

Smart, green, connected and engaged mobility

Zaragoza @OpenDays.EU

**SPACE4REGIONS:
Satellite solutions as a driver for innovation and growth**

07.10.14



Zaragoza. City profile

- 5th in population
- 4th in GDP
- 3th in cultural tourism
- 2nd in green areas
- ...
- **1st in “quality of life”**



Milestones to a smart, green mobility

- Shifting to intermodality
 - Highspeed train – AVE
 - Commuter, Bus, Light rail
 - Public bike renting system (2008): +30.000 users
 - 1st city in Spain to establish 30 Km/h limit
- Awareness: Zaragoza Citizen Card
- ICT
 - Connectivity
 - Apps and opendata
 - Geopositioning

According to TomTom^(*), Zaragoza ranks as the less congested European city of more than 500.000 inhabitants

(*) euobserver.com/transport/29927

Connectivity & GPS for security

- +40 “Connected” Police Cars: WiMAX/3G/TETRA/GPS seamless connectivity to allow real time apps, video and access to databases
- 462 Access Points in Metro WiFi Network
 - the city deployed a meshed network with 462 access points
 - The network is primarily intended to act as an innovation platform to develop new smart city applications

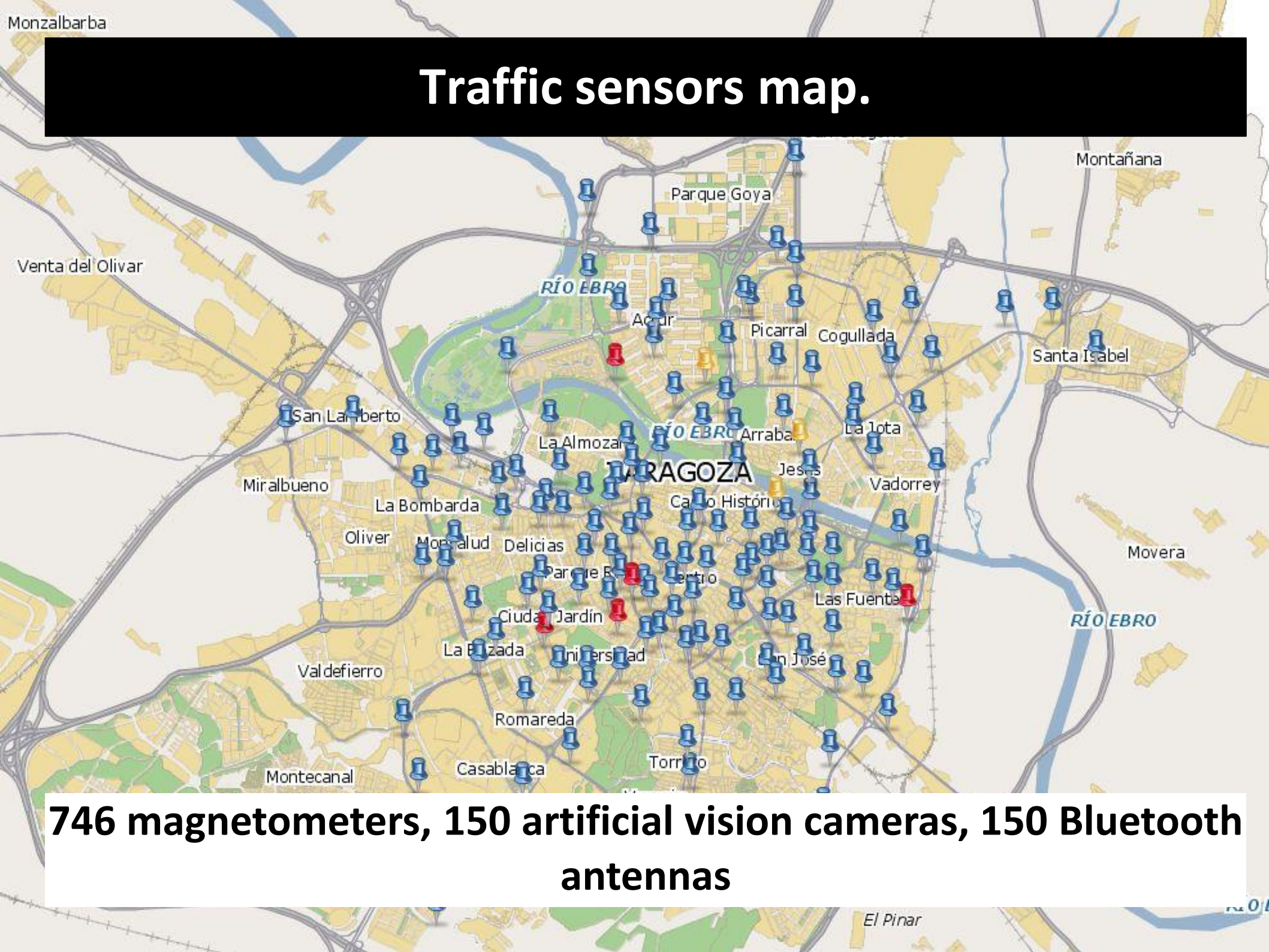
Full, reliable mobile connectivity for the city police fleet thru' combined GPS/WiFi/Wimax/4G networks

