# The current rules and opportunities for road user charging

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T&E membership

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## Freight demand challenge

#### + 43%

Freight transport volume growth in Europe (1990-2003)

Double the rate of passenger transport growth

Outpacing GDP growth of 30%

#### + 52%

Projected growth road freight transport demand (2000-2020)

#### **78%**

Road freight transport share of inland transport markets (2004) at the expense of rail and inland shipping



Source: EEA TERM Report 2007.

#### Barcelona leads Europe in long-distance road freight transport

Top 20 regions with the highest number of long-distance journeys (> 500

km, departing journeys), 2004.

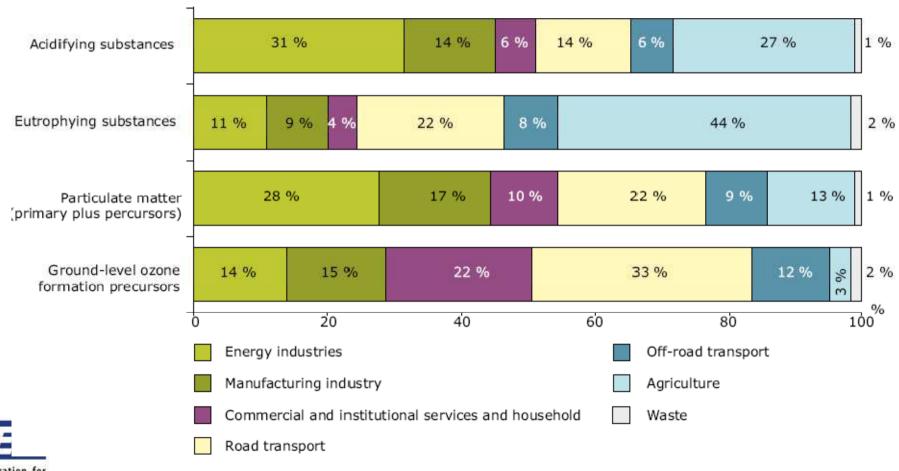
Region	Country	No. Long distance journeys	% long distance journeys of all departures
Barcelona	Spain	957 029	3.7
Madrid	Spain	573 548	2.7
Valencia	Spain	365 823	2.2
Milano	Italy	285 542	4.9
Nord	France	250 707	2.6



Source: Eurostat, Regional dimension of road freight transport statistics, 62/2007

## Air pollution from transport

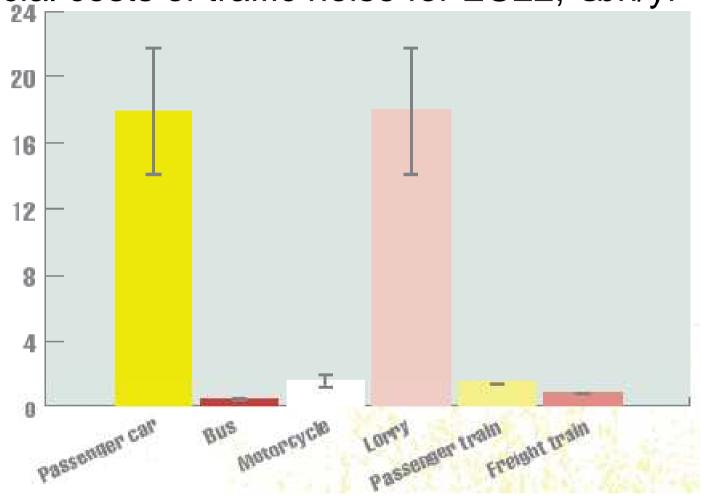
Air pollution responsible for 370,000 deaths in EU Share of road transport in air pollution 14 - 33% Road transport AT LEAST 80,000 deaths





