From e-administration, to Open Government and Smart Territories:

- all in one-
ALL IN ONE: Digital, Open and Smart

1. Starting Point and the context

2. All in One
   The integrated management platform: The municipal ERP.

3. All is digital
   The electronic administration

4. All is open
   Transparency, collaboration and participation

5. All is Smart

6. We follow up: Gijón-IN
The city of Gijón is located in the North of Spain, in the Principality of Asturias. It has a population of around 275,000 people, being the most populated and industrial city of Asturias.

It has an area of 181.7 km² and is located in the central area of Asturias; its maximum height above sea level is 672 m.

The urban area of the city covers around 27 km² and concentrates 93% of the total inhabitants, with a very high population density.

*Thanks to the last changes, Gijón is a well-structured and well-connected city.*
EUROCITIES is the network of major European cities.

EUROCITIES awards 2016: Gijón
Citizen participation and open government

EUROCITIES awards 2013: Gijón’s citizen card

Gijón´s working Eurocities groups:

- Air quality, climate change & energy efficiency
- Cohesion policy and structural funds
- Creative industries
- Employment
- Entrepreneurship & SMEs
- Homelessness
- Innovation
- Public services
- Urban Agenda for the EU
INFORMATION AS A MUNICIPAL ACTIVE. Integrity, consistency, unique data (Corporate Integrated Management Model)

OPENING, PROXIMITY AND MULTICANALITY
Citizen card – Citizen ATM - Virtual Office

SYSTEMS PLAN

1. Gijón Plan
2. Gijón @cerca Plan
3. Aspa Plan
4. Digital Transformation 2014-2018

e-ADMINISTRATION . CONSOLIDATION ERP-CRM
Offices 060 – Pre-interoperability collaboration

Gijón Smart & Sustainable

Strategic Plan 2016-2026

CONTINUED INNOVATION PROCESS
CONTINUED INNOVATION PROCESS

Answers to current demands

WELFARE
OF PEOPLE
QUALITY OF LIFE
A GOOD GOVERNMENT
AND A BETTER CITY

ORGANIZATIONAL REFORM
DIGITAL TRANSFORMATION
TRANSFER AND OPEN DATA
INTERNET OF THINGS
SMART & SUSTAINABLE GROWTH

Strategic Plan 2016-2026

INNOVATION
CONSOLIDATION
SMART CITY MODEL

MOBILITY
SmartcardCitizen, efficient urban transport, LabCityCar, bike lanes and accessible public bikes, participative mobility plan, carsharing...

ENVIROMENT
Air quality and water use, improvement of social communication routes (Green Line), "Cuida Gijón (take-care)"

SOCIAL INNOVATION
e-services, smartcard, open data, transparency, collaboration and civil participation, social and creative hub

ENERGY
Intelligent vehicles, smartlighting, smartbuilding, Covenant Mayors, charging points for electric cars...

ECONOMY AND GOVERNMENT
We are aware that the society is open and in the economy of access and use.

Change starts with ourselves.

We search a SUSTAINABLE MODEL to create greater public value.

Corporate ERP Licenses

Licensing of sectoral products without integration

Custom development

Access and use of ERP

Municipal ERP + City ERP
- **Key to use public services**: libraries, transport, sport center, public WC, bikes...
- **Payment card**: services and taxes.
- **100% of the population**: both legal and natural person.
- **Means of identification and electronic signature for electronic public services.**

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**15 years of SMART CITIZEN CARD**
More than 35 workshops
1500 people
15 informative videos
10 self-help guides
1 demo space
More than 8000 informative letters
ALL IS OPEN:
Electronic administration. The road to:

Local Transparency act:
- More than 400 indicators
- 75% already published
- Next challenge: from .pdf to Open Data. ERP
- Right to know: public information must be published
- Right to ask: few reasons to refuse.

Open Data
- More than 700 data sets.
- 14 apps created about them
- Observa.gijon.es: visualizing of the data, easy for citizens
- Graphics, maps and statistics sharing

Citizens collaboration:
- Public infrastructure
- Citizens send the message to the Council
- Flaws, damages…
- Streets, parks, streetlights, urban parks
- Location, picture, kind of incidence
- Next step: co-management of “public service”

Participation:
- Participative budget:
  - 10,000 registered users
  - 357% growth comparing with the last year
  - Participative budget to decide € 5,000,000
- Ask to the local parties: grupomunicipales.gijon.es
Local **Transparency Act** and Open Data.

**EX:** budget by agency and consolidated

**Citizens collaboration:**
Automatic generation of work orders

**Participation:**
INVENTORY AND EQUIPMENT MANAGEMENT
- Local and activities census
- Urban furniture
- Children’s ride

From ERP to e-administration, to the management of the city

Digital administration, open government and smart territories
“The purpose of this initiative is to encourage the effective application of the ICT in the city to encourage opportunities for economic development, innovation and entrepreneurship, improve the quality of life, the welfare of people and the level of public services that receive.”
Direct savings from the processing of procedures
Improvement of the management on public roads
Direct energy savings
Reduction of administrative barriers
Reducing workloads

Publication, information, processing in real time
Use of mobile technology
Use of 6LowPAN technology
Fostering collaboration
Alignment principles Open Government
M2M Platform
Innovation and entrepreneurship ecosystem

ENI Compliance (Electric Regulations)
ENS – LOPD Compliance (Security and Data Protection Laws)
SIG Platform following the SIG interoperability standards of OGC
Promoting Interoperability
Standardization via UNE-RECI (National regulators for standardization)
All the agents of the city will be present in the platform