GPS and Internet of Things for Taxis

- 746 magnetometers
- 150 artificial vision cameras,
- 150 Bluetooth antennas
- 1300 taxis equipped with GPS/3G that send position data every 7 seconds to the Traffic Control

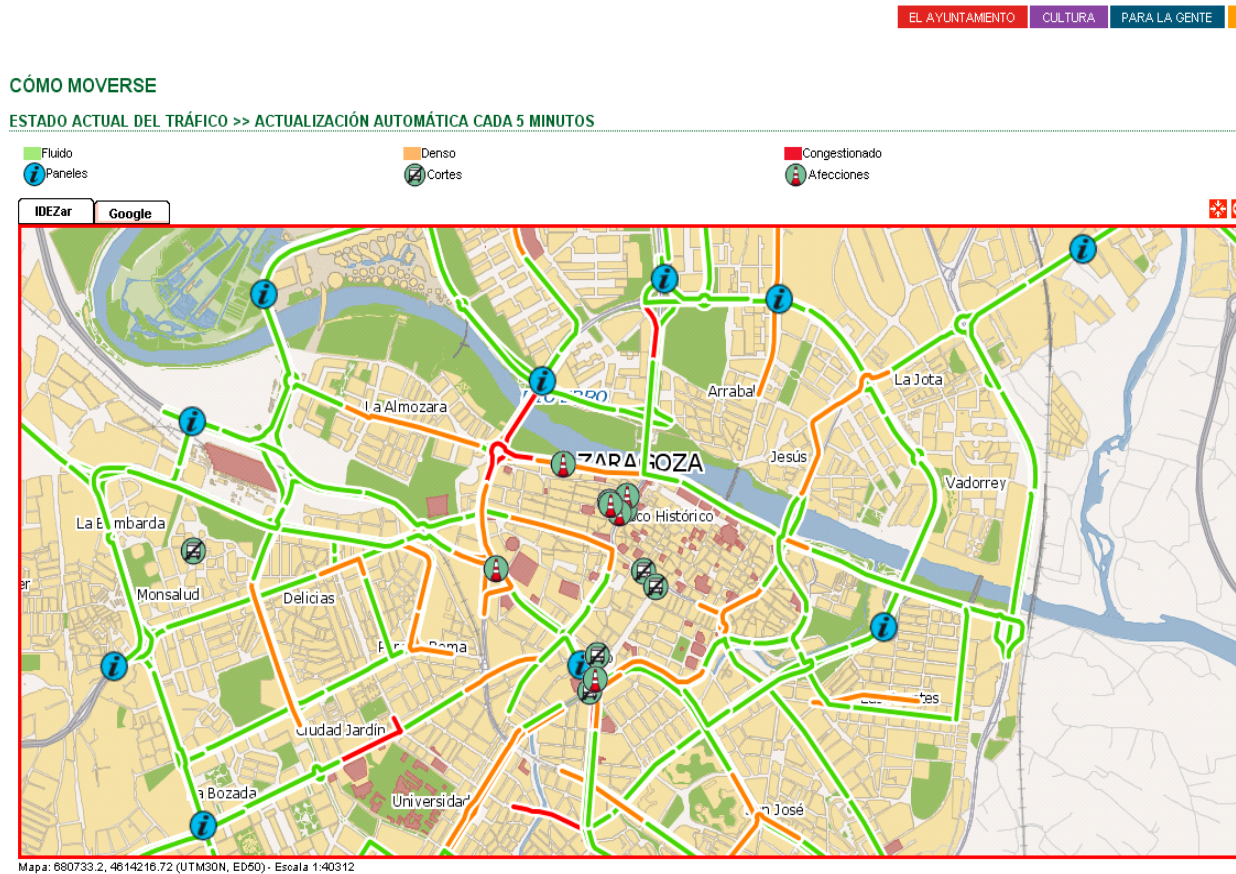
The data collected in this scenario is supporting new web services offering in real time traffic and transport information of high quality to the citizens