## Transport Noise

Social costs of traffic noise for EU22, €bn/yr



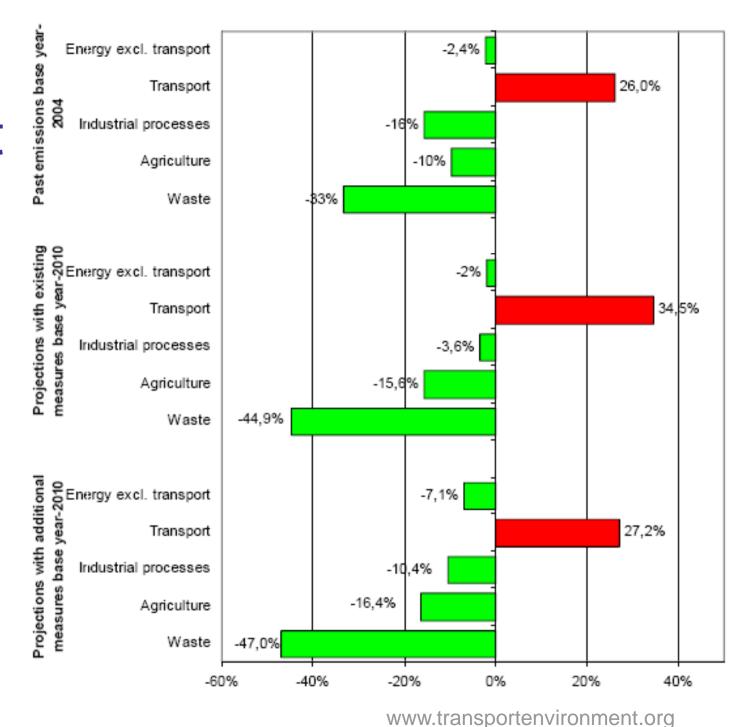


Traffic noise responsible for 50,000 deaths p.y. Lorries and cars both almost 50% transportenvironment.org

## Transport and Climate

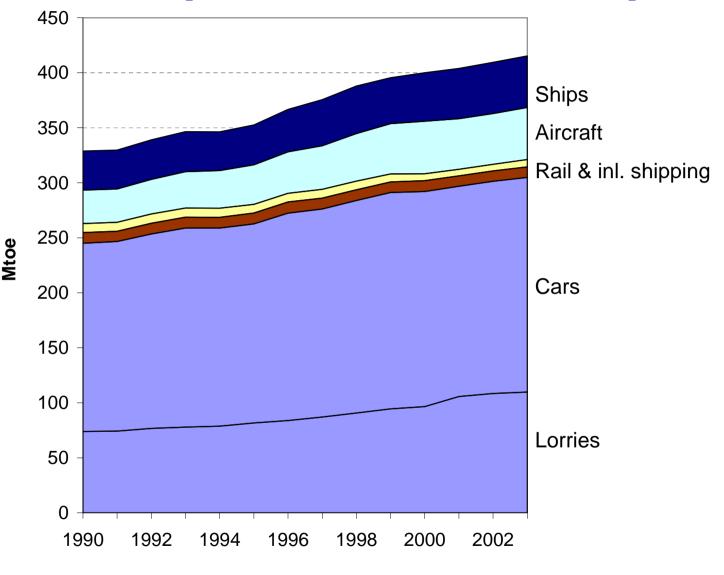
The only sector undermining European climate targets!





### Oil consumption in transport

□ road ■ rail □ inland navigation □ air ■ sea







#### An enabling framework...

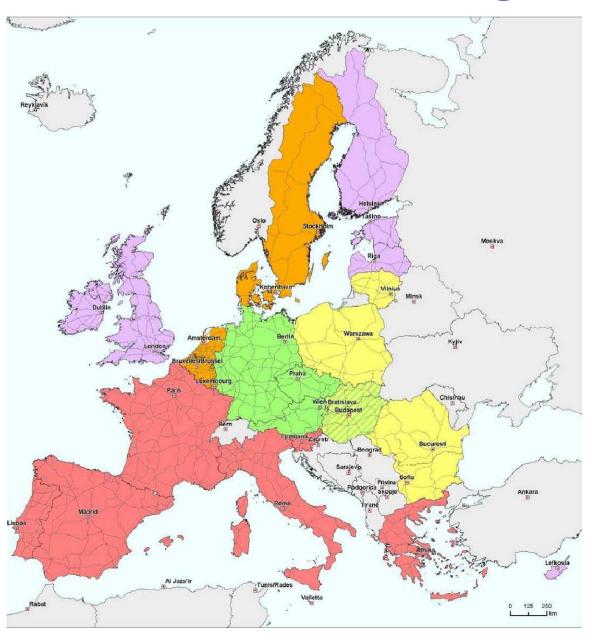
Allows - does not oblige - countries to levy charges or tolls on the entire road network

EU rules (from 1999) introduced a methodology linked to infrastructure costs, to limit to road charges levied by Member States.

Current rules allow both time-based vignettes and distance-based tolls.



## Current charging schemes



- Distance-based Charging (Green): AT, DE, CZ
- Time-based Eurovignette (Orange): SE, DK; Benelux (HU and SK under preparation)
- National Vignettes (Yellow): RO, BG, PO, LT
- Toll collection with physical barriers (pink): GR, SI, IT, FR, SP, PT
- No charges (purple): UK, IE, FI, EE, LV
- nb. **Switzerland** non-EU, own rules: distance-based charges with external cost internalisation on all national road network.

www.transportenvironment.org

## Experience of km-charging

#### Benefits found include: (CH, DE, AT, CZ)

- Better load factor, reduced empty driving
- Cleaner (newer) fleet composition
- Reduced emissions
- Revenues / Fast cost payback
- No effect on consumer prices

But... traffic diversion, modal shift moderate.



## System design – Rules and choices



#### Scope

#### No obligation to charge lorries, so options include...

Tolls, vignettes, user charges or no scheme.

