



Experiencias de FIWARE en Instituciones Académicas en México

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Taller de FIWARE

2º Encuentro ANUIES-TIC

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Agenda

- El Tecnológico de Monterrey en cifras
- FIWARE + Tecnológico de Monterrey
- Escenarios
 - Smart Cities
 - Smart Security
 - Smart Health
- Rastreo de autobuses sistema Transportec ITESM CEM
- Preguntas



Tecnológico de Monterrey en Cifras



El Tecnológico de Monterrey en cifras

Presencia	Alumnos	Profesores
26 Campus en México	• Total: 89,641	Total: 10,117
18 Sedes y Oficinas internacionales en el mundo	•Preparatoria: 26,114	• Planta 2,207
	•Profesional: 55,565	• Cátedra 7,910
		• SNI 470





FIWARE + Tecnológico de Monterrey



FIWARE MEXICO + Tecnológico de Monterrey

El Tecnológico de Monterrey participa de manera activa en FIWARE como socio en 3 proyectos:

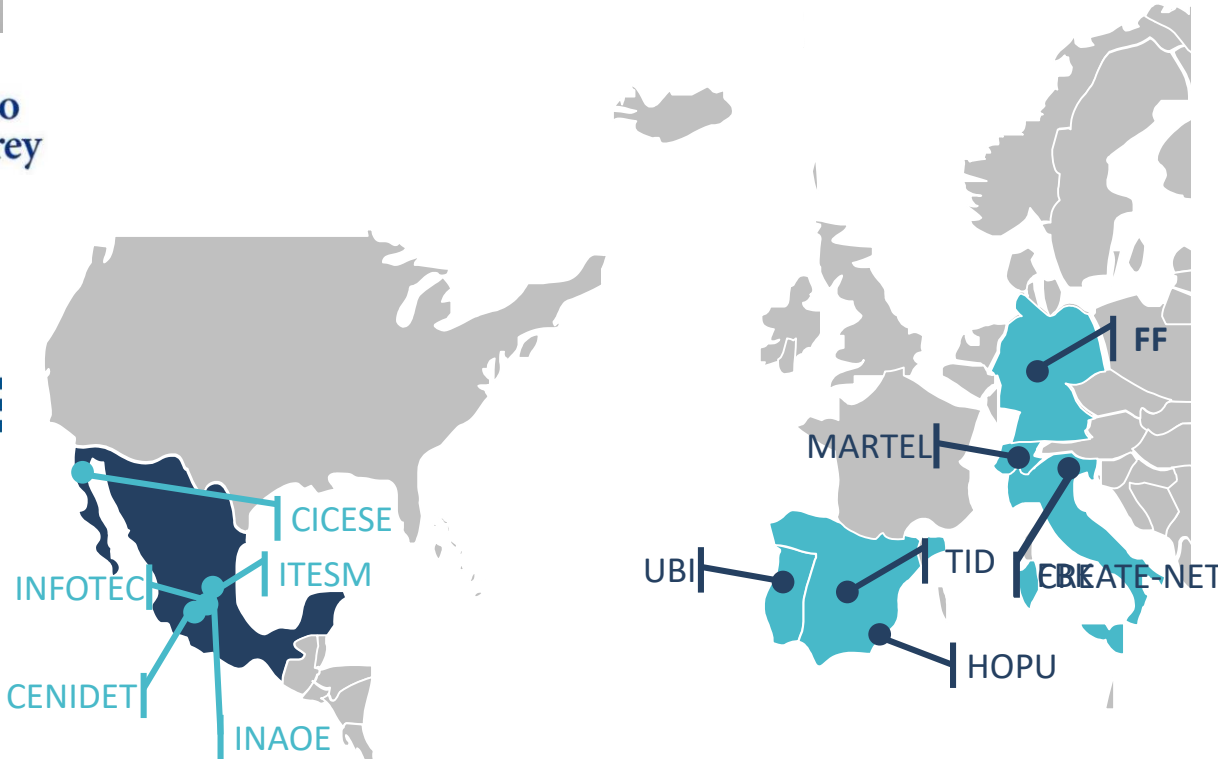
- ***FIWARE México*** [*http://www.fiwaremexico.org*](http://www.fiwaremexico.org)
- ***SmartSDK*** [*https://www.smartsdk.eu/*](https://www.smartsdk.eu/)
- ***FI-NEXT***



