

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

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Association of Municipalities and Towns of Slovenia: Intelligent City Transformation Overview

ICC Final Deliverable



Executive summary

Association of Municipalities and Towns of Slovenia (SOS) is a representative association of 179 municipalities out of a total of 212, which applied to the ICC in a consortium with its 12 interested members.

The consortium assessed real estate management, including short-term and occasional handovers, to be inefficient and therefore presented an untapped potential for improvement.

Access to communication infrastructure, services and data can support digital transformation and becomes more critical as more people and devices go online. Municipality representatives proposed the development of a new platform intended only for municipalities. After presentations of solution providers it turned out that this option would be expensive and that already developed online tools are more or less suitable for municipalities.

Therefore the municipalities selected two providers for the second round of presentations, considered to be the most suitable to provide an online tool as an upgrade of existing solution, which would reduce the cost of development. Finally, one provider's (www.sigmateh.si) proposal was favoured.

Mayor Foreword

Jasmina Vidmar, Secretary General

„During the implementation of the ICC project, we have faced many challenges in how to join the needs of different municipalities and communicate these needs to the market. On the other hand, we faced the challenge of how to communicate with companies fairly, not to put a specific company in an advance position.“

The SOS 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



1 Preparation & assessment

5 months:
September 2020 – January 2021



2 Ambition & roadmap

3 months:
February 2021 – April 2021



3 Implementation

15 months
May 2021 – July 2022



4 Review & way forward

2 months
August 2022 – September 2022

*Reported as
one section*

Summary

Within the consortium, two main horizontal challenges were recognized: **1) how to raise digital skills within the LG** (local government) and **2) how to start building ecosystem**, not only within communities between LG's, SME, NGO, citizens but also between them. Slovenian LG's are experiencing a lack of human and financial resources, which means they need to share resources in order to boost digital transition.

The roadmap contains activities to be performed for development of the main solution in 15 months along the following phases:

- Analysis** (As-Is, To-Be, Feasibility etc.);
- Online presentations** of different solution providers;
- Solution development** and testing; and
- Solution **dissemination** and after-implementation activities.

Municipal representatives: **Seven Municipalities confirmed interest** for solution development in Phase 2. But, some **other** (non-consortium) **municipalities** are also showing interests by actively engaging in ongoing activities.

We organized **presentations of different solution providers** and all interested municipalities **selected one** provider to cover the needs of all municipalities.

Section

1

Association of Municipalities and Towns of Slovenia: Preparation and assessment

ICC transformation

September 2020 to
January 2021

Introduction

At joint online meetings, the municipalities discussed and analysed their needs to be able to later search for a common (digital) solution that would address the needs of all, or at least most, municipalities.

Within the consortium, two main horizontal challenges were recognized:

- 1) how to raise digital skills within the local governments (LG), and
- 2) how to start building the ecosystem, not only within communities between LG's, SME's, NGO's, and citizens but also between them.

Slovenian LG's are experiencing a shortage of human and financial resources, which means resource sharing and resource pooling is needed to boost digital transition.

City needs: State of the city overview

 Of critical importance - and we should be working to change

 Of some importance - we should act if there's an opportunity

 Contextually relevant, but not major point

The state of ICC consortium of municipalities today

Access to communication infrastructure, services and data supports digital transformation and becomes more critical as more people and devices go online. During the Covid-19 epidemic, the importance of connectivity due to work and distance learning in individual local environments became even more pronounced. With several GOŠO tenders, the Ministry for Public Administration contributed to the improvement of the situation in market-interesting areas, while the measure was unsuccessful in less populated, geographically more demanding and thus less market-interesting areas. One of the indicators of the state of connectivity of municipalities is the data on network connection points in the Collective Cadastre of Economic Public Infrastructure <https://egp.gu.gov.si/egp/>. The data is captured and displayed by [4P DIH](#).

Prioritization of the needs of Slovenian municipalities

Higher performance observed

1 Access to the Internet 
A precondition for the use of new technologies is access to the Internet, Most of the city is covered by 3G / 4G networks. There is still room for improvement in offering free wifi in public areas and building more smart infrastructure

2 Citizens participation 
Currently, at municipal level, the possibility of using innovative public procurement is not used, as it also requires a good knowledge of the content of the tender (or needs) and knowledge of the implementation of the procedure. However, various initiatives have been taken by the citizens, but to a limited extent. With the digitization of public services, the citizens might be more invested in making changes.

Lower performance observed

1 Open Data 
Public sector institutions and organizations share little to no data. According to our experiences, municipalities do not know the added value of open data. Examples from practice, such as the presentation of municipal budgets - Transparency - do more harm than good.

2 Digitization of Public Services 
At the moment, a significant part of municipalities' services are not provided digitally. A lot can be done in order to be more citizen-friendly and to improve the availability of public services intended for citizens for the area of an individual municipality.

ICC consortium SOS ecosystem

National government/public administration:

- Ministry of Economic Development and Technology
- Government Office for Development and European Cohesion Policy
- Ministry of Public Administration

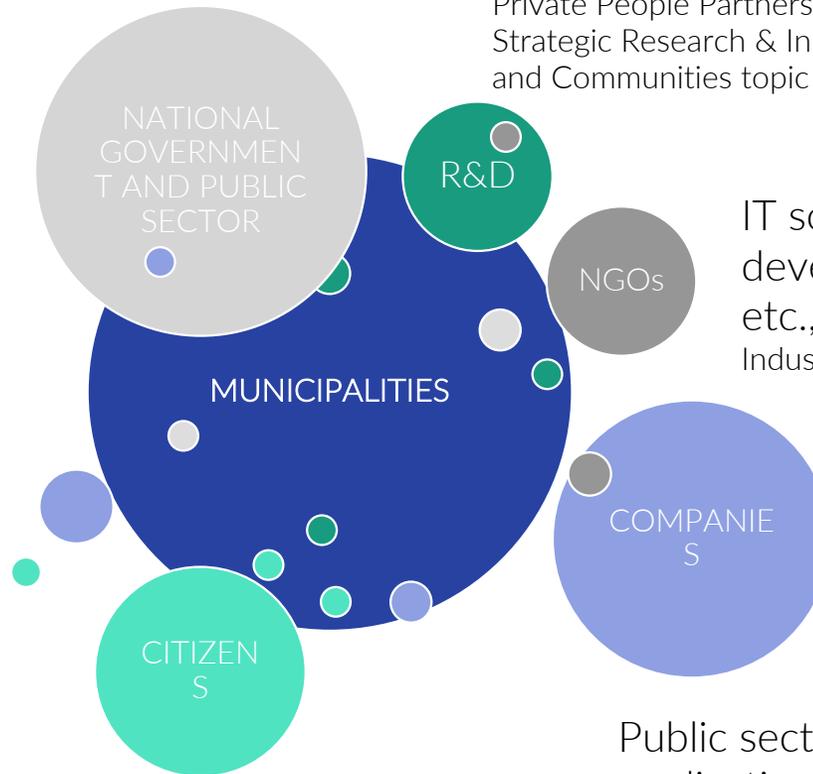
Potential common projects and initiatives with national level:

- Awaiting calls for smart cities and communities, which might also direct the ICC project
- Information support for local elections
- Establishment of a Hybrid cloud to hoast (also ICC) applications/platforms
- Integration of municipal services into eGovernment
- Involvement of municipalities in joint contracts / projects:
 - Video conferencing equipment,
 - Document system (Krpan), and
 - Microsoft license
- Support for the pilot implementation of the e-referendum
- Support for eTourism data distribution

Expert groups and partners from industry,

research and educational institutions, such as Faculty of Electrical Engineering, University of Ljubljana, Public Private People Partnership Digital Innovation Hub (4P DIH), Strategic Research & Innovation Partnership for the Smart Cities and Communities topic (SRIP PMiS)

IT solution providers: application developers, cloud service, IT support etc., such as Envirodual, Chamber of Commerce and Industry of Slovenia, ICT Horizontal Network etc.



Citizens as application/platform users and/or beneficiaries

Public sector employees as application/platform users and/or beneficiaries

SOS Ecosystem: Municipalities

12 consortium municipalities

179 member municipalities (also 6 city municipalities and Municipality of Idrija)

Municipalities in **20 SOS working bodies** (commissions and working groups), **367 experts** from **114 different municipalities** and their institutes and companies:

1. Committee on Legal and Legislative Affairs
2. Committee on Budgets and Public Finances
3. Spatial Commission
4. Commission for Culture
5. Commission for Social Affairs and Health
6. Commission for Public Utilities for Environmental Protection
7. Commission for Preschool Education
8. Tourism Commission
9. Commission for Agriculture and Rural Development
10. Digital Transformation Commission
11. Commission for Municipal Inspection Service
12. Commission for Municipal Police Service
13. Protection and Rescue Commission
14. Commission for the Integration of the Roma Community
15. Commission for Development Projects in the next financial perspective
16. Electromobility Working Group
17. Strategic Working Group on Participatory Budgeting
18. Strategic working group for decentralization of state services and harmonious regional development
19. Strategic working group for the preparation of a decree on the regulation of the image of settlements and landscapes
20. Working group for arranging water surfaces for tourism and recreation

SOS Ecosystem: Municipalities - "Services for Citizens"

- FAMILY AND CHILDREN, HOUSING - Allocation of one-off assistance at the birth of a child. Performing a permitted activity in a municipal apartment. replacement of municipal non-profit housing. Extraordinary help with the use of municipal housing ...
- LOCAL GOVERNMENT - Convening of the assembly of citizens. Call for a referendum on the general act of the municipality. Request for the issuance or annulment of a general act of the municipality. Objection due to irregularities in the work of the electoral committee. Consent to the organizer of the election campaign for posters ...
- AGRICULTURE, FORESTRY, FOOD - Ordering a ban on harvesting the fruits of cultivated trees in the forest. Excessive use of forest road. Reporting an abandoned animal ...
- PERSONAL CONDITIONS - Request for access to personal data ...
- ENVIRONMENT AND SPACE - Project conditions. Consent to the project to obtain a building permit. Certificate of land use. Assessment of municipal contribution. Location information. Complete or partial closure of a municipal road.
- ENTREPRENEURSHIP - Sale of goods on mobile stands. Sale of goods with vending machines and a traveling shop. Registration of operating hours of a catering establishment (farm). Permission to sell homemade dishes and purchased drinks on the farm ...
- CULTURE - Confirmation from the municipality that it does not exercise the pre-emption right on a monument of local significance. Claim of the owner of the monument of local significance for compensation ...
- COMPANIES, SOCIETIES, INSTITUTIONS - Permission to use the name of the municipality on behalf of the institution. Permission to use the name of the municipality on behalf of the association. Permission to use the name of the municipality in the company's name ...
- SAFETY, RESCUE - Permission to walk, skate and other activities on icy surfaces ...
- MUNICIPALITY AND SOCIETY - Obtaining public information. Notice of the meeting or event.
- PERSONAL FINANCE AND TAXES - Forecast for assessment of compensation for the use of building land. Exemption from payment of compensation for the use of building land ...
- FUNERAL AND BURIAL - Registration of burial. Scatter the ashes. Burial of professional representatives in the tombs of religious communities. Excavation of the remains of the deceased. Rent a grave. Erection, repair or removal of monuments in the cemetery.



SOS Ecosystem: Municipalities - "Responsibilities and tasks"

Responsibilities and tasks of Slovenian cities and municipalities (original tasks - general, Article 21 of the ZLS):

1. manages municipal property,
2. enables conditions for the economic development of the municipality and, in accordance with the law, performs tasks in the field of catering, tourism and agriculture,
3. plans spatial development, in accordance with the law performs tasks in the field of spatial interventions and construction of facilities and provides a public service for the management of building land,
4. creates conditions for the construction of housing and takes care of increasing the rental social fund of housing,
5. within its competences, regulates, manages and takes care of local public services,
6. promotes social welfare services, pre-school care, basic child and family care, the socially disadvantaged, the disabled and the elderly,
7. takes care of the protection of air, soil, water resources, noise protection, waste collection and disposal and performs other environmental protection activities,
8. regulates and maintains water supply and energy utility facilities,
9. creates conditions for adult education, which is important for the development of the municipality and for the quality of life of its inhabitants,
10. promotes educational, information-documentation, social and other activities in its area,
11. promotes the development of sports and recreation,
12. promotes cultural and artistic creativity, enables access to cultural programs, provides general educational library activity and, in accordance with the law, takes care of the cultural heritage in its area,
13. builds, maintains and arranges local public roads, public paths, recreational and other public areas,
14. in accordance with the law, regulates traffic in the municipality and performs the tasks of municipal police,
15. supervises local events,
16. organizes the communal-police service and takes care of order in the municipality,
17. takes care of fire safety and organizes rescue assistance,
18. organizes assistance and rescue in cases of natural and other disasters,
19. organizes the performance of cemetery and funeral services,
20. determines misdemeanors and fines for misdemeanors that violate municipal regulations, and performs inspection supervision over the implementation of municipal regulations and other acts regulating matters within its competence, unless otherwise provided by law,
21. adopts the statute of the municipality and other general acts,
22. organizes the municipal administration,
23. regulates other local matters of public importance.

