

D3.2: Delivery of the citizen participation playbook

+CityxChange | Work Package 3, Task 3.2

Final delivery date: 19-02-2020



Deliverable version	v.3
Dissemination level	Public
Authors	Javier Burón García (COL); Magdalena Sánchez Mora (COL)
Contributors	Rosie Webb (LCCC); Kristin Solhaug Næss (TK); Andrew Perkis (NTNU); Cristiana Fica (MAI); Miloš Prokýšek (MP); Luis Carlos Delgado Ortiz (SB); Eftima Petkova (SMO); Tiina Hallimäe (VORU)

Article 29.5 Disclaimer

This deliverable contains information that reflects only the authors' views and the European Commission/INEA is not responsible for any use that may be made of the information it contains.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Document Information

Project Acronym	+CityxChange
Project Title	Positive City ExChange
Project Coordinator	Annemie Wyckmans, Norwegian University of Science and Technology
Project Duration	1 November 2018 - 31 October 2023
Deliverable Number	D3.2: Delivery of the citizen participation playbook
Dissemination Level	PU-Public
License	CC-BY4.0 Creative Commons Attribution, except where otherwise noted. https://creativecommons.org/licenses/by/4.0/
Status	Completed
Due Date	31-01-2020
Work Package	WP3 – CommunityxChange
Lead Beneficiary	Colaborativa (COL)
Contributing Beneficiaries	Norges Teknisk-Naturvitenskapelige Universitet (NTNU); Limerick City & County Council (LCCC); Trondheim Kommune (TK); Municipality of Alba Iulia (MAI); Mesto Pisek (MP); Sestao Berri (SB); Obshtina Smolyan (SMO); Vöru Linnavalitsus (VORU)

Revision History

Date	Version	Author	Substantive changes made
21-11-2019	v.0.1	Javier Burón Magda Sánchez	First draft sent to WP lead
01-12-2019	v.1.0	Javier Burón Magda Sánchez	First version for internal review Added chapter 3 and 6 comments
20-01-2020	v.2.0	Javier Burón Magda Sánchez	Second version for QA review Added methodology in all chapters
19-02-2020	v.3.0	Javier Burón Magda Sánchez	Final version Added LHCs and FCs feedback



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Table of Contents

Table of Contents	3
List of Acronyms	6
1 Executive Summary	7
2 Introduction	9
3 Context for Citizen Participatory processes	11
3.1 Introduction	11
3.1.1 Why is citizen engagement important?	11
3.1.2 Citizen engagement within Bold City Vision Framework	12
3.2 Best practices in citizen engagement	14
3.2.1 Methodology	15
3.2.2 Define the community	16
3.2.3 Clear purpose and front-loading	19
3.2.4 Continuous engagement	20
3.2.5 Open process, Open source, Open data	23
3.2.6 Co-design, co-create and co-produce	26
3.2.7 Privacy by design	28
3.3 Understanding the context from each participant city	29
3.3.1 Methodology	29
3.3.2 Understanding the context from Limerick City & County Council (LCCC)	32
3.3.3 Understanding the context from Trondheim Kommune (TK)	33
3.3.4 Understanding the context from Alba Iulia (MAI)	34
3.3.5 Understanding the context from Mesto Písek (MP)	35
3.3.6 Understanding the context from Sestao (SB)	36
3.3.7 Understanding the context from Smolyan (SMO)	37
3.3.8 Understanding the context from Võru (VORU)	38
3.4 Regulatory framework for citizen engagement	39
3.4.1 Global Scope	39
3.4.2 European Scope	39
3.4.3 The case of UK	42
4 Citizen participation Playbook	43
4.1 Introduction	43
4.1.1 Methodology	43
4.1.2 Implementation	44
4.1.3 Summary	45
4.2 Process 1: Co-creation of Urban Interventions	48
4.2.1 Phase 1: Preparation	50



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.2.2 Phase 2: Defining the brief	51
4.2.3 Phase 3: Participative Decision Making	53
4.2.4 Phase 4: Implementation	55
4.3 Process 2: Collaborative Legislation	56
4.3.1 Phase 1: Preparation	58
4.3.2 Phase 2: Generating preliminary public debate	58
4.3.3 Phase 3: Collaborative legislation	61
4.3.4 Phase 4: Implementation	62
4.4 Process 3: Participatory Budgeting	63
4.4.1 Phase 1: Preparation	65
4.4.2 Phase 2: Proposals	65
4.4.3 Phase 3: Participatory budgeting	68
4.4.4 Phase 4: Implementation	69
4.5 Process 4: Citizens' Proposals	70
4.5.1 Phase 1: Preparation	72
4.5.2 Phase 2: Proposals	73
4.5.3 Phase 3: Voting and Approval	74
4.5.4 Phase 4: Implementation	76
4.6 Catalog of Physical Tools for Citizen Participation	77
4.6.1 Tool 1. Narrative Tours	78
4.6.2 Tool 2. Co-design Workshops	80
4.6.3 Tool 3. Focus Working Groups	82
4.6.4 Tool 4. Public Engagement Events	84
4.6.4 Tool 5. Go and Find Citizens	86
4.6.6 Tool 6. Mapping Sessions	88
4.6.7 Tool 7. Gamification	90
4.7 Communication & Accountability	92
5 +CityxChange participatory platform	94
5.1 Catalog of Online Tools for Citizen Engagement and Participation	95
5.1.1 Tool 1. Collaborative Text	96
5.1.2 Tool 2. Online Debate	97
5.1.3 Tool 3. Online Mapping	98
5.1.4 Tool 4. Online Voting	99
5.1.5 Tool 5. Accountability	100
5.1.6 Tool 6. Online Proposals	101
5.1.7 Tool 7. Participatory Budgeting	102
5.2 Online Software Suites for Citizen Participation	103
5.2.1 Consul	103
5.2.2 Decidim	107
5.2.3 Comparison between Decidim and Consul	109



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

6 Conclusions and Recommendations for LHC/FC	112
6.1 Next steps	112
6.1.1 WP3 CommunityxChange	113
6.1.2 WP4 +Limerick	113
6.1.3 WP5 +Trondheim	113
6.1.4 WP6 +Followers	113
6.2 Recommendations	114
6.2.1 LHC Limerick City and County Council (LCCC)	114
6.2.2 LHC Trondheim (TK)	115
6.2.3 Alba Iulia (MAI)	116
6.2.4 Město Písek (MP)	117
6.2.5 Sestao Berri (SB)	118
6.2.6 Smolyan (SMO)	119
6.2.7 Võru (VORU)	120
7 References	122
8 Annexes	127
8.1 Annex A: Open source platforms for participation	128
8.1.1 Scope	128
8.1.2 Methodology	128
8.1.3 Open source tools analysed	130
8.2 Annex B: LHCs and FCs responses to questionnaire	177
8.2.1 Municipality of Alba Iulia (MAI): Responses to questionnaire	177
8.2.2 Sestao Berri (SB): Responses to questionnaire	181
8.2.3 Sestao Berri: Remote interview with Luis Carlos Delgado	188
8.2.4 Smolyan (SMO): Responses to questionnaire	189
8.2.5 Võru (VORU): Responses to questionnaire	196
8.2.6 Mesto Písek (MP): Responses to questionnaire	200
8.2.7 Limerick City and County Council (LCCC): Responses to questionnaire	205
8.2.8 Trondheim Kommune (TK): Responses to questionnaire	208
8.3 Annex C: Results of workshops: Understanding the community	214
8.3.1 Workshop results: Understanding Users	214
8.3.2 Workshop results: Defining the participatory processes	220
8.3.3 Workshop results: Second edition	223
8.3.4 Workshop results: WP3 Workshop Trondheim	226
8.4 Annex D: Citizen Participation Playbook Diagrams	229



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

List of Acronyms

API	Application programming interface
BCV	Bold City Vision
CMS	Content Management System
CSS	Cascading Style Sheets
DA	Demonstration Area
ECI	European Citizens' Initiatives
EIP-SCC	European Innovation Partnership on Smart Cities and Communities
FC	Follower Cities
GDPR	General Data Protection Regulation
GNU	GNU's Not Unix!
GPL	General Public License
HTML	Hypertext Markup Language
ICT	Information and communications technology
LHC	Lighthouse Cities
LL	Living Lab
NGO	Non-governmental organization
OCS	Online Collection Software
OSS	Open Source Software
RSS	Rich Site Summary
SaaS	Software as a service
SDG	UN Sustainable Development Goals



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

1 Executive Summary

The Citizen Participation Playbook helps local authorities to enable local communities on how they could become a Positive Energy Block (PEB) and lead the transformation towards Positive Energy Districts (PEDs) and Cities.

Meaningful citizen engagement is a challenge in any city making process led by public institutions, and a key element for the success of the +CityxChange CommunityxChange. For this reason, the +CityxChange Bold City Vision (BCV) identifies citizen engagement as one of the six main processes within the framework. The +CityxChange Citizen Participation Playbook is part of two key sub processes within the BCV Framework involving new forms of deliberation and localization of the democratic process.

The Citizen Participation Playbook is not a mere catalog of physical and online participatory tools, but a detailed roadmap of four distinctive citizen participatory processes to co-design PEBs and PED including phases, steps, stakeholders, outcomes and a catalog of physical tools and a set of online tools:

- Process 1: Co-design of urban interventions. A co-creating process in which municipalities together with citizens, researchers, professionals and private stakeholders can plan and design physical interventions in cities.
- Process 2: Collaborative Legislation. Collaborative process in which all stakeholders can actively participate in preparing municipal legislation and action plans.
- Process 3: Participatory budgeting. A citizen participatory process in which the local community decides how to allocate part of a municipal budget.
- Process 4: Citizens Proposals. Enables direct and bottom-up citizen participation in which any individual and/or organization can submit an initiative to municipalities.

The Citizen Participation Playbook is supported by six best practices for effective citizen participation distilled after an analysis of other smart city projects, European Commission Initiatives and other organizations. These best practices are: (1) Define the community, (2) Clear purpose and front loading, (3) Continuous engagement: capacity building and feedback, (4) open process, open source and open data, (5) Co-design, co-create and co-produce, and (6) Privacy by design.

The catalog of physical tools together with the set of online tools (+CityxChange Participatory platform) provides an integrated and synchronized approach to citizen participation capable of adapting to the notable diversity of the LHCs and FCs participating in +CityxChange.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

The Catalog of Physical Tools consists of seven tools: (1) Narrative tools, (2) Co-design workshops, (3) Focus working groups, (4) Public Engagement Events, (5) Go and find citizens, (6) Mapping sessions and (7) Gamification. Each tool has different target groups, methodologies and requires different levels of participation from citizens. The description includes implementation guidelines and references to practical examples.

The +CityxChange Participatory platform consists of seven online tools: (1) Collaborative Text, (2) Online Debate, (3) Online Mapping, (4) Online Voting, (5) Accountability, (6) Online Proposals and (7) Participatory Budgeting. The description of each of these tools includes a list of recommended software applications distilled from the analysis of more than 35 applications.

The Playbook has been developed by firstly analysing previous experiences on citizen participation shared by smart city projects, EU initiatives and other European organizations (NGOs, municipalities and experts), and then combining insights of LHCs and FCs on citizen participation through collaborative sessions, questionnaires and interviews. This work allowed comparative analysis on citizen participation between all the different municipalities and formed a solid foundation for the development of this Playbook.

