

INTRODUCTION  
OF EPS GLOBAL AND THE  
CITYZEN SYSTEM



Q3 2018



# INTRODUCTION



EPS-GLOBAL is a Hungarian company in Hungarian (majority) & German (minority) ownership, active in parking management technologies development and operation and parking management business field.



Hungarian Governmental ownership since November, 2016 (37,5 % EXIM Bank's Export Incentive Investment Fund with an investment of EUR 5 million).

## Reference in China:

- 20 year PPP (BuildOperateTransfer) cooperation with a city in Jiangsu Province. Project fully financed by the private partner!
- Construction finished, operation starts in Q4, 2018.

# INTRODUCTION

EPS designs, develops, operates and sells tailor-made intelligent traffic demand management solutions for city governments and parking operators.

EPS provides full support on its smart city projects that includes: **Preparation, Planning, Business modeling, Financing, Implementation and Operation.**

EPS offers professional operational management team and international leading experiences.



# INTRODUCTION

**EPS Global offers it's clients, mostly city governments, a complex solution for their parking problems, in form of a smart parking system –possibly fully financed by EPS- with a long term professional management service.**

We realize the smart parking system allowing the collection, systematization, accessibility and utilization of all parking related information/data with state of art technology. Moreover, as part of the project, EPS Global as also an operational service provider is long term managing the smart parking system.

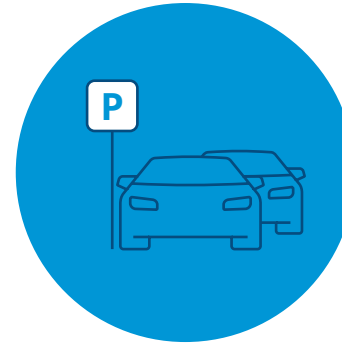


## INTRODUCTION

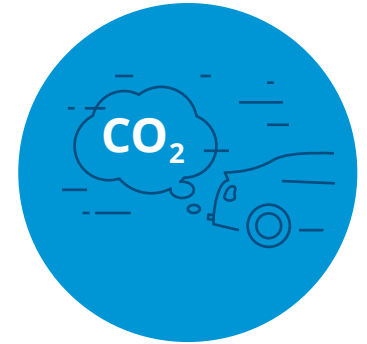
The most beneficial social impacts of the project in the given city / town area are:



the reduced search time  
for a parking space



the significantly less cars  
that are hunting for a park-  
ing spaces, thus fewer  
participants in the urban  
traffic causing congestion



even tens of thousands of  
tons per year emission  
savings

# PROJECT PROPOSAL

**EPS Global Zrt is ready to realize in its own financing** (based on a long term PPP cooperation) **a smart parking system for its clients** (mostly municipal governments) that collects data from any parking lot (whether public or private, such as hospitals, shopping malls, hotels, etc.) and provides them to users with a mapping interface and free navigation software and, if the data is shared free of charge with users, it is routed through road displays, allows all parking related administration (like parking fee payment) via a mobile app (WeChat & Alipay integrated). EPS is operating the system for the government without any governmental investment.

The government and the private partner (EPS) are sharing the parking data.



# PROJECTS



**PPP  
BUSINESS  
MODEL**

EPS Global 50,1 % owned ZTE EPS Yangzhong Parking Management Company has all the rights to operate the parking system of Yangzhong city (Jiangsu) Province in the PRC for 20 years in a PPP business model, e.g. collect the parking fees in the value of 4 RMB per hour from 7am to 10pm seven days a weeks in the name of the city government and receive all investment cost, financing cost, management fees, technology fee (like software license fee) from the municipal government.



