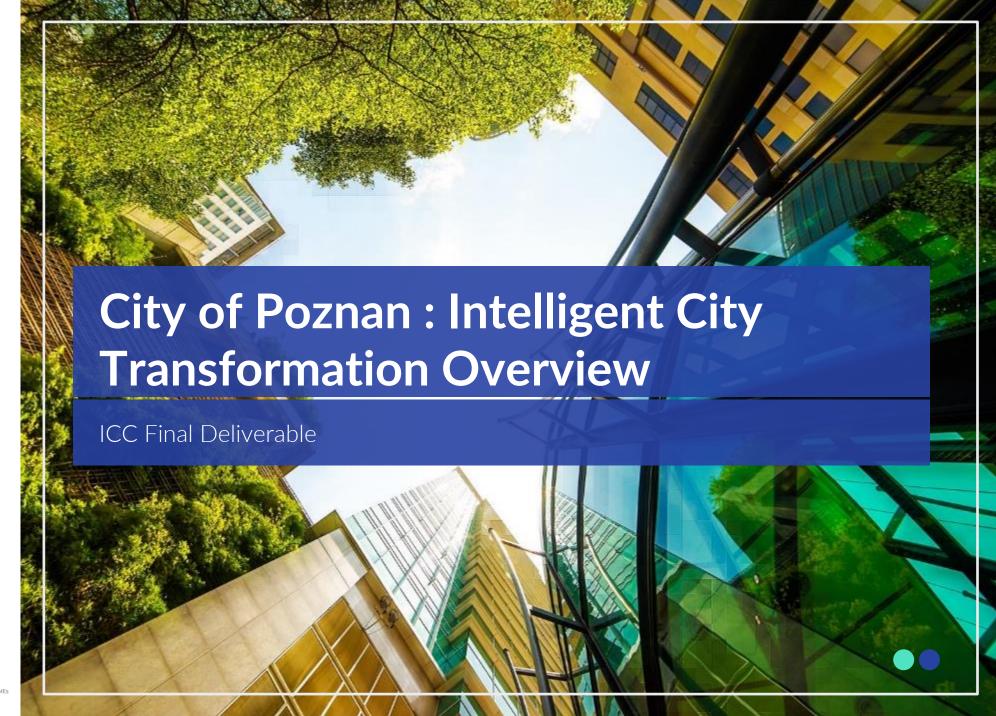
The European Commission's INTELLIGENT CITIES CHALLENGE

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Executive summary

Developing our city, making it the place we live in even better - we know we need to plan and act wisely. The direction is set by the UN Sustainable Development Goals. Particularly, Goal 11: To make cities and human settlements inclusive, safe, resilient and sustainable. Smart City Poznan Model focuses on Poznan residents. We want Poznan to be a safe, friendly, modern, and comfortable place to live.

Technology is a tool that we can use to reach our goals. Without technology, these goals will never be reached. If we want to provide high-quality services to our citizens, we have to use technology. In order to direct the development of the technology which will enable the implementation of the smart city idea, the Digital Transformation Program has been created. It corresponds with the general Development Strategy for the City of Poznan 2020+ as a document that defines the vision, goals and directions in information technology development and also complements the Smart Model. The proposed technological solutions will support the processes of the resident/ customer service and functioning of the City Hall. They will be designed so that they could be used on a long-term basis and gradually developed, reapplied or connected. It is for this reason that we have chosen three solutions based on technology, but ultimately designed to improve the quality of life for our residents:

- E-Services Platform -The goal is that in the area of administrative service to residents, modern public services should be characterized primarily by online accessibility. This means that we can use them 24 hours a day, from our own home, sitting on the couch with a laptop on our knees or a smartphone in our hand. An undeniable advantage of these services is their functionality, intuitiveness and, increasingly, simplicity of use.
- Open Data Platform Platform as a digital space for cooperation and interaction of city government, residents, business, science.
- The essence of data openness is both transparency in public administration and the ability to manage and make decisions based on municipal data. For this, an IT tool is needed: a platform to collect, share, analyze and draw conclusions from large data sets.
- Public Participation Platform Holistic resident participation, solutions and tools in one place.

During the course of the 100 ICCs, we consulted our lead expert Capgemini many times. They always supported us with professionalism and knowledge. This allowed us to better plan individual activities in the set goals. The added value was also the meetings with other cities, where we were able to exchange experiences, talk about the obstacles that European cities have to face. Often, regardless of their size or geographic location, we face similar challenges and seek answers to similar questions. These sessions were extremely informative and inspiring.

During the 100 ICCs we were able to prepare from the conceptual side - we observed good practices in other cities, we did a lot of analysis of implementations of similar solutions. We did a lot of work inside the Poznań City Hall, as much as possible without external funding. We believe that the key is to obtain external funding (mainly from the EU) to develop our three projects. Therefore, we will continue to search for them intensively in the coming months.

