



This project has received funding from European Union's

Life Programme under Grant Agreement

N° LIFE 17 ENV/IT/000212 I-SharE LIFE

# How ICT in Car Sharing can improve Smart Cities mobility

Dott. Marco Lupi Service Delivery Mngr - Nordcom



#### TECHNICAL CROATIAN WORKSHOP

**26<sup>TH</sup> OCTOBER 2020** 









### **Goals & Premise**

### I-SharE LIFE

Innovative Electrical Car sharing Model to optimize vehicle usage within 24h in a mix between different users/drivers (commuters, citizens, public and private companies)

### **Technological platform**

It plays a key role in pursuing project goals. Nordcom has been responsible for the creation and, subsequently, for managing the operation of the platform.



# **Project challenges**



# **Solution Contingency**

Nordcom focused to merge technical solution and stakeholder requirements, and i-Share Life fundamentals: design, usability, modularity, benefits for the environment, centrality of the traveler / service user.

### Persistence over time

Nordcom has also given great importance to the aspect of the persistence of technological choices with a view towards efficient evolution over time: the solution must be able to evolve without forcing users to completely change the platform too often.





# **Adopted Solutions**

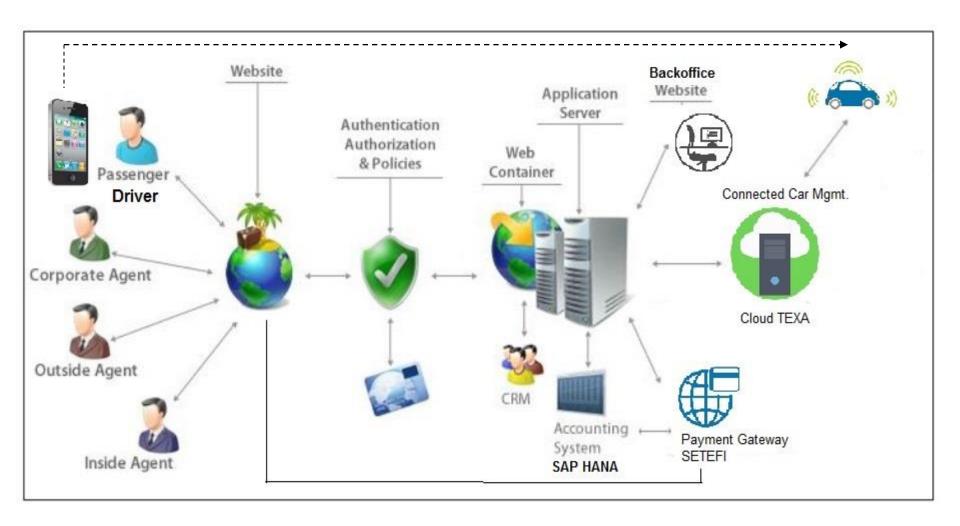
# **System Architecture**

The platform which is managing car sharing service for e-Vai and GPP-Osijek is made available in service mode (SaaS - Software as a Service). This approach, which we can consider as a state of the art for similar solutions, allowing many advantages on Users/Drivers and Service provider side.