## CURRENT PROBLEMS OF PARKING

- Insufficient supply for parking spaces
- Uneven service efficiency
- Incomplete systems and laws
- Serious money loss
- Difficult to find parking spaces
- Long parking time
- Helpless disorderly parking
- Will inevitably be punished
- Lack of basic data
- Lack of decision-making basis
- Insufficient management experience
- Backward management means

**It has become a rigid public demand to solve the parking problem, which has to be addressed.**



**PARKING  
CHAOS**

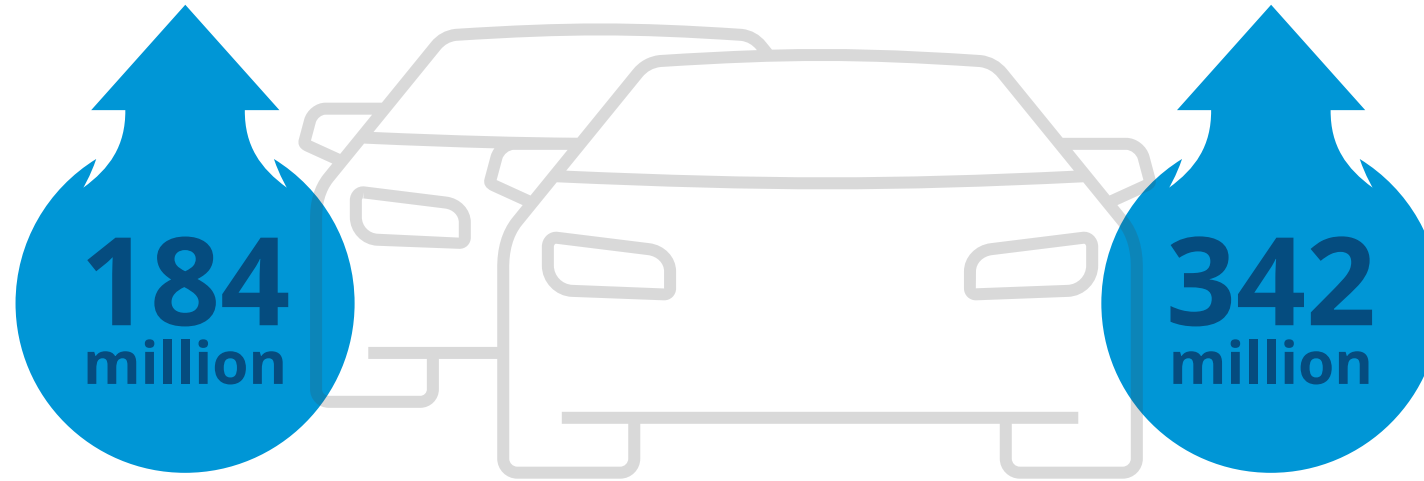


**TRAFFIC  
JAM**



