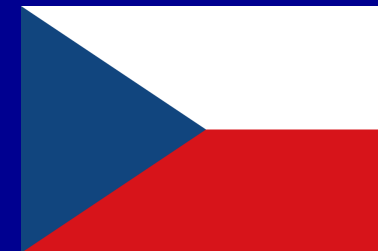




Parliament of the Czech Republic



Meeting with the Subcommittee on Transportation

# Evolution & Mobility Trends in the Parking Industry

**Laurence A. Bannerman**

President

European Parking Association

PRAGUE , 25<sup>th</sup> October 2018



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## Part 1 - PARKING IN EUROPE - Overview

1. On-street parking
2. Pricing Policy
3. Garage Buildings
4. Urbansim
5. Financing

## Part 2 - PARKING IN EUROPE - Trends



# Part 1 - PARKING IN EUROPE

## Overview



# EPA NETWORK



European  
Automobile  
Manufacturers  
Association

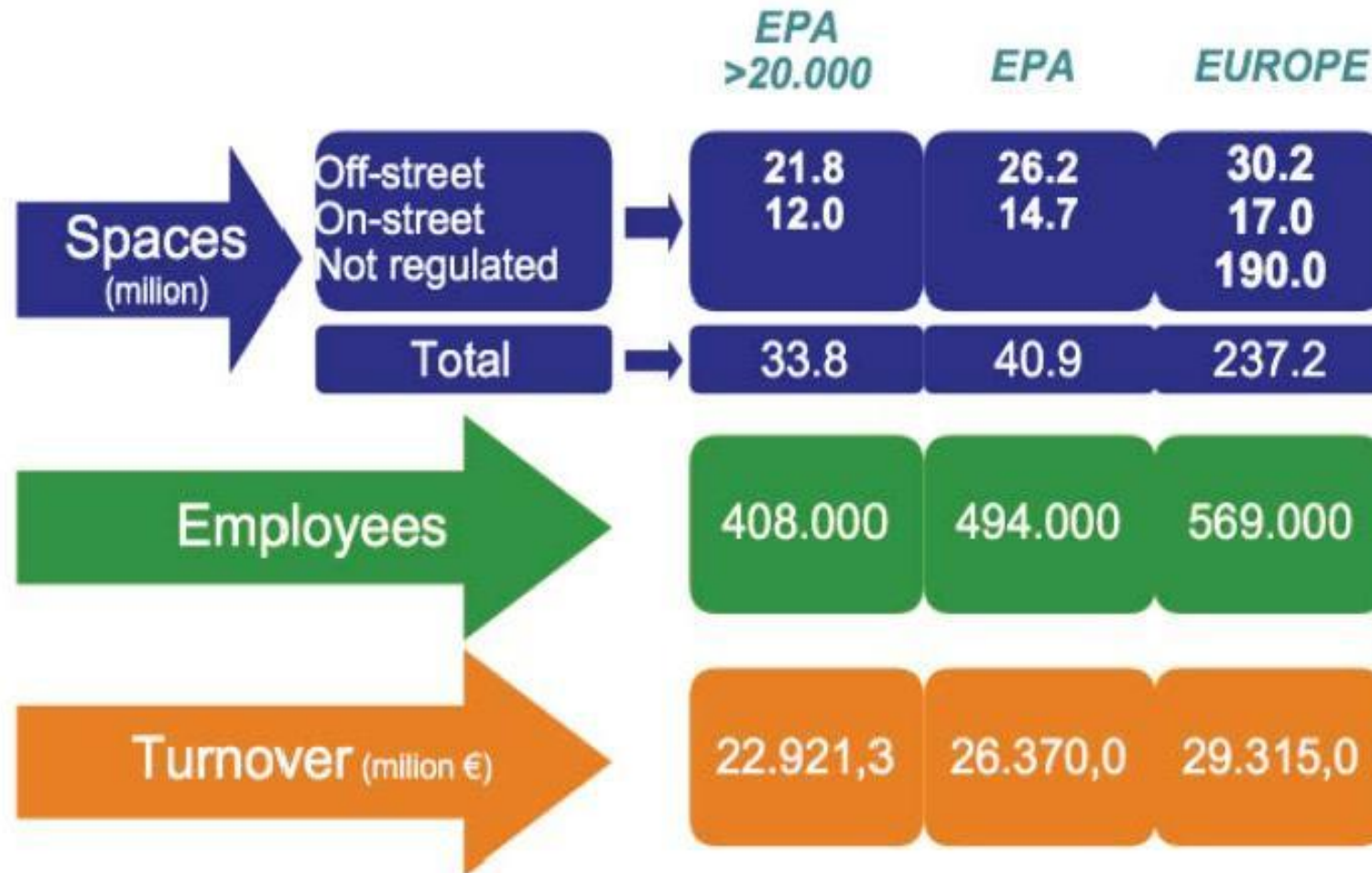


Associazione Italiana Operatori Sosta e Mobilità



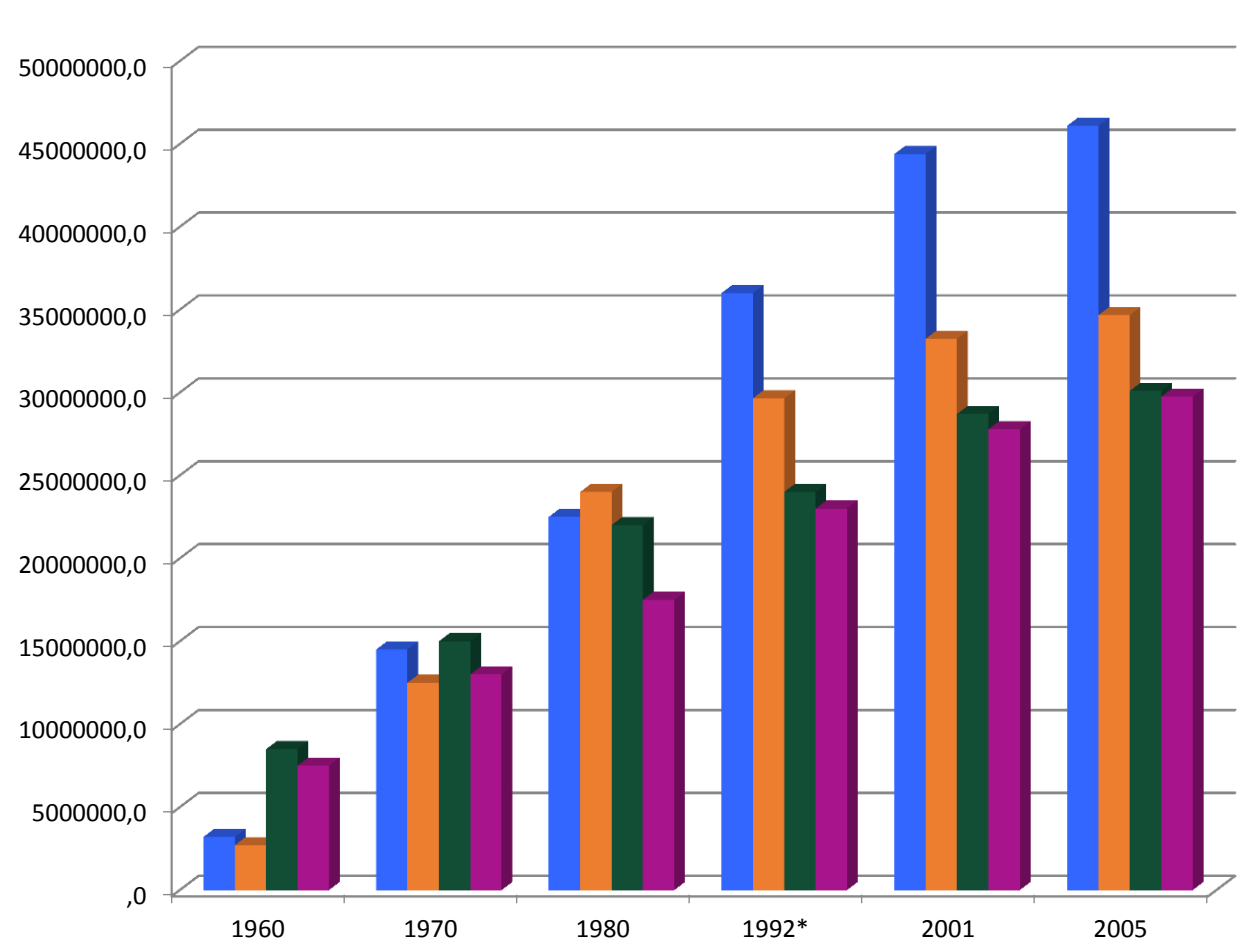


# EPA PARKING STOCK





# GROWTH IN PRIVATE CAR OWNERSHIP



2011/12 cars/1000 cit.

Germany	43.431.000	526
Italy	37.078.000	624
France	32.555.000	495
Britain	28.467.000	447
Rome:		700
Barcellona:		386





**233.000.000 private cars  
in EPA Countries**

**14.000.000 new private car  
registrations in 2015 in EU Countries**

**PRIVATE CAR OWNERSHIP**



# PARKING SPACE AVAILABILITY

Predictions on regulated parking spaces EPA municipalities with more than 20,000 inhabitants

