



43RD ASECAP STUDY & INFORMATION DAYS 2015

ASECAP and IBTTA initiatives on users-financed transportation: Success Tolling Stories - AET in Portugal

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ASECAP and IBTTA initiatives on users-financed transportation: Success Tolling Stories-AET in Portugal

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Objectives

- 01/** Introduce the timeline evolution of the Portuguese road infrastructure financing model which led to the generalization of the user-pays principle in all motorways and for all types of vehicles;
- 02/** Highlight the solutions implemented to overcome the technical, social and legal difficulties arising from the generalization of the user-pays principle;
- 03/** Brief characterization of the Portuguese FF/AET Systems: dimension, technologies used, payment methods, interoperability and enforcement;
- 04/** Free Flow and/or All Electronic Tolling in Portugal: facts and figures of a success story with some remaining problems that need an European answer;
- 05/** Next steps: what Portugal and the EU need to do in the near future.

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Portuguese Road Infrastructure Financing Model

Evolution 1996-Present

TILL **1996**

1999

2004

- Low investment in motorways
- **STATE MONOPOLY** in motorways through a Public Concessionaire with real tolls - manual and **SLFF since 1991**
- Opening market to private Operators
- **3 new concessions awarded with real tolls**
- Massive investment plan in new motorways (expansion policy)
- **Model:** Concessions to private Operators, Toll regime - *no cost to the user* – **8 of them with shadow tolls and only 1 with real tolls**

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Portuguese Road Infrastructure Financing Model

Evolution 1996-Present

2004

- Low investment period
- 1 new concession with shadow tolls
- 2 new concessions with Traditional Tolling (manual + SLFF)

2008

Present

- New phase of massive investment in roads and motorways
- New road infrastructure financing model implemented - **generalization of user-financed model, user-pays principle**
- New **All Electronic Tolling System (MLFF)**
- **Conversion of 7 Concessions from Shadow Toll to AET (MLFF)**
- **4 new concessions with MLFF (AET)**

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The challenge of tolling motorways previously designed to be payment free



**Financial
Crisis**



**Public budget
constrains**

Unsustainability of the Shadow Toll Schema

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The challenge of tolling motorways previously designed to be payment free

A new Financial Model was developed and implemented

User-pays principle

User – pays principle implemented in almost all motorways

Reorganization of the Road Authority:

Creation of a Regulation Authority and concession of all remaining PT roads to a Public Company (EP)

Financing model to EP

EP financed by i) Fuel tax and ii) Toll Revenues from some of the Private Concessions and Sub-Concessions

New Revenue model for shadow toll

Transformation of the Shadow Toll Concessions to Availability Concessions plus Toll Service Contracts

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The challenge of tolling motorways previously designed to be payment free

The existing Shadow Tolloed Motorways were not designed to receive Traditional Tolling Systems

High traffic volumes and the inability to close roads for long periods of time didn't allow the installation of Real Toll Plazas

Implement and Maintain the pay-per-distance proportionality was essential
(minimizing social injustice of the collection)

Existing conditions led to the installation of an

All Electronic Tolling System (MLFF)

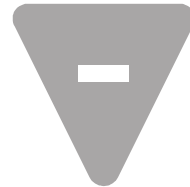
A new technical solution for Tolling was developed and adopted

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Free Flow and/or All Electronic tolling in Portugal Opportunities and Threats identified (2010)



- Long tradition in electronic toll collection (Free Flow – SLFF) in Portugal (since 1991)
- Large number of vehicles equipped with OBU
 - >3,0M subscribers, more than 50% of all PT cars,
 - DSRC technology, interoperable with Spain
- New market for Toll Services Contracts created



- Exclusive Free-Flow with no alternative barred channels could increase fraud
- Weak legal support for enforcement of national and - specially - foreign users
- Risk of social protest and potential impugment

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Free Flow and/or All Electronic tolling in Portugal Opportunities and Threats evolution (present)

What was Experienced

Yes

- Creation of a new market for Toll Services Contracts

VTC

ETC

- Fraud increase

Yes

No

- Weak legal support for enforcement of national and foreign users

Foreign

National

Yes

No

- Risk of social protest and potential impugment

No

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Portuguese Tolling Systems – APCAP Network



