From a smart and sustainable city...

DIGITAL TRANSFORMATION STRATEGY

2023-2027

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A strategy that is coherent with the European, national and local context, and which is aligned with the city plans of the different municipal areas.

EU Digital Compass 2030

European Declaration on Digital Rights and Principles for a Digital Decade
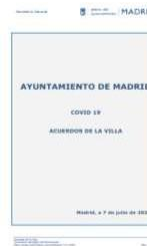
Recovery, Transformation and Resilience Plan.

Digital Spain 2026 and plans

Strategic Plan for the City of Madrid

Village Agreements

Recovery, Transformation and Resilience Plan for the city of Madrid

Government Area Strategies and Plans

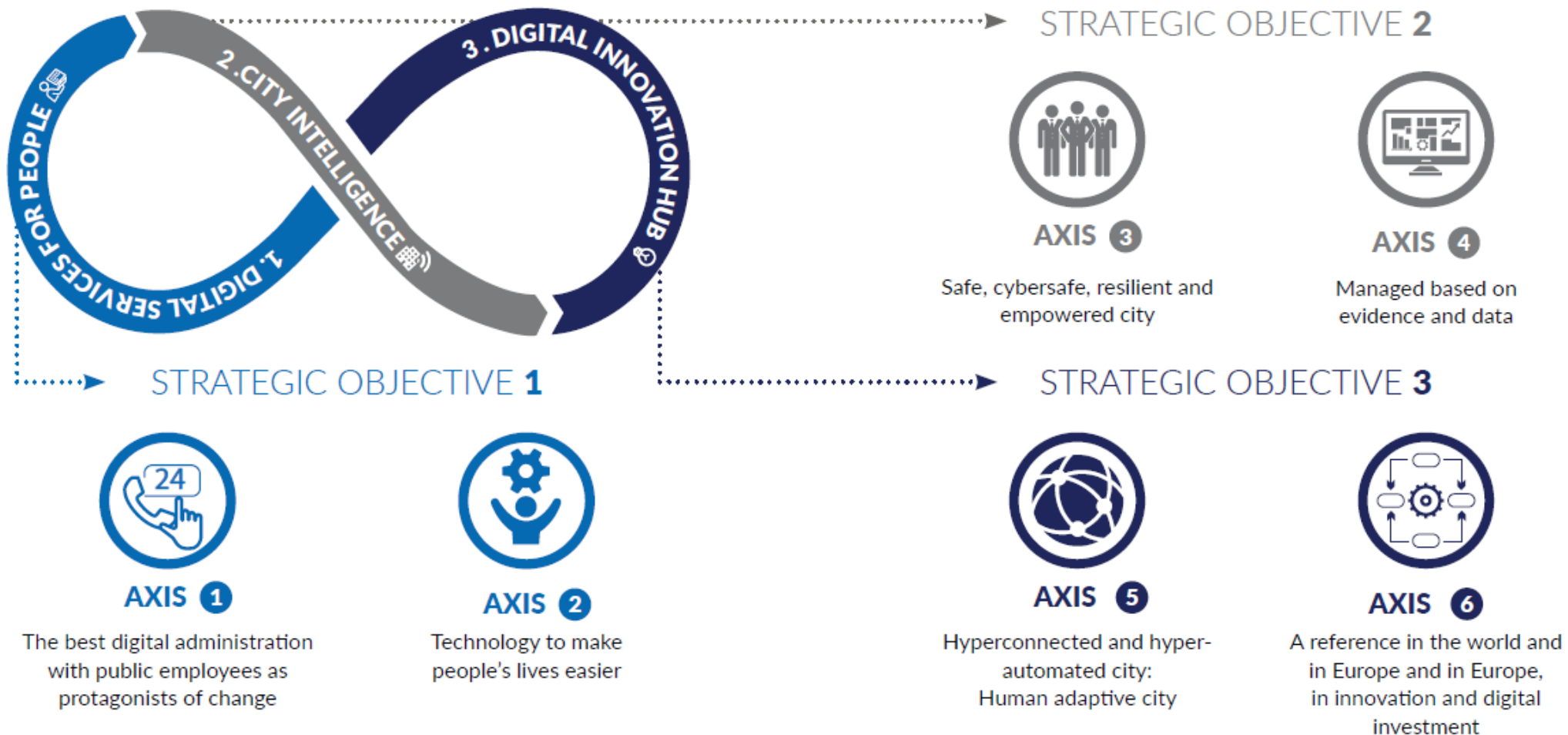**Madrid's Digital Transformation Strategy 2023-2027**

IT'S NOT JUST ABOUT TECHNOLOGY

IT'S ABOUT PEOPLE

Two strategic axes are configured around each of the strategic objectives, which are outlined as a tool for **defining the scope and sphere of action** of the objective.