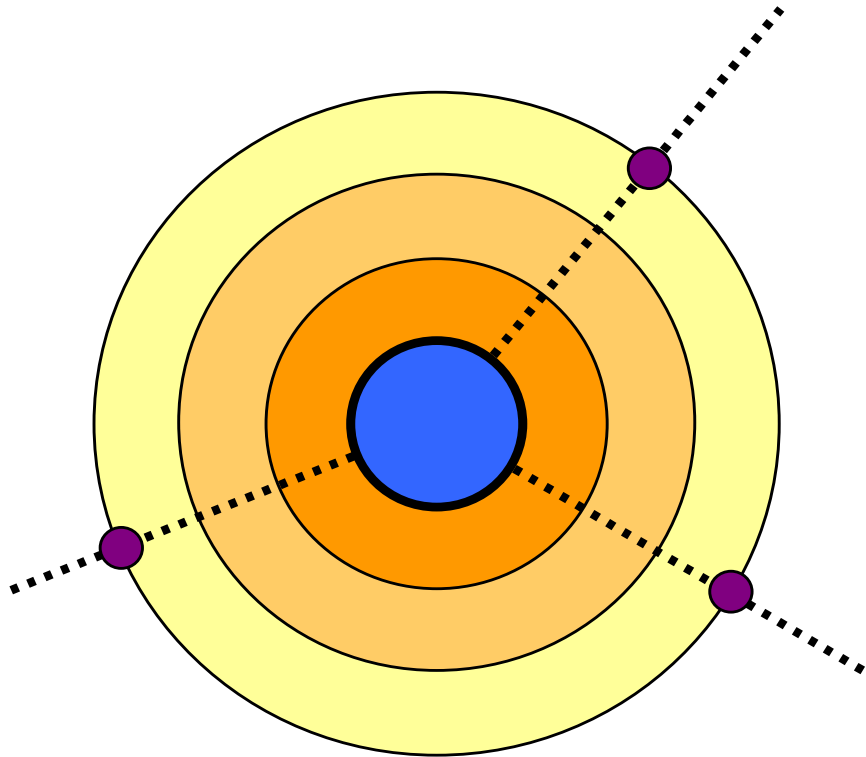
**Total 62%**  
for av. 11 cars/space

Off-street		21,756,041	
In structure	7,324,109	10.461.639 = 48%	
Surface level	3,137,530		
Park&Ride (dissuasion)	922,759		
In sport, cultural and leisure facilities	2,171,436		
In shopping centres and markets	5,326,328		
Hospitals, universities	1,993,466		
Airports	880,414		
On-street		12,004,105	
Regulated for general public use	7,069,879	10.742.499 = 89%	
Residents only	2,975,493		
Loading and unloading	482,528		
Motorbike spaces	779,464		
Other reserved spaces (handicapped, police, etc.)	696,741		
Total		33,760,146	





# ACCESSIBILITY MANAGEMENT: THE STRATEGIC CHOICE



**Which mobility tool for adjusting the modal split to inner urban areas?**

**manage movement**

(congestion charging, road pricing, etc.)

**or**

**manage the static part of traffic**

(parking)



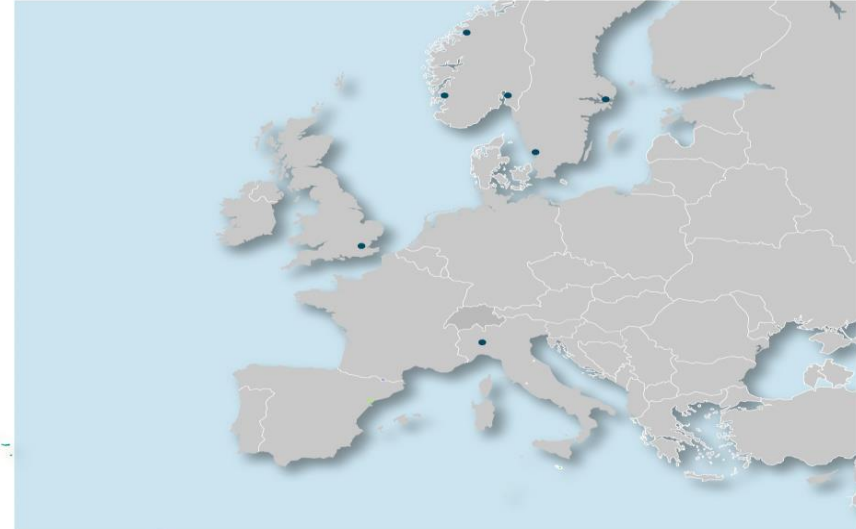
# INTEGRATED PARKING MANAGEMENT

parking management



- well accepted
- quick implementation
- little investments

road pricing /  
congestion charging



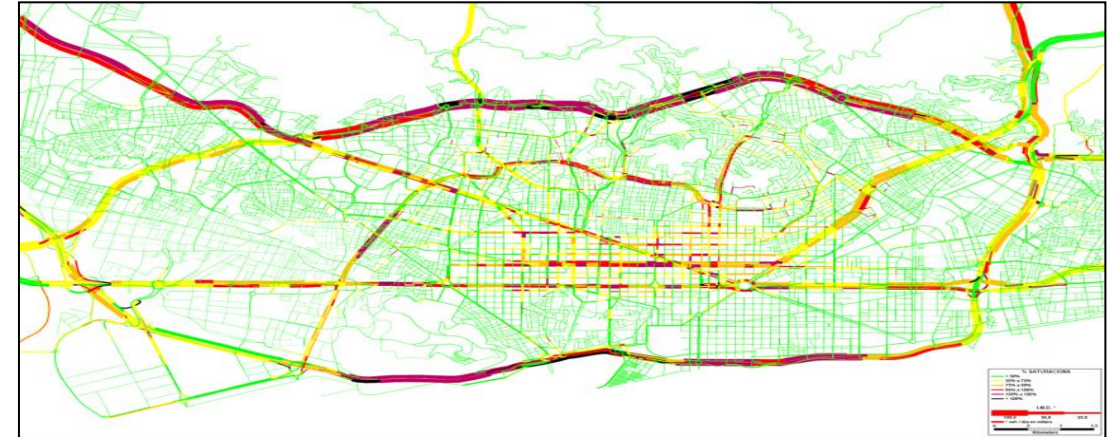
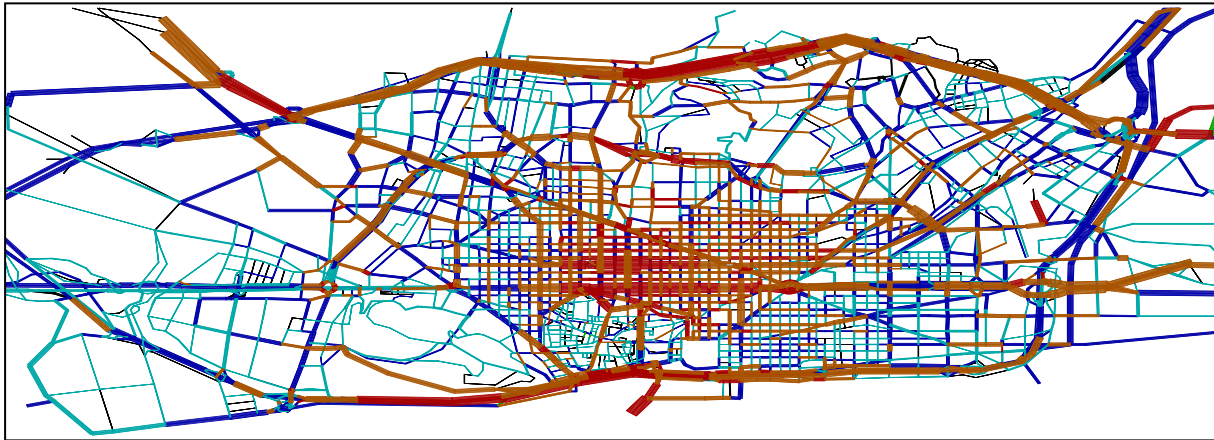
- political controversial
- mid term implementation
- high investment