The city of Poznan pursued an EU-supported transformation over four main stages, and this document details that journey by these sections

Overview to the city's journey and structure of this document



Preparation & assessment

5 months: September 2020 – January 2021



Ambition & roadmap

3 months: February 2021 - April 2021



Implementation

15 months May 2021 - July 2022 60

Reported as one section

Review & way forward

2 months August 2022 - September 2022

Summary

Find out where a city is, where it should go and who in the ecosystem is going to mobilise make things happen

Develop a concrete plan to achieve measured improvements,

collaborating with the community; push action with immediate benefits

Get "big moves" done and see results; take action in partnership with others

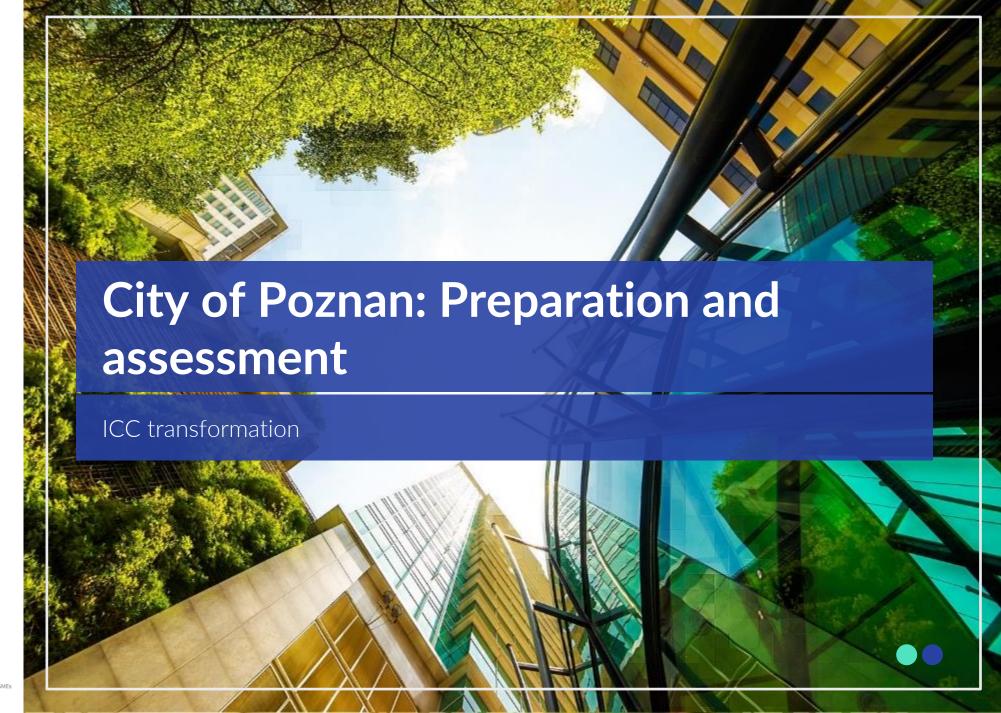
Measure success, and commit to keep connections and improvements going

The European Commission's INTELLIGENT CITIES CHALLENGE

Section

1

September 2020 to January 2021



1 Introduction

Poznań is the fifth-largest and one of the oldest cities in Poland. As of 2019, the city's population is 534,813, while the Poznań metropolitan area (Metropolia Poznań) comprising Poznań County and several other communities is inhabited by over 1 million people. It is the historical capital of the Greater Poland region and is currently the administrative capital of the province called Greater Poland Voivodeship. Poznań is a center of trade, sports, education, technology and tourism. It is an important academic site, with about 130,000 students and Adam Mickiewicz University, the third largest Polish university.

Poznań's involvement in the programme is strengthening the city's mission and vision for the 2030 and cooperation in the network of the cities helps to reflect and on the current actions and shapes future projects.

City needs: State of the city overview

Significance of insight to what we want to do on the ICC

Of critical importance to ICC journey and we should be working to

Of importance to ICC journey, and we should act to change this along the iourney as opportunity presents

Contextually relevant, but not major point of attention in ICC and unlikely to be impacted on the journey

The state of Poznan today

Today we recognize that the City of Poznan presents the features necessary to be called a smart city. However, the city it is striving to move up a level to become even smarter. In January 2017, the Development Strategy for the City of Poznan 2020+ was adopted. In that strategy the concept of a smart city was communicated for the first time. Since then, a Mayor's Proxy for Smart City was appointed to coordinate smart projects, as well the Smart City Team was established. The City of Poznan supports sharing of open public data and actively engages in developing solutions for smart urban space management. Therefore, the city is a member of organisations like Open & Agile Smart Cities and EUROCITIES. In the past months, the team has worked on Poznan's Smart City Strategy and also on the Digital Transformation Programme. In January 2020 together with another +65 cities we signed the political declaration 'Join, Boost, Sustain – Joining forces to boost sustainable digital transformation in cities and communities in the EU', which arised as a result of good cooperation with mentioned organisations.

The city's goal is to improve the quality of public services (administrative, social and municipal), ensure availability of high quality basic public services, accelerate administrative procedures and increase the level of use of modern technologies in contact with residents. Polish cities, including Poznan, still have a problem with the use of modern technologies that could be easily used in public tasks related to transport, municipal management, environmental protection and infrastructure and communication with residents. Despite a wide range of activities carried out by the City, there is still no comprehensive system of using the possibilities of modern digital technologies to create a fully interactive platform of e-services and Open Data, which would also integrate all the city's organisational units.

Key insights from city performance analysis

Higher performance observed

Poznań is one of the economically strongest cities in Poland. It is characterized by high potential for economic growth, a very low level of unemployment (1.4%) and the growing importance of small and medium-sized enterprises. The scientific and academic potential is high.