SOS Ecosystem: Private Sector - "To start, home reading - legislation"

Private sector (e.g. Envirodual, GZS, ICT – horizontal) findings:

- Companies do not know the environment, especially legislation in which municipalities operate (e.g. Local Self-Government Act, Financing of Municipalities Act, and General Administrative Procedure Act) and therefore the solutions are not adapted for use in municipalities. The differences between the business processes of companies and municipalities are unknown to them, as well as the differences in competencies between European cities, from where they (probably) draw inspiration for the development of solutions and competencies of Slovenian municipalities.
- The offer of private sector solutions and services to municipalities is very pervasive and "aggressive" in terms of marketing, while the effects in municipalities are small.
- There is no staff in the municipalities that could be a competent interlocutor for bidders and there is a lack of competencies for innovative public procurement.
- Many services and solutions, including data, are of closed type - "vendor lock-in", which also prevents data connectivity and integration into other systems. Thus, for example different parking operators with their closed systems do not provide the municipality with a comprehensive overview of the state and trends of use and occupancy of parking lots in the municipality owned by it, let alone parking lots owned by private companies, in order to design smart measures, monitor effects and adapt measures to actual needs.
- Offers of digital solutions and services come mainly from IT companies and not sectoral companies or associations (for example, the Chamber of Commerce and Industry - the Chamber of Municipal Economy or the Chamber of Tourism and Hospitality, which know the activity, needs and role of municipalities). There is no cooperation between sectoral companies and IT companies.
- Providers of basic services already used by municipalities do not appear in new "smart" initiatives (financial accounting systems: Cadis, Grad ...; Gis systems: Realis, 3Port, Kaliopa; document systems: Pia, Zaslon-Telekom ...). Why? Vendor lock-in?
- Envirodual is a stakeholder in the ICC consortium SOS, with a working solution and use in a small number of satisfied municipalities, which combines elements of a data platform for energy and climate, but despite the openness to different business models, which would reduce municipal costs and ensure the development of further solutions, activities have not moved from a stalemate - direct sales to individual municipalities.

SOS Ecosystem: R&D - "Quadruple & quintuple innovation helix framework"

Research and development (e.g. Faculty of Electrical Engineering UL, 4P DIH, SRIP PMiS) findings:

- SOS tried to establish a cooperation with SRIP PMiS already at the establishment of this strategic development partnership, but in-depth cooperation did not occur due to the condition for payment of membership fees, which SOS could not accept due to illogical policy - municipalities are subscribers, service payers, companies are providers. For the effective development of products, companies need insight into real needs, testing environments, feedback for improvements - all this is additional work / costs of municipalities and the necessary staff, which is not available in most municipalities. Paying a membership fee to incur additional development costs and end up being payers is not appropriate. SOS has repeatedly warned the Government Office for Development and European Cohesion Policy of the failed design of partnerships (the roles of public / private / research / academic / non-governmental are not the same) in the smart specialization strategy. Municipalities in the existing system can be 4x payers: 1. SRIP membership fee, 2. test infrastructure and staff 3. purchase of a solution and 4. upgrades, maintenance and purchase in other municipalities of everything that has already been paid for with public funds.
- The lack of active participation of municipalities in development is reflected in the offer of solutions and services that are pleasing at presentations, but show their shortcomings in first use due to shortcomings and inconsistencies with legislation defining procedures or competencies of municipalities, reporting requirements of various bodies and the like... The same laws apply to all 212 municipalities in Slovenia, with a few exceptions for urban municipalities. Municipal regulations are also an integral part of the *acquis communautaire* - which differ between municipalities.
- The Faculty of Electrical Engineering offered SOS "bottom-up" cooperation and partnership, equal cooperation, which the SOS presidency welcomed and concluded a strategic partnership, which we collectively called 4P DIH - we at SOS were satisfied with the systematic approach to the analysis of municipal needs. : 1. conducted regional workshops - in the field - for raising competencies and direct participation, a survey prepared on the basis of the starting points obtained in this way and the needs collected and tools developed on the basis of more than half of the municipalities.
- 4P DIH responded proactively to the outbreak of the epidemic and contributed to a more efficient transition to digital work environments dictated by limitations (conducting remote sessions, tools for remote group work, application for mutual assistance to citizens,...)

SOS Ecosystem: The State - "From words to deeds"

National level: Ministry of Public Administration (MPA), Ministry of Economic Development and Technology (MEDT), Government Office for Development and European Cohesion Policy, other ministries

Policies - what awaits us in the future:

- New Digital Strategy of Slovenia - simultaneously prepare a strategy for local self-government. Involve as many municipalities as possible in the process - preparing their local digital strategies - so that the measures are harmonized and the synergy potentials are exploited.
- Operational Programs 2021-2027, National Recovery and Resilience Plan - involve municipalities, representative associations in programming.
- Inter-ministerial coordination and close cooperation with municipalities - we all serve the people - the public sector
- Find a solution - for "the state cannot provide services and tools for municipalities if the service is on the market" - an example of energy management - Croatia can do it! (PPP?)
- Change the position (especially the MPA) to help municipalities "municipalities are self-governing communities - the state must not help, municipalities must themselves" to "the state offers help - municipalities can accept it,"

Regulations - SOS expectations:

- Also assess the dimensions of digitalisation in the legislative process (basis for access to data - IP; use of new technologies for efficient implementation;)
- For new tasks of municipalities in the field of digitalization - to provide tools and / or additional financial resources for tools and staff (example EZ - energy management, e-tourism; participatory budget) Enable municipalities to pilot, innovate and experiment using regulatory sandboxes and experimental clauses (see [adopted European Council conclusions](#)) (example e-referendum Municipality of Hoče-Slivnica)
- Amend the law on public-private partnerships, which is written for public utilities and is not applicable to new business models in the field of digitalization.

Resources - SOS expectations:

- Provide material, human and financial resources for the digital transformation of municipalities (joint municipal administrations)
- Digital infrastructure - GOŠO - the state should achieve its own strategic goals. Cloud services - hybrid cloud ?, promotion of common building blocks and assistance to municipalities in use and implementation,
- Possibility to use application solutions developed with public funds in municipalities - to order open solutions and provide funds for upgrading adaptations for local self-government (example MFERAC, eGovernment, tool for supporting public tender processes)
- Increase the number of tenders and funds for the digitization of municipalities!
- Reduce the time for the preparation of tenders for municipalities in the field of digitalization (tender for smart cities or IoT - [forecast 2017](#) - publication Feb 2021)
- Provide a systemic source of funding to representative associations of municipalities to provide support to local communities in the field of digital transformation.

SOS Ecosystem: MPA (Ministry of Public Administration) - "Key stakeholder!"