Strategic axes

STRATEGIC OBJECTIVE 2

AXIS ③
Safe, cybersafe, resilient and empowered city

AXIS ④
Managed based on evidence and data

STRATEGIC OBJECTIVE 1

STRATEGIC OBJECTIVE 3

AXIS ①
The best digital administration with public employees as protagonists of change

AXIS ②
Technology to make people's lives easier

AXIS ⑤
Hyperconnected and hyper-automated city: Human adaptive city

AXIS ⑥
A reference in the world and in Europe and in Europe, in innovation and digital investment

The Strategy builds on and integrates action plans designed to incorporate emerging technologies that facilitate and accelerate digitisation of municipal and city services. **PACKAGE OF IT STRATEGIES**

An ambitious but realistic strategy

Digital Transformation Strategy 2023-2027

Rationalisation and simplification action plan

Artificial Intelligence Roadmap

Mobile App Strategy

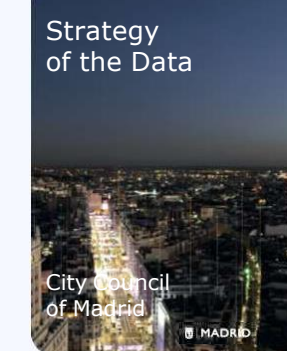**Cybersecurity Strategy**

Madrid GovTech Programme

Digital Administration Plan

5G Agenda

Multicloud strategy

Data Strategy

Digital Training Plan

Digital Twin

City Brain

5G_IoT Hyperconnected City

City Intelligence Madrid Smart City

Inclusive, Close and Capable City

Digital Skills for ALL

5.0 City Council Smart Process Platform

AI & Automatisation

Integrated Citizen Service Platform

Contracting

Digital Capital

Main characteristics of the specifications:

- They guarantee compliance with the measures of the Government Program
- Cross-cutting services: they respond to measures and strategies
- Managers by provision: transversal projects-transversal teams
- Monitoring indicators for permanent evaluation of the degree of compliance

L I C I T A C I O N E S

Management Intelligent Processes	Attention Integral Citizen	Spaces Urban Smart	Digital Twin	Digital Brain	Competences and Inclusion Digital	Contest Ideas Govtech	Center Transformation Digital

New generation of contracts

PRESTACIONES

- P1 - Análisis y KPI
- P2 - Componentes – Core
- P3 – IA
- P4 – Govtech
- P5 – Capacitación
- P6 – Ciudadanos
- P7 - Comunicación

OUR VISION TODAY AFTER 3 YEARS...

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From the Smartcity to a 5.0 City

OPEN, NEUTRAL AND INTEROPERABLE City

5.0 City
REALTIMEcity

PeopleCentred

HUMANcity

Secure, Ethical, Cybersafe & Resilient Automation AI

Social Environmental & Economic Sustainability

HUMAN ADAPTIVE CITY

Main topics:

- Madrid usercetricity:
- INTELLIGENT PROCESS MANAGEMENT
- New generation of Smart & Sustainable Cities
- Urban Intelligent spaces: People first
- Hyperconnectivity
  - Interoperability
  - 5G / 6G
  - IoT
- Hyperautomation
  - Dataspaces
  - AI
  - Digital Twin
  - City Brain
- Dynamic & Flexible manage of services
- Intensity of use – Flexible taxs
- Replicability & Scalability