**DIFFICULT  
TO  
MANAGE**

## CURRENT PROBLEMS OF PARKING



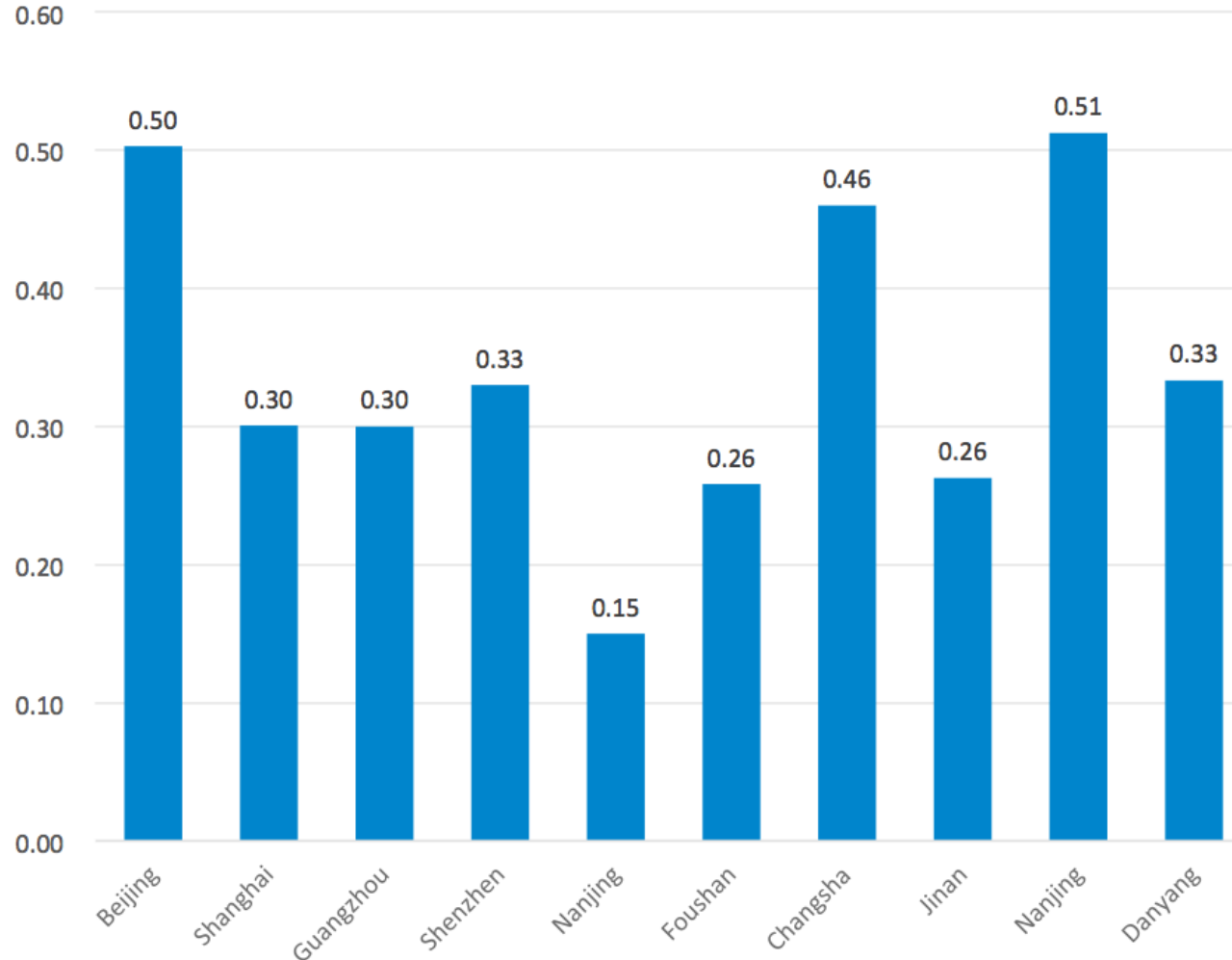
### PRC'S CAR OWNERSHIP

Car ownership has reached 184 million. In recent five years, the amount of newly registered cars has been showing the trend of rapid growth. The proportion of cars in motor vehicles has been growing.

### PRC'S NUMBER OF DRIVERS

According to the official announcement of the Ministry of Public Security: as of June 2016, the number of motor vehicle drivers reached 342 million persons, including 296 million car drivers