Revenues
€855M



AADT:
14.092



Network
21 Concessions



94%



6%



Network length
2.943 km



Açores - São Miguel

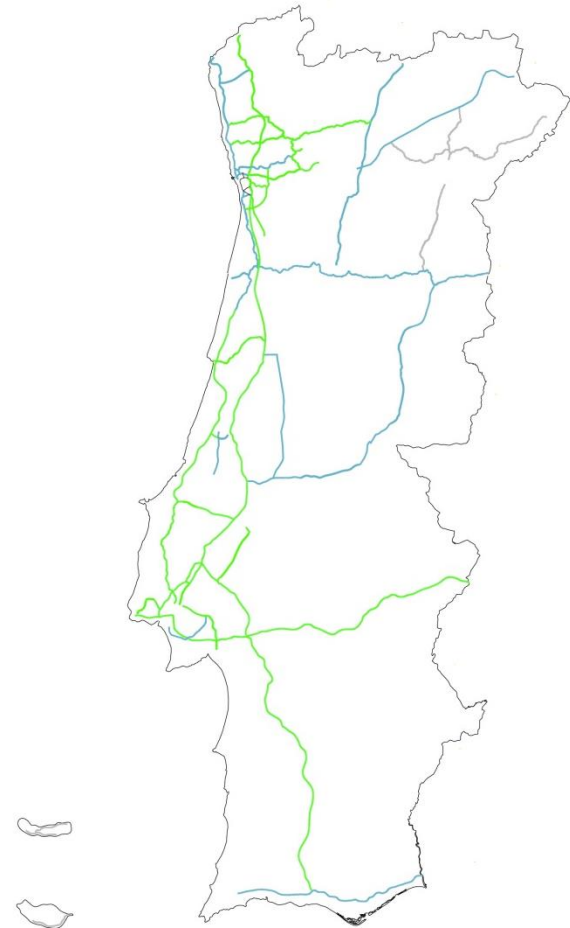
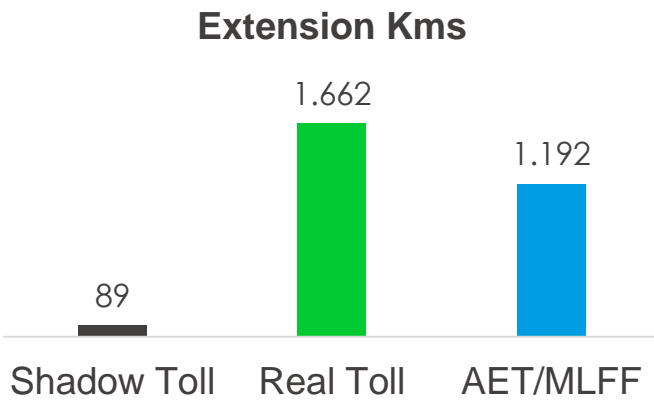
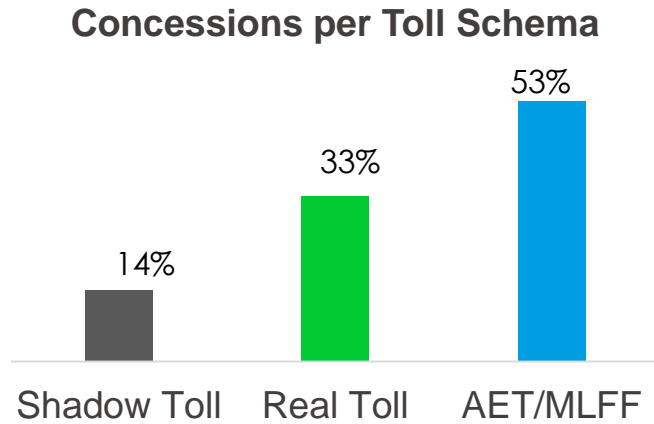


