



## European Digital Innovation Hub Madrid Region



### EDIH-MADRID REGION

EUROPEAN DIGITAL INNOVATION HUB – MADRID REGION

## D 6.1 REPORT SERVICES PROVIDED DURING THE FIRST YEAR. WP6

---

Task 1.2

Issued by:

Issued data:

26/03/2025

Work Package Leader:

Comunidad de Madrid (CM)

Written By:

Elvira Albarrán

Document history	
Version	Issued Date
D 6.1 v1	26/03/2025



EDIH-MADRID REGION has received funding from the Digital Europe Programme (DIGITAL) under the grant agreement No 101083564

## TABLE OF CONTENT

Executive Summary .....	3
Introduction .....	3
Description of services provided WP6 .....	4
Service Delivery Analysis .....	5
Best practices and Continuous Improvement .....	9
Conclusions .....	9

## Executive Summary

This document explains the procedures to evaluate and report the quality of the services provided by EDIH MADRID REGION during the first year of the project. The main goal is to help project managers and stakeholders to assess the performance and take informed decisions for the future phases of the project. This deliverable is addressed to Work Package 6 (WP6) and focuses in providing digitalization support services specifically for the public sector in the Madrid region. The main objective is to improve the digital capabilities of public sector entities (municipalities and other public companies), making them more efficient and digitalized.

## Introduction

The EDIH MADRID REGION project aims to establish a European Digital Innovation Hub (EDIH) in Madrid, with the goal to digitize the public sector and small to medium enterprises (SMEs).

The primary goals of the project include:

- Accelerate the digital transformation of SMEs and public sector organisations in the Madrid region (municipalities with less than 20.000 inhabitants and regionalized public sector companies)
- Provide support services like digital maturity assessments, skill development, and helping to find public investments for their digital transformation.
- Promote the integration of advanced digital technologies to improve digital operational actions by testing some of the most advanced technologies in the market.

The project focuses in the following key sectors:

- SMEs in the service industry.
- Industrial SMEs transitioning to Industry 4.0.
- Regional and municipal public administrations.
- Mobility and transport sectors.

The project started on December 1, 2022, and has a duration of 36 months, with phases for implementation, monitoring, and evaluation. In this deliverable, the analysis focus on the services provided during the first 18 months of the project (50% of the total timeline) and evaluates the achievements and problems found in WP6: Municipalities and public sector regionalized companies.

A key element of the EDIH MADRID REGION project is its focus on the digital transformation of regional and municipal public administrations. This is achieved through detailed digital maturity assessments and customised support services for the public sector. The main aim is to improve the digital capacity of these entities, making them more efficient and improving their operational performance.

**Objectives Enhanced Digital Capabilities:** improving digital maturity and capabilities within the public sector.

**The objectives of the project related to public sector digitalization include:**

- **Enhanced Digital Capabilities:** Improve digital maturity and capabilities within the public sector.
- **Efficient Service Delivery:** Achieve more efficient and effective public services through digital technologies.
- **Skilled Workforce:** Develop a public sector workforce with skills to use digital tools effectively.
- **Implementation of Digital Solutions:** Ensure the adoption and success of tested digital solutions.
- **Secured Funding:** Facilitate access to financial resources for digital transformation projects.

**Partners Involved in WP6**

1. **Comunidad de Madrid (CM):** As the lead beneficiary, CM oversees the coordination of all WP6 activities, ensuring they align with regional digital strategies and address the specific needs of the public sector.
2. **Fundación para el Conocimiento madrimsd (MADRIMASD):** Provides essential methodological support and ensures the quality and consistency of digital transformation services to maximize their effectiveness.
3. **Universidad Carlos III de Madrid (UC3M):** Contributes academic expertise and access to advanced digital tools to support digital maturity assessments and testing services.
4. **Entidad de Gestión de Derechos de los Productores Audiovisuales (EGEDA):** Manages educational and digital content resources, supporting the digital transformation of public sector education and communication initiatives.
5. **Asociación de Empresarios del Henares (AEDHE):** Offers business support and conducts digital maturity assessments for public sector organizations, leveraging their deep understanding of local needs.
6. **Hewlett-Packard Servicios España (HPE):** Provides high-performance computing resources and technical expertise to facilitate advanced digital assessments and implement tailored digital solutions.