Lower performance observed

Providing an interactive platform of e-services and Open Data, which would also integrate all the city's organisational units

In the CBRE "EMEA Tech Cities" ranking, which presents the largest technology clusters in Europe, the Middle East and Africa, Poznan is at the forefront of the most technologically advanced cities - as a "Growth Cluster". According to the studies, Poznan reached a 64% increase in employment in this sector over the course of the last 10 years.

Establishing partnerships with private capital through public-private partnerships.

- Poznan is also a significant hub for shared service centres and outsourcing centres. Out of the 80 business service centres operating in Poznan, over 30 are related to IT, ITO or IT-oriented R&D, and another 10 have IT processes in their portfolio.
 - Speeding up administrative procedures, improving the skills of administrative staff, and increasing the use of modern technology in dealing with customers.
- The level of indicators in the Participation Index compiled by the Institute of Public Affairs shows that Poznań residents and NGOs can participate to a high degree in the process of public participation and the scale of public communication is
- Car traffic and parking spaces consume large areas of urban space, including green areas, taking them away from residents. It is therefore necessary to increase the share of other forms of transport in urban traffic.
- Enabling older people to actively participate in social and economic life serves to improve the quality of life and social capital, as well as to increase the competitiveness of the urban economy.
- Support more intensively the cooperation between scientists and entrepreneurs, especially in order to develop companies from the creative sectors and to better use the intellectual potential of universities for the development of the city.



ICC strategy: Vision and ambition statements



Overarching ICC city vision

Citizen participation and digitisation of public administration



Ambition statement 1

Modernization and increasing accessibility of high-quality public services



Ambition statement 2

Improving the communication with residents

3

Ambition statement 3

Cooperation of education, science and business to support/implement innovation

"Poznan 2030 is a city where all its residents can co-decide. The local authorities use modern forms of social dialogue and governing, and a smart system of support for local initiatives. The priority is the integration of local communities, based on direct human, intercultural, and inter-environmental relations, and on a consequent social policy of solidarity, unity, and tolerance. The policy of social coherence aimed at equalizing opportunities and satisfying needs of all people living in Poznan is very important. The participation in culture and sports causes and increase of the level of tolerance and openness – the social capital grows. Poznan observes the emergence of social innovations, which – where possible – are used for the promotion of a city positive image and for commercialization by Poznan companies from creative industry. The sense of community has a positive influence on the aesthetics of the residential estates, and - thanks to the cooperation of the residents with urban authorities – on the cleanliness of the closest environment. Smart solutions are used in all areas of life, as well as in business and city management. The whole city area is covered by broadband Internet. The City provides public services basing itself on a relational model supported by IT systems aimed at the cooperation with the residents and the entrepreneurs. The residents use a wide range of electronic public services in the local administration and consultation e-tools, and entrepreneurs - the e-platform of public procurements, in which the local authorities employ social and environmental clauses. The introduced possibility of 24h interactive communication of the administration with the clients facilitates easier access to information and a shortening of time needed to settle all matters. The open data constitute a basis for creating applications making life in the city easier. Poznan has an operating free platform that uses wide possibilities of the Internet, which enables not only the communication between people, but also between various devices (the Internet of Things)."

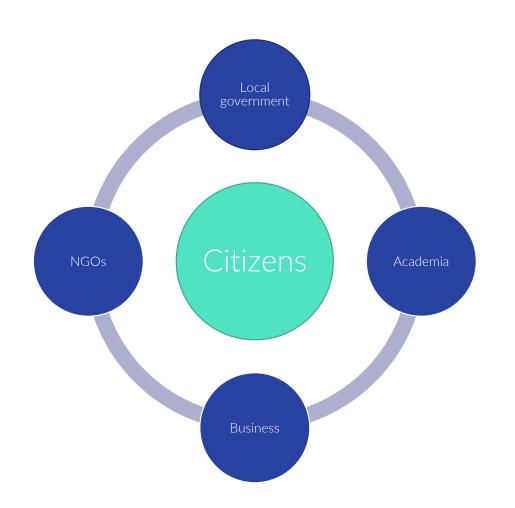
Development Strategy for the City of Poznan 2020+

3 City ecosystem

Key topics for discussion

- Shared aspirations and vision do all stakeholders see the city in the same light and believe we are already on a journey? Stakeholders share the same goal and vision and are ready to act. They see the importance of boosting citizen participation and improving digitisation of public administration.
- What we bring and how we work together what capabilities are different parties bringing to the party? Do we work
- together well in ecosystem situations?
 - Stakeholders commit to cooperate together, they see benefits of strengthen local government business academia NGOs connections.
 - **Urban resources for transformation** does our wider city more broadly have the typical assets needed for a major transformation like access to capital, a skilled labour force and critical thinking
- The city and its local network possesses a qualified staff and the ability to obtain funding for actions, as well as, have an experience in projects management and implementation.

3 City ecosystem



Local government

Poznan City Hall

Academia

- Poznan University of Technology
- Metropolitan Research Center, Adam Mickiewicz University in Poznan
- Poznań University of Economics
- Poznań Supercomputing and Networking Center

Business

- INEA Poznan
- Take&Drive
- Capgemini

NGOs

Altum Foundation

Executive summary of city ecosystem

Key local enablers

- Increased demand for digitisation
- Skills and experience of local enablers/innovators
- Recognition of the need for change
- Potential of obtaining an external funding
- Engaged residents and stakeholders
- IT companies & ICT Cluster

Key reflections

- ✓ Effective communication and promotion of the City's activities are a key to the citizen involvement in the city actions.
- ✓ It is also crucial to sustain the meet-ups of the local network.