Madeira



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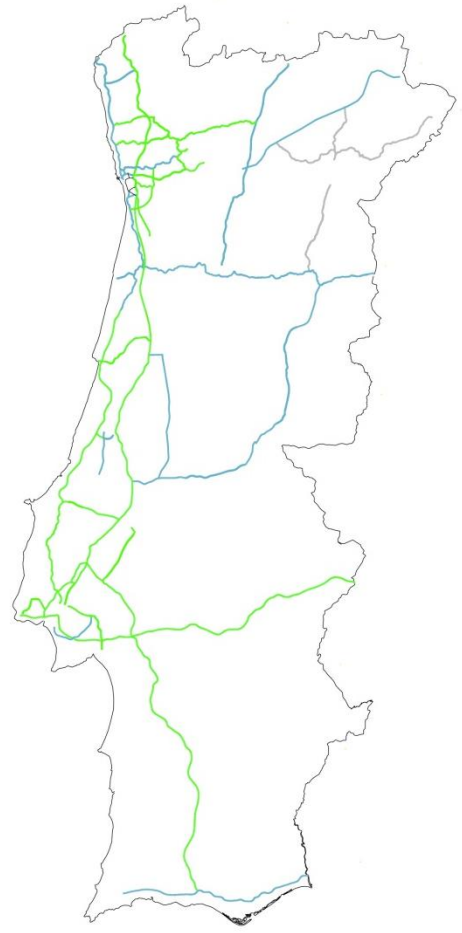
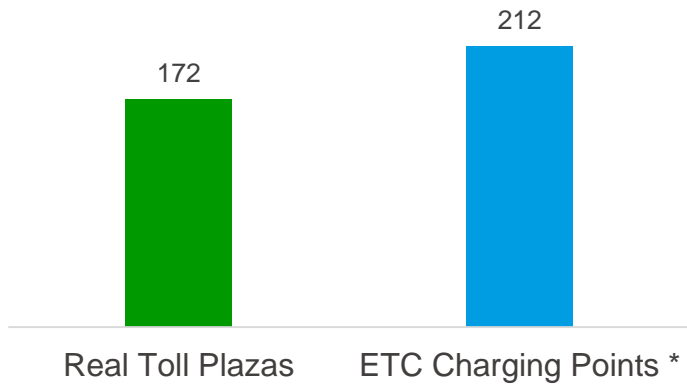
Portuguese Tolling Systems – AET vs Traditional



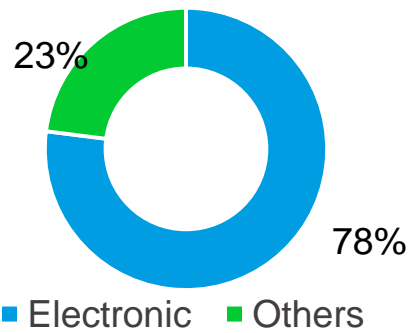
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Portuguese Tolling Systems – ETC prevalence

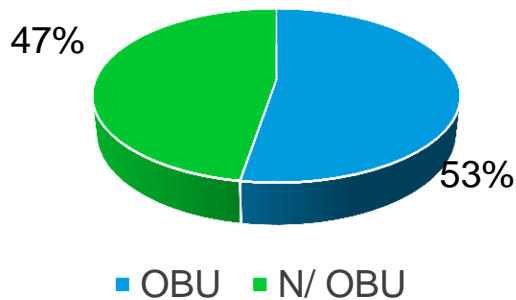
Charging points



% Transactions



% Vehicles w/ OBU



* Per side of road

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Portuguese Tolling Systems – AET payment methods

NATIONAL VEHICLES

- **Fully electronic payment** through a contract with an OBU Issuer (debit card)
- **Pre-payment** through an OBU – identified or anonymous client
- **Anonymous post-payment** through VTC – (with surcharge) available for payment at CTT and Payshop network

FOREIGN VEHICLES

- **Interoperability with Spain**
- **“Easy-Toll” system** (automatic registration at the borders, using credit card account and VTC)
- **Pre-paid vignettes (VTC)**
- **Temporary OBU** (rent-a-tag)

ENFORCED COLLECTION

- **Enforced Collection for non payment (with fines treated as fiscal offense)**
- **Mobile enforcement**



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Portuguese Tolling Systems



Portugal is a World Reference in

User-pays principle in road infrastructure

Almost every motorways are tolled

Electronic Toll Collection

AET and SLFF

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Challenges ahead

Simplify toll Schema for customers

(several schemas in place)

Improve collection to foreigners

(too many products available, more information)

Improve European interoperability programs

(accelerate the implementation of interoperable schemas)

Develop cross-border enforcement

(develop specific programs/laws)

Continue the path to implement a unique AET Schema for all Concessions in Portugal

***NEXT
Steps***

Thank You
Questions?