D3.2 +CityxChange Citizen Participation Playbook is part of the +CityxChange portfolio of community co-creation measures defined by +CityxChange Framework for Bold City Vision Guidelines, and Incentive Schemes developed in WP3 to promote the development of PEBs and PEDs: D3.3 Framework for an Innovation Playgrounds; D3.4 Framework for DPEB learning and education; D3.5 Framework for a Positive Energy Champion Network and D3.6 Framework for DPEB Innovation labs Framework.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

2 Introduction

This report contains the +CityxChange Citizen Participation Playbook developed within task “T3.2 Development of Citizen Participation Playbook & Platform” that should be implemented to support the Demonstration Projects foreseen by +CityxChange.

D3.2 +CityxChange Citizen Participation Playbook is part of the +CityxChange portfolio of community co-creation measures defined by the +CityxChange Framework for Bold City Vision Guidelines, and Incentive Schemes developed in WP3 to promote the development of PEBs and PEDs: D3.3 Framework for an Innovation Playgrounds; D3.4 Framework for DPEB learning and education; D3.5 Framework for a Positive Energy Champion Network and D3.6 Framework for DPEB Innovation labs Framework.

The +CityxChange Citizen Participation Playbook supports local authorities in transforming citizen participation into local impact, which increases community engagement and builds citizen trust. The playbook is not a mere catalog of physical and online participatory tools, but a detailed roadmap of four distinctive citizen participatory processes to co-design PEBs and PED including phases, steps, stakeholders, outcomes and a catalog of physical tools and a set of online tools.

The document is structured as follows:

[Chapter 3. Context for Citizen Participatory Processes](#) frames the importance of citizen participation within +CityxChange and the Bold City Vision Framework developed in D3.1 Following section distills a set of [best practices](#) for achieving effective citizen engagement and consequently the success of the final local outcomes. Third section provides an [understanding of the community context](#) for each city. Last section contains a [summary of european and global policies](#) regarding citizen participation.

[Chapter 4. Citizen Participatory Playbook](#) defines four multi-step participatory processes within CommunityxChange to enable local communities to lead the transformation towards Positive Energy Districts and Cities. These processes are: “[Co-creation of Urban Interventions](#)”, “[Collaborative Legislation](#)”, “[Participatory Budgeting](#)” and “[Citizens' Proposals](#)”. Each of these participatory processes are supported by a [Catalog of physical tools](#) and a range of online tools. The chapter ends with a summary of [communication and accountability actions](#).

[Chapter 5. +CityxChange Participatory Platform](#) identifies seven online tools to be used together with the Catalog of physical tools providing an integrated and synchronized approach to citizen participation. Each of these tools includes a list of recommended software applications based on the analysis of more than 35 compiled in [Annex A](#). All of these recommended applications allow a granular citizen verification system so they can



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

integrate with existing municipal login systems. Last section offers a more detailed analysis of the [two recommended suites](#) and a comparative summary.

[Chapter 6. Conclusions](#) describe the [next steps](#) for the implementation of the Citizen Participation Playbook linking the deliverable with other tasks within the project. The chapter concludes with a [summary of recommendations](#) which serves as a starting point for the implementation of the playbook in WP4, WP5 and WP6.

In order to use this Playbook we advise: First, to review the Best practices and understand the key principles driving successful citizen participatory processes. Second, to identify the desired outcome of the participatory process and match with one of the four processes described in the Playbook: A physical intervention in the city? A new municipal legislation or plan? A participatory budgeting campaign? An open call for citizens proposals? Third, to select the most appropriate physical tools from the catalog based on the defined steps of the selected participatory processes. Finally, to pair these physical actions with the most suitable online tools from the Participatory platform based on the existing online tools and resources available.

This task has changed scope from development of the platform to an analysis and selection of existing platforms. The partners have come to the conclusion that there are existing tools suitable for implementing the +CityxChange Participatory Platform, based on Open Source Software (OSS). A series of workshops, individual questionnaires and interviews were facilitated in order to understand the context of each city [See Chapter 3.3](#). The conclusion was that a single +CityxChange Participation Platform would not be suitable. First, each city has different needs for the platform – e.g. some cities are looking for an integrated solution while others just commissioned proprietary tools. Second, each city has different available resources – e.g. some cities are too small to successfully maintain a platform while others could benefit from an integrated solution-. Finally, each city has different levels of experience on citizen participation – e.g. some cities do not have much experience therefore they need to pilot first using quick and affordable tools. A more detailed explanation can be found in [Chapter 5](#). The decision then was to instead study the requirements and features needed in each step of the participatory processes described in the [Citizen participatory Playbook](#) and based on that, derive and present a range of existing digital tools to accomplish each step. Each of these tools are described in detail in [Chapter 5.1](#). The recommendations in [Chapter 6](#) define the basis for LHCs and FCs to start testing the most suitable tools in their respective cases. Further meetings with each city during the implementation phases in WP4, WP5 and WP6 will be used to choose and test them. This process has already started.

Also, as per description +CityxChange Participation Playbook was expected to be available as part of the wiki of T8.1. As this platform is still under discussion, this dissemination work will happen during the implementation phases in WP4, WP5 and WP6 as part of an integrated dissemination platform for the whole project.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3 Context for Citizen Participatory processes

3.1 Introduction

This section states a set of best practices for effective citizen participation ([3.2 Best practices in citizen engagement](#)) shared by smart city projects and city councils of European cities. LHC and FC are recommended to follow them when implementing the participatory processes in their cities: WP4 +Limerick, WP5 +Trondheim and WP6 +Followers.

Additionally, section [3.3 Understanding the context from each participant city](#) provides a comprehensive understanding of the community context for each LHC and FC by gathering all the information collected from the three remote/onsite held workshops and online questionnaires. An important part of the context is also European and global policies regarding citizen participation. These are described in [3.4 Regulatory framework](#).

3.1.1 Why is citizen engagement important?

In this introduction, we pursue to share the vision and vast experience of several major European organizations and projects in relation with the great importance of citizen participation in any city making process lead by public institutions, being a vital element for the success of WP3 CommunityxChange, and in particular for accomplishing effective citizen engagement towards transforming Positive Energy Districts and Cities.

The European Manifesto on citizen engagement¹ (EU Smart Cities, 2017) states how important it is for a smart city project to start by focusing on citizen needs, embracing citizen-centric design and the search for an integral quality of life:

An essential element for successful outcomes of smart city projects, is to start from people by focusing on citizen needs, embracing citizen-centric design and the search for an integral quality of life. Technology can offer new creative solutions but it should always remain a means to an end at the service of citizens.

When local communities are empowered to lead and influence decision-making, it makes a real difference to their neighbourhoods for the better² (Locality, 2018). The importance of citizens engagement³ (Eurocities, 2016) is also highlighted by the Eurocities initiative, which is a network of major European cities founded since 1986 and with the main goal of

¹ EU Smart Cities (2017). Manifesto on Citizen Engagement. Retrieved August 30, 2019, from https://eu-smartcities.eu/sites/default/files/2017-09/EIP-SCC%20Manifesto%20on%20Citizen%20Engagement%20%26%20Inclusive%20Smart%20Cities_0.pdf

² Locality (2018). Neighbourhood Plans Roadmap. Retrieved August 29, 2019, from https://neighbourhoodplanning.org/wp-content/uploads/NP_Roadmap_online_print_friendly.pdf

³ Eurocities (2016, June 2). Smarter cities: city-led, citizen-focused - www.eurocities.eu. Retrieved August 23, 2019, from http://nws.eurocities.eu/MediaShell/media/EUROCITIES%20stmt_smarter%20cities_June2016.pdf



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

influence and work with the EU institutions to respond to common issues that affect the day-to-day lives of Europeans.

Smart citizens are at the heart of the smarter city process. Improving citizens' quality of life, offering quality jobs, creating a more equal and inclusive society, all while becoming more sustainable, will be at the core of smarter cities. Citizens have an important role to play in developing and implementing smart city strategies and solutions. A successful smart city will reach out to, empower and engage with its citizens to capitalise on their potential as co-creators of urban solutions.

3.1.2 Citizen engagement within Bold City Vision Framework

The +CityxChange Bold City Vision Framework helps cities identify and address key opportunities and actions on their way towards becoming smarter and more sustainable. The framework incorporates the process of creating a city vision and goals that situate the ambition of creating Energy Positive Cities within the cities overarching strategy, planning and management process⁴ (Tanum et al., 2019). The framework sets out 6 processes and number 5 focuses specifically on citizen engagement.

In the BCV, Citizen engagement is seen as an extension of the organisational development process as municipal organization has to resonate with the social conditions and material conditions under which the city operates (Tanum et al., 2019). Two key sub processes within the Framework involve new forms of deliberation and localization of the democratic process in which new tools become part of the core operation or planning and running the city (Tanum et al., 2019). The +CityxChange Citizen Participation Playbook will be based on these premises to provide a solid set of participatory processes which integrate a wide range of online and physical tools with a methodology that allows the engagement of all the different stakeholders in the co-creation of Positive Energy Blocks and Districts.

⁴ Tanum, Ø., Reeves, K., Næss, K. S., & Mjøen, K. (2019). +CityxChange Deliverable D3.1 Framework for Bold City Vision, Guidelines, and Incentive Schemes
<https://cityxchange.eu/knowledge-base/framework-for-bold-city-vision-guidelines-and-incentive-schemes/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.







	Engage	Design	Activate	Accelerate	Support
 Standardisation	Evaluation	Visualisation	Simulation	Funding	Sharing
 Policy development	Review	Revision	Planning	Budgeting	Analysis
 Innovation partnerships	Appointment	Linking	Collaborating	Prioritising	Portfolio management
 Organisational development	Identification	Leadership	Intrapreneurship	Self organisation	Twinning
 Citizen engagement	Acknowledgement	Deliberation	Localisation	Connection	Amplification
 Project development	Pitching	Prototyping	Delivering	Capitalising	Storytelling
BOLD CITY VISION FRAMEWORK FOR 2050					

Figure 3.1.2 Bold City Vision Framework by +CityxChange (Source: +CityxChange D3.1)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.2 Best practices in citizen engagement

Citizen engagement is a top-down initiative led by governments⁵ (Lodewijckx, 2019) with the goal of increasing the collaboration between citizens and government and improve public services and policy. Lack of proper engagement can result in delayed or canceled measures due to not having the community's support. Meaningful local engagement will always result in a better sense of community ownership, understanding and awareness of how their community could become a Positive Energy Block and lead the transformation towards Positive Energy Districts and Cities.

The following information is based on best practices and benefits regarding citizen participation processes and focusing on effective citizen engagement shared by other smart city projects: Smarter Together (Smarter Together, 2020)⁶, EU-MACS⁷ (EUropean MARket for Climate Services, 2018) and SmarterLabs⁸ (Smarterlabs, 2019), European Commission Initiatives: EIP-SCC⁹ (EIP-SCC, 2020) and other organizations: Locality, Decide Madrid, Consul Barcelona and CitizenLab.