Key tasks of the MPA

- provides a systemic regulation of the organization and operation of Slovenian municipalities
- prepares legal solutions in the field of local self-government
- participates in the preparation of sectoral legislation within the competence of other departments, when the contents relate to the operation of municipalities.
- advises municipal authorities in the performance of their tasks and responsibilities.
- provides strategic planning and promotion of the digital transformation of Slovenia
- provides the operation of the national communication network and support to all users in the state administration and more widely through a single contact center
- prepares national strategic development documents in the field of information society and electronic communications and coordinates and implements development measures.
- strategic goal - to digitize all areas of social life through innovative and intensive use of digital technologies and the Internet, which is crucial for the competitiveness of the economy, a high level of prosperity
- implements the development of a cloud framework and useful e-services for the state, citizens and the economy,
- issuing digital certificates,
- implements uniform information security policies,
- we manage information solutions and data sets.
- It enables citizens and businesses to use e-services efficiently, reliably and easily at the national level and in the digital single market.
- at the inter-ministerial and cross-sectoral level, coordinates the implementation of measures to promote the general digitalisation of society, with coordination with external stakeholders from the economy, non-governmental organizations and the field of education and research taking place through the Slovenian Digital Coalition
- represents the Republic of Slovenia in international organizations (EU, OECD, ITU, ICANN, IGF, CEPT, Eutelsat).

MPA and municipalities:

- Call for smart cities and communities
- Information support for local elections
- Hybrid cloud
- Integration of municipal services into eGovernment
- Involvement of municipalities in joint contracts / projects:
 - Video conferencing equipment
 - Document system (Krpan)
 - MS license
- Support for the pilot implementation of the e-referendum
- Support for eTourism data distribution

SOS Ecosystem: MPA - "Are policies opportunities for municipalities?"

The key strategic goals from the draft Digital Strategy of Slovenia, for the achievement of which two-year action plans with measures will be formed, are the following:

- 1) managing and monitoring the digital transformation of public administration,
- 2) raising digital awareness and skills in public administration,
- 3) optimization and digitalization of public administration processes,
- 4) development of smart digital public services together with users,
- 5) providing optimal information infrastructure,
- 6) development of common building blocks and horizontal solutions,
- 7) development of a system of integrated data management and use in public administration,
- 8) promoting the use of new technologies,
- 9) modernization of support to internal and external users,
- 10) strengthening information and cyber security.

Regulations:

- [Electronic Communications Act \(ZEKom-1\)](#)
- [Information Security Act \(ZInfV\)](#)
- [Accessibility of Websites and Mobile Applications Act \(ZDSMA\)](#)
- [Electronic Business and Electronic Signature Act \(ZEPEP\)](#)
- [Electronic Commerce Market Act \(ZEPT\)](#)
- [Return of Investments in the Public Telecommunications Network Act \(ZVVJTO\)](#)
- [Public Procurement Act \(ZJN-3\)](#)
- [Local Self-Government Act \(ZLS\)](#)
- [General Administrative Procedure Act \(ZUP\)](#)
- [Administrative Fees Act \(ZUT\)](#)
- [Public Information Access Act \(ZDIJZ\)](#)

Regulations in preparation:

- [Electronic Identification and Trust Services Act](#)

SOS Ecosystem: MPA - "Are projects opportunities for municipalities?"

1. Renovation and optimization of state administration websites - The project will enable a uniformly organized and flawlessly functioning state administration web service, which will provide users with easy and fast access to comprehensive, up-to-date and credible presentation information on the country, procedures related to the country and to easily feasible e-services of the state administration.
2. Single Business Point (EPT) - new electronic services and building blocks, prepares content and information for potential entrepreneurs, companies and other business entities. For example, the SPOT portal (former e-VEM).
3. Renovation of the information system for publishing open public sector data - OPSI - Evidence and public sector databases, which data are publicly available and with which to create new stories, applications, visualizations ..
4. Establishment of a data warehouse and business analytics system - Chest 2.0 - Wealth of Information! Prudent decisions based on data? Yes, definitely!
5. Interoperability common building blocks for electronic data interchange - For easy data interchange. Citizens and businesses rightly expect state institutions to operate efficiently and exchange data in a secure and reliable way.
6. Development and administration of a geographic information system (GIS portal) - (COMPLETED) National portal for spatial data and applications - GIS portal represents a single entry point to spatial data, services and applications available to state institutions.
7. The SI-TRUST Trust Services Project Program - Providing various services online is becoming part of our daily lives as we handle various formalities as citizens and businesses, either with the public administration or with the private sector, with e-banking certainly being the most widespread. At the same time, it is crucial that we feel safe in this way of doing business, that our privacy, our identity and our personal data are protected.
8. SI EESSI (CLOSED) The Ministry of Public Administration is a partner in a national consortium of five project partners, which has applied for the project "Slovenian implementation of the Electronic Exchange of Social Security Information - SI EESSI" within the CEF mechanism.
9. SEMPER - The Ministry of Public Administration is a partner in an international consortium of four project partners from Austria, Spain, the Netherlands and Slovenia, which applied for "SEMPER - Cross-border Semantic Interoperability of power and mandates" within the CEF mechanism.
10. eGovernment - Did you know that you can change your address at eGovernment ? Did you know that you can also renew your license there? Or look at your personal information stored in state records. And all this without waiting in line!
11. Renovation of the information system to support the management of documentary material - KR PAN - Our electronic office. Krpan will be a unified, technologically renewed and advanced information solution to support the management of documentary material. It will be used as a basic record of documentary material by all state administration bodies.
12. Technical and Semantic Consolidation of Core Data Registers (R2GO) - How to improve work at administrative counters?
13. EU-SEC (CLOSED) The Ministry of Public Administration is a project partner in an international consortium of nine companies and public institutions in the EU-SEC project. The purpose of the project is to significantly simplify procedures and reduce efforts to achieve compliance with various information security requirements for cloud computing services.
14. TOOP - The Ministry of Public Administration is a partner in an international consortium of 50 project partners from as many as 19 different countries in the TOOP project. The purpose of the TOOP project is to explore the possibility and introduce the principle of "only once" on various pilot e-services for business.
15. Information Security Management (ISO 27001) - (2016 COMPLETED). The aim of the project is to establish an information security management system in the field of the national cloud in accordance with the requirements of the ISO / IEC 27001: 2013 standard.
16. Slovenian NIO Interoperability Framework - The Interoperability Framework is an umbrella set of policies, standards and guidelines that describe the way in which the participating organizations have agreed to use it for mutual electronic commerce. The use of NIO products reduces administrative costs, speeds up people-friendly procedures and maintains a high level of service security.
17. CARPE DIGEM - »CARPE DIGEM - Catalysing Regions in Peripheral and Emerging Europe towards Digital Innovation Ecosystems«.
18. Digital Europe for All - DE4A - to establish technological systems and organizational mechanisms for cross-border electronic services.
19. Connecting Slovenian e-services with the national node eIDAS - SI-PASS 2.0 - . The project will significantly contribute to the successful implementation of legal requirements from the so-called eIDAS Regulation and the SDG Regulation.
20. PIACERE - "Programming trustworthy Infrastructure As Code in a sEcuRE framework - PIACERE" (hereinafter: the PIACERE project - Infrastructure as code in a secure environment).