 Network can work in a groups and be engage in a specific projects.
- ✓ From the beginning we should think how to finance a particular projects and what is feasible.

Key insights from interviews



Focusing on the e-services and open data platform



Increasing cooperation with the Poznan's universities and local business and SMEs; need for a regular meet-ups

City solutions and delivery strategy





Description

The services offered should be intuitive, mainly mobile, user-centric and supported by embedded intelligence. Their accessibility must be multi-channel, e.g. with digital assistants and natural interfaces for machine-to-machine and machine-to-machine communication. Most of the City eServices are integrally linked to the activities performed by the City Hall and therefore the Authority for these services must be seen as a Digital Authority Platform.



Relevant to which city ambition statement

Ambition statement 1:Modernization and increasing accessibility of high quality public services



Benefit to city

Residents can access data from wherever they are at, saving time, the ability to store documents online



Business model

To be updated



Parties interacting

Poznan City Hall, academia, local businesses, Poznań Supercomputing and Networking Center, ICT Cluster, startups, residents



Blockers and risks

Systems integration, habits & culture

Pending uncertainties

Solution technical requirements



City solutions and delivery strategy





Description

Launching a dedicated portal (in the so-called One Stop Shop model) aggregating three federated areas:

- Open Data SmartCity for business,
- Virtual Laboratory SmartCity for science,
- SmartCity Observatory for residents and local governments.



Relevant to which city ambition statement

Ambition statement 3: Cooperation of education, science and business to support/implement innovation



Benefit to city

Creating innovative services and new business models



Business model

To be updated



Parties interacting

Poznan City Hall, academia, local businesses, Poznań Supercomputing and Networking Center, ICT Cluster, startups, residents



Blockers and risks

Systems integration, habits & culture, finances, regulations



Pending uncertainties

Solution requirements



City solutions and delivery strategy



Solution #3
Public Participation Platform



Description

This platform will enable discussions, debates, civic budget consultations, ecological and transport consultations, consultations on development plans, development of social financing (crowdfunding), participation in scientific research (CITIZEN SCIENCE), building of volunteers around socially important tasks etc.



Relevant to which city ambition statement

Ambition statement 2: Improving the communication with residents



Benefit to city

It will facilitate cooperation between inhabitants and city, commune and housing estate councils in the area of decision-making.



Business model

To be updated



Parties interacting

Poznan City Hall, Urban Planning Office, Metropolitan Research Center, Adam Mickiewicz University in Poznan, Poznań Supercomputing and Networking Center, residents



Blockers and risks

Financial resources, implementation risk - high cost of the developed solution over the capabilities and benefits offered by the solution



Pending uncertainties

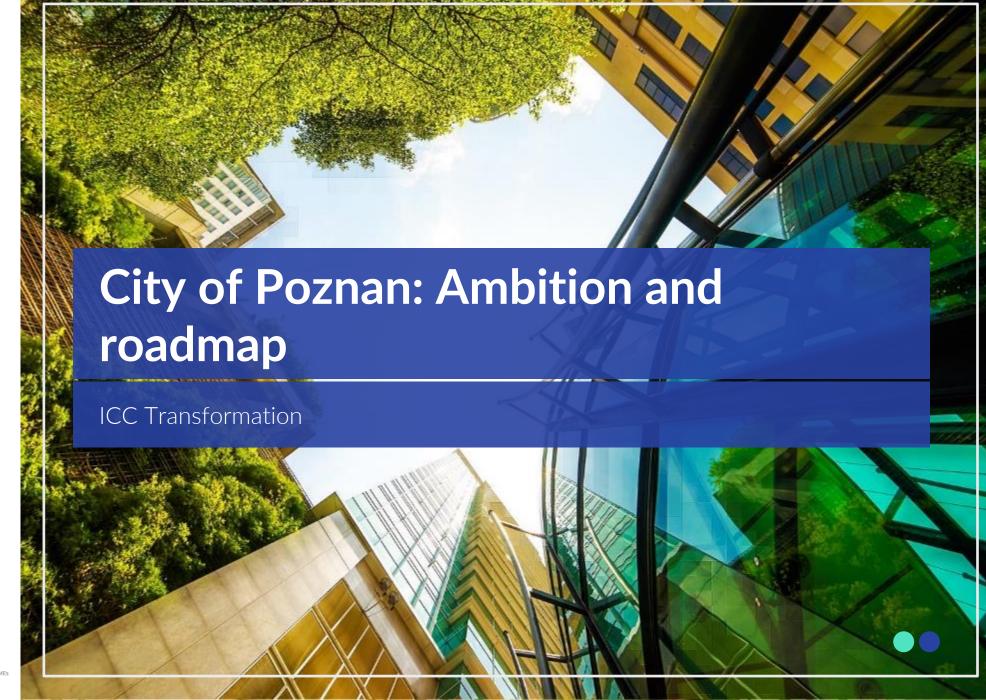
Solution structure and their owners

The European Commission's INTELLIGENT CITIES CHALLENGE

Section

2

February 2021 to May 2021



Roadmap summary

Poznan 2030 is a city where all its residents can co-decide. The local authorities use modern forms of social dialogue and governing, and a smart system of support for local initiatives. The priority is the integration of local communities, based on direct human, intercultural, and inter-environmental relations, and on a consequent social policy of solidarity, unity, and tolerance.