**The integrated parking policy choice is the most used and very successful!**



# INTEGRATED PARKING MANAGEMENT

*THE strategic choice:* Accessibility Management - Barcelona



MODAL DISTRIBUTION DATA			
	1.986	1.998	2.010
PRIVATE TRANSPORT	1.876.000 (40,12%)	2.610.409 (43,53%)	1.533.838 (23,7%)
TOTAL TRIPS PER DAY	4.675.853	5.996.473	6.471.891

**DAILY CAR TRIPS**

**ALL DAILY TRIPS**



# THE URBAN MOBILITY SYSTEMS - EU - TODAY

Mode	Average EU: range from – to		
Private car	24%	50	77%
Public transport	15%	40	60%
2 wheels	0%	5	25%
On-foot	3%	5	46%



UITP MODAL SPLIT DATA (all sustainable modes)

Rome 40% - Paris 60% - London 60% - Barcelona 75%



# Part 1 - PARKING IN EUROPE

## On-street parking

Who determines:

1. the regulations
2. The tariffs
3. The form of the parking fee
4. Who collects the fees
5. Who does the enforcement
6. Is it easy to enforce





**Many politicians and planners have not understood or have underestimated the power of the parking tool.**



# The parking road map – a holistic approach for competitive cities

Off street spaces

On street spaces

Special categories spaces

Loading & unloading bays

Parking fees

Payment systems

Info for Mobility

Parking wardens

Access Control

Motorcars

Motorbikes and bikes

Tourist Busses

Electric mobility support

Soft mobility support

Residents

Visitors

Long term parkers

Special Categories

Urban Logistics

Public transport

Dynamic pricing

Space availability

Data/info distribution

Real time controls

## The central role of the local authority



## **The „GART“ initiative**

- ✓ **The importance of political objectives**
- ✓ **Parking is part of the wider mobility system**
- ✓ **Efficiency enables investments in positive growth**
- ✓ **Integrate the roles of the different players – public & private**
- ✓ **Use controls to make the parking policies efficient**
- ✓ **Explore hard & soft enforcement solutions**
- ✓ **Readability – make it easy and understandable for users**
- ✓ **Communication – a constant process**
- ✓ **Get away from the image of a revenue generating initiative**
- ✓ **Social schemes funded from parking revenue**



**PARKING is a right - it should be free - FALSE**

The parking tariff improves circulation and allows a democratic right.

**With the French reform, more parking spaces have to be created - FALSE**

It optimizes what is there, this is one of the objectives.

**The reform is simply making it more difficult to park - FALSE**

In reality, the current situation is complex. Only 15% of users pay spontaneously in Paris.

**With this reform the mayors will do what they want - FALSE**

On the contrary, this reform will give citizens the chance to express their needs  
- there are not 2 equal cities.

**This reform will be unjust, it is not supporting equality – FALSE**

This reform will abolish the abuses present.





**Drivers' rights will be reduced - FALSE**

The rights will be maintained and the time for justice will be reduced.

**This reform will only bring money to the coffers of the administrations - FALSE**

The goal is not related to economic reasons, but will be instrumental in improving the flow of mobility.

**The mission of payment control will be limited to private companies - FALSE**

This is not the case, administrations will have the option to run directly or manage outsourced.

**The system will encourage parking in the loading and unloading stalls or on the pedestrian crossing - FALSE**

The possibilities made available by the reform will make these habits risky.

**This reform will damage commercial activities in urban centers and will attract less economic activity from the territory - FALSE**

On the contrary, better management of the parking will increase the dynamism of the city





# Part 1 - PARKING IN EUROPE

## Pricing Policy

What are:

1. On-street/off-street rates
2. Price rates for: Residents, local businesses, visitors
3. Extent of preference for local residents, local business - spaces and prices



15<sup>o</sup> EPA  
CONGRESS  
BERLINO 2011  
AI PARK

# SIIM KALLAS

The Vice President of The European Commission  
and Commissioner of Transport



MR SIIM KALLAS EXPLICITLY EXPRESSED THE IMPORTANCE OF PARKING AS AN ECONOMIC AND OPERATIVE COMPONENT OF THE URBAN MOBILITY SYSTEMS OF OUR EUROPEAN CITIES.