SmartSDK

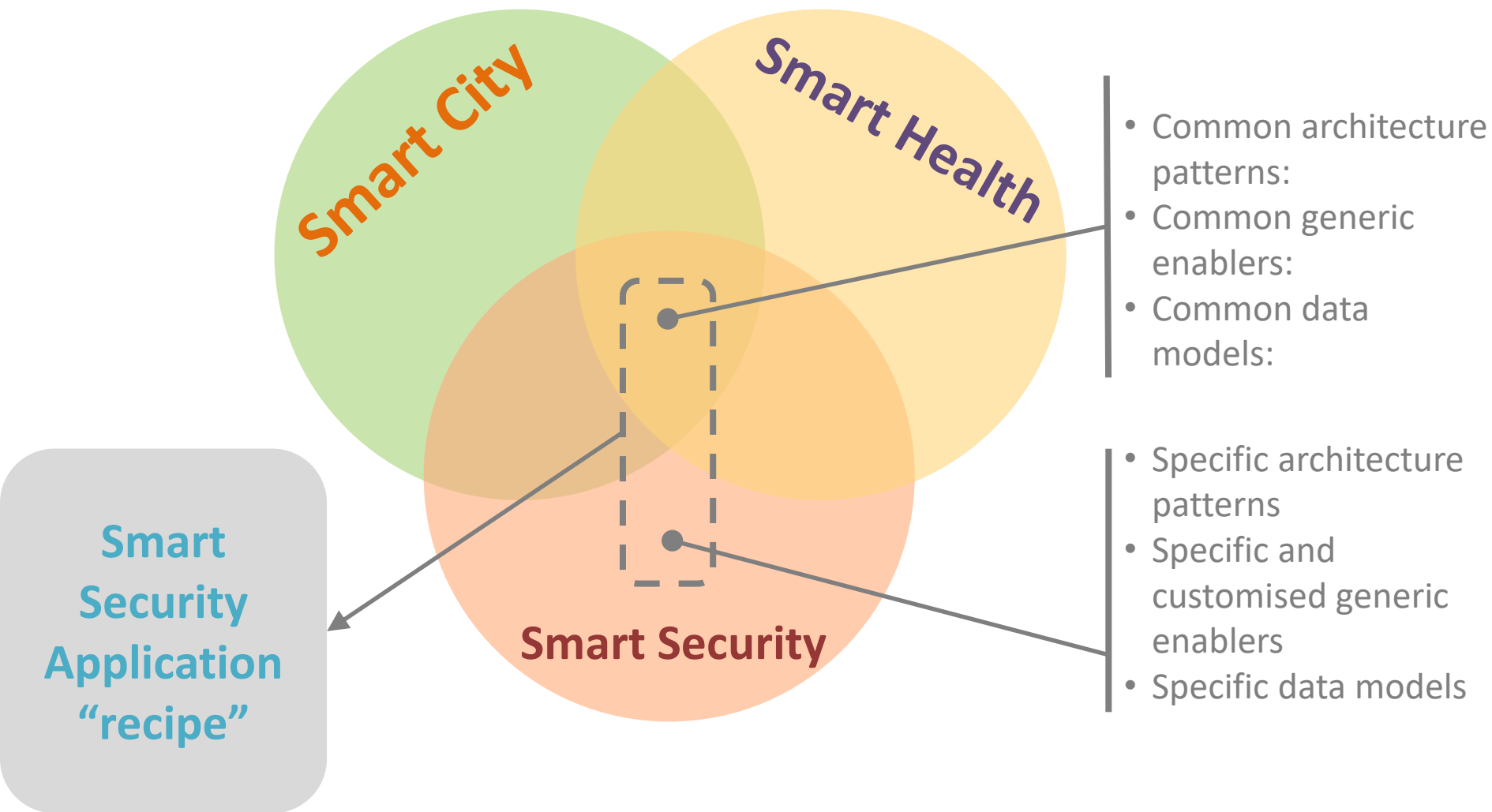


Project Consortium



Escenarios





Smart City

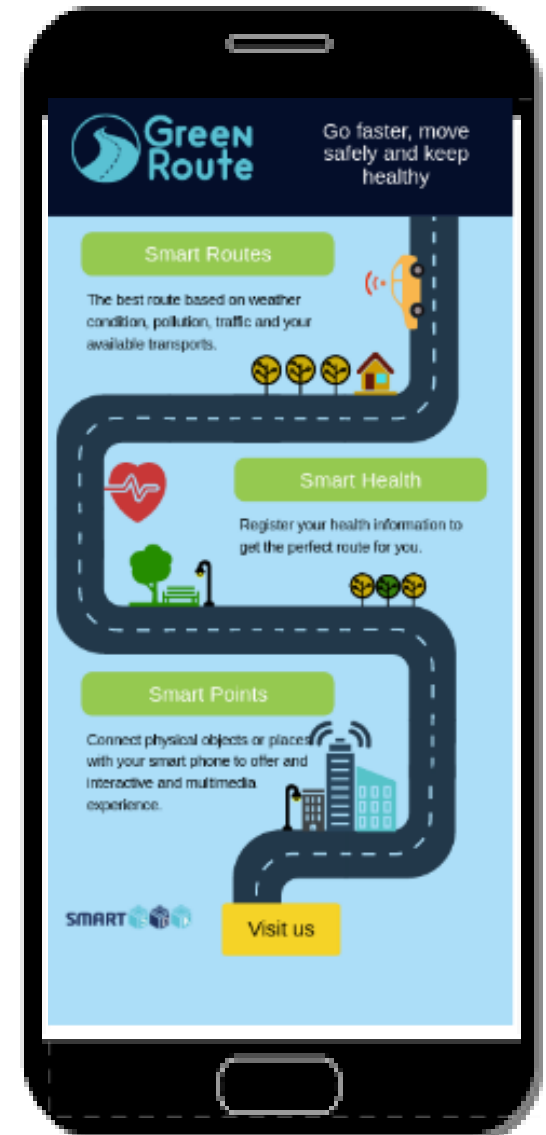


Scenario Story: Smart Mobility

The application developed in the Smart City domain (called Green Route) is focused on supporting the citizen mobility in high polluted cities, like Mexico City, with the aim of improving the life quality of citizens and fostering environmental friendly behaviors by citizens.

The objective of Green Route is to help the final user to determine the best route to follow to reach a destination, taking into account the user profile (such as health conditions), and the user preferences, such as transport type.

*INFOTEC ,CICESE, ITESM, CENIDET, INAOE,
UBIWHERE*



Smart Cities

3964 Blanca Vázquez

Home

Alerts

My Events

Groups

Plan your trip

Create alert

Trip Options

Start: (19.41997, -99.16054)

End: (19.39536, -99.12003)

Depart 6:34pm 07/12/2017 Now

Travel by: Transit

Maximum walk: 750.00 m. Presets:

Preferred Routes: (None) Edit...

Weight:

Banned routes: (None) Edit...

Wheelchair accessible trip: ☐

Plan Your Trip

Map of Mexico City showing transit routes and air quality data.

Air Quality Parameters

Parameter	Value	AQI
Temperature (T):	19 °C	-
Relative Humidity (RH):	65 %	-
Particle Pollution (PM10):	nr µ	NaN
Sulfur Dioxide (SO2):	3 PPB	4
Nitrogen Dioxide (NO2):	44 PPB	41
Ozone (O3):	39 PPB	31
Carbon Monoxide (CO):	1.0 PPM	11