Ambition statement 1

Modernization and increasing accessibility of high-quality public services

Ambition statement 2
Improving the communication with residents

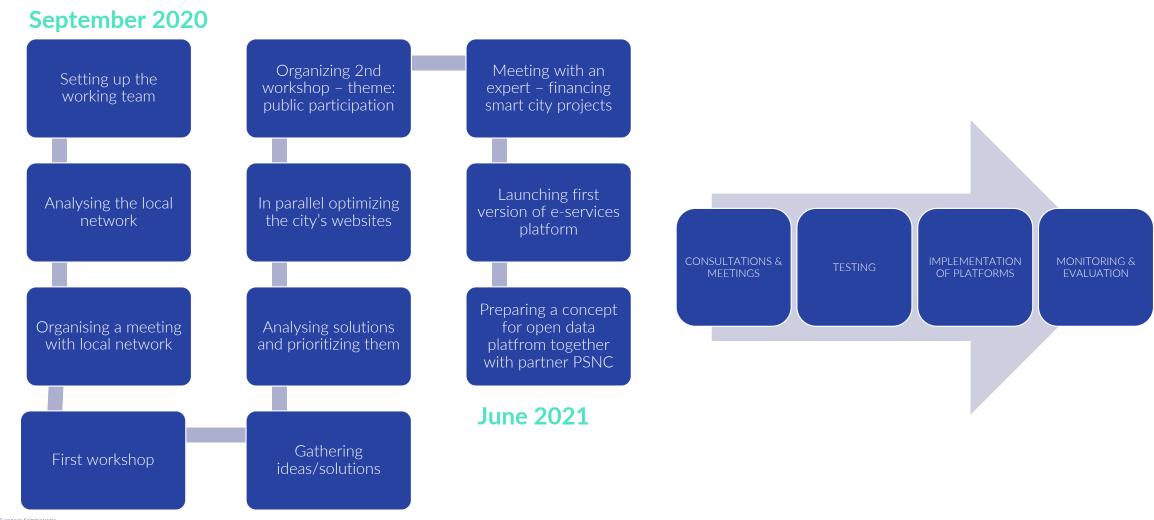
Ambition statement 3

Cooperation of education

Cooperation of education, science and business to support/implement innovation



Roadmap summary



Initiative charter

	E-services Platform	Open Data Platform	Public Participation Platform
Link to vision	The local authorities use modern forms of social dialogue and governing, and a smart system of support for local initiatives. The priority is the integration of citizen participation and digitalisation of public administration.	The local authorities use modern forms of social dialogue and governing, and a smart system of support for local initiatives. The priority is the integration of citizen participation and digitalisation of public administration.	The local authorities use modern forms of social dialogue and governing, and a smart system of support for local initiatives. The priority is the integration of citizen participation and digitialisation of public administration.
Link to ambition statement	Modernization and increasing accessibility of high-quality public services	Cooperation of education, science and business to support/implement innovation	Improving the gommunication with residents
Description	The services offered should be intuitive, mainly mobile, usercentric and supported by embedded intelligence. Their accessibility must be multi-channel, e.g. with digital assistants and natural interfaces for machine-to-machine and machine-to-machine communication. Most of the City eServices are integrally linked to the activities performed by the City Hall and therefore the Authority for these services must be seen as a Digital Authority Platform.	Providing multiple open data on the functioning of the city of Poznan, including data from the city's public transport card, air quality, traffic jams, events, environment, security, demography and quality of life, education, urban planning. Launching a dedicated portal (in the so-called One Stop Shop model) aggregating three federated areas: Open Data SmartCity for business, Virtual Laboratory SmartCity for science, SmartCity Observatory for residents and local governments.	This platform will enable discussions, debates, civic budget consultations, ecological and transport consultations, consultations on development plans, development of social financing (crowdfunding), participation in scientific research (CITIZEN SCIENCE), building of volunteers around socially important tasks etc.
Estimated cost and source of funding	200 - 500 thousand PLN (in the simplest variant: data server + web server + web applications -> standard technologies;); city budget + EU funds	150 - 250 thousands PLN	100 - 200 thousands PLN
Initiative lead	Digitalization and Cybersecurity Office	Digitalization and Cybersecurity Office	Digitalization and Cybersecurity Office
Initiative working team (core team)	Poznan City Hall, Poznan Supercomputing and Networking Centre, Poznan universities, private entities, startups, City Transport Authority, GEOPOZ - Department of Geodesy and Cadastre	At the beginning, mainly Poznan City Hall, Poznan Supercomputing and Networking Centre	Poznan City Hall – at the beginning all essential departments and city organizational units who are in charge of public consultations
Ultimate goal and scope of this initiative	Better quality of life of citizens – comfort of arranging visits at city hall	More StartUps, Business Growth	Better quality of life of citizens – The feeling that they have an impact on the development of the city

Open data platform and Citizen participation platform

Strategy

Description Open data platform



Proof of Concept based on data related to the location of public transport vehicles as an example of using analytical platforms as a component of the Open Data Platform

Citizen participation platform

Workshop, public consultations website, public consultations and workshop event micromobility, districts committees

Link to vision

Development Strategy for the City of Poznan 2020+, Poznan Smart City Model, Open Data Policy, Digital Transformation Programe,

Expected impact and timing



Open Data Platform - first proof of concept end of January 2021.