Best Practices in Citizen Engagement	Benefits
1. Define the community	Effective and inclusive community engagement
2. Clear purpose and front loading	Gain of credibility in the participatory process. Higher participation rates.
3. Continuous engagement: capacity building and feedback	Continuous communication; community ownership
4. Open process, open source, open data	Gain credibility, greater engagement, well-informed participation
5. Co-design, co-create and co-produce	Continuous citizen involvement; Ensures project implementation
6. Privacy by design	Increase citizen privacy & trust in the process

Table 3.2.0 Best Practices in Citizen Engagement suggested for use by +CityxChange

⁵ Lodewijckx, I. (2019, April 4). What is the Difference between Citizen Engagement and Participation?. Retrieved August 30, 2019, from <https://www.citizenlab.co/blog/civic-engagement/what/>

⁶ Smarter Together (2020). Smarter Together. <https://www.smarter-together.eu/>

⁷ EU MACS (2018). EU MACS. <http://eu-macs.eu/>

⁸ SmarterLabs (2019) SmarterLabs. <https://smarterlabs.uni-graz.at/en/>

⁹ EIP-SCC (2010). EIP-SCC. Retrieved February 12, 2020, from <https://eu-smartcities.eu/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.2.1 Methodology

The following methodology has been applied for distilling these best practices for effective citizen engagement:

First, wide research and analysis was made to identify the state of the art in the development of frameworks and processes on citizen engagement within the context of smart cities and energy transition:

- All the Horizon 2020 projects in the "Smart Cities & Communities"¹⁰ topic were briefly studied and the project Smarter Together (Smarter Together, 2020)¹¹ was selected for further analysis as it includes the most relevant & latest information.
- A methodology for stakeholders identification was found within the project EU-MACS¹² (EUropean Market for Climate Services, 2018) funded by the European Union under Horizon 2020 - Fighting and adapting to climate change.
- European Innovation Partnership on Smart Cities and Communities published in July 2019 the Smart city Guidance Package¹³ (Borsboom-van Beurden, 2019) was analysed in detail in relation to how citizen engagement strategies are integrated when implementing Smart City plans.

Second, research was expanded to identify practical information and examples of citizen engagement in european cities:

- SmarterLabs¹⁴ (Smarterlabs, 2019), improving Anticipation and Social Inclusion in Living Labs for Smart City Governance, is a project from European Union's Urban Europe Joint Programming Initiative which provides practical and recent examples of citizen engagement in different cities and great detail.
- A number of organizations with vast experience in citizen engagement in Europe were identified and four selected for further analysis: Locality (UK), Decide Madrid (ES) and Consul Barcelona (ES) and CitizenLab (BE) (referenced later in the chapter) as all these organization have published practical guides about citizen engagement.

Finally, this research and analysis was formulated into the following six concepts which serve as the foundations for the [Chapter 4 Citizen participation Playbook](#) as well as a summary for LHCs and FCs of the key aspects to achieve successful citizen participation.

¹⁰ European Commission (2020) "H2020 projects Smart Cities & Communities" <https://ec.europa.eu/inea/en/horizon-2020/h2020-energy/projects-by-field/879>

¹¹ Smarter Together (2020). Smarter Together. <https://www.smarter-together.eu/>

¹² EU MACS (2018). EU MACS. <http://eu-macs.eu/>

¹³ Borsboom-van Beurden, J., Kallaos, J., Gindroz, B., Costa, S., & Riegler, J. (2019, July 15). Smart City Guidance Package Retrieved February 5, 2020, <https://eu-smartcities.eu/news/smart-city-guidance-package>

¹⁴ SmarterLabs (2019) SmarterLabs. <https://smarterlabs.uni-graz.at/en/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.2.2 Define the community

The community involved in the citizen participatory process must represent the character and diversity of the local population in order to achieve effective community engagement. People from different locations and sections of the community should be included. The following list of demographics and socio-economic characteristics¹⁵ (Locality, 2018) shows an example and should be considered when defining the participation area, and will help the design of more inclusive and broad communication campaigns:

- Demographics: Income levels, age profile, employment-type, socio-economic groups, unemployment levels, literacy rate, ethnicity and more. Intrinsic characteristics: for example young, elderly, men, women, LGBT+, disabled, ethnic groups;
- Socio-economic characteristics: for example tenants, owner-occupiers, low income, small business owners, larger firms, creative industries, not-for-profit sector, public sector, private sector, non-car owners, parents, single people, unemployed, students;
- Gender, age group, education level, employment status (pensioners, students, public sector, private sector, carer), economic activity (active, inactive, unemployed), geographical area (urban, semi-urban, rural), household type (single, married, divorced ..etc), internet access.

Additionally, interest groups and actors must be identified, next an example list is provided:

- Interests/knowledge/expertise: for example housing, employment, transport (including public transport), urban design, retail, built heritage, natural environment, sports and recreation, education/skills, culture, city or town centres, night economy (e.g. food, drink, entertainment), communications, health, knowledge economy, crime and anti-social behaviour, play, waste and recycling.
- Residents associations, local businesses, commercial associations, voluntary and community groups and local politicians.
- Building owners, architects, contractors and building occupants.
- Involving creative industries and the arts is useful for helping promote dialogue and civic participation.

The Quadruple helix innovation model, as described in D9.1 Framework for intra project collaboration, Chapter 2.1 Multi-Actor Collaboration Frameworks¹⁶ (Wyckmans et al., 2019), responds to the need for a hybrid exchange among science, industry, government and society. Using the Quadruple helix model to define the engagement target groups leads¹⁷

¹⁵ Locality (2018). Neighbourhood Plans Roadmap. Retrieved August 30, 2019, from https://neighbourhoodplanning.org/wp-content/uploads/NP_Roadmap_online_print_friendly.pdf

¹⁶ Wyckmans, A., Vandevyvere, H., Gohari, S., Nielsen, B. F., Driscoll, P., & Ahlers, D. (2019, February 28). +CityxChange D9.1 Framework for intra-project collaboration. <https://cityxchange.eu/knowledge-base/framework-for-intra-project-collaboration/>

¹⁷ EU MACS (2018) quadruple helix stakeholder engagement. Retrieved September 17, 2019, from <http://eu-macs.eu/outputs/livinglabs/panelmanagement/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

(EU-MACS, 2018) to the inclusion of representatives from each sector in the innovation process and resulting in measures from which all involved groups can benefit.

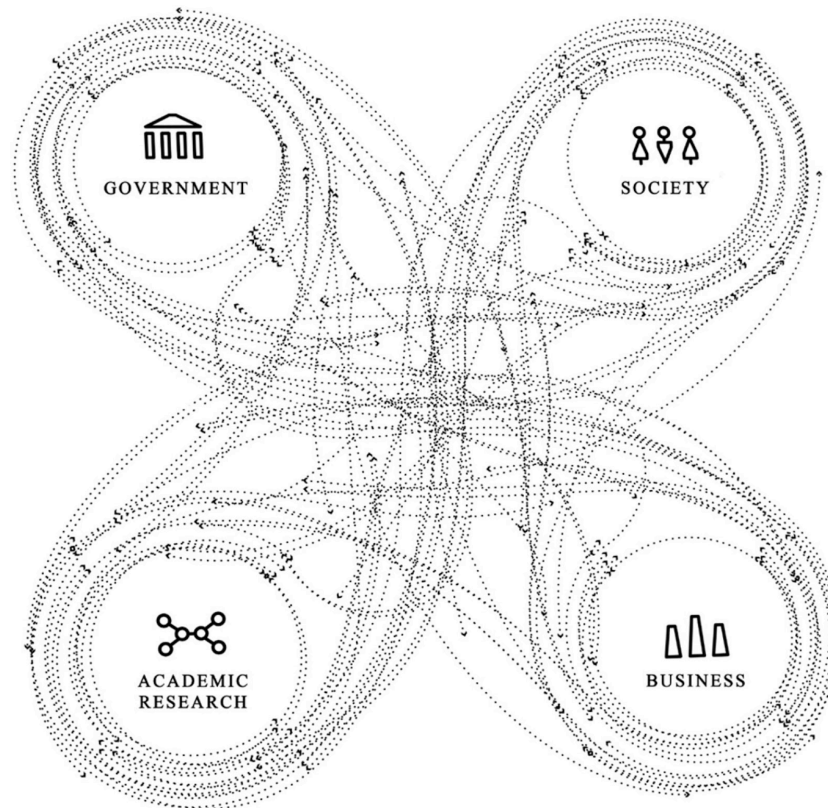


Figure 3.2.2.1 The Quadruple Helix Model adapted by Fraunhofer (2016), originally developed by Carayannis and Campbell (2009). Copyright © 2015 Fraunhofer.

Example: Smarterlabs in Living Lab Brussels

Examples on how to define the community and improve social inclusion in a smart city project can be found at¹⁸ (Dijk et al., 2019) for the case of engagement process in Living Labs initiatives. Stakeholder analysis in order to identify potential types of exclusion and adequate coping strategies need to be developed at the start, and also participants need to take part in identifying possible sources of exclusion during the different stages of the participation process, their feedback in this matter is a great complement to the city council knowledge about the community.

¹⁸ Dijk, M., van Heur, B, Boussauw, K., da Schio, N., Chemin, L., Cassiers, T., ... Castri, R. (2019, March 20). SmarterLabs D5.1 – Report on synthesis and implementation guidelines for “smarter” Living Labs https://static.uni-graz.at/fileadmin/projekte/smarterlabs/downloads/SmarterLabs_WP5_D5.1_Report_on_synthesis_and_implementation_guidelines.pdf



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

These strategies range from the choice of the venue and schedules of the meetings, to the language and the style of moderation, to the time spent in all sorts of training or citizen capacity building and more. A good practice can be going to the people instead of waiting for the people to come.

The city of Brussels within the Smarterlabs found a great barrier regarding the citizens' place of residence to broad inclusion. A great number of workers commuters go in and out of the city from the metropolitan area, who are impacted by air pollution and also contributed to it.

The engagement process failed in this case due to lack of time and resources to identify peripheral locations where to celebrate the engagement activities. Also these workers commuters had a perception that suburban living is less impacted by air pollution which results in less interest and less participation of citizens.