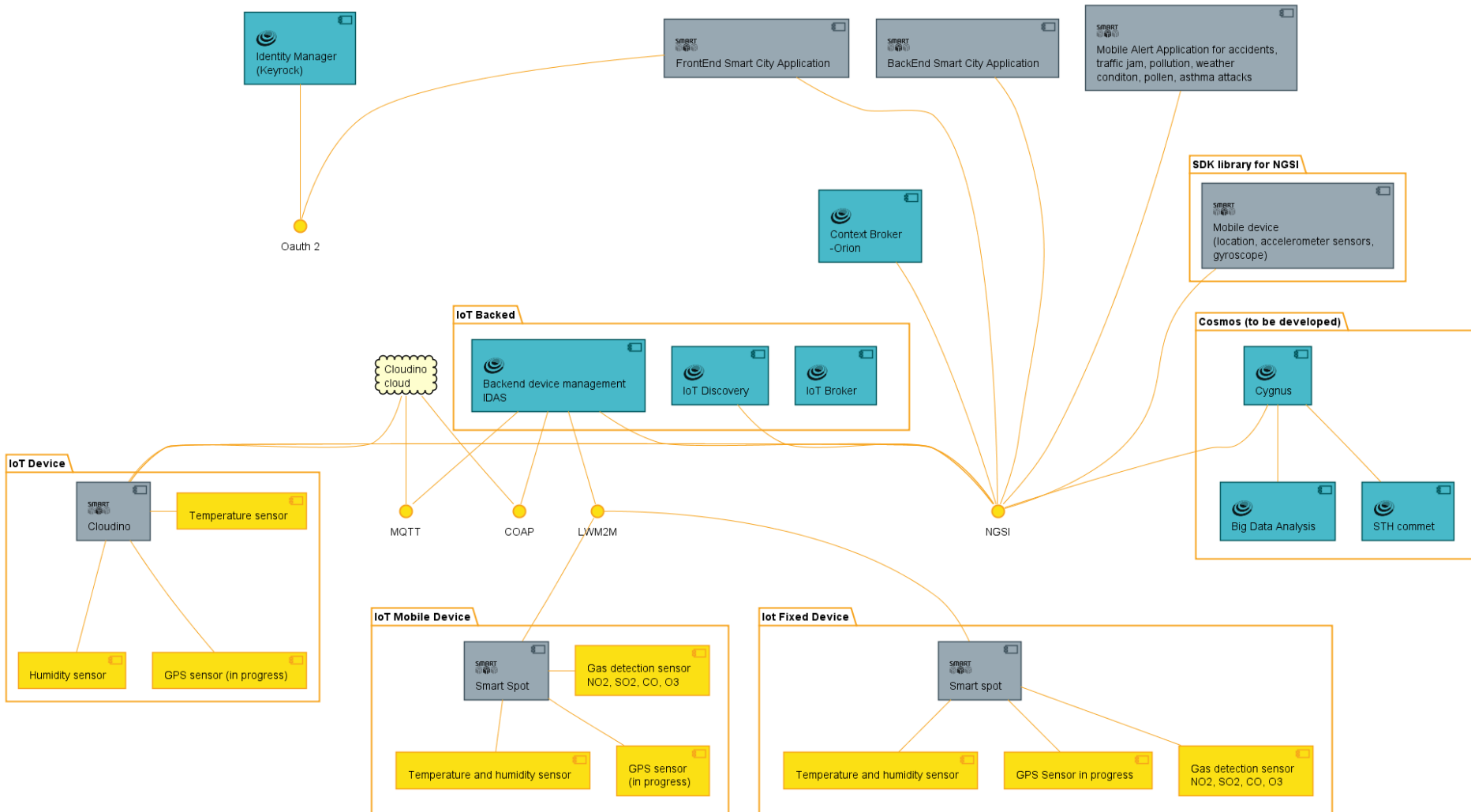
Health Concerns:

Air quality is considered satisfactory, and air pollution poses little or no risk.

<https://www.greenroutesdk.com/>
<https://www.smartsdkitesm.com/>

Co-funded by the Horizon 2020 Framework Programme
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Architecture



Smart Security

Prototype – at INAOE's campus



Cameras location.



Processing equipment location.