Stakeholders involved

Solution lead:

Digitalization and Cybersecurity Office



Solution working team:

Smart City Poznan Team, PSNC. Capgemini,



Contributors:

District Committees, city units and departments, NGOs



Risks and mitigation



Personal data management

Reluctance to share data

Stereotypes about opening data

The multitude of channels for the city to communicate with residents

Inputs, outputs, outcomes and impacts

City Hall Budget

Source of funding and estimated cost



Open Data Platform - provide data to inspire Solution startups and private enterprise maturity

> eServices, chatbot, voicebot - services accessible for all



outputs

Application Smart City Poznań - a multifaceted platform that promotes democratic action.

City performance outcomes and impacts



Multimedia air quality information boards at bus stops

The lowest unemployment rate in the region

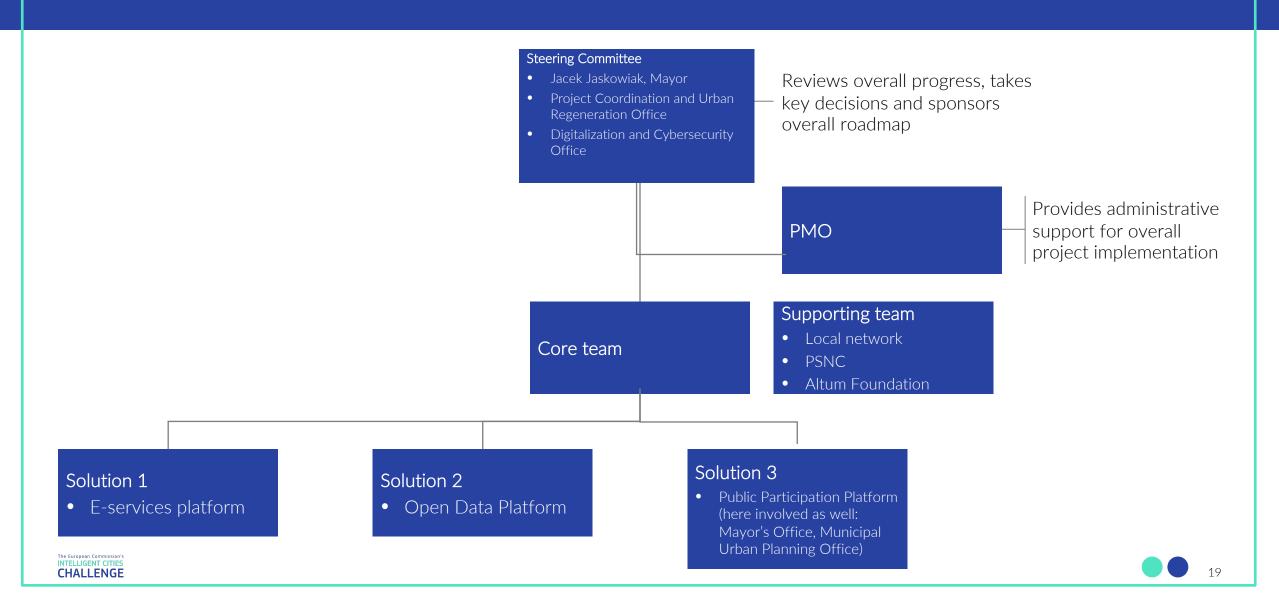
New investors

Digital services - parking ID, tax returns



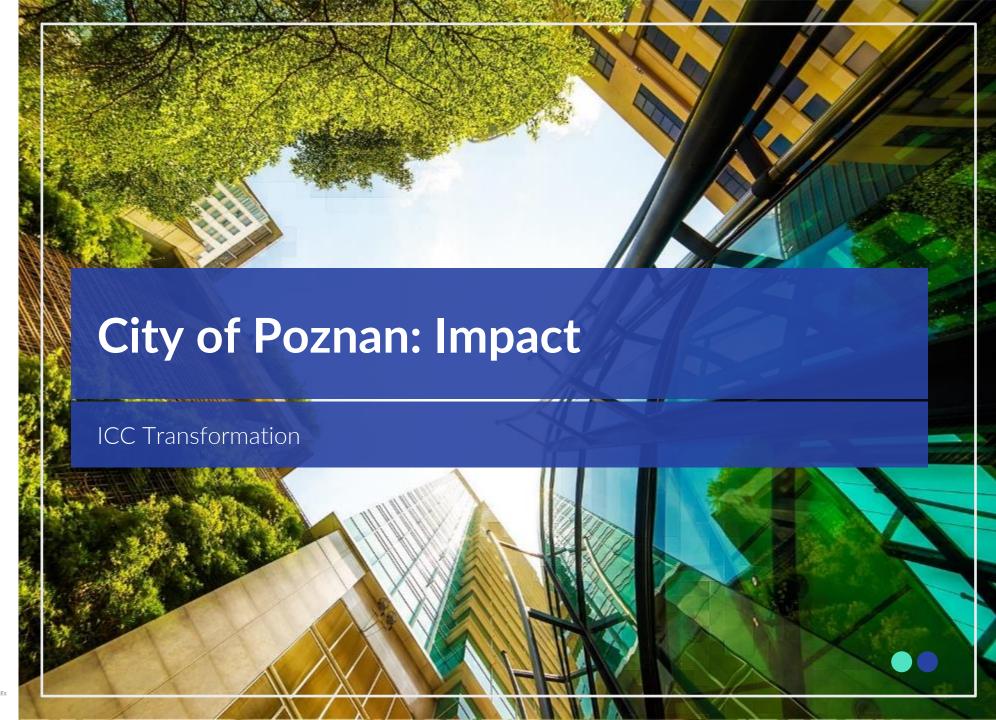


Governance structure for roadmap implementation



The European Commission's **INTELLIGENT CITIES CHALLENGE**

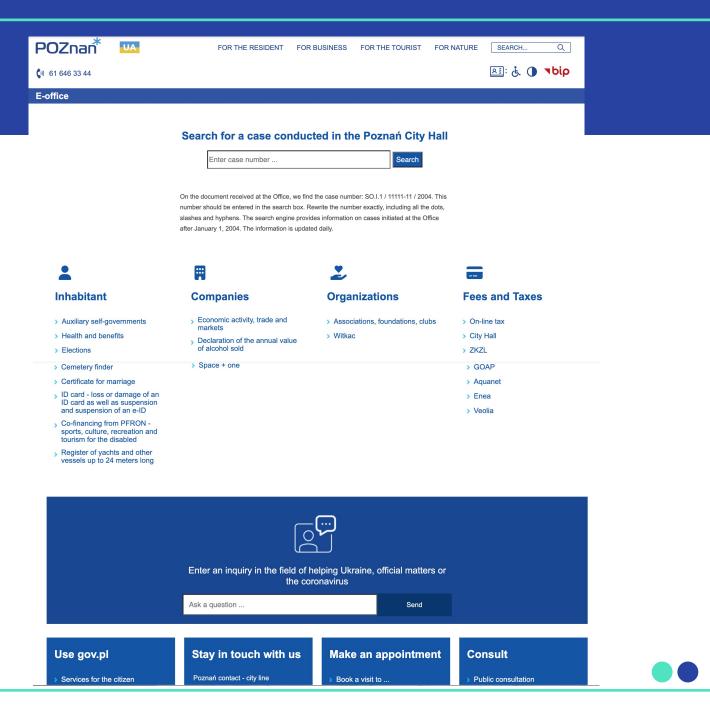
Section



E-Services Platform

In cooperation with our lead expert Capgemini, an audit of city websites was conducted twice, specifically targeting UX research. In addition, work was underway to expand the eservices of the Poznań City Hall.

As a result, the website was updated based on the latest trends and all standards, including digital accessibility.





Smart City Poznań