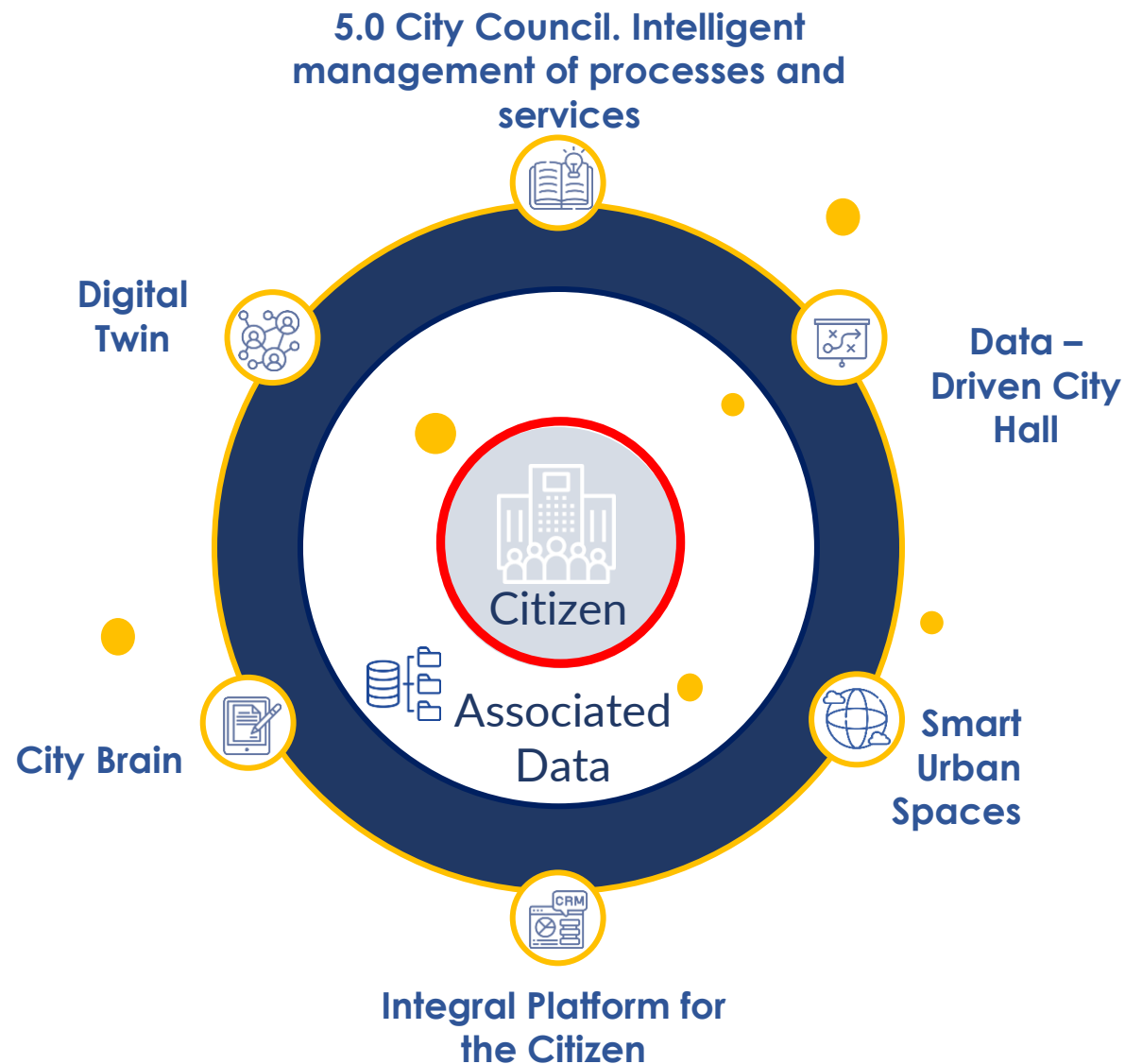**MORE HUMAN, GREENER, DIGITAL AND SUSTAINABLE**

DATA, DATA
&
MORE DATA

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We identified a set of **transversal and transformative projects** for Madrid City Council related to the Digital Twin project, associated with a revolution in the **use of data** associated with the citizen in order to offer more **personalised, adapted and higher quality services**.

5.0 City Council. Intelligent management of processes and services

Digital Twin

Data – Driven City Hall

Citizen

Associated Data

City Brain

Smart Urban Spaces

Integral Platform for the Citizen

OUR VISION:

DIGITAL TWIN
OF DIGITAL TWINS

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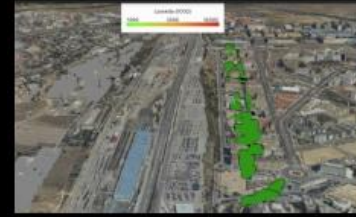## OPEN & INTEROPERABLE CITY

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DIGITAL-TWIN: USES CASES

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- The aim is to design a digital twin platform that provides a flexible, scalable and interoperable solution for various technologies, industries and use cases.

- The platform will be designed to be deployable across multiple cloud providers making it adaptive (**agnostic and cloud-ready**).

- It will use geo-featured data from municipal services that make up a GeoDataLake that will enable advanced analytics with geospatial capabilities (**data is king**).