ICC consortium: SOS vision and ambition statements

The digital open source platform will be a common foundation for the exchange and storage of data and the modular integration of municipal services. With the joint digitalisation of municipal services, we will be greener, mobile, accessible and friendly.

Our EFFORTS are focused to ensure the data sovereignty of municipalities and the empowerment of staff to exploit the potential of digitalization

When choosing common building blocks of the inter-municipal platform, we PREFER the open source FIWARE platform and/or similar, and compatible open source solutions that provide key standards for breaking information silos, simplify IoT and enable data management from a variety of sources into knowledge and bases for better decision-making.

We dream big, starting with small, local steps, with wide open eyes and inclusive attitude towards different ecosystem opportunities.

City strategy: justification

Based on the narrative of conversation in the meetings and workshops, the integrated strategy adopted corresponds to potential solutions to be decided in the next phases of the project. Due to resource and financial limitations the plan is to agree on one solution to be developed which will have positive synergies between municipalities to reinforce the success of individual municipalities. Conflicting interactions might occur in case of changes in political will to implement the common solution. We have developed the strategy to address given resources, processes, technology (potential), and ecosystem (opportunities), which should lead us when things get tough in implementation.

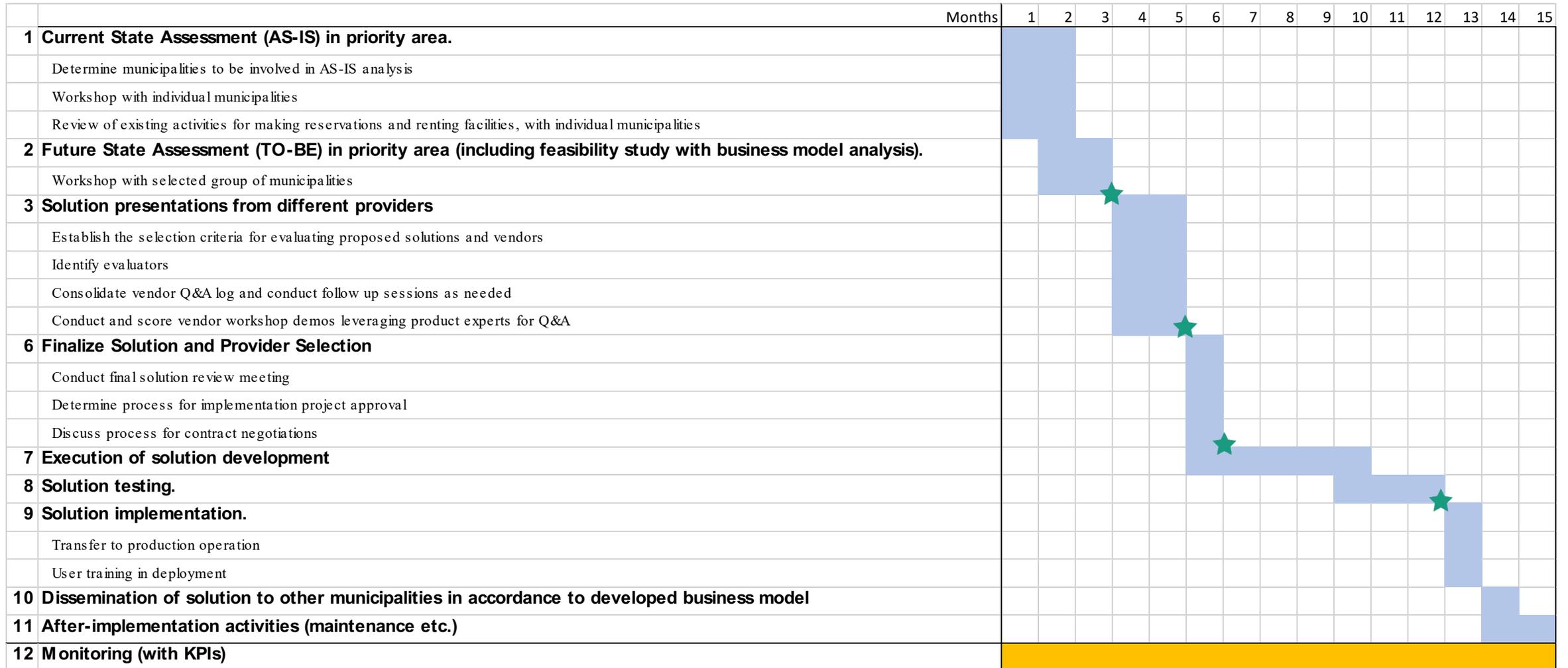
Section
2

Association of Municipalities and Towns of Slovenia: Ambition and roadmap

ICC Transformation

February 2021 to April 2021

High level implementation roadmap for solution (“10000m plan”)



★ Milestone



Initiative charter

Strategy	Stakeholders involved	Inputs, outputs, outcomes and impacts
<p>Description</p> <p> What: Development of a digital tool for renting vacant municipal infrastructure</p> <p>Why: Renting vacant municipal infrastructure is a manual process, with no supporting tool.</p> <p>How: 1. Choosing developer (IT firm); 2. Solution development and testing; and 3. Solution dissemination and after-implementation activities</p>	<p>Solution lead: Association of Municipalities and Towns of Slovenia</p> <p></p> <p>Solution working team: Municipal representatives. Seven municipalities confirmed interest for solution development in Phase 2. But some of the other municipalities are also showing interest by actively engaging in ongoing activities.</p> <p></p>	<p>Source of funding and estimated cost</p> <p>Municipality budget and AMTS budget. The estimated costs are around 50.000 EUR. We are currently in the phase of finding providers and getting their price estimate.</p> <p></p>
<p>Link to vision</p> <p> Initiative is focused on digitalisation of municipal services with the following aims: (i) to organize the work process within municipality more efficient, (ii) to make the service more accessible and (iii) to design the digital tool with potential for reuse by other municipalities.</p>	<p>Contributors: KPMG as PMO.</p> <p></p>	<p>Solution maturity outputs</p> <p>The digital tool will improve effective monitoring and use of vacant municipal infrastructure, and has the potential to be further developed to facilitate also the sales of vacant municipal infrastructure</p> <p></p>
<p>Link to ambition statement</p> <p> A compatible solution that provides key (eg. open source) standards for breaking information silos, simplify IoT and enable data management from a variety of sources into knowledge and bases for better decision-making.</p>	<p>Risks and mitigation</p> <p>The key risk is financial: the cost of tool development and potential budget cuts/retention/limitations,</p> <p>To mitigate financial risk there will be constant progress reporting to decision makers to keep the project among higher priority ones. Also, in case less funds will be available, we will try to accommodate the speed and complexity of development.</p>	<p>City performance outcomes and impacts</p> <p>There are expected time savings on the side of administrative municipal procedures and higher income from a more transparent and easier renting process through the common online platform that the digital tool will provide.</p> <p></p>
<p>Expected impact and timing</p> <p> To unburden the infrastructure renting process for municipal officials as well as potential renters.</p> <p>We are currently searching for providers. Digital tool development should begin in the next months, and is expected to take about half a year.</p>	<p>Another expected challenge potentially to arise during implementation is the coordination of needs and wishes of all municipalities involved.</p> <p>For this reason KPMG prepared a document with key tool functionalities, which were not disputed by any municipality and therefore represents the common goal.</p>	

