



# ECIM

## EUROPEAN CLOUD MARKETPLACE FOR INTELLIGENT MOBILITY

**GORAZD MARINIC**



CONNECT.INNOVATE.CREATE

BRUSSELS, 13/03/2014

# TARGET: IMPROVE CITY MOBILITY!





# PROJECT INFORMATION

Theme:	Cloud of Public Services and Smart Cities
Project start	January 2014
Duration	30 Months
Consortium	14 Partners from 5 countries

# CONSORTIUM

No	Name	Country	
1	iMinds	Belgium	
2	IS-practice	Belgium	
3	21c Consultancy	UK	
4	Mobile For	Belgium	
5	Intrasoft	Luxembourg (Greece)	
6	Relational	Greece	
7	EJ Consultants	UK	

No	Name	Country	
8	BePark	Belgium	
9	CIBG	Belgium	
10	Issy Media	France	
11	PaybyPhone France	France	
12	CenGroup Ltd	UK	
13	ESADE	Spain	
14	ENoLL	Belgium	

# VISION AND OBJECTIVES

**“ECIM will develop a state-of-the-art solution that will facilitate the easy migration of existing services and innovative creation of new ones.”**

## **ECIM solution aims to:**

- 1) provide a pathway for cities and businesses **to easily migrate services to the cloud**
- 2) **open these services to innovators** for use as the basis for new applications and services
- 3) Provide a **Marketplace for Intelligent City services** to promote **new services across Europe**

# TARGET USERS

## Public Administrations



Cost effective, scalable, shared cross-border solutions for managing city mobility

## Small Business



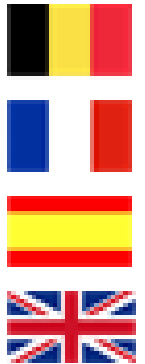
Access to service creation tools, services and new business opportunities

## People



Real-time, more effective transport solutions / services on your mobile phone

# APPROACH



# ECIM FEATURES

## ECIM – European Cloud for Intelligent Mobility

**Transport  
Service  
Catalogue**

**Mobile  
Payment  
System**

**Open  
Innovation  
Environment**



Access the ECIM  
Platform – Anytime,  
Anywhere



Use your location to  
instantly find Parking  
in your Area



Park your Car – No  
Circling, No Hassle



Pay for Parking with  
your mobile





# AGGREGATION OF PUBLIC & PRIVATE SERVICES

**Current situation: Public and private services provided separately do not allow use to benefit from their combination and cross-border interoperability**

## ECIM

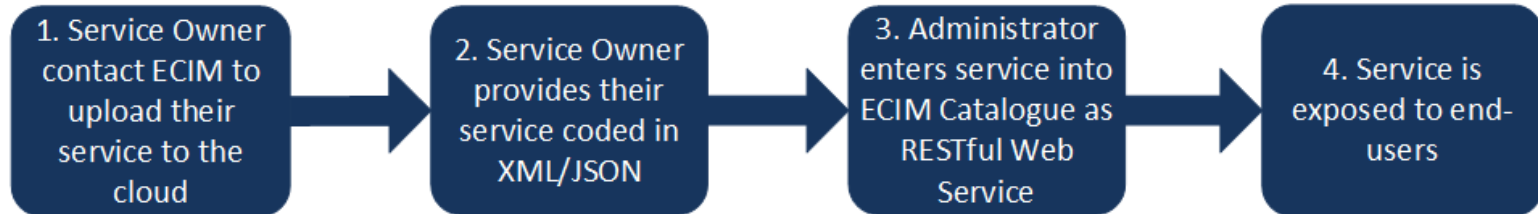
- Migrates **public and private services to the cloud**
- Delivers **extra value to users by aggregating these services and adding new services**

## Example

- **Real-time management of on-street and of-street parking availability**
- Merged with **Public sector transport options**
- **No long searching for a parking place, offers public transportation connectivity**
- **Mobile Payment** solution
- Provides **cities with a tool to manage traffic circulation**

# CLOUD PLATFORM

- Reliable **cloud platform**, built using service-oriented architecture (SOA)
- **Open architecture** and **cross-border interoperability**
- **Provides access to and allows reuse of**
  - **Data sets** – POIs, `Plug and play` data interface allowing cities to easily publish their data etc.
  - **Services** - operational implementation of new services plugged to the platform as XML/JSON web services



- **STORK eID modules** integration



# SERVICE CATALOGUE

- Lists **services published** on the platform
- Enables cities across Europe to easily **access, combine and adopt new services**
- Enables **service developers** to easily **discover and integrate** with available services
- **One-stop shop**

# MOBILE PAYMENT SYSTEM

- **Mobile Payment service** integrated as a **WebService**



- **Modules** handle
  - **parking** and **permits**,
  - **ticketing** and **controlling**
  - diverse range of **payment methods**
- Modules provide **multiple user interfaces** (WEB, SMS, apps etc.)

# OPEN INNOVATION ENVIRONMENT

- **Living Labs** methodology used to engage **citizens and SMEs** in **developing new services** (based on **open APIs**)
  - Hackatons
  - App Competitions
  - Focus Group Sessions
- **New services development**
  - eID parking permit
  - MyNeighborhood Community parking – based on crowdsourcing
  - Park-with-Us – peer 2 peer parking rental
  - Intelligent Parking Locator – guides to the nearest free parking



# VALIDATION: MOBILITY & PARKING

- **Cross-border interoperability** of services tested in **three pilots**
- **Aggregation and migration of multiple public and private services to the cloud**
  - Off-street parking
  - On-street parking
  - Mobile payment
  - Public transportation
  - STORK eID
- **Combining with new services**
  - Issue of parking permit using eID
  - Parking locator
  - Parking crowdsourcing

## Pilots:

- Brussels
- Greater Paris
- Barcelona

### WEB platform

Enroll, check your account's credit, your consumption and sign-up for a monthly subscription



### Mobile platforms

FIND parking, OPEN the parking barrier and PAY through ANY PHONE



# VALIDATION: MOBILITY & PARKING

## Proof-of-Concept in the Birmingham region, UK

- **Validates the cross-border interoperability and ease of deployment of ECIM services** tested in pilots
- **Car2Bus Mobile solution** – locates free parking & public transportation connectivity

### Car2Bus Mobile Solution

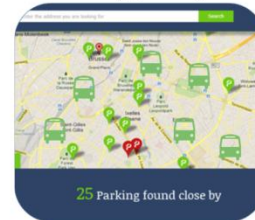
Birmingham Businessman  
Geoff finds himself late  
for work as he struggles  
in congestion



Geoff uses his mobile  
device to access the ECIM  
Platform and find a  
quicker way into the city



Geoff uses the Location  
Service to find bus stops  
with nearby parking



Geoff parks near a bus  
stop and rides to work!





# INTEROPERABILITY AND PORTABILITY

- 1) Any format of OpenData plug-in
- 2) Web Services: REST, SOAP
- 3) RESTful API for consuming data and services
- 4) STORK eID for Cross-border user authentication





Delivered by:



European Cloud Marketplace  
for Intelligent Mobility

THANK YOU.  
ANY QUESTIONS?

Supported by the  
Competiveness  
and Innovation  
Programme