#### **Eurovignette rules do NOT apply:**

- To vehicles under 3.5t
- Outside the Trans-European road network (m-ways)
- Urban areas, parallel roads

Eg. London, Stockholm, Milan free to design schemes.







#### Toll / user charge calculation

Tolls must be based on recovery of <u>infrastructure</u> <u>costs only</u> (including construction, operation, maintenance, development costs)

Weighted average fee (total revenues/total vehicle km) must not exceed costs on the tolled network.

Important exceptions: Regulatory charges and Mark-ups





## Mark ups



#### Surcharge permitted in specific cases

- Moutainous areas & TEN-T corridors (higher infrastructure costs)
  - subject to acute congestion and / or
  - suffering significant environmental damage

Motivation: Revenues for TEN-t project in same corridor 15% mark-up in national sections / 25% cross-border

- + Protection of designated areas
- + Potential safety benefits



Possibly applicable: <a href="Pyrenees?">Pyrenees?</a>

## Regulatory charges

Important new opportunity since 2006!

Top-up charges may be permitted in addition to weighted average fee (TEN-r roads)

- To combat traffic congestion and
- Local environmental impacts

Suggested use in urban areas to tackle congestion, improve air quality (Barcelona, Girona, port area?)

Very flexible Article - Open interpretation



Can be added to mark-ups

#### Fee variation

## Variation of fees *permitted* on basis of time of day, day of the week

- + Traffic management
- + Reduced congestion
- + Managing pollution / noise peaks

## Variation of fees *obligatory* on 'Euro' emissions classes or PM/NOx emissions from 2010

- + Environmental incentives & awareness
- + Cleaner fleet renewal
- + Air quality objectives



## Use of revenues and implementation

Use of revenues at Member States' discretion

Recommendation for use to benefit transport sector and optimise transport system Use for non-transport purposes permitted

Member States obliged to ensure proper implementation, including effective, disuasive penalties.



## Major gap in current rules

Marginal External Costs, incl. accident, congestion, environment costs.

**Eurovignette Directive REVIEW** 

(expected June 2008)

**Marginal Infrastructure Costs** 

**Eurovignette Directive** (June 2006)

**Fixed Infrastructure Costs** 

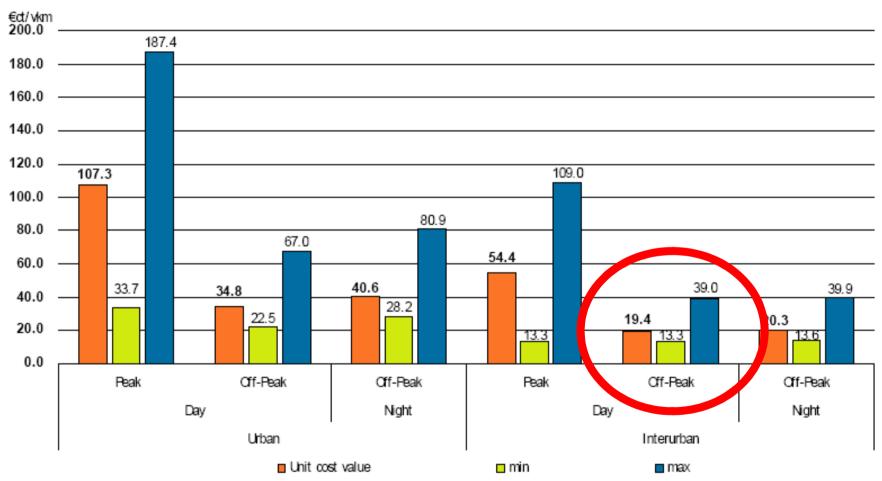
Polluter pays principle:

"environmental damage should as a priority be rectified at source and that the polluter should pay." (EU Treaty)



#### Typical external costs HGV

€0.2 per km, off-peak, interurban





Source: IMPACT Handbook, 2007



#### Key benefits of road charging

#### Economic

- Improved efficiency and innovation in road freight sector
- Reduced congestion
- Revenues (double dividend)

#### Social

- Who suffers from noisy and polluted roads? Who are the victims of climate change?
- Reduced pressure on oil prices

#### Environmental



Improved air quality, less noise, reduced GHG emissions, cleaner fleet, local differentiation.

#### Possibilities for action!

#### **Outside Eurovignette rules:**

Urban areas, light vehicles, non TEN roads – Regions/cities can charge as they want for local objectives – Solution for Barcelona?

Within current Eurovignette rules: Recovering infrastructure costs plus further opportunities...

Mark-ups for the Pyrenees (to fund Pyrenean link)? Regulatory charges for congested and polluted/sensitive areas - Port? Natural areas? Mountains?



### Towards smart charging

An opportunity to – finally - allow Member States to internalise of external costs in road tolls ('Eurovignette')

Scientists/economists have done their job: IMPACT Handbook on external costs



### Thank you

For more information on the current Directive:

"A Price Worth Paying' T&E 2007

- also available in Spanish

www.eurovineta.es

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