PARKING POLICIES AND DIFFERENTIATED PARKING SUPPLIES AND PARKING FEES CAN CONTRIBUTE:

- TO A MORE EFFICIENT USE OF PRIVATE CARS
- AS AN ECONOMICAL INSTRUMENT FOR DETERMINING THE OVERALL MOBILITY DEMAND
- TO OPTIMIZING SPACE THAT IS A PRECIOUS COMMODITY
- AND TO INTEGRATE DIFFERENT MOBILITY MODES





## THE DIFFERENT PARKING “CLIENTS” WHO REQUIRE DISTINCT PARKING PRODUCTS ARE:

- A. **RESIDENTS** — ON AND OFF STREET LONG TERM PARKING NEAR THEIR HOMES
- B. **NON RESIDENTS** — ON AND OFF STREET FOR SHORT AND MEDIUM TERM TURNOVER PARKING
- C. **NON RESIDENT LONG-TERM USERS** — WORKERS IN OFF STREET,  
PARK & RIDE STRUCTURES AND USE OF PUBLIC OR ALTERNATIVE TRANSPORT
- D. **SPECIAL USERS** — DISABLED PARKING, EMBASSIES AND CONSULATES,  
TAXIS AND HOTELS, SPECIAL & ESSENTIAL SERVICES
- E. **LOADING AND UNLOADING BAYS** —  
IMPORTANT FOR BUSINESS AND COMMERCIAL ACTIVITIES.



**SUSTAINABLE ENVIRONMENTAL CONTRIBUTION IS AN OPTION AND A LEVER**





# INTEGRATED PARKING MANAGEMENT

## BARCELONA

### Metropolitan area's Modal Split

*Public Transport: 34 %*

*Walking & Cycling: 42%*

*Private car trips: 24%*

**Daily trips to centre: 6,5 million**

*23,7% of daily trips corresponds to 1,5 million trips using private vehicles.*

## ROME

### Metropolitan area's Modal Split

*Public Transport: 28,9%*

*Walking & Cycling: 5,6%*

*Private car trips: 50,0%*

*Motor bikes: 15,5%*

**Daily trips to centre: million**

*% of daily trips corresponds to million trips using private vehicles.*





## Barcelona

**Total parking offer 789.849**

**Parking off street:**

*648.788 spaces:*

*419.971 for residents*

*142.865 for public use*

*85.952 reserved*

**Parking on street:**

*141.060 spaces*

*64.468 motorbike spaces*

*8.850 rotation*

*35.647 shared use:*

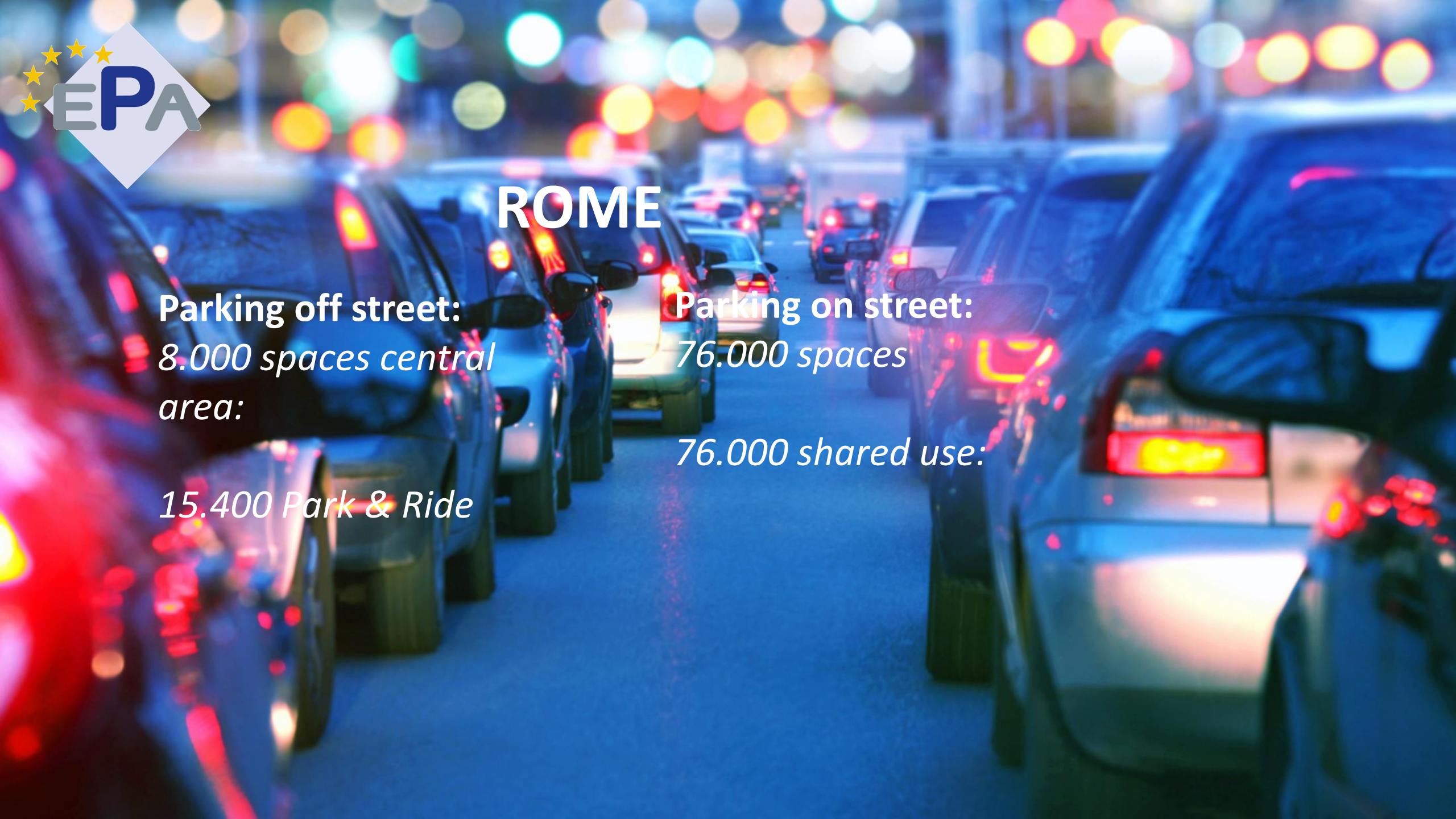
*10.631 loading and  
unloading*

*8.317 special*

*3.392 only residents*

*74.224 white*





# ROME

**Parking off street:**

*8.000 spaces central  
area:*

*15.400 Park & Ride*

**Parking on street:**

*76.000 spaces*

*76.000 shared use:*





## Parking fees - Barcelona

On street:

inner zone:

08.00 20.00

2,75 – 3,00 €/hour max. time 1-2  
hours

Adjacent zones:

09.00 14.00 - 16.00 20.00

1 hour stay – 2,50 €/hour

2 hour stay – 2,20 €/hour

3 hour stay – 1,96€/hour

4 hour stay – 1,08€/hour

Off street :

Park & Ride

€ 7,50 daily

Parking structures 24/7

2,00 – 3,00 €/hour





## Parking fees - Rome

On street:

Central area:

08.00 20.00

0,50 – 1,20 €/hour

4,00 €/8 hours

70,00 €/ monthly

Off street :

Park & Ride

€ 2,00 to 3,00 daily

Parking structures 24/7

1,00 – 3,00 €/hour



## TARIFAS (BONIFICACIÓN Y PENALIZACIÓN)

Nueva ordenanza fiscal: bonificaciones y recargos

TIPO DE VEHÍCULO	BONIFICACIÓN/ RECARGO	NIVEL DE OCUPACIÓN	BONIFICACIÓN/ RECARGO
A	-20%	A	-20%
B	-10%	B	-10%
C		C	
D	10%	D	10%
E	20%	E	20%

Para más información consulte: [www.madrid.es](http://www.madrid.es)

**MADRID**  
ESTACIONAMIENTO  
REGULADO  
2014-2015





# CONSIDERATIONS for Mobility Decision Makers

## ✓ WHAT TO DO:

- ✓ EVALUATE THE EFFECTIVE UNUSED CAPACITY OF THE PUBLIC URBAN TRANSPORT SERVICES OR THE POSSIBILITY TO INCREASE THE OFFER.
- ✓ INTRODUCE PARKING FEES THAT MAKE THE COST OF THE DAILY LONG TERM PARKING UNACCEPTABLE
- ✓ INTRODUCE TIME LIMITS TO ENSURE THAT LONG TERM PARKING IS NOT POSSIBLE
- ✓ ESTABLISH CONTROLS TO ENSURE THAT THESE CONDITIONS ARE RESPECTED





# Part 1 - PARKING IN EUROPE

## Garage buildings

Who is:

1. The main investor
2. Public – Private Partnerships







# URBAN MOBILITY HUBS

## TRANSFORMATION

of parking infrastructures, into  
important urban mobility hubs,

Supplying logistic support for:

✓ electric mobility:

- electric charging infrastructure
- smart grids - storage
- parking as a new fuel supplier

✓ soft mobility components;

✓ last mile logistic support platforms etc.

✓ Info - intelligent networking of vehicles





# Part 1 - PARKING IN EUROPE

## Urbanism

What are:

1. The technical requirements of new parking structures
2. Minimum and maximum parking standards
3. What do they regulate and what not



- **DEDICATED SINGLE FUNCTIONAL PARKING FACILITIES**
  - **AT OFFICES, ONLY USED MON-FRI 8AM – 6PM**
  - **RESIDENTIAL CAR PARKS: SPACES AVAILABLE MON-FRI 8AM – 6 PM**
  - **SHOPPING CENTERS: PEAK USE OUTSIDE OFFICE HOURS**
- **REAL TIME OCCUPATION DATA & TREND:**
  - **AVAILABILITY IN-CAR INFORMATION FOR VISITORS**
- **UNUSED SPACES AVAILABLE FOR VISITORS' CARS**
  - **INNER CITY OFFICE CAPACITY**
  - **COMBINATION OF OFFICE PARKING & RESIDENTIAL PARKING**
  - **COMBINATION OF OFFICE PARKING & RETAIL PARKING**
- **OPTIMIZED USE OF EXISTING PARKING CAPACITY:**
  - **HURDLES TO OVERCOME: SECURITY, ACCESS OUTSIDE OFFICE.**







# Part 1 - PARKING IN EUROPE

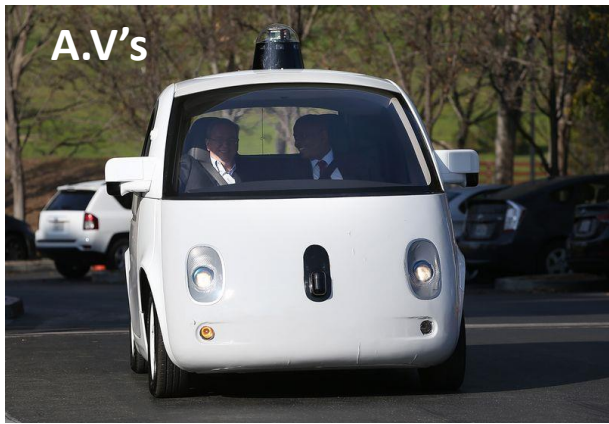
## Parking revenues

Where do:

1. revenues generated from parking go?
2. are they reinvested in city regional transport?

**THE CENTRAL ROLE OF THE LOCAL AUTHORITY**





# TOMORROW





# Part 2- PARKING IN EUROPE

## Trends

Here do:

1. Moving from on-street to off-street
2. Dynamic use of on-street parking
3. Digitalization in parking for drivers, enforcement and planning
4. The opportunities - how to go forward ...