- The city is committed to create new ways of communicating with residents, as well as to improve existing ones.
- The application provides access to up-to-date notifications on road works, breakdowns, changes in public transportation and more. Thanks to Smart City Poznań, you will report initiatives such as cultural and social events or issues that should be addressed by city services. The application allows you to participate in surveys and polls, on topics of importance to your neighborhood.
- Through the application you can easily make an appointment at the city office or use other e-services such as the cemetery search service.

Public Participation Platform

Workshop with technical experts and many stakeholders about topic citizens participation.

Involved in the cooperation are:

Poznan City Hall, Capgemini, Adam Mickiewicz University, Poznan University of Economics and Business, Altum Foundation, Poznan Supercomputing and Networking Center, Take&Drive, Inea, city owned company (WCWI)

Micromobility in Poznań

A:





On Sunday, September 12, residents of Poznan had the opportunity to participate in the event "Hulaj przepisowo". The event organized by Poznan CityLab promoted safe micromobility in urban space. Many people enjoyed a free ride on an electric scooter and shared their opinion on the future of urban micromobility zones.



Micromobility in Poznań - discussions with residents



Simultaneously with the

work on the platform for

various forms of public

consultations are carried

out, often combined with

consultation we held in

2021. For them, we used

online surveys available,

city's Smart City Poznań

among others, in the

application.