Fully replicable
It allows to share part of the infrastructure (all the backend, backoffice and frontend in Cloud), as well as data sets, indicators, dashboard and the metrics that are obtained from this service
It allows opening to the cityzenship
Citizens are involved in decision-making
Collaboration with other cities and provinces

The potential savings to obtain are identified depending on the initial situation and the equipment to be installed
It will connect all citizens, companies and organizations with each other and with the target audience
It directly generates substantial savings in the maintenance of the city
Indicators and dashboard

Holistic management of grants and contracting
It allows the development of new applications on IOT technology
Open third-party creation spaces with apps and Big Data solutions
It constitutes a physical and virtual space for continuous experimentation
Online data from the ERP
Online data from the M2M platform
Local stakeholders supporting the project

Utility companies (water, waste, cleaning, transport, economic promotion...)

Cities
- Leganés
- Concello de Lugo
- AYUNTAMIENTO DE GETAFE

University and innovation centers
- tsc uniovi
- CeDIt
- Gijón
- tecnalia

ICT industry
- edp
- IntermarK
- it
- Bittmark
- Telefónica
- Orange
- Treelogic

Third sector
- FADE
- Cámaras Gijón
- FAEN
- Clúster TIC
- Puertos de Gijón
- Clúster Tic
- ESYCSA
- GMV
- ThyssenKrupp
Summary: accelerate the digital transformation process of the city council, the city and the society of Gijón, and share with other cities

**Smart**
- Consolidation of the model. **BUILT ON THE CONSTRUCTED**
- Strong technological innovation and service management. **DIFFERENTIATED**
- The designer staff is the same one that implements it. **IMPLICATION**

**GI**
- Technical standards. Commit to the reuse and integration of common services. **ENI**
- Commitment Standards UNE – Aenor – Reci. **STANDARDIZATION**

**JÓN**
- Financial implication of the City Council. Not only 40%. **COMMITMENT**
- Direct participation of 4 Spanish cities, and open to more. **REUSABLE**

**IN**
- Applied research centers with proven proposals. **INNOVATION**
- Social movements, business, entrepreneurship ecosystem. **COLLABORATION**
- Focus on improving city management and people well-being . **PARTICIPATION**
Integrated model
The EIP-SCC Is Working to Smarten Up the 'Humble Lamppost' Across Europe

**Smart Lamppost – Functional Mapping**

**Urban Functions**
- Energy Efficient Lighting
- Community Lighting (auto/adapt)
- City Beautification
  - City identity

**Management Functions**
- Lighting Control
- Blue light assistance
- Local Comms
- Backhaul Comms
- Energy monitoring & metering
- Asset maintain

**Infrastructure Functions**
- 3G/4G Services
- Public WiFi
- MAC Tracking
- Safety & Security
- Environ control
- Digital Signage
- Traffic Mgt
- Power gen + DR
- IoT Network
- Community Cloud
- Impaired Assist
- Weather
- Digital traffic signs
- Parking Mgt
- EV Charge

**Starting point**

Smart cities
First service added to the platform: lighting

- Point-to-point monitoring and control
- Global lighting management indicators
- Detection of faults
- Preventive Maintenance
- Independent of manufacturers
- Use the services of the Smart City platform (API HUB)

Link to video
1,250 LIGHTING CONTROL NODE
- 6LowPAN.
- Control ON/OFF/Dimming and metering of led lamps.
- Electrical and water metering (Wired MBUS Meters).
- Switch ON/OFF devices.
- Digital and analogic inputs.

15 GATEWAYS DUAL BAND
- 2.4 / 5.4 GHz (WIFI).
- 868 MHz (6LowPAN).
- LTE (connection with Cloud).
GIJÓN SMART CITY PILOT RANGE

6LowPAN based IoT network

1,250 IoT network points

Downtown area and Science Park

IOT NETWORK MANAGEMENT

- Cloud platform operation (in 5 years)
- Network management

SMART CITY PLATFORM

App Smart Lighting

HW IoT
Currently it is only in operation the City Application of **SMART LIGHTING** on two platforms: CMS of the manufacturer Paradox Engineering and definitive application, on PLAT.ONE of SAP, in development phase by T-Systems.
INTEGRATED MODEL: harmonization of data and integration

1. CITY SYSTEMS
   - Lighting control systems
   - Parking management systems
   - Sensor-based solutions
   - Video-based solutions

2. CITY MANAGEMENT PLATFORM

3. MUNICIPAL MANAGEMENT PLATFORM
   - ACCOUNTING
   - TAXES
   - POPULATION
   - TERRITORY
   - E-ADMIN
City of Gijon has embarked on an ambitious journey to finalize energy audits for **98 public buildings and 40,000 street lighting points**, identifying the set of energy efficiency and/or renewable energy related interventions, as well as publishing the tendering documentation to launch a **€20m investment programme** (estimated) in renovation works and preferably selecting an ESCO company to accomplish the measures within a two year timeframe. EEEF will be accompanying the City during the whole process, while collaborating with the management team proposed by the City side by side.
INTEGRATED MODEL: harmonization of data and integration

1. NEW CONNECTED OBJECTS

2. SMART CITY PLATFORM

3. MANAGEMENT APPLICATIONS
Willing to keep working together in building a better world for the future

THANK YOU!

www.gijon.es
@gijon