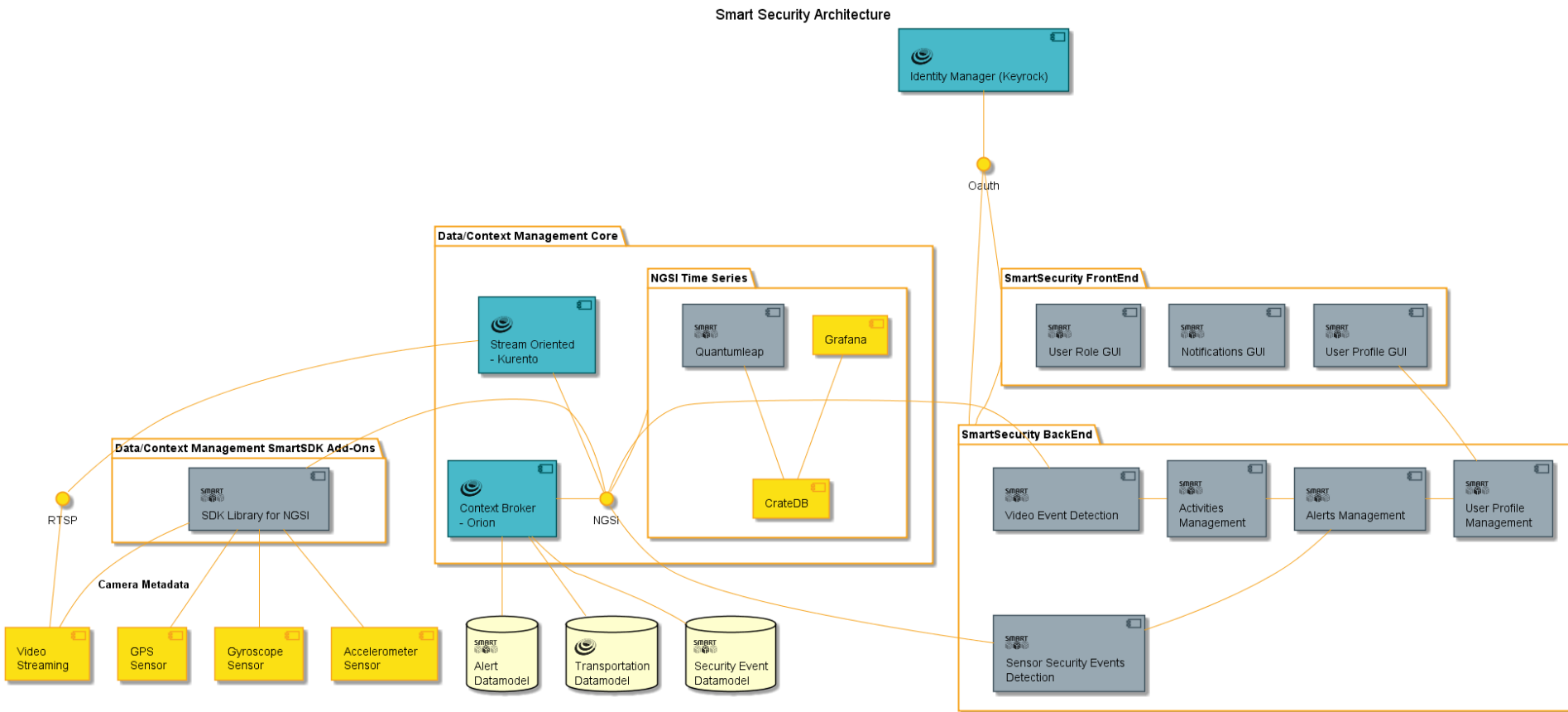
<https://smartsdksecurity.com.mx/>

Test scenario

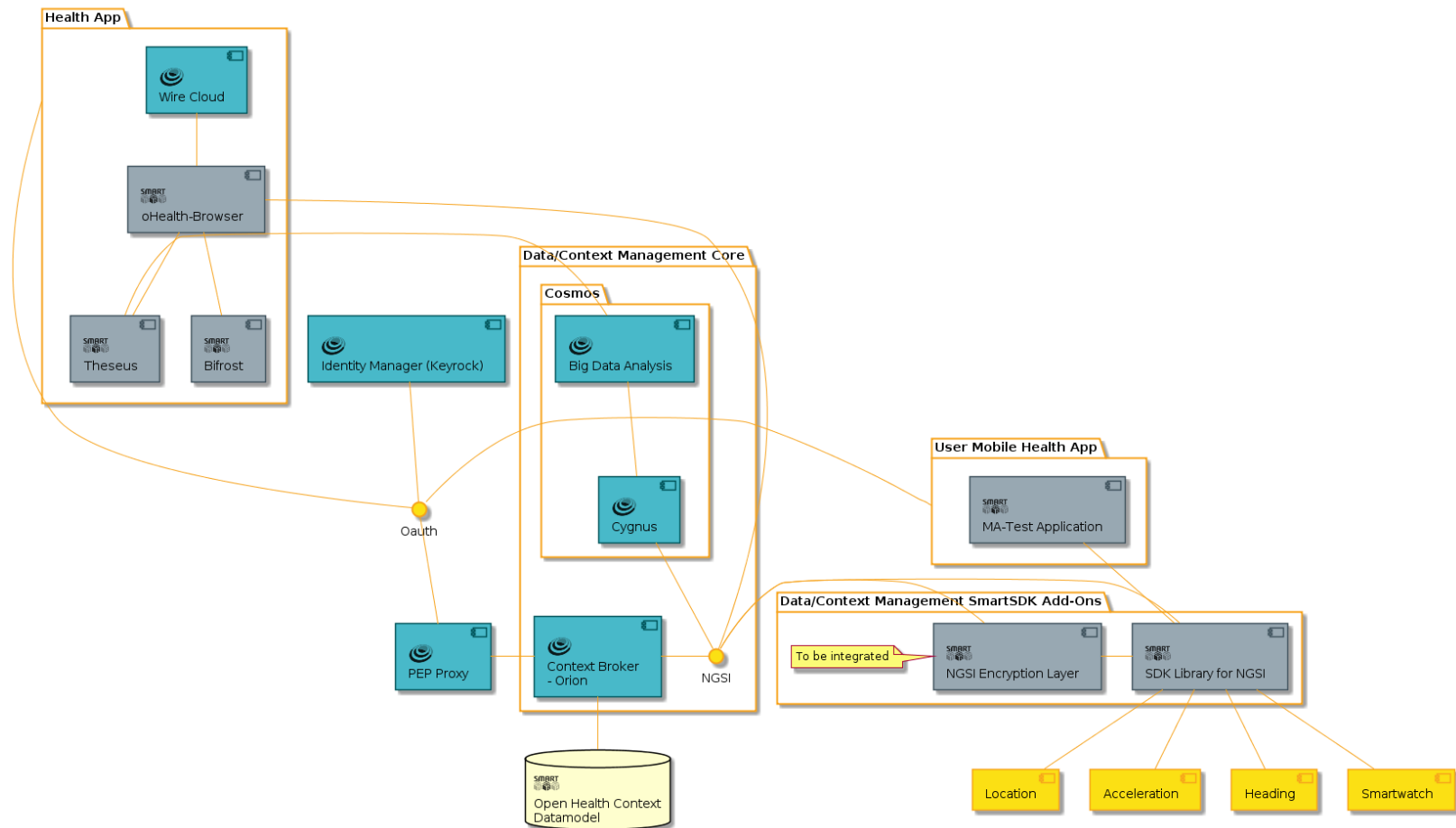
ITESM campus



Architecture



Smart Healthcare



Rastreo de autobuses

Sistema Transportec ITESM CEM



Transportec en datos

Zonas

Norte	7
Sur	2
Este	7
Oeste	2
Satélite	4

Rutas

Más de 30 rutas que no solo cubren la periferia del Estado de México pero que llegan hasta algunos puntos de la Ciudad de México (Reforma)