Traffic sensors map.

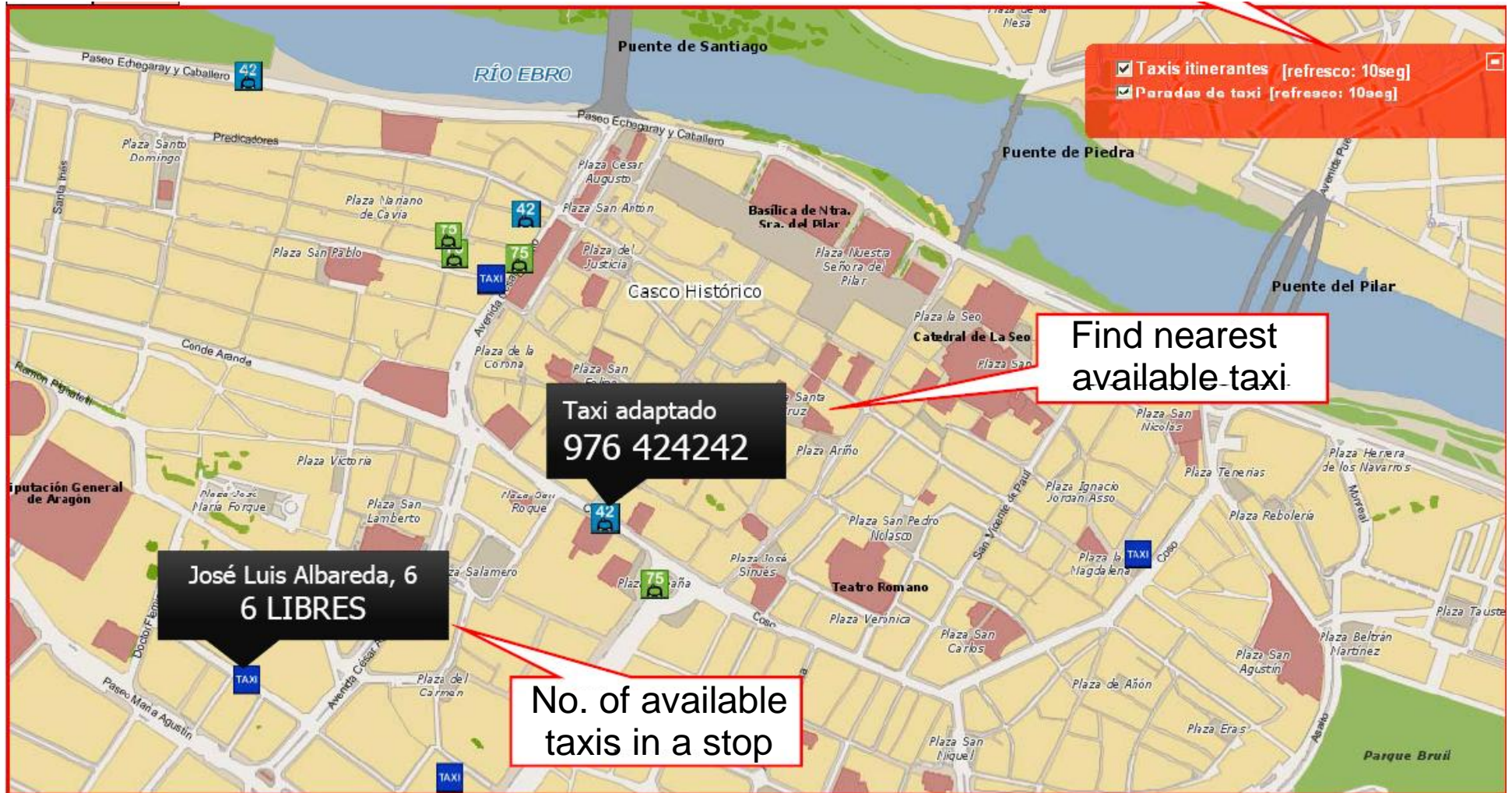


746 magnetometers, 150 artificial vision cameras, 150 Bluetooth antennas

Apps. Traffic times



Apps. Geo-locating taxis (GPS)



First app: Disabled persons can see availability of adapted taxis

Apps. Optimal routing for Public Transport

LA CIUDAD EL AYUNTAMIENTO CULT

zaragoza.es / La Ciudad / Servicios y Vía Pública/Cómo Moverse

CÓMO MOVERSE EN TRANSPORTE PÚBLICO

Opciones Líneas de transporte Información de la ruta

IDEZar Google

A AVENIDA REAL ZARAGOZA, 2
Ir por **Avenida Santa Isabel**. Recorrer 21 metros (17 s).
Tiempo acumulado: 17 s aprox. Distancia acumulada: 21 metros.

A Ir por **Avenida Real Zaragoza**. Recorrer 40 metros (32 s).
Tiempo acumulado: 49 s aprox. Distancia acumulada: 61 metros.

A Continuar hasta **Avenida del Real Zaragoza**.
Recorrer 12 metros (10 s).
Tiempo acumulado: 59 s aprox. Distancia acumulada: 73 metros.

A Ir por **Avenida del Real Zaragoza**. Recorrer 34 metros (31 s).
Tiempo acumulado: 1 min 30 s aprox. Distancia acumulada: 107 metros.