## Description of services provided WP6

The following services have been provided:

- **Test before invest,**

3 dmas have been carried out to public services:

- All are Town Councils , 2 of towns with less than 20,000 inhabitants. For the City Councils, personal interviews have been carried out with each one to carry out the DMA and identify their needs.

- **Training services**

A total of 5 training activities have been conducted in universities, and town councils with the following contents all of them based on Artificial Intelligence and Decision support.

- **Networking and access to innovation ecosystems**

Two events of networking have been conducted on city councils for mobility solutions

## Service Delivery Analysis

These services include everything from digital transformation projects and tools for data-driven decision-making to platforms for citizen engagement and smart city solutions. The main goal is to drive sustainable development **and bring public administration up to date**. Each service is designed with an emphasis on quality, scalability, and aligning with the broader objectives of improving public services and fostering innovation across municipalities and other public sector organizations.

### List of Services to Public Sector

- 1- **Virtual assistant services** for city councils, promotional videos of municipalities accessible through QR and NFC and a robotics and artificial intelligence solution for the rehabilitation of minors are being managed for application.

- 2- **Chatbot for Web Municipalities**

An AI-powered chatbot designed specifically for municipal websites to enhance citizen engagement and streamline public services. This intelligent virtual assistant provides 24/7 support, answering frequently asked questions, guiding users to relevant resources, and assisting with common tasks such as appointment scheduling, service requests, or document submissions.

The chatbot is customizable to reflect the municipality's specific services and policies, ensuring accurate and relevant information for users. By automating routine inquiries, it reduces the workload on municipal staff and improves the efficiency of public service delivery, offering a seamless, user-friendly experience for residents.

- 3- **Email Security and Vulnerability Study**

This service involves conducting a comprehensive assessment of the City Council's email security and exposure levels. The study aims to identify vulnerabilities, evaluate potential risks, and assess the level of awareness and training among municipal employees regarding cybersecurity threats. These threats include phishing attacks, ransomware, trojans, and data theft. The findings will help implement targeted strategies to strengthen email security and enhance staff preparedness to mitigate risks effectively.

- 4- **Creation of Accessible Digital Content Using NFC and QR Chips**

This service focuses on the development of audiovisual digital content to promote an accessible municipality. By integrating Near Field Communication (NFC) and Quick Response (QR) chips, municipalities can offer interactive and inclusive content that improves access to information and services for all citizens, including those with disabilities. This initiative underscores the commitment to fostering an inclusive community through innovative technology.

- 5- **Development of an AI-Powered Virtual Assistant**

This service entails creating a virtual assistant equipped with Artificial Intelligence to provide location-specific information. Hosted on a tablet, the virtual assistant supports both text and voice interactions, offering an intuitive and user-friendly way for citizens and visitors to access essential information about municipal services and locations. This solution enhances the accessibility and efficiency of public information delivery.

## 6- **Cybersecurity Audit of Municipal Websites**

This study evaluates the cybersecurity status of municipal websites across the region. The assessment aims to identify vulnerabilities, propose specific recommendations for improvement, and develop actionable policies to enhance the cybersecurity posture of each City Council. By addressing potential risks proactively, this service ensures the safety and reliability of digital resources for municipalities and their residents.

## 7- **Pilot Test of a Rehabilitation and Training Solution Using Social Robotics and AI**

This functional pilot project tests a solution that integrates assistive social robotics and Artificial Intelligence for rehabilitation and training purposes. The initiative explores innovative ways to support individuals in need of rehabilitation, offering personalized and interactive training experiences. By leveraging cutting-edge technologies, this service aims to improve the quality of life and foster greater independence for users.