Rationale to road map

After online meetings between municipalities, discussing and analysing their needs, the pool of needs, for which to develop a common (digital) solution, was shrinking by process of elimination. To prepare a road map, the municipalities agreed to activities to be performed for development of the main solution in 15 months along the following phases:

- 1) Gap analysis with As-Is and To-Be analysis;
- 2) Online presentations of solution providers;
- 3) Solution development and testing; and
- 4) Solution dissemination and after-implementation activities (beyond the scope of the ICC project).

Key Performance Indicators – Activities (inputs and actions)

Solution	Initiative	Activities – Inputs and actions
Smart management of infrastructure	Renting of free municipal infrastructure, Effective monitoring and use of energy of free municipal infrastructure, Sales of free municipal infrastructure	Funding committed by cities, ecosystem or partnership with other ICC city
Smart management of infrastructure	Renting of free municipal infrastructure, Effective monitoring and use of energy of free municipal infrastructure, Sales of free municipal infrastructure	% of activities completed on time
Smart management of infrastructure	Renting of free municipal infrastructure, Effective monitoring and use of energy of free municipal infrastructure, Sales of free municipal infrastructure	

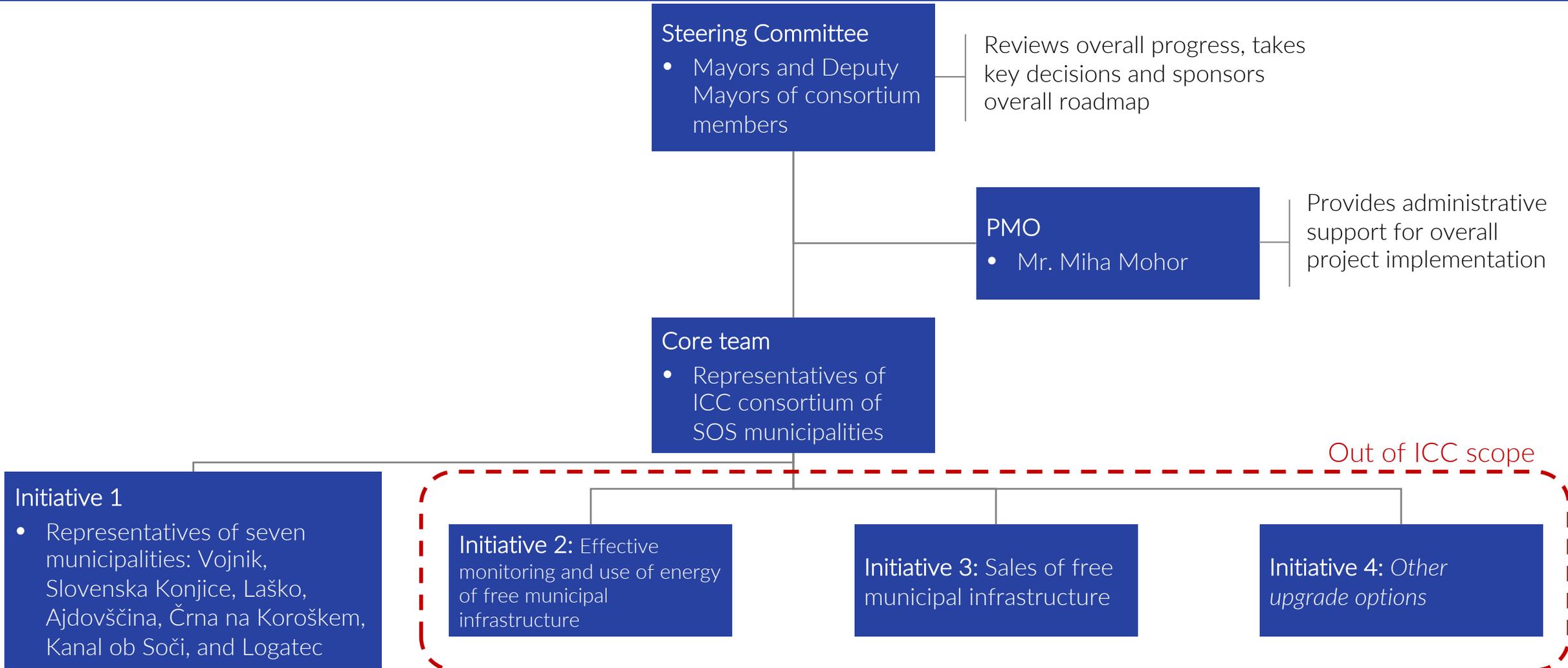
Key Performance Indicators

Solution	Initiative	City performance – outcomes and impacts	Targets	Link to SDGs (optional)
Smart management of infrastructure	Renting of free municipal infrastructure, Sales of free municipal infrastructure	Time taken to reserve a free municipal infrastructure - from the municipal employee perspective	Reduction for 25%	
Smart management of infrastructure	Renting of free municipal infrastructure, Sales of free municipal infrastructure	Time taken to reserve a free municipal infrastructure - from the citizen / business perspective	Reduction for 25%	
Smart management of infrastructure	Effective monitoring and use of energy of free municipal infrastructure	Energy costs	Reduction for 10%	

Rationale to KPI approach

- Pursuing the simplification of administrative procedures and consequently raising the efficiency of work, which would enable the use of resources for activities with higher added value.
- Automation and digitization of processes.
- Standardization of the way of equal work in different municipalities.
- Increasing the efficiency of existing administrative procedures does not require the development of a new solution, but above all a better use of existing solutions. An upgrade is also possible.
- Enabling a better exchange of knowledge between municipal officials.
- General upgrade of digital literacy of municipal officials.
- In this round, the biggest challenge was the coordination of municipalities - time, desire for presentations, obtaining information about the premises. Coordination has brought slow progress towards a possible solution. A tool for renting municipal space that would help municipalities and citizens is now a more realistic option. It is also of interest to municipalities that are not members of the ICC and have already provided information on the rental space they would like to include.

