bears value, and needs better infrastructure: there should be room
 for sharing the benefits of enhancing (and maintaining!) infrastructure





Agradecimiento/ Thanks

Olivier.quoy@a63-atlandes.fr