Example: European Market for Climate Services

Public services	30	Society	40	<p>The centrality of stakeholders has been analyzed from the panel circles. Society, Public administration & government, citizens & public services were the groups identified as most central stakeholder groups.</p> <p>In terms of individual stakeholders, city council and architects were identified as most central roles in the panel circles.</p>	
Kindergarden	2	NGO's	5		
Schools/University	7	Local communities	7		
Hospitals/ care facilities	5	Activists	3.5		
Waste companies	2	Environment	6.5		
Utility services (water/electricity)	6	"Trend makers"	5		
Energy professionals	3	Key opinion leaders	2		
Public transport operators	5	Media	1		
Design & Building cities	26	Consultants/experts	5		
City planners	4.5	Investors	2		
Urban designers	4.5	Tourists	1		
Building companies	5	Religion & culture representatives	1		
Architects	10	Terrorists	1		
Landscape designers	2	Public Administration/Government	33.5		
Science	13	Legislation	2		
Research community	6	City council	12		
Living Lab	7	Central government	6		
Business	11	Local planning department	7		
(Inter)national companies (eg VW)	6	Politicians	3.5		
Banks/ financial services	2	Civil protection	3		
Tourist companies	1	Citizens	33		
Retail	1	Children	3.5		
IT companies	1	Adults	3.5		
		Man	3.5		
		Woman	3.5		
		Elderly	3.5		
		Minorities	3.5		
		People with allergies	3.5		
		Disabled people	3.5		
		Students	2		
		Tenants	1		
		House owners	1		
		Commuters	1		

Man	3.5
Woman	3.5
Elderly	3.5
Minorities	3.5
People with allergies	3.5
Disabled people	3.5
Civil protection	3
Energy professionals	3
Key opinion leaders	2
Investors	2
Legislation	2
Students	2
Kindergarden	2
Waste companies	2
Landscape designers	2
Banks/ financial services	2
Media	1
Tourists	1
Religion & culture representatives	1
Terrorists	1
Tenants	1
House owners	1
Commuters	1
Tourist companies	1
Retail	1
IT companies	1

Figure 3.2.2.2 Results from workshop identifying stakeholders in European Market for Climate Services by EU-MACS. (Source: EU-MACS Panel matrix of stakeholders)

The above table shows the results of a workshop for identifying stakeholders using the quadruple helix approach¹⁹ (EU-MACS, 2018) in the context of the EU-MACS project.

¹⁹ EU MACS (2018). European Market for Climate Services. Retrieved September 26, 2019, from http://eu-macs.eu/wp-content/uploads/2018/05/1_panelmatrix_stakeholders.pdf



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

An extended stakeholder mapping was identified together with a number representing the centrality of their role (the larger the number of the table, the more central their role). This group methodology can be used in identifying the community for a participatory process.

3.2.3 Clear purpose and front-loading

In order to gain interest and credibility from citizens in the whole participation process, the following needs to be clear from the beginning:

- The purpose of the community engagement
- When citizen participation will take place
- How the citizen participation will affect the outcomes of the participatory process, in other words, how local council will collect and how they will incorporate their voices into the final project (regulations, urban plan or others).

Early community engagement builds trust and eases the overall process. It should always start before the work starts, which is called front-loading. It is the most important stage of community engagement and should be done before the project goals are developed. The first step should be to identify key issues and themes by gathering information from citizens²⁰ (Locality, 2018).

There is also a need for identifying the incentives for both citizens and government staff, so focusing on what will motivate the team to participate while complying with budgetary and legal restrictions is recommended.

Example: Air quality and climate change plan for the city of Madrid

An example of front-loading can be found at the “Air quality and climate change plan for the city of Madrid”²¹ (Ayuntamiento de Madrid, 2016), which started with 15-20 open questions as a way to start the conversation with citizens on the development of the plan. Focus working groups were held with citizen associations, social collectives, ecologist groups, other institutions, citizen

²⁰ Locality (2018). Neighbourhood Plans Roadmap. Retrieved August 29, 2019, from https://neighbourhoodplanning.org/wp-content/uploads/NP_Roadmap_online_print_friendly.pdf

²¹ Ayuntamiento de Madrid (2016). Borrador de Plan de Calidad de Aire y Cambio Climático. Retrieved January 20, 2020, from <https://decide.madrid.es/legislation/processes/74>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

representatives, business collectives, trade unions to give answers to these questions. Consul's debate module was used as the online debate space to compile all the conversations in which 6250 answers and comments were accounted for.

Front-loading the process with a preliminary open debate before detailed plans are drawn up allowed early and productive community engagement, and the inclusion of high quality suggestions (weighted by votes in the online debate) in the earlier versions of the plan. Traditional consultation processes at later stages often suffer from low participation and higher opposition rates. This example is explained in more detail as a case study in Chapter 4.2 Collaborative Legislation.

[Case Study: Air quality and climate change plan for the city of Madrid](#)

3.2.4 Continuous engagement

There are common difficulties in every participatory process: to communicate and engage with the community involved (citizens, organizations, businesses, local council). Lack of interest in the topic, lack of faith in institutions, or not finding their own benefits in the final aim of the project and the proposed measures²² (Borsboom-van Beurden, 2019) are some of the challenges to be faced. Continuous communication with the community is key in order to achieve real engagement, the following measures will help to maintain the community alive:

- Capacity training: generate informed participation by educating and training citizens in consultation activities, which will result in more understanding and interest in the field where the participation is taking place.
- Design a communication and management strategy: encourage dialogue and target different audiences using digital and social media and public communications campaigns. Every participatory process should also have a website and email address. Involving all the relevant target groups will result in the final measures taken by the institution capturing the community needs.
- Transparency and dissemination of information: for example after celebrating engagement events including community feedback and how will they impact the final measures. Unrealistic expectations and disappointment of citizens will be

²² Borsboom-van Beurden, J., Kallaos, J., Gindroz, B., Costa, S., & Riegler, J. (2019, July 15). Smart City Guidance Package Retrieved February 5, 2020, From <https://eu-smartcities.eu/news/smart-city-guidance-package>



avoided by being transparent and clear about the scope and limitations of the participatory process.

The following examples show communication strategies used by different initiatives when running a community engagement activity:

Example: Locality

Locality²³ (Locality, 2018) is an organization working with the UK government in supporting local community organisations to be strong and successful. They have developed a guide on “how to consult with your community”²⁴ (Locality, 2018) including useful information regarding communication strategies, such as: five golden rules for using social media for neighbourhood planning (post regularly, publicise your online spaces, try a range of social media tools, create dialogue and keep it visual), how to promote an event, social media platforms to use and even some examples of good social networking. Some of the communication strategies found in this guide have been included in each tool described in [Chapter 4.6 Catalog of Physical Tools](#) as well as in [Chapter 4.7 Communication and Accountability](#).

Locality's guide describes a method to plan and deliver successful community consultation process. As the guide emphasizes, keeping the community engaged since the inception of the project will minimize the conflicts that otherwise would come too late in the planning process.

Example: Consul Communication Guide

Madrid City Council has developed several communication guides in their effort of understanding their participation environment DecideMadrid. One of them is the

²³ Locality (2018). Neighbourhood Planning. Retrieved September 26, 2019, from <https://neighbourhoodplanning.org/>

²⁴ Locality (2018). How to consult with your community - Locality Neighbourhood Planning. Retrieved September 26, 2019, from <https://neighbourhoodplanning.org/toolkits-and-guidance/how-to-consult-with-your-community/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

“Consul Communication Guide”²⁵ (Consul, 2018), a comprehensive guide giving recommendations to civil servants on how to communicate at different stages of the participatory project: before launching the participatory platform, daily communication and dissemination and communication campaigns contemplating both online and offline advertising actions.

Consul Communication Guide targets a key group in any citizen participation process that it is often overlooked: Civil servants and other staff from small cities in which no dedicated communication team will be available.

A communication and management strategy needs to be defined to address all identified target groups, applying tailor-made methods for each of them, and adopting proper facilitation methods, in order to ensure that any voice will be heard.

Example: SmarterLabs Living Lab Graz

The City of Graz aimed to take action in a district with challenging circumstances: high proportion of migrants, various cultures and ethnicities, education levels and incomes below average. The strategy to reach out to marginalized groups such as migrants, elderly people and children was to offer different formats of LL activities: workshops, social safaris, online questionnaires, mental maps, etc.

Lab organizers did not wait for people to show up, but actively approached them on the street, literally bringing the Lab to the people. By repeatedly offering possibilities for stakeholders to participate and actively approaching them, over a long period of time, marginalized groups were included in the process.

²⁵ Consul (2018). Communication guide. Retrieved September 3, 2019, from http://consulproject.org/docs/consul_communication_guide_en.pdf



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.2.5 Open process, Open source, Open data

The participatory process must remain open to welcome new members of the community at any time, which will help to capture the diversity of the area and also gain credibility of the engagement process amongst the community.

Open source software (OSS) has been explicitly recognized as a key driver towards achieving ambitious governmental digitisation goals by 2020. The following text can be found under the Tallinn Declaration on eGovernment at the ministerial meeting during Estonian Presidency of the Council of the EU on 6 October 2017²⁶ (Council of the EU, 2017) (within point 5) Interoperability by default:

5) Interoperability by default. We will in our countries:

- make more use of open source solutions and/or open standards when (re)building ICT systems and solutions (among else, to avoid vendor lock-ins), including those developed and/or promoted by EU programmes for interoperability and standardisation, such as ISA;

- make ICT solutions owned by or developed for the public administrations more readily available for reuse in the private sector and civil society, for example, by developing and publishing terms and conditions on how third parties may reuse the solutions.

5) Interoperability by default. We call upon:

the Commission to consider strengthening the requirements for use of open source solutions and standards when (re)building of ICT systems and solutions takes place with EU funding, including by an appropriate open licence policy – by 2020.

This declaration was signed by 32 countries of the European Union (EU) and the European Free Trade Area (EFTA). It includes specific remarks to strengthen the adoption and use of open source solutions in e-government and when building ICT systems with EU funding.

The +CityxChange Citizen Participation platforms shall take into account this declaration and consider existing OSS solutions, if available, since the project benefits from EU funding and the software solutions will be used by local administrations to interact with citizens. Open Access, Open Data, and Open Source are also ambitions of the project and are reflected in many cities' policies as well. The +CityxChange Data Management Plan (DMP): [D11.7 Data Management Plan 2](#) discusses and develops further details.²⁷ (Ahlers, D et al., 2019)

²⁶ Council of Europe (2017, October 6). Tallinn Declaration on eGovernment. Retrieved September 3, 2019, from https://ec.europa.eu/newsroom/document.cfm?doc_id=47559

²⁷ Ahlers, D., Brigg, D., Karatzoudi, K., & Wyckmans, A. (2019). +CityxChange D11.7: Data Management Plan 2. Retrieved February 12, 2020, from <https://cityxchange.eu/knowledge-base/data-management-plan-2/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Regarding dissemination of data, an open data policy is recommended to be used by local governments to ensure citizens having access –freely used, re-used and redistributed by anyone to the requirement to attribute and share alike²⁸ (Open Knowledge Foundation, 2019)– to the participatory processes generated data, such as the results from meetings and working sessions, participatory budgeting proposals, technical reports when evaluating citizen proposals and similar data.

An open data policy will result in a well-informed participation and in a greater citizen engagement. Also open data generates transparency and trust in the process²⁹ (Vandenbroele, 2017).

Example: Consul Open Government Platform

Borja Prieto's Interview, Institutional Extension Unit, Madrid City Council.

"We use public money to open the development and reuse the source code... ...there is a credibility problem in politics: the fact of being OS means the whole participation process could be audited which is of great importance for gaining credibility... ...everything is in github, everybody improves the tool."

Consul³⁰ (Consul, 2019) is an open government and e-participation web software originally developed by the Madrid City government, implemented in Madrid under the name "DecideMadrid". Consul is an example of an open source platform, all its code can be used by any person or entity. Consul is used by millions of people in some of the major capital cities of the world such as Paris, Madrid and Buenos Aires, as well as dozens of towns and regions across the globe.