Governance structure for roadmap implementation



Section

3+4

Association of Municipalities and Towns of Slovenia: Impact

ICC Transformation

May 2021 to July 2022

Impact executive summary

The ICC consortium of municipalities agreed to develop a digital tool for renting vacant municipal infrastructure (sport halls, swimming pools, playgrounds, conference halls etc.) and decided to invite 5 providers to present possible solutions in the form of a platform that would facilitate the process of renting to citizens/companies by municipal officials.

Before the presentations, the representatives of the municipalities proposed the development of a new platform intended only for municipalities. It later turned out that this option would be very expensive. The already developed online tools were more or less suitable for municipalities. Therefore it was unanimously decided that the solution will be made as an upgrade of existing available tools, which will facilitate and reduce the cost of development.

The municipalities selected the two solution providers that they considered to be the most suitable and invited them for a second presentation. One provider (www.sigmateh.si) received the majority of municipalities' support and was therefore selected.

There are four types of measurable concepts that come together to drive success in the ICC



Solution implementation impact

- Real estate management also includes short-term and occasional renting, which is assessed as untapped potential and inefficient management.
- The inventory and descriptions of the existing infrastructure will enable the development of a plan for the active management of the diverse infrastructure.
- Supporting short-term lease of facilities, as long-term lease requires the publication of a tender.
- Supporting the use of sports, cultural, administrative and other facilities for the purpose of conducting events, happenings, competitions, etc.
- Facilitating the process of renting facilities to citizens and companies by municipal officials by enabling or facilitating payments, local road closures, reports to the police and administrative unit, etc.

Assessment of city performance - discussion

Within our consortium, several aspects are deemed important. However, at the moment we want to digitize public services and contribute to overall digital connectivity. In order to do that, we will start by providing our employees with trainings to obtain new knowledge in digital skills. With the digital tool, we want to maximize the efficiency of renting out our premises. It would also contribute to time efficiency from the perspective of our employee (less administrative work) as well as from a perspective of a person/business that is interested in renting our premises (better overview, quicker process, ...).

Where we started	Midway through the challenge	Desired outcomes
<ul style="list-style-type: none">Inefficient real estate managementLack of digital skills of municipality employeesLack of an organised database regarding municipalities' premises available to rent	<ul style="list-style-type: none">Employee trainings,	<ul style="list-style-type: none">Digitized public services, digitally skilled employees, better use of municipal premises, organised database

Assessment of solution maturity - discussion

Our solution is a digital tool for renting vacant municipal infrastructure. We did not start with the implementation yet, but what we wish for is to improve our time efficiency as well as more efficient occupancy of the municipal premises. Due to our scarce human resources, we value time of our employees. Since everything was done manually so far, there have been a lot of mistakes done and a lot of time lost due to administrative tasks. This tool would help us overcome administrative obstacles and make better use of space.

Where we started

Municipalities have a poor overview of municipal vacancies. Reservation records are kept manually. Duplicate bookings often occur due to loss of information.

Midway through the challenge

Municipalities have the possibility to try out a tool for booking premises. It gives them a better overview of occupancy. For users, it allows them to book with fewer administrative obstacles.

Desired outcomes

Improved time efficiency, more planned use of municipal premises.

Assessment of city ecosystem and activities - discussion

Association of Municipalities and Towns of Slovenia (SOS) is a representative association of 179 municipalities out of a total of 212, which applied to the ICC in a consortium with its 12 interested members. Municipalities responded well to presentations on possible solutions although it has sometimes been difficult to coordinate meeting dates. Consequently, the transmission of the necessary information was sometimes a little slower.

Where we started

Inefficient real estate management

Identifying our first priority: renting vacal municipal properties on a digital tool

Midway through the challenge

Selection of one solution provider

Desired outcomes

In the future, we would like the tool to be used not only for facilities owned by the municipality, but also for facilities with different owners

5 key lessons

Lesson	Reflections
1	Coordination of interests of several stakeholders and several municipalities takes extra effort and time.
2	The problem of the development of small municipalities lies primarily in limited financial and human resources. The latter made the ICC project completion particularly hard.
3	It should be noted that since there are no financial resources available in the ICC framework, the actualisation of planned activities are heavily dependent on requirements of available financial sources, which could be unaligned with ICC objectives.
4	We learned about the digital tool development process from idea onwards.
5	The project activities, especially workshops, facilitated the cooperation between municipalities as well as contributed to better communication with state authorities, especially relevant ministries as key stakeholders for successful implementation phase.

Reflections on city collaborations

During the ICC project, we participated in many different activities. We particularly enjoyed workshops and City Labs, which offered us great insight into other municipalities and the problems they are facing. Within those we learned how to:

- identify the needs of digitally less developed municipalities,
- align stakeholders towards the same goal,
- train staff in a digital context (according to available equipment).

We talked about the importance of the digital transformation of cities and learned about different ways how to transite into the digital era of the internet and interconnectivity.

Commitments

Commitments to on-going resources

The project will continue with the current resources, but if necessary we will resort to external personnel.

Commitments to on-going collaboration

In the future we want to strengthen our local ecosystem. We want for our solution to reach outside of our local government and invite the residents of the municipality to use the tool for renting out their vacant premises.

Commitments to on-going KPIs

We will track the current KPI-s and develop new ones according to our needs.

3 Year plan - ambitions

Building on the ICC, what would will the city aim to achieve in 3 years time?

The goal from the user's point of view is that the user can find a place to rent from one place, regardless of the location/owner. Our tool would withhold all the necessary information in one place. We want to get as many municipalities as possible to use this tool. Moreover, we would encourage to add the vacant premises that are not owned by the municipality. We would also like to develop the tool in order to monitor occupancy of individual premises, the increase in revenue from the rental of premises, the reduction of administrative costs, and time savings from using the tool. At the same time, we want to improve the time management of sports halls (to improve the use/occupancy)

What steps will you take over the next 3 years to achieve these goals?

By sharing good practice, we would try to convince other municipalities to use the tool. Our efforts will be focused to ensure the data sovereignty of municipalities and the empowerment of staff to exploit the potential of digitalization. We would do this by educating and training them for the use of the tool and obtain other digital skills. We will also communicate with citizens and try to get their support for digital solutions.