- The capabilities of the Digital Twin Platform will be integrated and offered as a service that can be consumed by users and other systems through APIs (**as a service**).
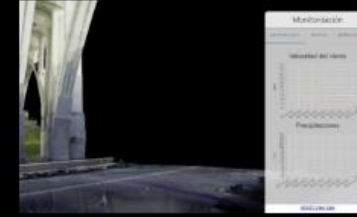
https://gemelo.madrid.es/en

VSD Madrid New North
Learn more →

VSD Bailén Bridge
Learn more →

VSD Madrid Half Marathon
Learn more →

VSD City Inventory
Learn more →

VSD Mercamadrid
Learn more →

VSD Parade of Kings
Learn more →

EUI Smart Urban Space
Learn more →

VSD Landscape of Light
Learn more →

VSD Santiago Bernabeu
Learn more →

VSD Citizen Sentiment
Learn more →

VSD M30 "Madrid Nudo Norte"
Learn more →

VSD Urban Planning
Learn more →

5G Corridors

Smart Urban Spaces with 5G connectivity to develop interoperable use cases in real-world demonstrator environments.

MONCLOA - ARAVACA

ETSIT
Investigación en bandas milimétricas
En licitación

Casa de Campo
Drones, Videojuegos, SAMUR 5G
En licitación

EME5GENCIAS
Network Slices para emergencias
En licitación

Ciudad Universitaria
5G para otras especialidades
*Diseñado, pendiente de financiación
(UNICO 5G)*

CORREDORES URBANOS 5G

CENTRO

Oficina de Turismo
Realidad eXtendida
*Diseñado, pendiente de
financiación (UNICO 5G)*

VILLAVERDE

La Nave
Vehículo autónomo
*Diseñado, pendiente de
financiación (UNICO 5G)*

VILLA DE VALLECAS

Valdemingómez
Entorno Industrial
En adjudicación

Mercamadrid
Vehículo autónomo
Diseñado con financiación HORIZON 2020

ARGANZUELA

Matadero
Mayores, Medialab y videoarte
*Diseñado, pendiente de financiación
(UNICO 5G)*

Centros de Innovación
SAN BLAS
MORATALAZ
VICÁLVARO
PUENTE DE VALLECAS
CARABANCHEL
VILLAVERDE

https://youtu.be/7WDep
Xg5SUc&list=PLaxP1gUf9
OHFZW8Q4SGWQV83Z6v
-Gwnl2

What is a smart urban space?

DEMONSTRATOR, HYPERCONNECTED, DATA-DRIVEN SPACES, with intensive application of **SUSTAINABLE TECHNOLOGIES** for a smart and climate-neutral Madrid by 2030.

MADRID INTEROPERABILITY CITY FRAMEWORK: COLABORATION IS THE KEY: OMA, AIOTI, SMART DATA MODELS
EIF4SCC - EUROPEAN INTEROPERABILITY FRAMEWORK FOR SMART CITIES AND COMMUNITIES

The EUI are

1. Specific **physical spaces** in Madrid
2. End-to-end IoT demonstrators: **real citizen experience**.

Services tailored to people and needs

1. **Measure**: SENSORS in urban facilities -> reliable data
2. **Interact**: apps on citizens' mobile phones, signage...
3. **Data-based management**: Big Data, AI -> Digital Twin

The challenges and advantages of the interoperability of the equipment installed in the EUI
Interdisciplinary: environmental sensors, energy meters, lighting network, traffic lights, street furniture, containers, sensors in trees, in urban installations, etc.
Designing the city of the future according to the PRINCIPLES OF THE TWIN TRANSITION (GREEN & DIGITAL).

They are not sandboxes. They are operated by the companies in charge of the public services there.

Vision & Conceptual Model

NO ONE BEHIND

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Digital
Capital

DIGITAL INCLUSION

Digital skills for all

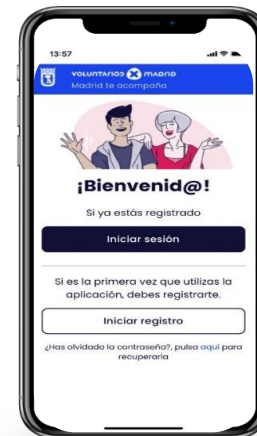*"Digital Training, city talent"*

Human technology

"Digital Services for people"

Volunteering

- Serving 500,000 seniors
- More than 18,000 volunteers

emancipatic

VOLUNTARIOS MADRID

PALOMA

PALOMA is a social intervention project that uses Artificial Intelligence to DETECT AND COMBAT UNWANTED LONELINESS in people over 75 years of age. The system makes phone calls and analyzes responses to identify risk cases.

1	*Detection*
2	*Intervention*
3	*Improvement*

AI for the PEOPLE

Capital Digital

Thanks

HUMAN, GREENER, DIGITAL AND SUSTAINABLE

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https://www.linkedin.com/in/oficina-digital-madrid/

oficinadigital@madrid.es

The European Commission has awarded Madrid the EU Mission Label for Smart and Climate-Neutral Cities.