The fact of being open source makes it possible for any municipality to freely modify the code to suit its requirements. Another advantage is that all institutions using Consul are part of the same work network, a community of users sharing experiences, best practices and knowledge. Thanks to this community, Consul is growing and becoming more powerful constantly. Some of the characteristics of successfully OSS projects are present in Consul:

²⁸ Open Knowledge Foundation (2019). What is Open Data? - The Open Data Handbook. Retrieved September 3, 2019, from <http://opendatahandbook.org/guide/en/what-is-open-data/>

²⁹ Vandenbroele, J (2017, March 1). How can open data feed citizen engagement?. Retrieved September 5, 2019, from <https://www.citizenlab.co/blog/civic-engagement/how-can-open-data-feed-citizen-engagement/>

³⁰ Consul (2019). CONSUL. Retrieved August 30, 2019, from <http://consulproject.org/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- Consul has extensive and up to date documentation including technical, user and installation guides allowing interested cities to set up an instance of the software by themselves and test extensively before deployment. Consul also provides a demo server to check user and admin interfaces.
- The project is designed in a way that it can be easily adapted to other municipalities, different modules and features (language localisation, custom themes and stylesheets, advance sign-up features such as connections with census databases and more) can be activated to suit each city's needs.
- Using Github for development allows a distributed community of contributors around the world to maintain, fix bugs and develop new features.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.2.6 Co-design, co-create and co-produce

Extensive and early engagement from all stakeholders is key for achieving an agreement on the final aim of the project and therefore ensuring its implementation. Successful development and roll-out of Positive Energy Blocks/Districts (PEB/Ds) requires open innovation, combining knowledge and experience of different actors in a quadruple helix ecosystem³¹ (Wyckmans et al., 2019). Enabling all of them to become co-designers, co-creators and co-producers of the final solutions is a common successful strategy in smart city projects.

Citizen engagement must be designed and implemented so these new roles are incorporated³² (EIP-SCC, 2017). Co-creation can be defined as the process when all stakeholders in the city are involved in the planning of a service, for example when civil society initiate the construction of a digital platform, or contribute in a city council discussing its maintenance and design.

Co-production is when all stakeholders in the city help shaping the service during later phases of the life cycle³³ (Lember & Brandsen, 2019), for example, co-production happens when citizens actively engage in the design and delivery of their personal services through a digital platform provided by the city council.

The co-design process can happen during the definition of the problem and actions to be performed in which both citizens, specialized experts and civil servants work together. The co-creation process will happen during the implementation stage. Consequently, the citizen engagement process goes from ideation until implementation of the final measures.

Example: Smarterlabs in Living Lab Bellinzona

The SmarterLABS project³⁴ (Dijk et al., 2019) focuses on improving anticipation and social inclusion in living labs for smart city governance. They implemented Living

³¹ Wyckmans, A., Vandevyvere, H., Gohari, S., Nielsen, B. F., Driscoll, P., & Ahlers, D. (2019, February 28). +CityxChange D9.1 Framework for intra-project collaboration.

<https://cityxchange.eu/knowledge-base/framework-for-intra-project-collaboration/>

³² EIP-SCC (2017). Manifesto on Citizen Engagement. Retrieved September 10, 2019, from https://eu-smartcities.eu/sites/default/files/2017-09/EIP-SCC%20Manifesto%20on%20Citizen%20Engagement%20%26%20Inclusive%20Smart%20Cities_0.pdf

³³ Lember, V., & Brandsen, T. (2019, June 6). The potential impacts of digital technologies on co-production and co-creation Retrieved September 5, 2019, from

<https://www.tandfonline.com/doi/full/10.1080/14719037.2019.1619807>

³⁴ Dijk, M., van Heur, B, Boussauw, K., da Schio, N., Chemin, L., Cassiers, T., ... Castri, R. (2019, March 20). SmarterLabs D5.1 – Report on synthesis and implementation guidelines for “smarter” Living Labs https://static.uni-graz.at/fileadmin/projekte/smarterlabs/downloads/SmarterLabs_WP5_D5.1_Report_on_synthesis_and_implementation_guidelines.pdf



lab experiments regarding mobility-related topics in four cities. One of them is the city of Bellinzona, where citizens were co-designed a smartphone app aimed at promoting behaviour change and rewarding those who reduce car usage.

One of the key elements was to involve all relevant stakeholders in the co-design process in order to avoid a polarized sample of participants, such as only cyclists. To favor large diversity and high representativeness of the local population among the Living Lab participants, Living Lab organizers opted for a hybrid recruitment campaign, relying on both bottom-up and top-down activities. The co-design of the smartphone app involved a user centered approach instead of a more traditional expert-driven learning process. Inclusive participatory techniques were adopted such as division in small groups, favor round-robin interactions, voting, short discussions for different topics and more. These methods encourage participation, motivation and knowledge-sharing of all the different personalities of a heterogeneous group of participants during the co-design phase.

Example: SmarterTogether Urban Living Lab Vienna

A creative way of citizen engagement in open public spaces is shown in the SCC1 SmarterTogether project “SiMmobil”³⁵ (Smarter-together, 2019), which is a mobile information bus and citizen participation platform used in public areas. Targeted stakeholders were pupils, local businesspeople, social and cultural initiatives and representatives of institutions, local policy makers and opinion makers.

One of the activities was running a co-design process for collecting ideas for the “playground of the future”³⁶ (Smarter-together, 2019). Around 250 children and adolescents visited SiMmobil and participated in the co-design process by expressing their proposals for the future schoolyard. A list of ideas from the students was collected regarding different categories: spaces for recreation and retreats, design aspects, additional offers and functional aspects. The interest of the pupils was very high. The most repeated ideas were to install different seating options, sockets for mobile phone charging, free wi-fi, free-to-use lockers for everyone and a water dispenser.

³⁵ Smarter Together (2019). Vienna. Retrieved September 26, 2019, from <https://www.smarter-together.eu/cities/vienna>

³⁶ Smarter Together (2019, January 7). D5.22 Co-design processes. Retrieved November 19, 2019, from <https://www.smarter-together.eu/file-download/download/public/1015>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.2.7 Privacy by design

Compliance with GDPR is enforced since 25 May 2018 by the EU. Ensuring the privacy of data of citizens is an important concern in any smart city project. With the goal of working on guidance for achieving GDPR compliance, the European Innovation Partnership on Smart Cities and Communities (EIP-SCC) is developing the [ISO/IEC 27570](#) standardization project Privacy Guidelines for Smart Cities³⁷ (ISO, 2020). The standard will address the following challenges:

- Governance of ICT ecosystem from a smart city viewpoint
- Data sharing agreement management in an ICT ecosystem from a smart city viewpoint
- Risk management of an ICT ecosystem from a smart city viewpoint
- Ensuring privacy by design practice
- Implementing citizen engagement process on privacy management matters

In May 2019, a presentation was made by EIP-SCC giving the current status of the second draft of the ISO/IEC 27570³⁸ (EIP-SCC, 2019). Once finished, this guideline will give directions on how privacy standards can be used at a global level and at an organizational level for the benefit of citizens. A section on privacy guidelines for the citizen engagement process is planned in to be included. This section will have an impact on citizen engagement, therefore it is recommended to follow this guide once it is finalized.

Within the +CityxChange project we are dealing with data privacy in physical and only participatory tools and processes interacting with citizens, and making these processes compliant is not trivial, so they need to be addressed consistently. Data privacy aspects are also handled in the +CityxChange Data Management Plan (DMP): [D11.7 Data Management Plan 2](#).³⁹ (Ahlers, D et al., 2019)

Example: Smart City Guidance Package

The Smart City Guidance Package⁴⁰ (Borsboom-van Beurden et al., 2019) shares two recommendations regarding privacy management in smart cities in order to

³⁷ ISO (2020). ISO/IEC CD TS 27570.2 - Information Technology - Privacy guidelines for Smart Cities. Retrieved January 22, 2020, from <https://www.iso.org/standard/71678.html>

³⁸ EIP-SCC (2019, May 17). Citizen Centric approach to data. Retrieved September 10, 2019 http://eu-smartcities.eu/sites/default/files/2019-06/Citizen_centric_approach_to_data_GDPR_revisited

³⁹ Ahlers, D., Brigg, D., Karatzoudi, K., & Wyckmans, A. (2019). +CityxChange D11.7: Data Management Plan 2. Retrieved February 12, 2020, from <https://cityxchange.eu/knowledge-base/data-management-plan-2/>

⁴⁰ Borsboom-van Beurden, J., Kallaos, J., Gindroz, B., Costa, S., & Riegler, J. (2019, July 15). Smart City Guidance Package Retrieved February 5, 2020, <https://eu-smartcities.eu/news/smart-city-guidance-package>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

create a common body of knowledge, to speed up GDPR compliance and to allow similar cities to exchange/reuse practices:

1. Engage within the smart city community to share concerns and experience of privacy management.
2. Converge towards common practices concerning privacy management.

3.3 Understanding the context from each participant city

A good understanding of the current and future context regarding citizen participation in each LHCs and FCs is the supporting foundation for designing an inclusive and effective citizen engagement strategy. Through the methodology described below, a concise summary from each city is developed. The work developed in this chapter allowed comparative analysis on citizen participation between all the different municipalities and formed a solid foundation for the development of the Citizen Participation Playbook and +CityxChange Participatory Platform which provides a solid methodology for the co-creation of Positive Energy Blocks and Districts by means of citizen participation. Finally a set of recommendations in [Chapter 6](#) define the basis for LHCs and FCs to start testing the most suitable tools in their respective cases. Further meetings with each city during the implementation phases in WP4, WP5 and WP6 will be used to choose and test them. This process has already started.

3.3.1 Methodology

Individual questionnaires and interviews were used to understand each LHCs and FCs actual situation (the context) regarding citizen participation and form a richer overview for each city demo area. Later, collaborative sessions were used to exchange ideas between LHCs and FCs and lessons learnt from each other regarding: understanding the community, the DA, share existing good practices/challenges and participatory processes, gathering target groups and themes for the participatory processes. Additionally, the information provided about each city from “D3.1: Framework for Bold City Vision, Guidelines, and Incentive Schemes, v.2.0” Appendix 3: Preliminary Bold City Visions.⁴¹ (Tanum et al., 2019) was studied and contributed in each city section.

3.3.1.1 Questionnaires and interviews

A written questionnaire was prepared to initiate a conversation with all participants municipalities during the first months of the project when municipalities teams were still forming. A standardized set questions facilitated a cross analysis between cities and

⁴¹ Tanum, Ø., Reeves, K., Næss, K. S., & Mjøen, K. (2019). +CityxChange Deliverable D3.1 Framework for Bold City Vision, Guidelines, and Incentive Schemes <https://cityxchange.eu/knowledge-base/framework-for-bold-city-vision-guidelines-and-incentive-schemes/>



municipalities project team was able to forward them to other departments in case they could not respond directly. The goals were the following:

- To Define the context for each LHC and FC regarding their citizens: Existing data was mostly focused on the physical, technical and built characteristics of the DAs so further information regarding their inhabitants was required to define the communities. [See Chapter 3.2.2](#)
- To identify LHC and FC existing participatory tools, methodologies and processes used in their respective municipalities as well as communication strategies, identified target groups and overall citizen participation rates.

Additionally, individual interviews were conducted to expand on the information provided on the questionnaires. Providing the questionnaire prior to the interviews facilitated a more focused and effective discussion.