3 Year plan - targets

KPI	Category	What commitments will the city make to this end?
1 Time taken to reserve a free municipal infrastructure from the municipal employee perspective	City Performance	Due to scarce human resources, we want our employees to be as time efficient as possible. With adequate digital training and the use of the tool, they will spend less time on administrative tasks related to renting.
2 Time taken to reserve a free municipal infrastructure from the citizen/business perspective	City Performance	With all the necessary information in one place, it will be much easier and quicker to proceed with bookings.
3 Number of municipalities that are using the digital tool	Development of ecosystem	By the end of 2025, we wish to have 5 municipalities using this tool to rent their vacant premises. We will achieve this by promoting good practice.
4 Number of objects that are being rented through the digital tool	Development of ecosystem	We want to have all of our vacant premises in one place. If possible, we would also like to encourage other owners to use our tool in order for our citizens to have a wider choice of premises to rent.
5 Revenue increase from renting through the digital tool	City performance	We want to monitor the revenue increase from renting out our premises via digital tool in comparison to how it is at the moment.

Association of Municipalities and Towns of Slovenia: Additional information

ICC Transformation



Recap on previous guidance given for solution strategy

What does the solution set out to solve?

The primary objective of the tool is to provide a better quality digital public services to citizens. In parallel, due to increasing scarcity of human resources, the municipalities aim to be more efficient with their real estate management. This is the challenge primarily being addresses.

New tool development and use requires also the improvement of digital competencies of employees in municipal administrations and their stakeholders in local ecosystems.

What are the main features of the solution?

To develop the digital tool that would be used to rent municipal vacant premises, we first analysed our needs and performed an as-is analysis. Due to scarce financial resources we decided not to develop a completely new tool but to rather upgrade an already existing tool and customise it to support our needs. We had online presentations of several solution providers, and we chose the final one based on the following criteria: coverage of the functional requirements of the existing solution, degree of process automation, and coverage of our technical requirements and price.

Recap on previous guidance given for solution strategy

Why is this the right solution for the city?

We had several workshops with the twelve consortium municipalities to distill a solution that most municipalities would agree is what they need and are ready to support. The selected solution received the most interest and confirmations.

What is the business model?

At the moment, the tool development will be planned to be funded by individual municipalities. In the future, we hope for other funding opportunities, such as tenders from the state or private-public partnership if the tool will also be given to use to private companies.

What are the main blockers and risk and how will they be overcome?

The challenge of any kind of development of municipalities is mostly based on their size. Differences in municipal financing cause differences in development, which is related to the size of municipalities. In general, smaller municipalities are on average less developed than large municipalities. The problem of the development of small municipalities lies primarily in limited financial and human resources. Therefore, the lack of financial and human resources will be mitigated by obtaining additional funding if possible, and outsourcing activities that could be performed more efficiently by topic experts.

Recap on previous guidance given for solution strategy

What, at the highest level, are the main stages from today to getting this solution at full impact?

- 1) Solution development with our selected provider Sigmateh.
- 2) Solution testing.
- 3) Solution implementation.
- 4) Educating and training of municipality employees.
- 5) Dissemination of solution to other municipalities in accordance to developed business model.
- 6) After-implementation activities (maintenance etc.).
- 7) Monitoring (with KPIs).

Recap on previous guidance given for solution strategy

Who is making it happen?

The project coordinator is SOS. The solution will be developed by the selected solution provider Sigmateh in close cooperation with individual municipalities' staff.

What major uncertainties still need to be investigated?

Firstly, Sigmateh is a small company that may potentially not produce the tool or produce it late. Secondly, there is a possibility that during the development phase not all needs will be identified and addressed (properly). Or new specific needs might arise that would require additional development. Thirdly, we currently do not know how many and which municipalities will finally decide to finance the tool, where the price of development is tied to the common number of objects listed for rent. There is also a risk that involved municipalities will not cooperate or that the tool will not function properly.

How do the solutions interact?

Association of Municipalities and Towns of Slovenia (SOS) only aims to develop one solution, but one of the factors affecting the selection of Sigmateh is that several municipalities are already using some of their other solutions, which are built on the same principals and will therefore have positive synergies, according to Sigmateh,

Recap on previous guidance given for solution overall strategy

If you could boil down your strategy to three thoughts that have best guided you on your way, what would they be?

- 1) Since the ICC is part of a wider EU support system that recognizes the importance of delivering on the promises made by the European Green Deal, the digital strategy, and other EU policies we wanted to develop a solution that would be aligned with these goals. We realized we need to improve our services to the citizens and therefore, we chose a solution that would not be beneficial only for the current selected municipalities, but also for citizens and other municipalities (potentially also private companies in the long term) that will want to join using the tool.
- 2) We want to emphasize the importance of digitization. We believe, that in the past, digitization strategies have been slow to take off due to several factors, such as perceived complexity, financial concerns, and most importantly fear of change. We want to take a step towards digital connectivity and empower our people to feel comfortable in the digital changes that are happening and will continue to happen in the future.
- 3) We want to simplify the process for citizens and employees. Since we are struggling with scarce human resources we want to improve the efficiency of our employees. We strongly believe that our solution will save a lot of time that our employees spend on administrative tasks, and improve their digital skills.

Recap on previous guidance given for solution overall strategy

What are the key factors that define success across all of your solutions?

1) Communication

Project communication is critical to ensure all stakeholders are aware of their role in the project. Firstly, we have to establish good communication flow within municipalities that are using the tool. Secondly, we have to develop a good communication plan to reach a wider community in order to engage citizens to use the tool and to attract other municipalities to implement the tool. After tool implementation we should also do customer satisfaction survey to see where we can still make improvements.

2) User Acceptance

We realise the natural response to change is aversion, Therefore we will support change management initiatives and involvement of municipality employees already in development stage to gain their acceptance, as well as from citizens and other municipalities.

3) Financial resources and if needed some external support

Customization or implementing unique/specific processes might lead to the solution becoming non-scalable and expensive to maintain. Therefore, it is crucial that the technical complexity is limited, latest software and protocols are utilised and external experts are in continuous communication with municipalities.

Overview of our approach to the development of KPIs to assess city performance and activities

	<u>Idea</u>	<u>What purpose do they serve?</u>	<u>What is it 'attached' to</u>	<u>When do we measure them?</u>	<u>What have we set?</u>
 Helps deliver	City performance	How well SOS is performing on outcomes and impacts (e.g., quality of life)	City programme as a whole	At the end of Implementation phase	Number of municipalities using the tool Number of rental premises on the tool
 Helps deliver	Solution maturity	How well SOS is using new technological solutions	New digital tool	At the end of Implementation phase	Reduced time for administration tasks Increase in revenues
	Activities	How well SOS is taking action and encouraging others to take action	City programme as a whole	Once per month	Number of digital trainings for employees