- 8- **On-street automated parking in regulated zones:** Connected car technology, implementable via software or through a device connected to the vehicle (dongle), to efficiently manage parking in regulated areas.
- 9- **Digital auditorium for audiovisual content and streaming events:** A platform for disseminating content and organizing online events, facilitating communication and citizen engagement.
- 10- **Training in digitalization and creating learning experiences in corporate environments:** Training programs to develop and digitalize learning experiences in corporate settings, enhancing employees' digital competencies.
- 11- **Support for businesses within the European Single Market:** Assistance to take advantage of opportunities provided by the European Single Market, facilitating cross-border collaboration and expansion.
- 12- **Digitalization roadmap:** Development of a personalized strategic plan recommending how to effectively approach the digitalization process.
- 13- **Incident control for public transport infrastructure:** SaaS platform for monitoring and managing incidents in public transport infrastructure, improving operational efficiency.
- 14- **Personalized advice for strategic business decision-making:** Specialized consultancy to support strategic decision-making, optimizing business performance and competitiveness.
- 15- **Electric bike subscription:** Subscription system for electric fleets allowing companies to provide sustainable vehicles to their employees, promoting eco-friendly mobility.
- 16- **Support for applying for funding for innovative projects:** Assistance in preparing and submitting applications for funding for innovative projects, facilitating access to financial resources.
- 17- **Measurement of mobility patterns and healthy habits, with incentives:** A tool to encourage sustainable habits among employees and stakeholders, using technology to monitor and promote healthy practices.
- 18- **Access to EU funding programs:** Guidance to identify and apply for European Union funding programs, supporting the development and growth of local projects.

- 19- **Implementation of open data platforms:** Support in setting up and managing open data platforms to promote transparency and facilitate access to public information.
- 20- **Digitalization of administrative processes:** Services to streamline and automate administrative workflows, enhancing efficiency and reducing manual tasks.
- 21- **Smart city solutions:** Deployment of technological tools and platforms to transform municipalities into smart cities, improving urban management and citizen services.
- 22- **Cybersecurity audits and consulting:** Comprehensive evaluation of IT systems to identify vulnerabilities and recommend measures to enhance cybersecurity in public administration.
- 23- **Advanced data analytics for decision-making:** Implementation of analytics tools to process and interpret large datasets, enabling informed decision-making in public policies.
- 24- **Training in green and digital transformation:** Capacity-building programs focused on combining sustainability initiatives with digital technologies for holistic development.
- 25- **Cloud adoption for public administration:** Guidance and technical support to migrate systems and services to cloud platforms, improving scalability and accessibility.
- 26- **IoT integration for public services:** Solutions to integrate Internet of Things (IoT) devices into public infrastructure, enabling smarter and more efficient service delivery.
- 27- **Citizen engagement platforms:** Development of digital platforms to enhance communication and interaction between local governments and citizens.
- 28- **AI-powered chatbots for public services:** Implementation of AI-driven chatbots to assist citizens with inquiries and provide faster service response times.
- 29- **Municipal energy efficiency solutions:** Technological initiatives to monitor and optimize energy usage in public buildings and infrastructure.
- 30- **Digital twin creation for urban planning:** Development of digital replicas of cities or municipalities to simulate and plan urban development projects
- 31- **Blockchain for public administration:** Solutions to implement blockchain technology for secure and transparent management of public records and processes.
- 32- **Digital skills assessment for public employees:** Tools and methodologies to evaluate the digital competencies of municipal employees and identify areas for improvement.
- 33- **Public procurement digitalization:** Services to digitize and optimize procurement processes, enhancing efficiency and transparency in public contracts.
- 34- **Disaster recovery and business continuity plans:** Development of robust strategies to ensure public services remain operational during and after emergencies or disruptions.
- 35- **GIS (Geographic Information System) solutions:** Implementation of GIS tools to improve territorial planning and management, aiding municipalities in decision-making processes.
- 36- **Sustainability tracking and reporting platforms:** Creation of digital platforms to monitor and report on sustainability initiatives and environmental impact.
- 37- **Integration of 5G technologies:** Support for deploying 5G infrastructure to enhance connectivity and enable advanced digital services in municipalities.
- 38- **Digital identity and e-government solutions:** Implementation of secure digital identity systems and platforms to facilitate online access to public services for citizens.