3.3.1.2 Workshops

Following the individual interviews and questionnaire, a series of collaborative workshops were conducted. The goals were the following:

- To understand the community in each Demonstration Area.
- To share existing participatory processes & good practices between partners
- To co-design citizen participatory processes to achieve PEBs and PEDs
- To gather collective knowledge on organizations that +CityxChange should engage with in each participant city.
- To define common themes within +CityxChange participatory playbook and learn more about each city challenges.

A number of exercises were created specifically to achieve the above goals:

- Interviews to get a better understanding of the community living in the DA. Subjective insights from workshop participants living in each city were a source of useful information, and they will complement the demographic and socioeconomic data gathered from LHC & FC questionnaires and Eurostat data.
- Brainstorming to gain knowledge on citizen participatory processes hosted in participant cities and other places. A fast method to list collectively lessons learned, what worked or did not work, what could be done differently.
- Design thinking to co-design actions to make +CityxChange citizen participation processes more inclusive and engaging.
- Brainstorming to gather as many organizations to engage during +CityxChange and identify agents being overlooked in each city.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- Define and clustering to identify projects that could benefit from a participatory approach, categorizing these projects and cluster to propose categories for the participation playbook.

Mural⁴² (Mural, 2020), an online collaborative visual tool, was used for running the workshops and for improving the experience of remote participants. The attendants rapidly learnt how to make contributions to the murals defined for each exercise. The workshop timing was accurate and we were able to run the exercises as planned. Complete results and analysis can be found in [Chapter 8.3 Annex C: Results of workshops](#).

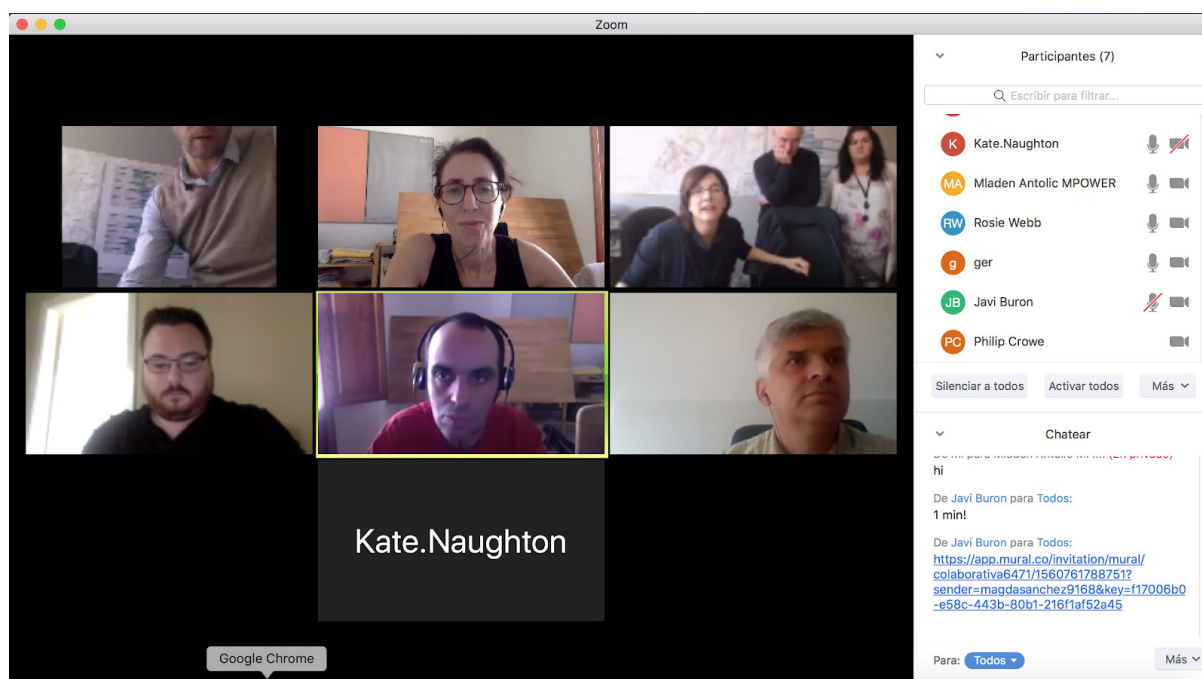


Figure 3.3.1 Remote workshop organized by +CityxChange on 18th June 2019 (Source: Colaborativa)

⁴² Mural (2020). Mural homepage. Retrieved February 1, 2020, from <https://mural.co/>



3.3.2 Understanding the context from Limerick City and County Council (LCCC)

3.3.2.1 Introduction

Limerick has a population density of 3.848 inhabitants per km² and a total population of 94.192. The local unemployment rate was 14.4% in 2017. 34.08% of the population is between 35-60 years old and 12.50% is older than 60 years. There are around 2.386 inhabitants in the DA which is at the heart of the historic city centre (the Georgian Innovation District) which is 0.62km² in area. The DA has 1.626 dwelling units of which 320 are vacant. At the time of this research there was no socioeconomic information provided from the demonstration area.

The list of target groups includes universities (University of Limerick and Limerick Institute of Technology), neighbour associations and citizen groups such as Georgian Society, Tidy Towns Groups from certain neighborhoods and towns, various communities of interest depending on the topic for engagements.

The Limerick Public Participation Network (Limerick PPN) is a network that allows local authorities around the country to connect with community groups in their area to give citizens a greater say in local government decisions which affect their own communities.

<https://limerickppn.ie>

82% of the entire population are internet users. LCCC uses press releases, social networks, outdoor campaigns and more.

3.3.2.2 Understanding the context on citizen participation

LCCC recently commissioned MyPoint <https://mypoint.limerick.ie/> based on CiviQ⁴³ (CiviQ, 2020) platform (proprietary). The platform allows them to run public consultations on council proposals such as Development Plans, Local Area Plans, Strategies and Policies, Planning Applications etc. Also is possible to conduct both internal and external surveys, it has a reporting tool for analysing responses received to all of the above.

MyPoint platform is working from early May 2019 and to date (november 2019) 14 consultations processes have been done, receiving 110 submissions in total from the public. Citizen awareness campaigns are being planned by the City Council. Participation rates can vary according to the issue at hand and also by the location of the issue so it's difficult for LCCC to quantify. Submissions tend to come via email, but in a lot of cases the citizen will have attended a public meeting in advance of that to get clarifications before submitting.

⁴³ CiviQ (2020). CiviQ - Consultations & Opinion Insights. Retrieved February 1, 2020, from <https://civiq.eu/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.3.3 Understanding the context from Trondheim Kommune (TK)

3.3.3.1 Introduction

Trondheim has a population density of 557 inhabitants per km² and a total population of 202.235 inhabitants⁴⁴ (Statistisk sentralbyrå, 2019). Trondheim is a strongly growing city and has a low unemployment rate (2.5 %). The demonstration district has a population of 11,954 inhabitants and covers 1.2 km² (estimated). At the time of the research no further socioeconomic data was provided for the demonstration area.

The whole city covers 341 km². There are three demonstration areas: DA1 Sluppen-Tempe: mixed-use district with eight buildings comprising: residential buildings (54 apartments), seven corporate buildings (old storage and warehouses), industry buildings, a data centre and new office buildings. DA2 Brattøra: workplace area including the city's harbour, hotels, museums, convention centre and sports facilities/swimming pools. The development of new apartment buildings and the Trondheim Station centre is planned for the coming years, resulting in future massive densification. DA3 Campus Gløshaugen: seven buildings varying from old educational buildings to new office buildings and the proposed Valgrinda ZEB Flexible Lab due by 2020.

Trondheim Kommune is a large organisation consisting of 14.000 people. The municipality of Trondheim covers all sectors, everything from child care to road works because of this TK is in contact with most of the existing associations and interest groups in Trondheim City and the County.

98% of the entire population are internet users and 81% have profiles on social networks. Social and digital networking communication is strongly used (Facebook, Instagram, Twitter, websites and google sites). Newspapers in the city are important communication channels (Trondheim 2030 is a new magazine run by the city council).

3.3.3.2 Understanding the context on citizen participation

Trondheim uses many digital tools throughout its organisation for organizing different kinds of participatory processes. There are currently testing the use of Decidim. As all the different participatory processes are being run through different departments, it is not possible to provide info about participation rates, this has been identified by municipality representatives as an issue.

⁴⁴ Statistisk sentralbyrå (2019). Population - SSB. Retrieved February 1, 2020, from <https://www.ssb.no/en/befolkning>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.3.4 Understanding the context from Alba Iulia (MAI)

3.3.4.1 Introduction

Alba Iulia has a population density of 713 inhabitants per km² and a total population of 63.536 inhabitants. 42% of the population live in apartments and 54.4% in houses. One third of the population are between 30 to 49 years old. The local unemployment rate was 6.7% in 2016. It is worth highlighting that 21.2% of the population are retired persons due to early retirement for factories going bankrupt in the 1990s⁴⁵ (IUC, 2018).

There are around 1500 inhabitants in the DA, the neighbourhood of Cetate located at the west of the city, which is 2km² in area, mostly populated by non-residential buildings such as educational facilities, sport facilities (municipal Stadium and the Olympic Stadium), the county hospital, and other institutions). The target groups identified include "1 Decembrie 1918" University Alba Iulia, regional institutions (Europe Direct Center Alba Iulia, Alba Communitarian Foundation, PAEM Alba Foundation and others), NGOs and tenants associations.

The city has free WIFI hotspots within the Alba Carolina Citadel, and citizens need to answer a question regarding the city in order to have access to the internet. 75% of the entire population are internet users. They are active most popular social networks (Facebook, Youtube, Instagram and Twitter). Citizens can communicate with the city council using Facebook Messenger or telephone.

Alba Iulia City Council uses the following communication channels press releases, press conferences, social networks (over 10 channels of communication), smart surveys in 15 busses, e-Albalulia platform through the free WIFI installed in various parts of the city and through the E-Albalulia app + over 400 beacons spread all over the city.

3.3.4.2 Understanding the context on citizen participation

Currently the council has an online mapping tool for citizens to report, view, or discuss local problems (graffiti, broken paving slabs, or street lighting). Alba Iulia Municipality is planning to develop an online participatory budgeting platform through an EU project starting end of 2019. There is a Local Community Barometer⁴⁶ (Alba Iulia Smart City, 2019) at a testing phase, being developed by the Municipality in partnership with the local university, for diagnosing the community support for the planned development projects. Citizens will be able to participate using this tool to give their opinion regarding different issues at the local level, no participation data is available yet.

⁴⁵ IUC (2018). Start up Information Alba Iulia. Retrieved October 3, 2019, from http://www.iuc.eu/fileadmin/user_upload/Regions/iuc_lac/user_upload/START_UP_INFORMATION_VE_EN_Alba_Iulia.pdf

⁴⁶ Alba Iulia Smart City (2019). Local Community Barometer. Retrieved October 3, 2019, from <https://albaiuliasmartcity.ro/en/proiect/public-barometer/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.3.5 Understanding the context from Mesto Písek (MP)

3.3.5.1 Introduction

Písek has a population density of 480 inhabitants per km² and a total population of 30.351 inhabitants. The local unemployment rate is very low, 1.7% in 2019. 20.9% of the population aged 65 years old and over⁴⁷ (CZSO, 2019). There is one DA: the inner city area. DA is comprised of two Positive Energy Blocks. The Physical PEB A consists of Primary School J.K.Tyla and Frana Sramek Theater. The Virtual PEB B consists of Primary School Jana Husa, Kindergarten Zayerova, one of the City Council buildings and planned in near future car parking building.