## CURRENT PROBLEMS OF PARKING

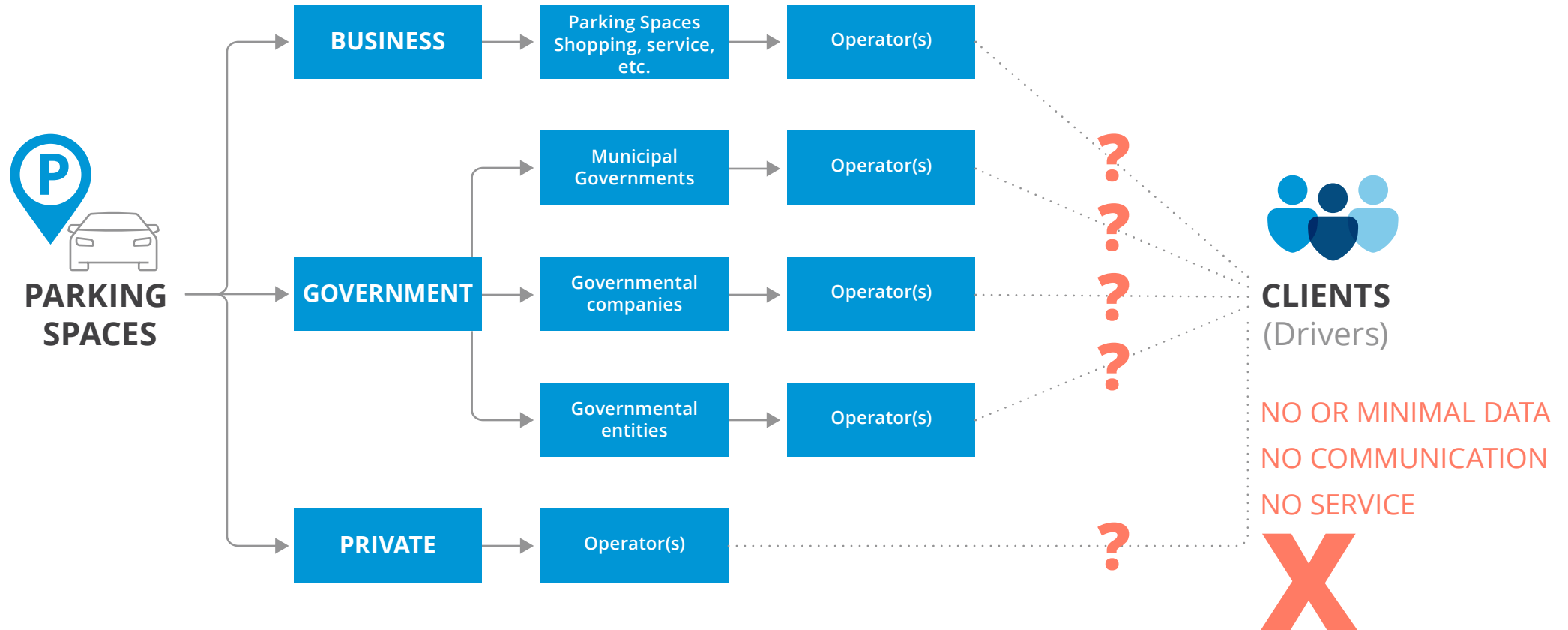


The ratio of the number of motor vehicles to the number of parking spaces in various cities.