- 39- **Predictive maintenance for public infrastructure:** Application of advanced analytics and IoT to predict and prevent failures in public facilities and infrastructure.
- 40- **Smart lighting systems for municipalities:** Deployment of energy-efficient and intelligent lighting solutions to reduce costs and improve urban infrastructure.
- 41- **Digital health monitoring systems:** Tools to support public health management, including monitoring health trends and optimizing healthcare delivery in local communities.
- 42- **CRM implementation consulting:** Expert advice to implement a Customer Relationship Management system effectively.
- 43- **Carpooling service for public and private organizations:** Shared mobility solutions for municipalities, universities, and businesses.

### **How services have been offered and implemented**

Firstly, we decided to address the DMA and services to municipalities with less than 20.000 inhabitants of the Comunidad de Madrid. This decision has been addressed as we believe that this is the public sector will less possibly access to digital services, as some of them don't have technical departments. This does not mean that other municipalities or public sector entities will not receive our services, but our communication efforts have been done on these municipalities, to begin with.

In this first year, the interviews with the town councils have been organized, so only 3 have been carried out, as the period ends at the beginning of the interviews. It has been organized to conduct a series of interviews to identify and document the specific needs and priorities of each locality. This process included providing hands-on support to municipal representatives in completing the Digital Maturity Assessment (DMA), ensuring that the collected data accurately represented their current level of digitalization.

The results of these interviews were carefully cross-checked against our service excel and aligned with the digitalization percentages outlined in the DMA.

The interviews were carried out by two digitalization specialists whose knowledge played a key role in the success of the initiative. These discussions helped uncover the specific challenges and opportunities each municipality faces, allowing for the creation of strategies tailored to their unique needs while contributing to broader digital transformation efforts. This organized and collaborative approach shows a strong dedication to promoting inclusive and effective digital growth across the Community of Madrid.

### **How Services They Have Been Offered**

In this first year, as the project is still in an early stage, only few services have been offered, as the DMAs are in the process of being carried out.

It is expected that by next year, the DMAs of municipalities with fewer than 20,000 inhabitants will be completed to enable the analysis and preparation of the action plan, which will include the most suitable services for their implementation.

### **Communication and centralization of contact**

The Community of Madrid has centralized communication as the entity responsible for Work Package 6



(WP6), ensuring an efficient and streamlined flow of information among all stakeholders. This approach helps coordinate actions effectively and reduces redundancies throughout the project.

As the lead for WP6, the Community of Madrid has taken on the responsibility of managing all communication efforts, ensuring municipalities are kept informed about the project's objectives, progress, and the services available to them. This centralized strategy ensures consistent messaging and promotes a shared understanding of the project's goals across the region, enabling a smoother and more cohesive implementation of the initiative.

The implementation of the DMAs has been planned as an initial contact with the different municipalities to establish a communication channel with them and continue the digitalization process, offering them various services in the next phase.

## Best practices and Continuous Improvement

During the first phase of the project, we have been focused on building a strong foundation for the delivery of services in the upcoming stages. This includes defining clear guidelines and frameworks for service provision, conducting detailed needs assessments to align services with the specific requirements of municipalities, and strengthening communication channels to ensure effective engagement with stakeholders, CM as a WP leader will be coordinating and centralization these communications.

These initial efforts have created positive expectations for the integration of digital solutions in municipalities across the Community of Madrid and other public entities. By taking a structured approach, the project is well-positioned to support the smooth adoption of innovative technologies, modernizing public administration and improving services for citizens.

To build on these findings, it is recommended to maintain regular communication with municipalities to ensure their evolving needs are met, invest in training programs to maximize the impact of digital solutions, and prioritize scalable and sustainable solutions to expand services to more public entities.

## Conclusions

The first year of the EDIH Madrid Region project have established a solid foundation for advancing digital transformation across municipalities and public sector entities in the Community of Madrid. It has been important to take a structured and focused approach, the project has made significant strides in assessing the digital maturity of these entities and addressing their specific needs.

The implementation of Digital Maturity Assessments (DMAs) project has started with the aim to know the real problems of the municipalities. Visit them will give us value information of the real problems they have in digitalization, some of them is as basic as not having people with a basic knowledge of possible digital solutions

For the next phase, the objective is to further develop the pillars established during the first year, conduct all DMAs for municipalities and other entities, consolidate the services, formulate action plans, and offer them for implementation to as many organizations as possible.