The list of target groups includes: citizen associations such as the Water and Greenery in Písek (Voda a zeleň v Písku), a citizen group focused on environment topics in the city; local and regional institutions such as Píseckem, s.r.o and cultural agents such as City Library Písek (Městská knihovna Písek), Písek Culture Centre and The Playful Gallery Sladovna.

54% of the population in Czech Republic are active social network users. [Press releases](#), [Mesto Písek Municipal website](#) and [Facebook](#) are used as communication channels. [Discussion forums](#) are opened for communicating with citizens, mostly related to questions related to infrastructure and fees. Contact form related to [Smart Písek activities](#)

3.3.5.2 Understanding the context on citizen participation

Písek does not use a particular citizen participatory platform, instead they use Facebook, email, discussion forums and online surveys such as recent climate and water surveys or public transportation surveys. Dozens of citizens have participated in physical public debates and presentations (Smart Mobility/Energy/ICT, introduction of SECAP etc.).

Smart Písek municipal group has increased the level of participation since its establishment. One of the initial projects was the creation of a series of physical events about the Smart City concept which gathered over a hundred people⁴⁸ (Písecký Svet, 2015).

The most recent example is the Smart mobility plan. The new public transportation network was created based on a survey. The draft was presented to the public and followed by a discussion with citizens. Smart Písek also posted an email address where comments could be sent. Those comments will be considered, implemented and eventually presented in the second draft of the mobility plan which was also presented and discussed with citizens.⁴⁹ (Smart Písek, 2018)

⁴⁷ CZSO (2019). CZSO. Retrieved February 1, 2020, from <https://www.czso.cz/csu/czso/home>

⁴⁸ Písecký Svet (2015, October 30). Občan versus politik.. Retrieved February 1, 2020, from <http://www.piseckysvet.cz/veci-verejne/video-c-2-z-besedy-obcan-versus-politik-smart-city-pisek>

⁴⁹ Smart Písek (2018, November 20). Představili Písek v roce 2025 - Smart Písek - Písek.eu. Retrieved February 1, 2020, from <https://smart.pisek.eu/index/aktuality/predstavili-pisek-roce2025.html>



3.3.6 Understanding the context from Sestao (SB)

3.3.6.1 Introduction

Sestao has a population density of 7.926 inhabitants per km² and a total population of 27.445 inhabitants. 28% of inhabitants of the DA are unemployed. 28.31% of inhabitants of Sestao are between 30 to 49 years old. 8.65% of inhabitants of Sestao are foreigners.

There are 660 inhabitants in the two DAs (ARI Txabarri neighbourhood and La Punta Housing development), which is 0.0147km² in area. The DAs are populated by several former industrial buildings from Altos Hornos de Vizcaya, one of the biggest companies in Spain in the 20th century⁵⁰ (Cuartas, 2001): two of them are still empty but with a project to be developed, the rest are residential housing which consist of dwellings lacking accessibility and energy efficiency of around 70 square meters. Low income and immigrant population occupies the dwellings. Banks also own many of the dwellings as a result of evictions during the spanish real estate crisis. The list of target groups includes neighbourhood associations, regional centers and NGOs such as the Gypsy Initiative Association.

The online web of Sestao's City Council is used for publishing the meetings and results of any participatory process. There is a monthly physical bulletin (ensestao.com) that informs citizens about everything related to the city, and where our institution can also publish information. 93% of the entire population are internet users and 60% of the population use social networks.

3.3.6.2 Understanding the context on citizen participation

Sestao City Council has a participatory budgeting functionality in its website [Sestao Decide](#) and [FAQ proposals](#). 175000 euros were reserved in 2018 for citizen proposals: citizens submitted a total of 273 proposals (124 forms were submitted by hand and 79 online) [Results here](#). A total of [556](#) votes were received on the final voting process using a physical voting station located at a centric place on a particular day.

Sestao Berri has a social intervention team of who supports urban participation processes. This team is well known by the community and consists of three workers of the Sestao City Council. Sestao Berri already has a community development plan for the demonstration area for the next four years. A citizen participatory process facilitated by specialist consultants has already been performed for deciding about the future uses of the two former industrial buildings. The results show a mix-use development. The online web of Sestao's City Council was used for publishing the meetings and results of the participatory process, a total of three meetings were held with around 50 attendees each. During the interviews Sestao Berri stated that their perception of citizen participation is low.

⁵⁰ Cuartas, J. (2001, February 17). La siderurgia sustentó el poderío industrial vasco - El País. Retrieved January 24, 2020 https://elpais.com/diario/2001/02/17/economia/982364404_850215.html



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.3.7 Understanding the context from Smolyan (SMO)

3.3.7.1 Introduction

Smolyan has a population density of 236 inhabitants per km² and a total population of 31.686⁵¹ (GRAO, 2019). The local unemployment rate is 7.8 %⁵² (National Employment Agency, 2019). Smolyan population has Bulgarian nationality, only a small percentage of roma population (around 1%). DA is around 1 km² in area, mostly populated by occupied conventional dwellings (residence of one or more people). The DA1 Old City Center covers around 0.282 km² including residential, public and business buildings (sports hall, city swimming pool, training stadion, multifunctional training playgrounds). The DA2 New City Center covers around 0.630 km² including residential, public and business buildings. The buildings were built in the period 1975-1985 are features of the socialist architecture and landmarks of the town that need to be made futureproof. The DA3 Raikovo Replication site covers a smaller area compared to the DA1 and DA2, including public buildings and facilities (a stadium, sport building, public kindergarten and service support building). The area is located in the Eastern part of the city of Smolyan.

The list of target groups includes: regional and local institutions, NGOs, such as New Horizons Association focused on citizen participation in the local area, young people and citizens with different backgrounds.

Internet access within the city is 100%. Facebook and Youtube users are high however there are no statistics. The Municipality has a website: www.smolyan.bg, Facebook profile and a digital screen on one of the main squares in the pedestrian zone of the city centre.

3.3.7.2 Understanding the context on citizen participation

A citizen participatory process was facilitated when developing the Municipal Development Plan for 2014-2020 and the Plan for Urban Regeneration and Development. Different consultation groups were formed in order to cover all spheres of development. In the groups, people with different professional backgrounds and citizens were involved as well as municipal experts.

When developing the municipal plan, they created an online space where citizens were asked to give their ideas for the future development. There is not a permanent platform, online surveys are organized through the municipal website for consultations. Also, the municipality organizes citizen consultations on important topics like the annual budget, report of the municipal budget, for taking a municipal loan, when developing internal ordinances on publicly important matters and others. Municipality representatives have stated that citizen participation rates need to be improved.

⁵¹ GRAO (2019). ГД ГРАО. Retrieved February 13, 2020, from <https://www.grao.bg/>

⁵² National Employment Agency (2019). Агенция по заетостта. Retrieved February 13, 2020, from <https://www.az.government.bg/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.3.8 Understanding the context from Võru (VORU)

3.3.8.1 Introduction

Võru has a population density of 845 inhabitants per km² and a total population of 11.831 inhabitants. 47% of the population aged 50 years old and over. Võru County has 95.85% Estonians, 3.9% Russians, 1.25% of other nationalities. Võru County has an unemployment rate of 5.8% (2014), no available data for the city. There are around 600 inhabitants in the DA which is part of the historical town centre covering an area of 0,22 km². The composition of land purpose is residential (37.3%), commercial (19.6%), national defence (1.1%), manufacturing land (1,2%), transport (14.8%), public buildings land (25.5%) and unreformed land (0.5%). There are 148 properties in the demo area with mix-used: residential buildings 94, dwellings 749, non-residential buildings 69 and non-residential rooms 165. 75% of dwellings are actively in use.

The list of target groups includes citizens, business, service providers, county council and real estate developers. There are no universities. No NGOs or other local associations have been identified during the research stage so it is encouraged that further actions are done to identify them.

85% of the population in Võru County has internet access. Võru town Facebook has 7999 followers, Võru town newspaper has 6500 subscribers and Võru town Instagram has 632 followers. For every day communication Võru council uses Facebook, Võru town newspaper (<http://www.voru.ee/et/voru-linna-leht1>), Võru infolists (e-mails), Võru web page (www.voru.ee), press releases, Instagram, posters in outdoor infostands.

3.3.8.2 Understanding the context on citizen participation

When making bigger development plans there are open public meetings where ideas and wishes from citizens are gathered –no specific online or physical tools were described–. Many participation actions are regulated by national laws. Anna teada platform <http://www.anna-teada.ee>: is a mapping tool of national scope under development for citizens to report, view, or discuss local problems (like graffiti, fly tipping, broken paving slabs, or street lighting). Available on desktop and smartphone. Almost no usage of this tool in the city (just one entry)

Participation rates differ substantially on topics. Võru town development vision meetings gathered approximately 120 people. Sustainable energy action plan meetings only gathered 12 participants which highlights the necessity of specific actions for citizen engagement on PEBs and PEDs. On the other hand, voting on Facebook regarding choosing a name for a school got 921 people involved.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.4 Regulatory framework for citizen engagement

How the citizen engagement participation should be implemented will depend on the local context, and an important part of the context are local, national, european and global policies. This section will cover these specific regulations and is also related to “Appendix 2: Existing Policies” of +CityxChange D3.1 Framework for Bold City Vision⁵³ (Tanum et al., 2019), which gives a comprehensive review of policies in relation with smart sustainable development for LHC, as well as +CityxChange D2.1 Report on Enabling Regulatory Mechanism to Trial Innovation in Cities⁵⁴ (Bertelsen et al., 2019), which analyses how EU and national legislation influences the creation of positive energy blocks (PEBs), positive energy districts (PEDs) and community grid systems (CGSs).

This section includes relevant codes of good practices related to public participation. It is recommended to review these documents when planning and delivering any participation processes described in the Playbook, especially if there are no national regulations available. The following documents have been taking in consideration when distilling the principles described in [Chapter 3.2](#).

3.4.1 Global Scope

The International Association of Public Participation (IAP2) is an international leader in public participation and has developed with broad international input: a Code of Ethics, Code of Values and Spectrum of Public Participation⁵⁵. The Code of Ethics supports the participation process by enhancing its integrity. The Code of Values defines the expectations and aspirations of the public participation process. And The Spectrum of Public Participation defines what is the public’s role in any public participation process. These three pillars form the foundation of the public participation process. Permission to use, copy or reproduce IAP2 Federation copyrighted materials is required.