**Cities have adopted the  
ENVIRONMENTAL  
AGENDA**

- **Reduce pollution  
(CO<sub>2</sub>, PM<sub>10</sub>, NO<sub>x</sub>)**
- **Reduce Congestion**
- **Reduce the presence  
of private cars**
- **Improve accessibility**
- **Improve quality of life**





# ENVIRONMENTAL REVOLUTION

**Sustainable environment contribution enabling:**

- **identification of the euro 0 to 6 classification of vehicles and determining parking fees as a result;**
- **balancing the urban modal split ratios;**
- **lowering polluting and timely searching traffic;**
- **promoting co-mobility notions;**
- **Important support systems for electrical mobility.**





## NEW MOBILITY MODEL

- limited capacity of TPL
- Connected cars
- Electric & Hybrid
- Sharing economy
- AV's
- Possible increased mobility demand – discuss algorithms







## SUSTAINABILITY

- Quality of life
- Reducing air, noise and visual pollution
- Accessibility
- Economic growth







## NEW MOBILITY SERVICES & NEW SPATIAL NEEDS

- Shared vehicle parking
- Electric charging
- Pick up – drop off for goods, personal “bus” stops...
- surface activity serving mobility







**NEW  
MOBILITY  
SERVICES**

**NEW SPATIAL  
NEEDS ...  
substituting  
parking space**







- New spatial solutions
- “New” mobility will occupy the “Old” mobility spaces
- Car drivers to change transport mode .... Not anybody else ...
- New rules
- New players
- New investments



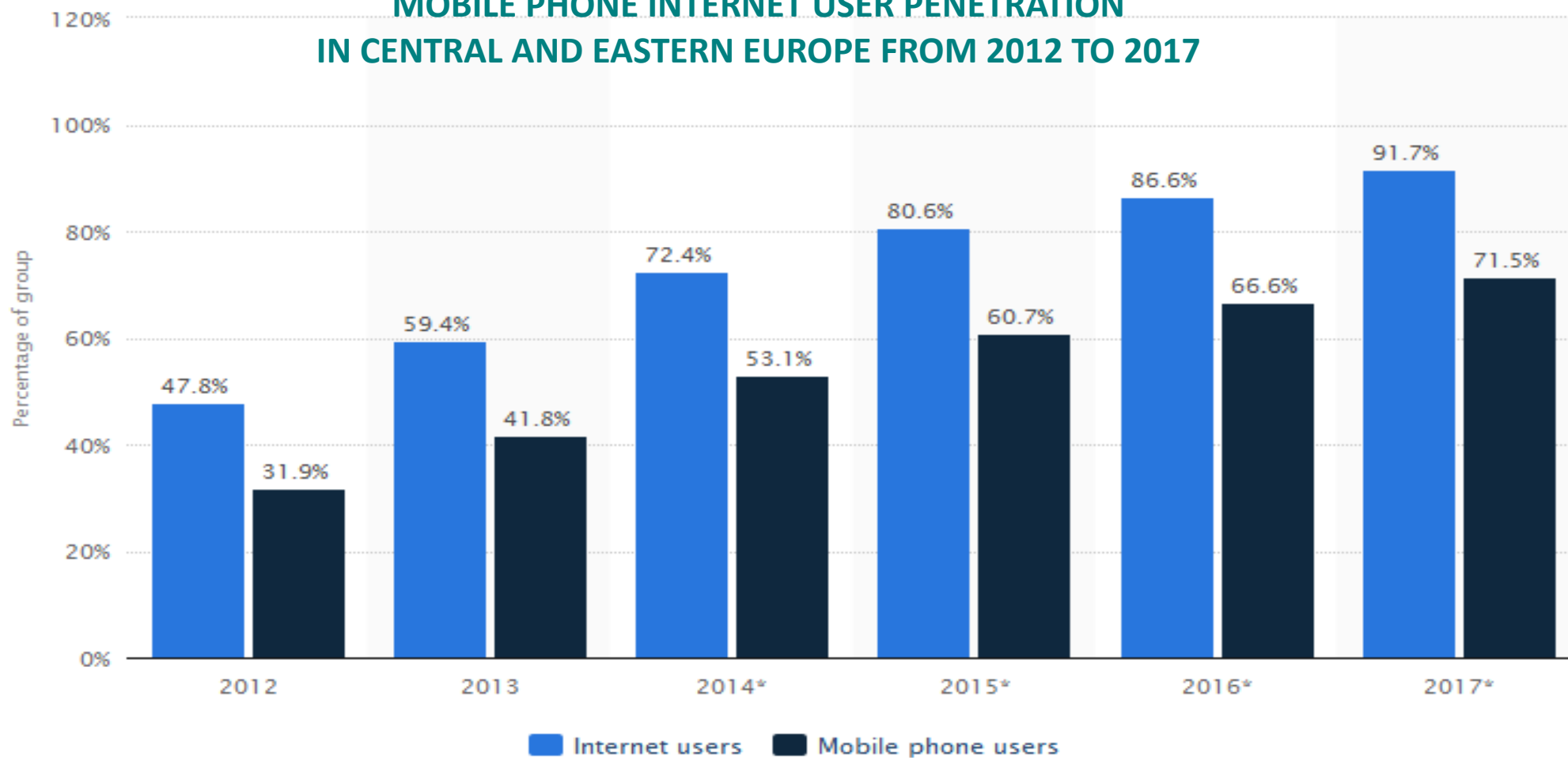




## PARKING MANAGEMENT TODAY AND TOMORROW



## MOBILE PHONE INTERNET USER PENETRATION IN CENTRAL AND EASTERN EUROPE FROM 2012 TO 2017





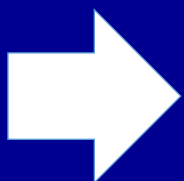
<b>41% of population owns a smartphone</b>	<b>92% of smartphone users find local info on the mobile phones</b>
<b>84% of smartphone users know products via use of cell phones</b>	<b>1 out of 3 users have bought an app for the cell phone</b>
<b>30% of smartphone users buy using cell phones</b>	<b>4 out of 5 smartphone users interact with publicity on their cell phones</b>