**International**  
**1.2~1.4**

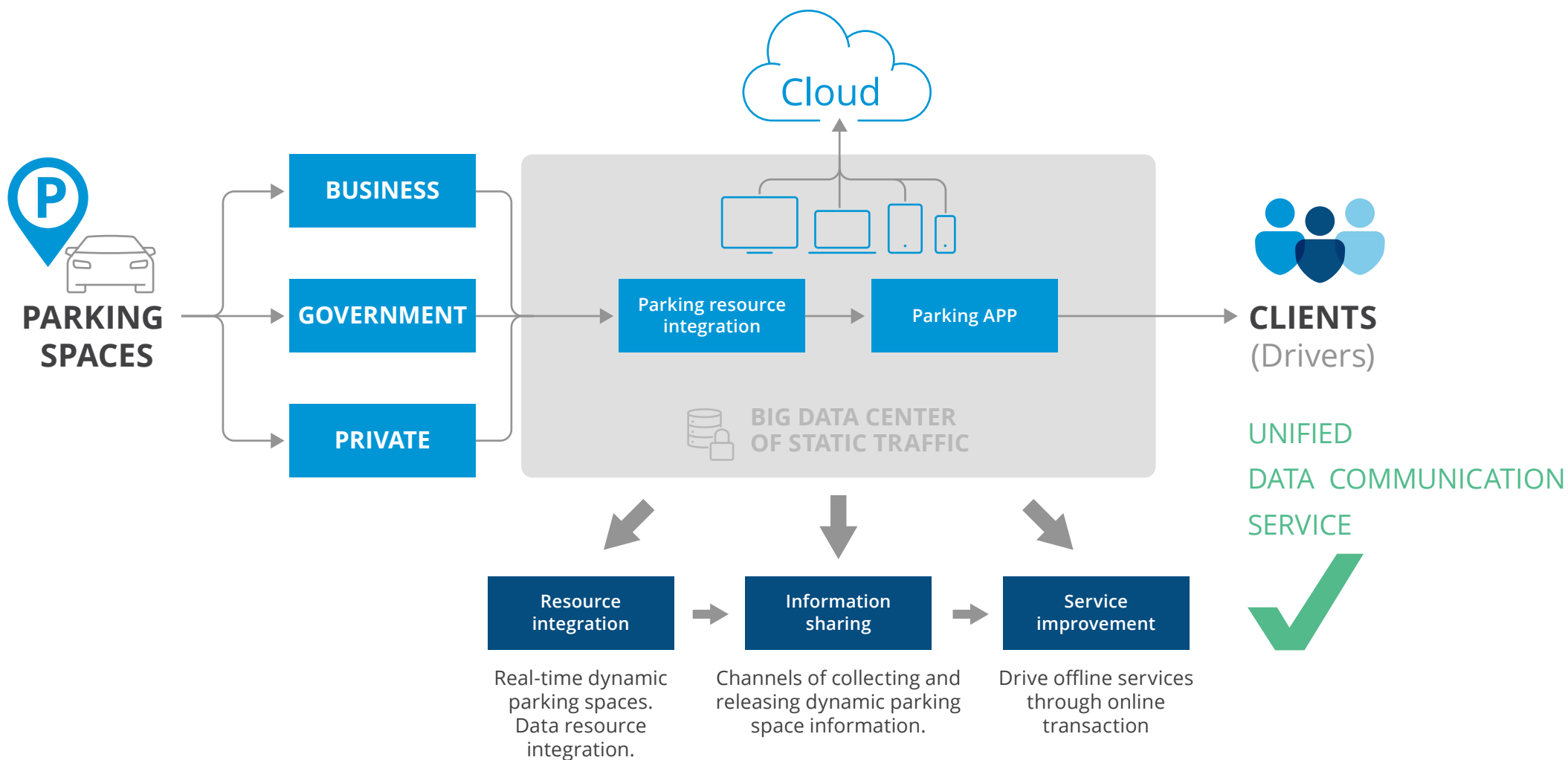
**Domestic**  
**0.15~0.5**

# CURRENT PROBLEMS OF PARKING

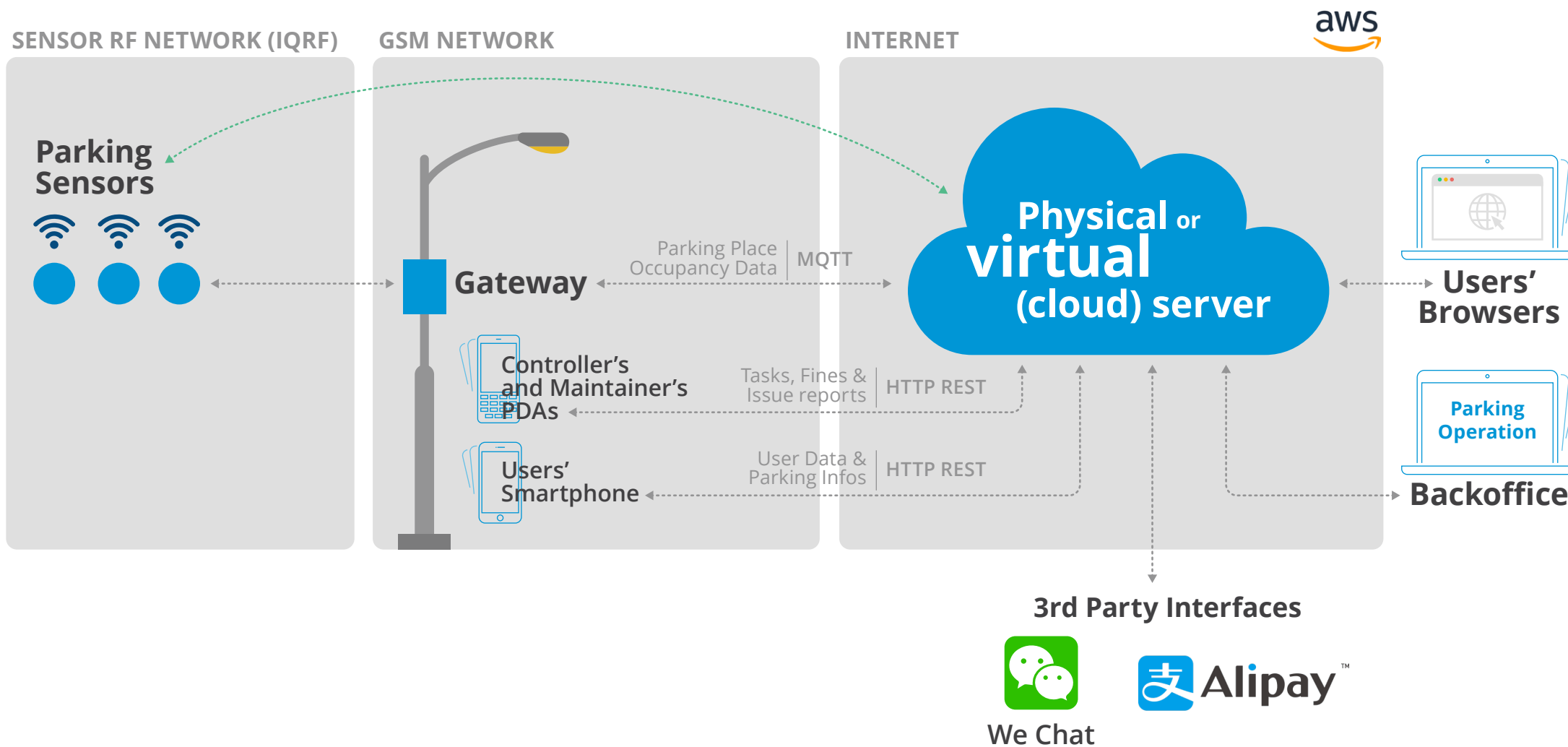


- **Fragmented**: a wide range of parking management and scattered parking resources
- **No standard**: no unified standard for access and release of parking space information
- **Integration difficulty**: the current models can not integrate existing parking resources