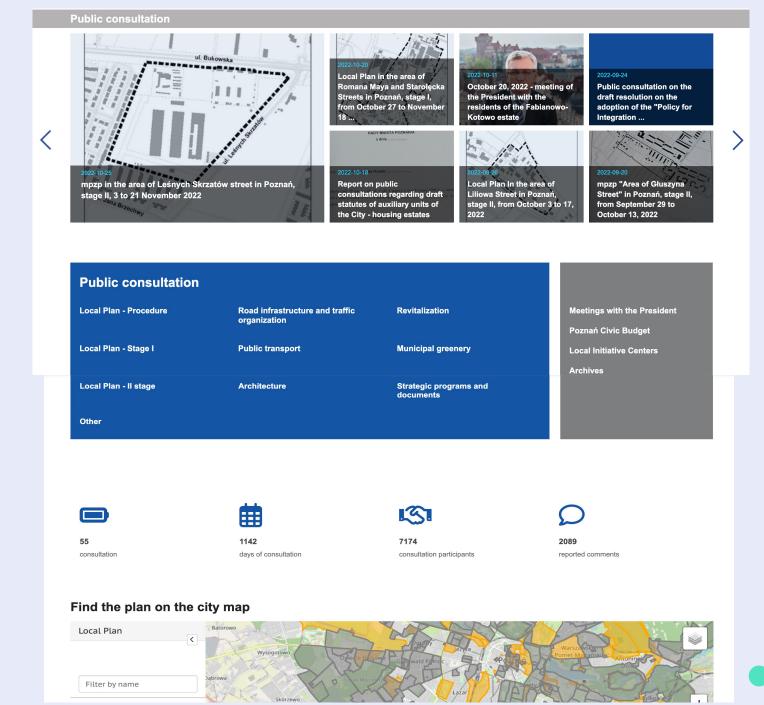
public participation,

workshops. Such an

example was the



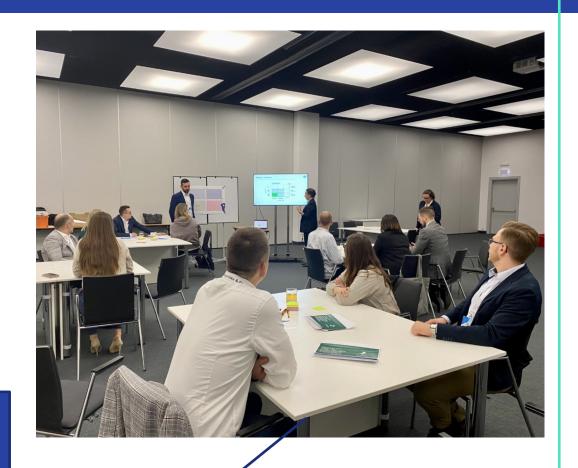
An updated public consultation website as the basis for a future public participation platform - an important element to integrate internal staff working on this topic.



Conference Smart City Wielkopolska & Guests 2022



What does the urban community want? Workshops open to all – we were working on an idea of Poznan City Lab which could use public participation platform as one of digital tools.



Open Data Platform



Pages PAGE TREE

- POC na bazie danych komunikacji
- Dokumentacja miejskich zbiorów
 - Dane carsharing
 - Dane meteorologiczne
- Dane przestrzenne
- · Gospodarka odpadami
- Interwencje straży miejskiej
- · Komunikacja miejska
- Liczba pasażerów komunikacji m
- Miejska sieć WiFi
- Monitoring ruchu pojazdów
- Pojazdy w strefie płatnego parko
- Przepływ wody w kanalizacji des
- Rezerwacje wizyt
- Stacje roweru miejskiego
- Statystyki odwiedzin stron
- Statystyki połączeń telefoniczny
- Wydarzenia miejskie

Pages / Otwarte dane dla miasta - platforma analityczna



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<u>W</u>atch

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Dokumentacja miejskich zbiorów danych

Created by Marcin Krystek, last modified on 14 Mar 2022

Doda	nowy
Doda	IIOVV

Title	Kategoria	Właściciel	Dostęp	Sposób dostępu	Zawartość
Dane przestrzenne	Geoinformacja	GEOPOZ	TAK	https://sip.poznan.pl/sip/	 zbiory danych przestrzennych w formacie rastrowym oraz wektorowym wszelkie dane mające charakter przestrzenny, zgłaszane przez inne jednostki miejskie, np informacje o awariach cyfrowy model budynków
Rezerwacje wizyt	Usługi IT	UMP + jednostki zależne	NIE	pośrednio poprzez logi usługi wysyłającej maile / sms'y	statystyki rezerwacji (zgłoszenia, anulowanie, itp)statystyczny czas obsługi
Statystyki połączeń telefonicznych - Poznań Kontakt	Usługi IT	UMP	TAK	API	 Informacja na temat liczby połączeń telefonicznych Informacja na temat kolejek (wirtualne nazwy kolejek) przykład osadzenia informacji - https://www.poznan.pl/kontakt/
Statystyki odwiedzin stron	Usługi IT	UMP/PCSS	TAK	Dostęp do logów serwera WWW	 statystyki wyświetleń poszczególnych stron serwisu
Dane carsharing	Komunikacja		NIE		lokalizacja - miejsce



Proof of Concept based on data related to the location of public transport vehicles as an example of using analytical platforms as a component of an Open Data Platform

- An example of incorporating open data into a City Data Platform
- In Poznan, we have a mechanism for sharing location data of public transport vehicles in the form of GTFS-RT files via API and in the passenger information system
- Solving the problem of sharing historical data will open up new possibilities for public transport analysis in Poznan
- Example scenarios

Open Data Platform

- Preparation of a model of the Open Data website for the city of Poznań. The portal is designed to to make available to all Internet users datasets that can be downloaded (and, to a certain extent, processed to a certain extent process) under open access. The data relates to issues related to residents, urban infrastructure, the environment and other resources on the territory of Poznań.
- Desk research, or a comparison of existing solutions on the market. We conducted an analysis of 7 portals Open Data type of cities from around the world (Seattle, New York, Los Angeles, Helsinki, London, Gdansk, Wroclaw).
- We prepared preliminary versions of prototypes based on use cases and established solutions:
- Home page
- Category page
- Search results
- Dataset card (basic / advanced)