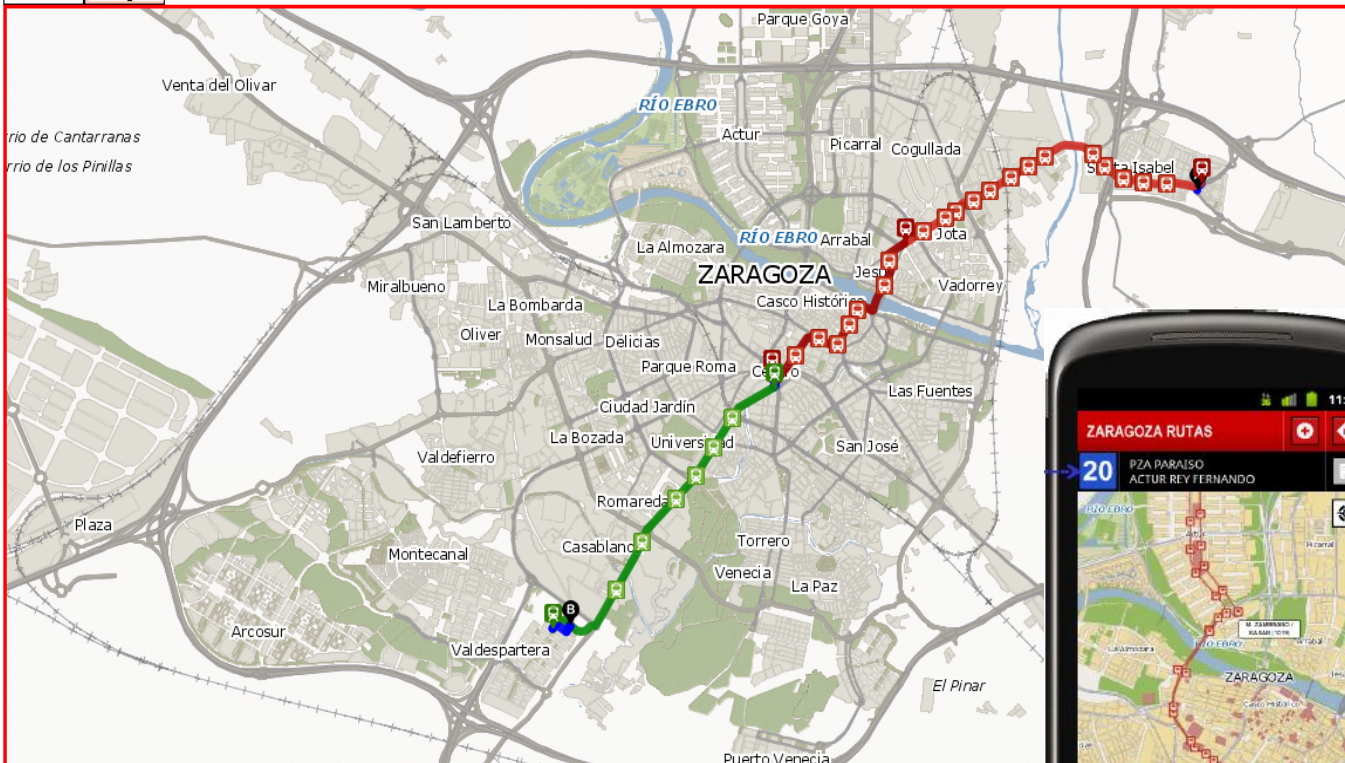
16 Toma la línea 32 de autobús con sentido hacia **Bombarda**, en la parada **AV REAL ZARAGOZA S / II** (Poste 3519).
Frecuencia: 6 min aprox. Tiempo acumulado: 4 min 30 s aprox.

↑ Deja la línea 32 de autobús y toma la **21** con sentido hacia **Oliver** en la parada **AV CATALUÑA 51** (Poste 59).
Frecuencia: 8 min aprox. Tiempo acumulado: 24 min 52 s aprox. Distancia acumulada: 4203 metros.

16 Deja la línea 21 de autobús en la parada **PS PAMPLONA 4** (Poste 669).
Tiempo acumulado: 35 min 53 s aprox. Distancia acumulada: 6952 metros.

A Ir por **Paseo de Pamplona**. Recorrer 31 metros (28 s).
Tiempo acumulado: 36 min 21 s aprox. Distancia acumulada: 6983 metros.

A Ir por **Calle de Doctor Cerrada**. Recorrer 13 metros (12 s).



Apps. Parking information for cars, bikes, motorcycles and disabled



Citizen engagement. ZGZ City Card

+200.000 units already issued (since 2010)

Bus, Tramway, City bikes, Car sharing,

Public parkings, Libraries,

Museums, Sport facilities

City WiFi

Cloud city services

Taxi, open Government



All-in-one card. Allows pricing per user-profile. Single entry point for credentials

Etopia Center for Arts & Technology: the City's R&D Lab

- PPP models
- EU projects
- Innovation services
- Alliances with regional, national and european innovation agents
- Citizentrism
- OpenUrbanLab.es: Focused on “smart city” projects: energy/water, mobility and ICT
- Incubation ecosystem: +50 startups
- Unique showroom and dissemination facility

Contact information:

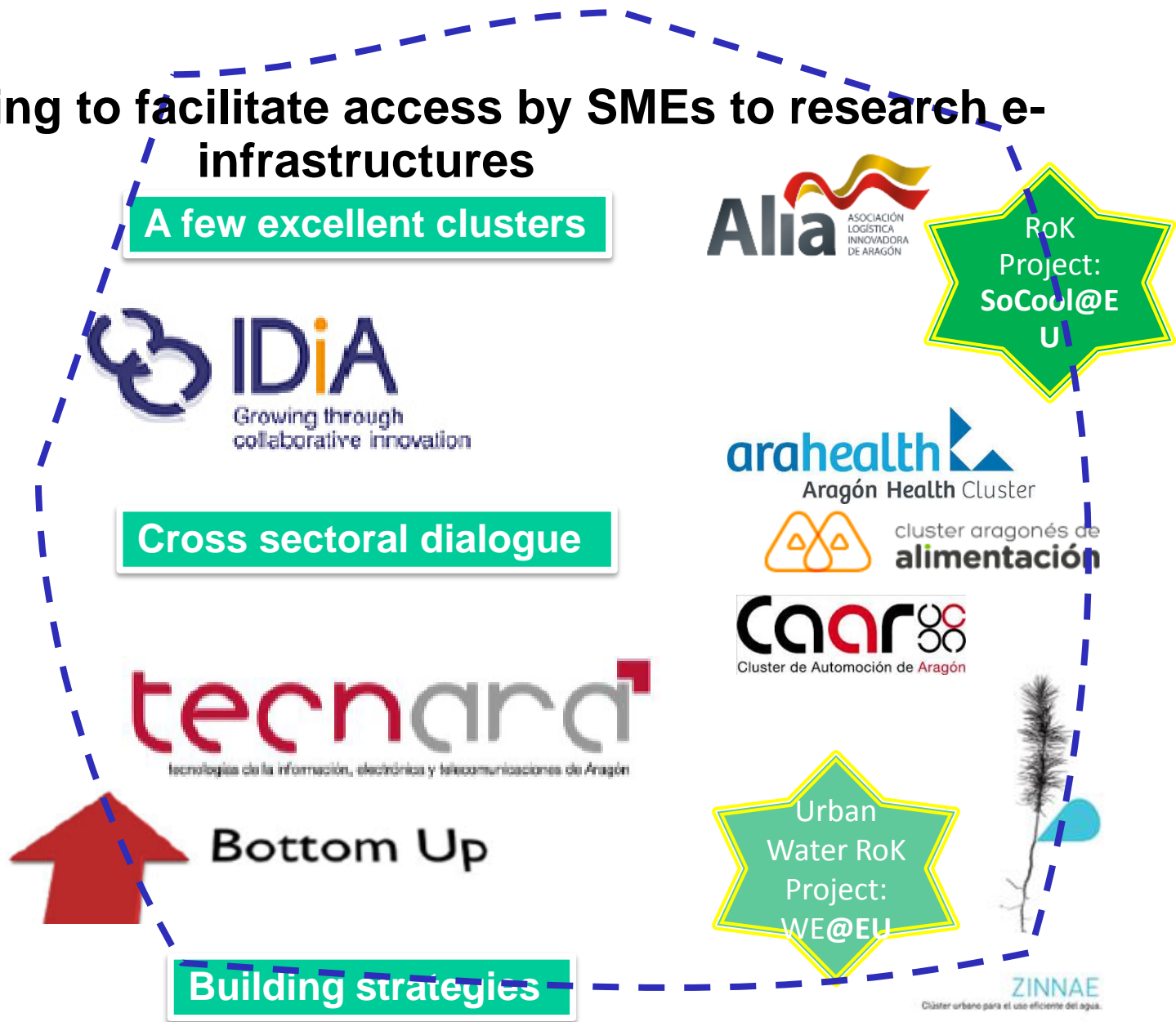
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Scheme running to facilitate access by SMEs to research e-infrastructures

↓ Top Down



A few excellent clusters



Cross sectoral dialogue



↑ Bottom Up

Building strategies