FIWARE GE

Uso de SmartSpot*

Rastreo de Rutas

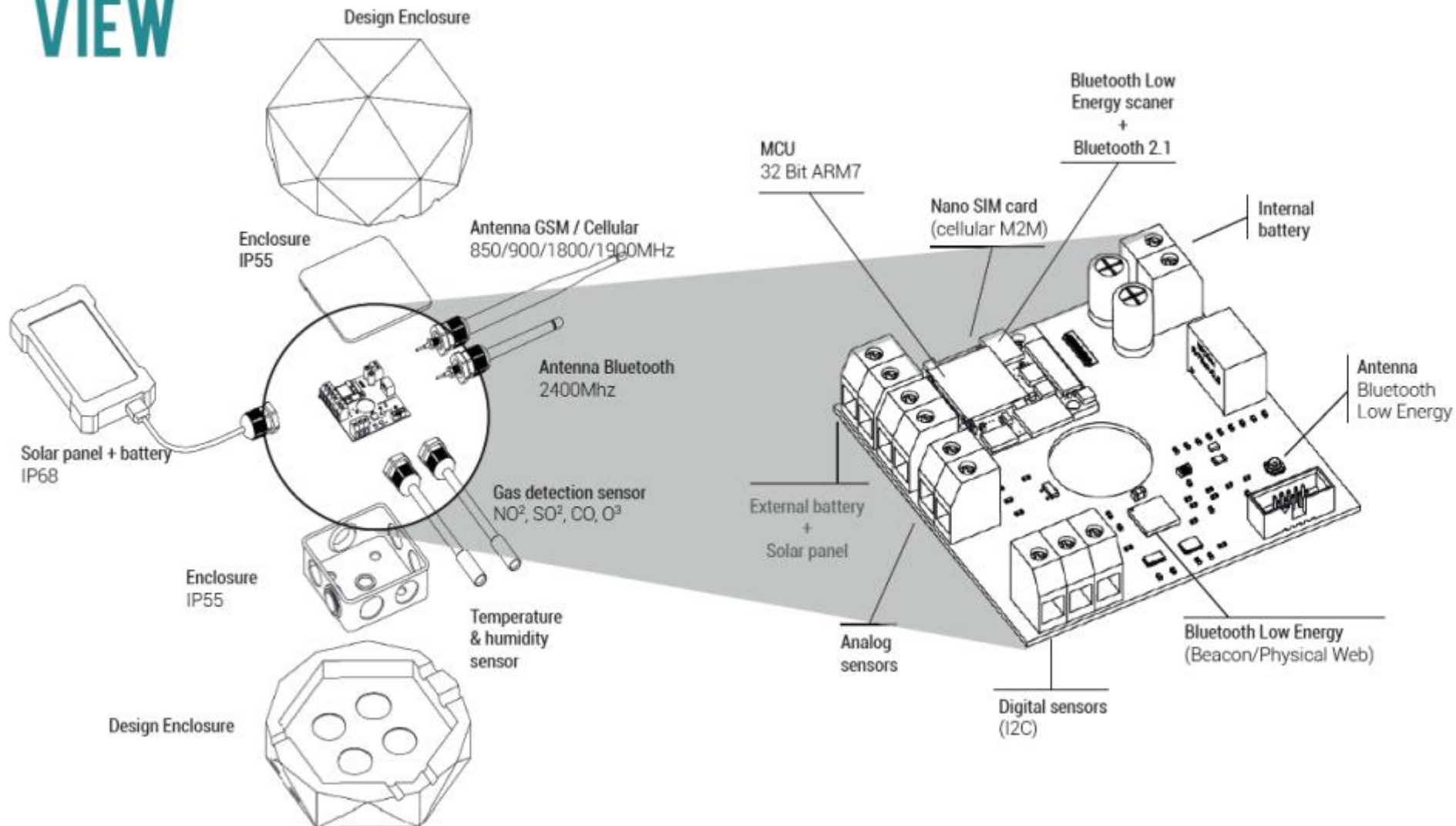
1. información de medio ambiente
2. Realtime Location of buses (usuario y agencia)
3. información interesante donde se hace transbordo



Smart Spot

Exploded view of the technology

VIEW



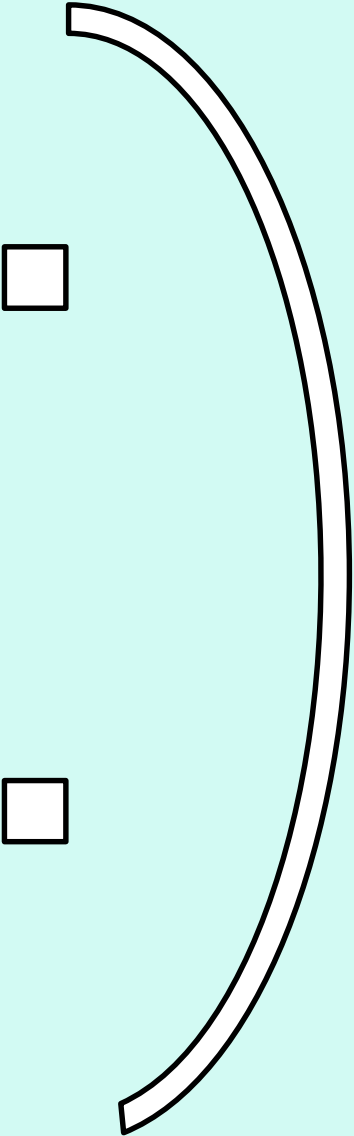
Tourism, environment & Green Routes

- **Tourism deployment in Ceutí – Murcia, Spain**
 - Physical Web for guided tours in open air museums
 - Environmental Monitoring (Temperature & Humidity)
- **Green Routes over Buses deployment and Points of Interest in Mexico (CDMX)**
 - Smart POI with GPS (Location)
 - NO₂ / SO₂ / O₃ Probes (Air Quality)
- **Co-creation and citizens engagement**



Preguntas





Gracias

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