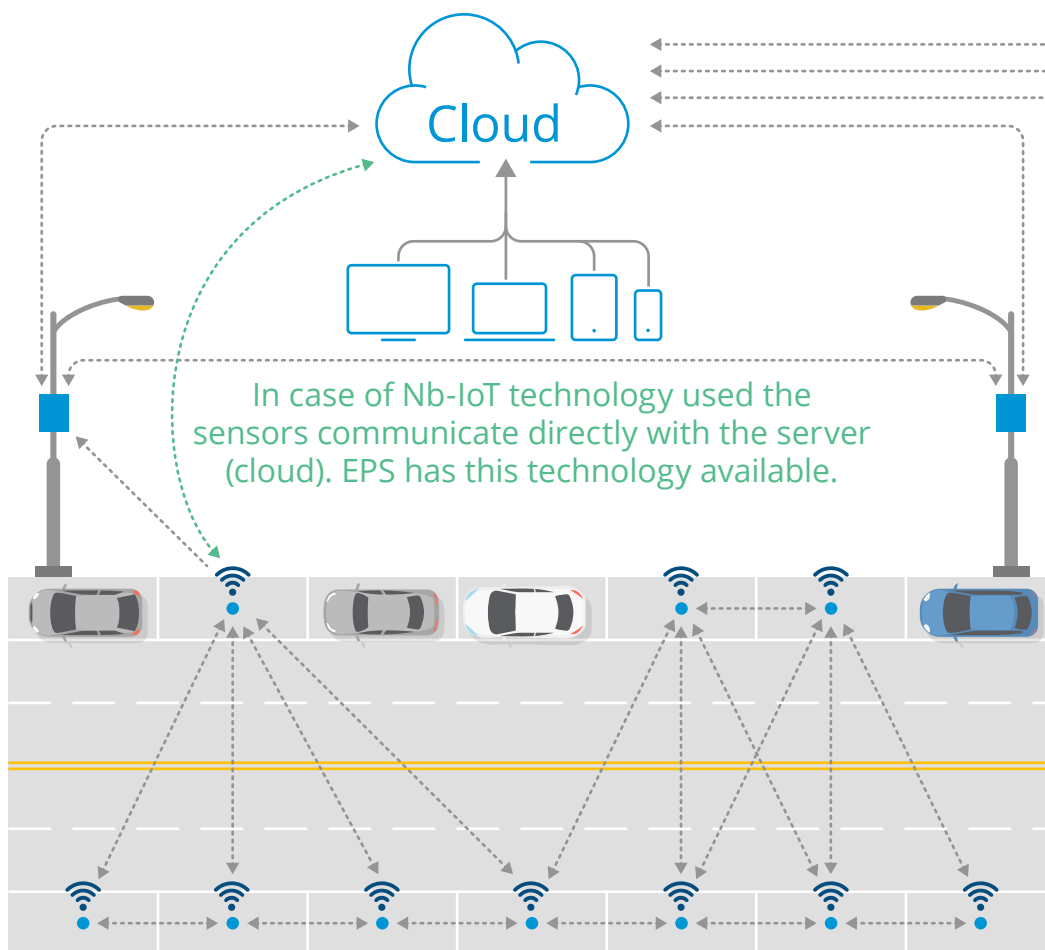
# UNIFICATION WITHOUT DISTURBING THE INDIVIDUAL INTERESTS



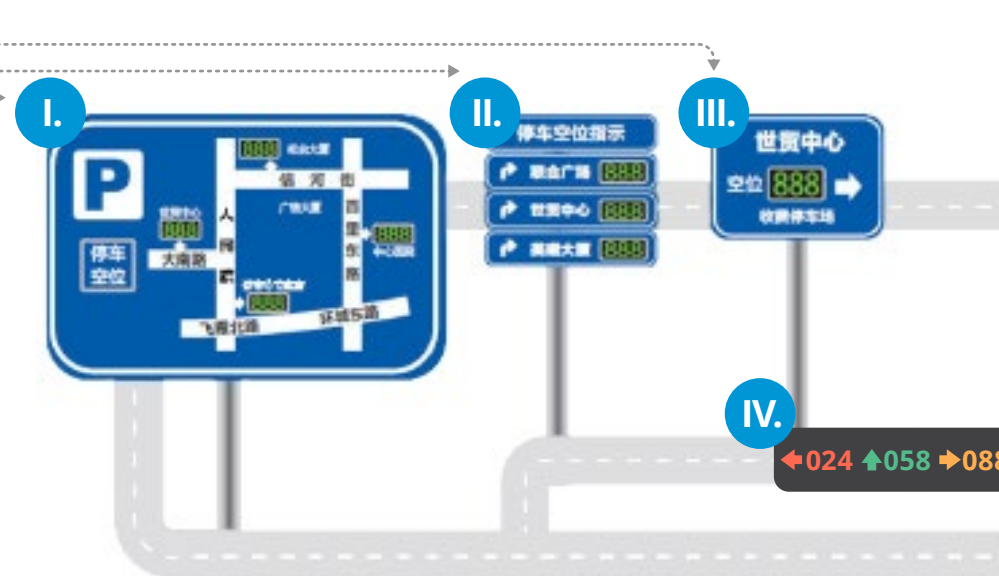
# THE STRUCTURE OF THE CITYZEN SYSTEMS I.



## THE STRUCTURE OF THE CITYZEN SYSTEMS II.



The sensors communicate besides the gateway also with each other in a MASH network



**I. First-class guidance** screens display the road sections, approximate locations and real-time parking information of the surrounding parking lots.

**II. Second-class guidance** screens display the traffic directions, distances and real-time parking lot information of the surrounding parking lots.

**III. Third-class guidance** screens are set up near the entrance and exit of parking lots to display the real-time parking lot information.

**IV. Fourth-class guidance** screens display the on-site parking lot information

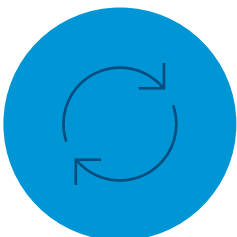
## THE DATA PROCESSING OF THE CITYZEN SYSTEM

With the help of the **CityZen** system developed by EPS Global Zrt, all parking data, such as occupancy status of parking spaces, are available in real-time for drivers with the help of a mobile application which can easily be used to find free (on-street and off-street) parking spaces.

Municipalities can design and organize traffic more easily and efficiently by collecting, processing and organizing data collected by **CityZen**.