**The digital world is transforming the way in which we live and many aspects of our daily life**

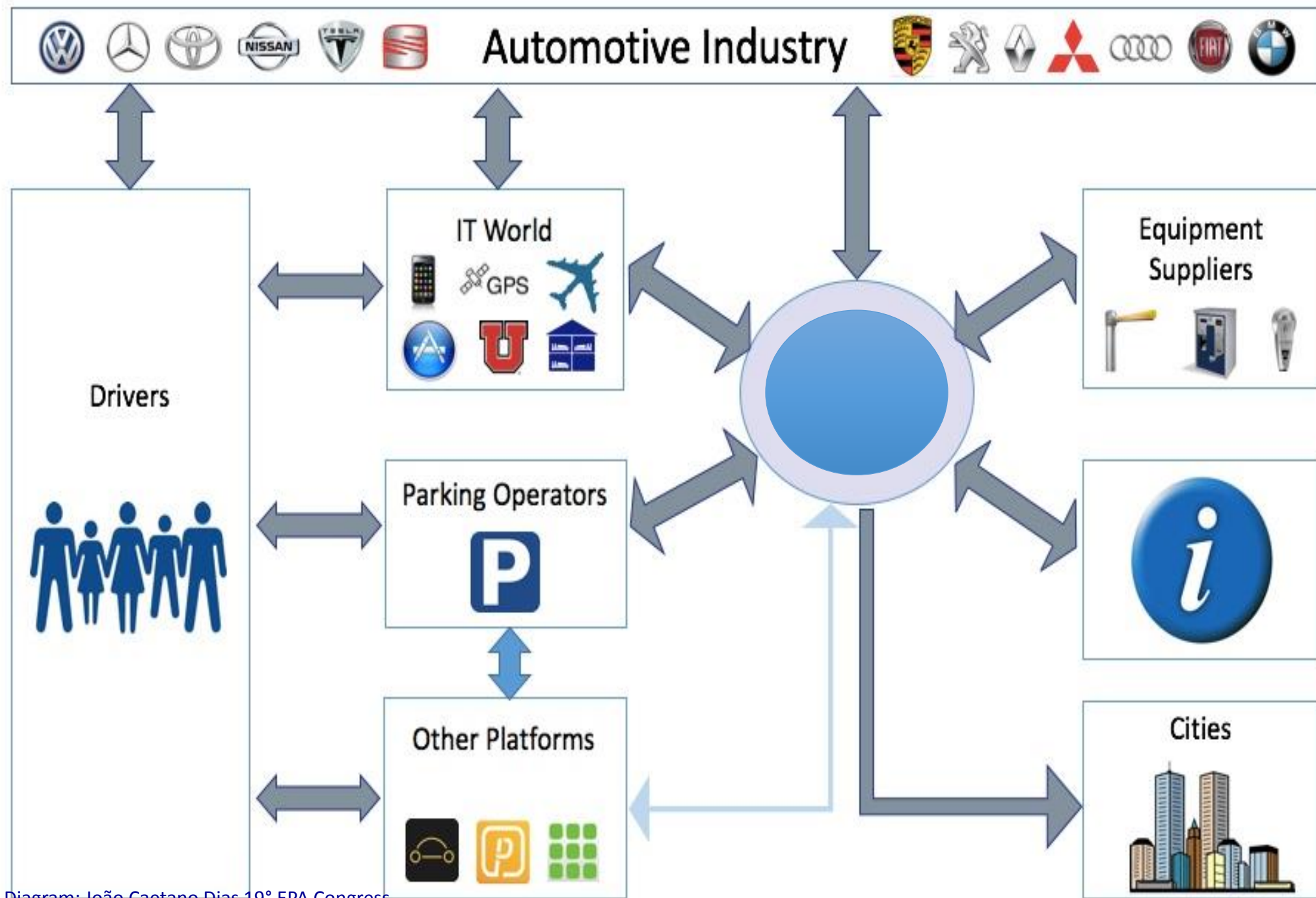




THE NEW URBAN  
MOBILITY WORLD



THE NEW URBAN  
MOBILITY CLIENTS





- New road categories ...
- New urban mobility infrastructures – not simply parking structures
- New digital standards for all our mobility related services
- Local authorities with vision and not blinded by “ready” technological solutions







## EXPERTISE :

- We manage integrated services
- We know how to condition behaviour introducing change & regulation
- We can contribute to modal change
- We plan systems and apply appropriate technology
- We can contribute to sustainability







## WE MUST PROMOTE:

- collaboration with local authorities, governments, stakeholders etc...
- integration in the mobility chain
- sustainable solutions ... for customers
- participation for a new mobility pact

# THANK YOU



19° EPA INTERNATIONAL CONGRESS – MALAGA  
20-22 September 2019  
[WWW.EUROPEANPARKING.EU](http://WWW.EUROPEANPARKING.EU)