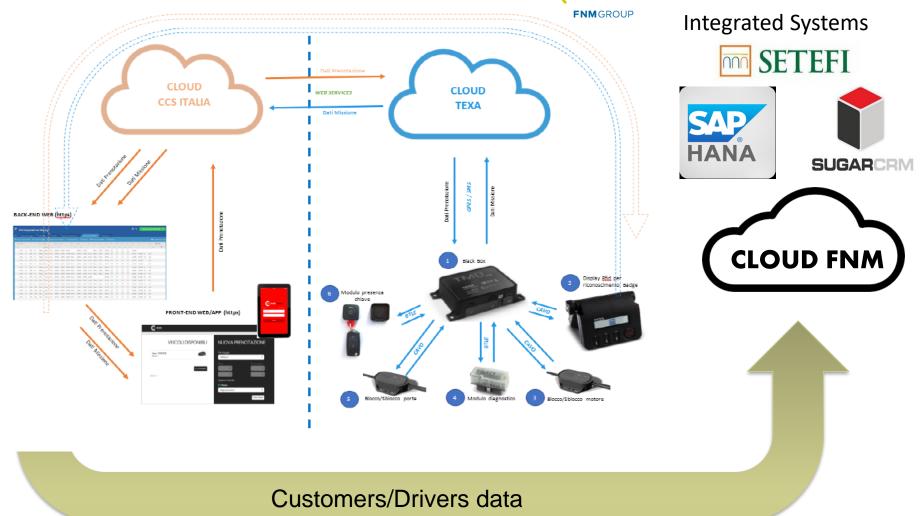
### **Platform Architecture**







# Cloud Platform Architecture (e Vai>



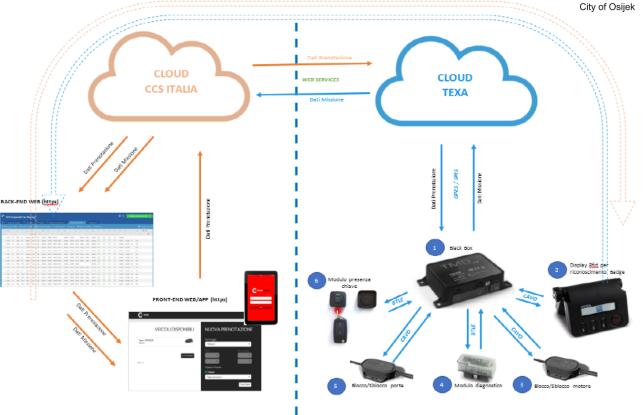




## **Cloud Platform Architecture**















Customers/Drivers data





# Service Implementation and tuning

#### Activities Overview for e-Vai

- Oct 2019 to Jan 2020, development continued to complete functional requirements and solve relevant technical and functional issues
- ❖ Due to Covid-19 E-Vai decided to delay public go-live for commercial reasons
- \* May 26, 2020: new I-SharE system Go-Live with the new app-mobile published on Google & Apple Store
- ❖ Co-design between the DEV TEAM, EVai's and Poliedra went on as co-design workshops in the demo sites with beta users

### Activities Overview for Osijek-GPP

- June to July 2020, Payment Gateway development activated to complete functional requirements and solve functional issues
- \* Aug 4<sup>th</sup>: Internal Go-Live' (Payment gateway and invoicing system in test, not real environment)
- ❖ Oct 31<sup>st</sup> to open to Public Usage



### NORDCOM

# Service Implementation and tuning

### Challenges encountered

#### ❖ E-Vai

- Change Management due to new Software operation
- Data Migration
- Blackbox operations (car and GPS messages handling) and connectivity
- App-mobile GUI
- I-Phone incompatibility