# ADVANTAGES



## REAL TIME DATA:

- Real time traffic control
- Network status
- Route calculation



## HISTORICAL DATA:

- Parking behavior
- Occupancy statistics

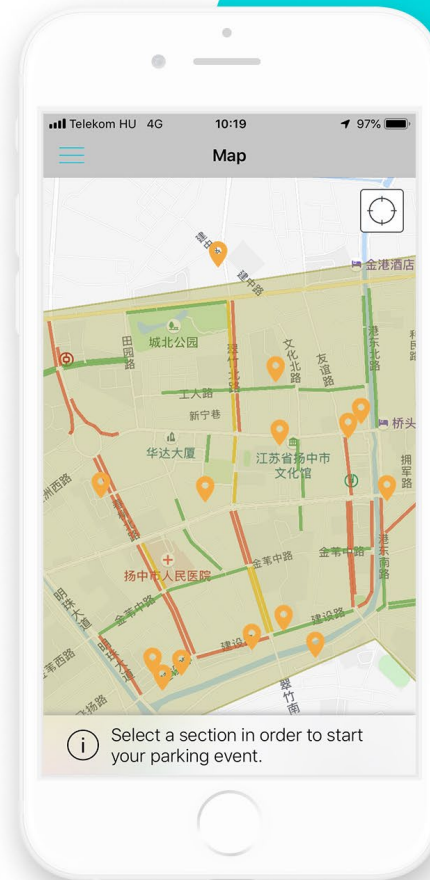
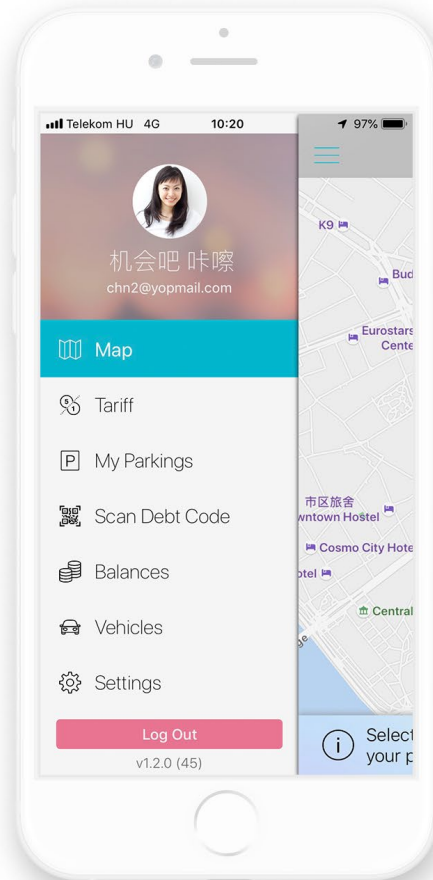
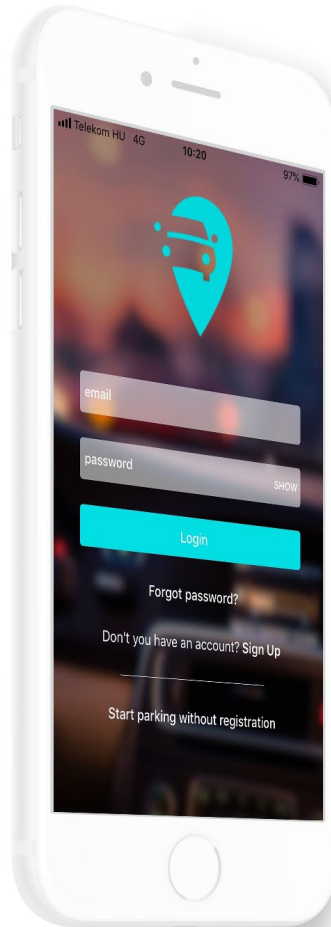


## GRANTED EXTRA SERVICES:

- Dynamic tariff system (the higher the occupancy the higher the parking fee)
- Occupancy prediction (Users can see in advance whether there is a free parking space on the planned site at the time of arrival)
- Important parking operation statistics for municipal governments, parking operators, etc. like rotation speed, average parking time, etc.
- Conducive parking services like estimated free up time, etc.



# THE MOBILE APP



**THANK YOU FOR  
YOUR ATTENTION!**



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