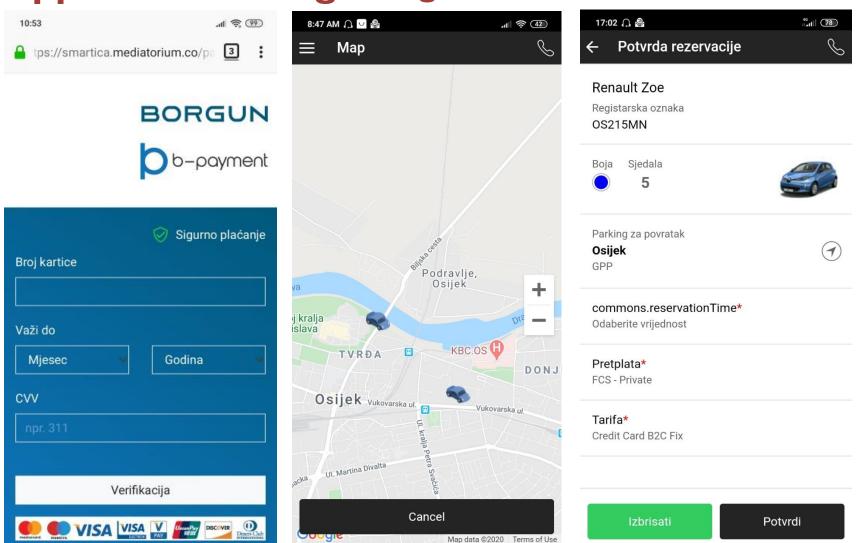
### Osijek/GPP

- Blackbox operations (car and GPS messages handling)
- I-Phone incompatibility
- Multilanguage release (Croatian)



# App-mobile Design: Register & Book

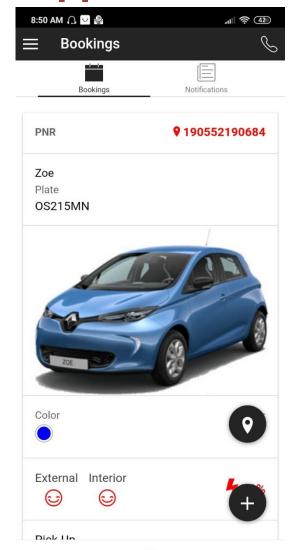


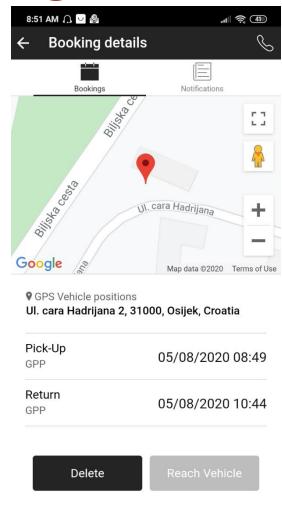


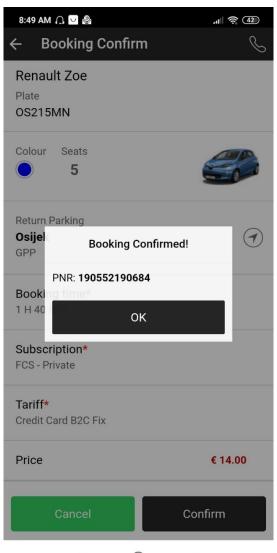


### NORDCOM

# App-mobile Design: 3 steps to book











# Service Implementation and tuning

### •Phase 2 developments : e-Vai

- ❖ Back-Office functionalities improvement have been identified by e-Vai as: map view for available car/parking, Integration with charging station, charging status display, sanctions management, Decision support tools, notifications improve, smart-list evolutions.
- **End-User** functionalities improvement as: Logging of reservation attempts, COMPANY Profiles and new I-SharE models extension to the existing customers, new tariff review.
- Phase 2 : in progress

### Phase 2 developments: Osijek-GPP

- OnBoard functionalities improvement as : managing windows closure, increase BlackBox frequency update,
- **Service-cfg** functionalities improvement as: vehicles return anywhere, car return max to 3hrs
- **Operations** functionalities improvement as :Advanced Fleet manager features
- ❖ Phase 2 : Evaluating request/CR (Osijek-GPP) Nov-Dec 2020





# Service Replicability & Transferability

- •Issue Support for last project period (further service tuning and evolution)
  - ICT and Technical request management
  - Integration and process support for 3° party systems
  - City of Osijek car sharing model Replicability to others





#### **COORDINATORE DEL PROGETTO**



#### **PARTNER**











#### SOSTENITORI























This project has received funding from European Union's Life Programme under Grant Agreement N° LIFE 17 ENV/IT/000212 I-SharE LIFE

# THANK YOU FOR YOUR KIND **ATTENTION!**

Dott. Marco Lupi Service Delivery Mngr - Nordcom