3.4.2 European Scope

3.4.2.1 OSCE, MCIC and ECNL

The European Center for Not-for-Profit Law (ECNL), the Organization for Security and Co-operation in Europe (OSCE) and the Macedonian Center for International Cooperation (MCIC) wrote the paper “Comparative Overview of European Standards and Practices in

⁵³ Tanum, Ø., Reeves, K., Næss, K. S., & Mjøen, K. (2019). +CityxChange Deliverable D3.1 Framework for Bold City Vision, Guidelines, and Incentive Schemes <https://cityxchange.eu/knowledge-base/framework-for-bold-city-vision-guidelines-and-incentive-schemes/>

⁵⁴ Bertelsen, S., Livik, K., & Myrstad, M. (2019, July 31). +CityxChange Deliverable D2.1 Report on Enabling Regulatory Mechanism to Trial Innovation <https://cityxchange.eu/knowledge-base/report-on-enabling-regulatory-mechanism-to-trial-innovation>

⁵⁵ IAP2 (n.d.). Core Values, Ethics, Spectrum – The 3 Pillars of Public Participation Retrieved September 23, 2019, from <https://www.iap2.org/page/pillars>



This project has received funding from the European Union’s Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Regulating Public Participation”⁵⁶ (Hadzi-Miceva-Evans, 2010), providing a brief overview of European standards and models of public participation in decision-making processes, specifically for drafting laws and regulations on governmental level.

The following principles are highlighted when regulating the procedure for consultation institutions and organizations in Europe:

Commitment	Openness and consideration
Recognition of rights and responsibilities	Objectivity and equal treatment
Access and clarity of information	Resources
Continuity (ongoing)	Sufficient time
Proper structure (coordination)	Accountability for the process and result
Publicity	Acknowledgement and feedback
Transparency	Evaluation

Table 3.4.2 Principles when regulating consultation process in Europe by OSCE, MCIC and ECNL (Source: Comparative Overview of European Standards and Practices in Regulating Public Participation)

3.4.2.2 Lisbon Treaty

The participatory process in law and policy making on EU level is mentioned into the Lisbon Treaty⁵⁷, which was signed by the EU member states on 13 December 2007. Articles 10 and 11 provide that:

Article 10

“Every citizen shall have the right to participate in the democratic life of the Union. Decisions shall be taken as openly and as closely as possible to the citizen.”

Article 11

- 1. The institutions shall, by appropriate means, give citizens and representative associations the opportunity to make known and publicly exchange their views in all areas of Union action.**
- 2. The institutions shall maintain an open, transparent and regular dialogue with representative associations and civil society.**

⁵⁶ Hadzi-Miceva-Evans, K. (2010). Comparative Overview of European Standards and Practices in Regulating Public Participation Retrieved September 24, 2019, from <http://www.icnl.org/research/resources/ngogovcoop/compover.pdf>

⁵⁷ EUR-Lex (2012, October 26). Consolidated version of the Treaty on European Union. Retrieved September 23, 2019, from <https://eur-lex.europa.eu/resource.html?uri=cellar:2bf140bf-a3f8>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3. The European Commission shall carry out broad consultations with parties concerned in order to ensure that the Union's actions are coherent and transparent.

3.4.2.3 Council of Europe

The Council of Europe (CoE) is the continent's leading human rights organization. The Conference of INGOs drafted a Code of Good Practice on Civil Participation in the Decision-Making Process in 2009 (Brief Brochure version here⁵⁸ (Council of Europe, 2009)). The principal objective of the Code of Good Practice is the definition of a set of European principles and guidelines in decision-making processes that are to be implemented at local and national level in Council of Europe member States. This document includes: how to engage, principles to foster a constructive relationship, a matrix of civil participation depending on the level of participation, and more.

Following this line of work, Guidelines for civil participation in political decision making was published by the Council of Europe in 2017⁵⁹ (Council of Europe, 2017). This document states the conditions enabling civil participation, the participation principles to be followed and the types of participation. There is also a list of useful recommendations at the end of the document such as:

- Recommendation on the participation of children and young people under 18.
- Recommendation on balanced participation of women and men in political and public decision-making.
- Recommendation on the participation of young people in local and regional life, recommendation on media pluralism and diversity of media content, etc.
- Recommendation on the evaluation, auditing and monitoring of participation and participation policies at local and regional level.
- Recommendation on media pluralism and diversity of media content and others.

Transparency and open government report⁶⁰ (Council of Europe, 2018) was also published by the Council of Europe in November 2018. As citizen participation and open government are closely related, we have included this guide with recommendations for local governments on how to adopt transparency, participation and accountability.

⁵⁸ Council of Europe (2009). Civil participation in the decision-making process. Retrieved September 24, 2019, from <https://rm.coe.int/16802eede1>

⁵⁹ Council of Europe (2017, September 27). Guidelines for civil participation in political decision making. Retrieved September 24, 2019, from <https://rm.coe.int/guidelines-for-civil-participation-in-political-decision-making-en/16807626cf>

⁶⁰ Council of Europe (2018, November 7). Transparency and open government. Retrieved September 24, 2019, from <https://rm.coe.int/transparency-and-open-government-governance-committee/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3.4.3 The case of UK

The UK Government has had a Code of Practice on Consultation since 2000, the third version of this guide⁶¹ (UK Government, 2008) was published in 2008. This document establishes seven consultation criteria to be followed in order to achieve effective consultation, and improve the transparency, responsiveness and accessibility of consultations. The criteria that should be reproduced in consultation documents are::

The seven consultation criteria	
1. When to consult	Formal consultation should take place at a stage when there is scope to influence the policy outcome.
2. Duration of consultation exercises	Consultations should normally last for at least 12 weeks with consideration given to longer timescales where feasible and sensible.
3. Clarity of scope and impact	Consultation documents should be clear about the consultation process, what is being proposed, the scope to influence and the expected costs and benefits of the proposals.
4. Accessibility of consultation exercises	Consultation exercises should be designed to be accessible to, and clearly targeted at, those people the exercise is intended to reach.
5. The burden of consultation	Keeping the burden of consultation to a minimum is essential if consultations are to be effective and if consultees' buy-in to the process is to be obtained.
6. Responsiveness of consultation exercises	Consultation responses should be analysed carefully and clear feedback should be provided to participants following the consultation.
7. Capacity to consult	Officials running consultations should seek guidance in how to run an effective consultation exercise and share what they have learned from the experience.

Table 3.4.3 The seven consultation criteria by the Better Regulation Executive Department for Business, Enterprise and Regulatory Reform, UK Government (Source: Code of Practice on Consultation)

⁶¹ Better Regulation Executive Department for Business, Enterprise and Regulatory Reform, UK Government (2008, July). Code of Practice on Consultation. Retrieved September 24, 2019, from <https://assets.publishing.service.gov.uk/government/uploads/100807/file47158.pdf>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4 Citizen participation Playbook

4.1 Introduction

The "Citizen participatory Playbook" consists of the definition of four multi-step participatory processes which cover the applications needed in CommunityxChange to enable local communities to have better ownership, understanding and awareness of how their community could become a Positive Energy Block and to lead the transformation towards Positive Energy Districts and Cities.

These processes are: Urban interventions [Chapter 4.2](#); municipal legislation and action plans [Chapter 4.3](#); participatory budgeting [Chapter 4.4](#) and one specific process for enabling bottom up participation [Chapter 4.5](#). In each of these participatory processes a range of physical activities/tools and online tools are suggested which are described in detail in [Chapter 4.6 Catalog of Physical Tools](#) and in [Chapter 5. Participatory platform](#) respectively. The playbook also explains how to use these physical and online tools in an integrated and synchronized approach. Finally, a summary of general communication and accountability actions are described in [Chapter 4.7](#).

4.1.1 Methodology

The analysis made for each city described in [Chapter 3.3](#) showed great differences between them regarding previous experience and scope on citizen participation. A mere catalog of physical and online participatory tools would not be sufficient. We additionally provide support for their use in the form of a detailed roadmap of phases, steps, outcomes and recommended physical and online tools for each of these steps.

A series of collaborative workshops and the detailed analysis of case studies together with the best practices developed in [Chapter 3.2](#) were used to define a manageable number of multi-step participatory processes that at the same time will cover the needs of each city.

4.1.1.1 Workshops

Three collaborative workshops were conducted to co-design the most important aspects of participative processes as well as clustering previous processes carried out in their respective cities to define relevant categories and themes.

- In workshop one "Understanding Users, Ensuring People Participate", [See Chapter 8.3.1](#), participants worked in a session to create more effective citizen participatory processes. The key insight of the workshop resulted in the importance of integrating face-to-face actions (which later were coined as physical tools) and digital tools within the participatory process. It was also a key finding to define clear outcomes of each step and a set clear roadmap of the whole participatory process.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- In workshop Two “Defining the participatory processes”, [See Chapter 8.3.2](#), participatory processes were categorized into top-down (lead by municipalities) or bottom-up started and/or lead by other stakeholders). Another categorization was proposed differentiating into legislative (which included plans such as Bold City Vision) and those related with physical interventions.
- In workshop Three held in Trondheim [See Chapter 8.3.4](#) +CityxChange Participatory Playbook was discussed within the context of the BCV Framework with participants from Trondheim Kommune, Limerick City and County Council, University of Limerick and Norwegian University of Science and Technology.

4.1.1.2 Practical case studies

A number of participatory processes conducted in Madrid in Barcelona in recent years have been studied in detail for each of the categories differentiated in the workshops. The choice of Madrid and Barcelona was based on the fact that these two cities have developed two very successful online citizen participatory platforms, [Consul](#) and [Decidim](#), and successfully integrated them across their organizations. After this research, a meeting with Borja Prieto from the Institutional Extension Unit, Madrid City Council was arranged. This visit was key to clarify steps in the participatory processes that were not described with enough detail in literature and get a greater insight of their experience and facing challenges of integrating these new processes in an organization such as Madrid City Council.

Key learning from this analysis was that successful participatory processes are designed with a clear roadmap of phases, tools and outcomes so all the stakeholders can understand their different level of involvement through the process. The inclusion of preparatory and implementation phases as part of the participatory process itself was also derived from this analysis. Finally, the importance of introducing accountability mechanisms at each step of the process was also a key learning from this research.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.1.2 Implementation

The Citizen Participation Playbook offers four distinctive processes to co-design PEBs and PEDs, involving a great diversity of stakeholders and using physical actions and digital tools in an integrated and synchronized way. These four processes serve different goals within the +CityxChange project:

- Process 1: Co-design of urban interventions would be applied when municipalities lead urban intervention processes designed together with citizens, researchers, professionals and private stakeholders. For example, the installation of the Tidal Turbine in Limerick, and similar infrastructure projects in other cities, is a complex multifaceted issue which can lead to strong public opposition. This process allows us to bring participation early in the process while maintaining the technical quality and feasibility and increasing citizen engagement during the ideation and implementation phases.
- Process 2: Collaborative Legislation would be used when municipalities led the development of new legislation or actions plans. This process can be used within The Bold City Vision Framework⁶² (Tanum et al., 2019) to prioritize which are more important to local stakeholders and the translation into direct actions plans. Also, this process would increase the understanding by citizens of municipal competencies and available resources for meeting these goals.
- Process 3: Participatory budgeting would be implemented to allocate part of a municipal budget in the DAs directly by the local community. This process is described within The Bold City Vision Framework (Tanum et al., 2019) as part of the Process 5: Citizen Engagement subprocess: Connection and can greatly increase the understanding of the budget formulation & implementation by local stakeholders.
- Process 4: Citizens Proposals would enable direct and bottom-up citizen participation in which any individual or organization can submit an initiative to municipalities. E.g. Open calls for the creation of prototypes within the innovation playgrounds could benefit from this process as it provides a flexible procedure for citizens and organizations to develop innovative solutions and submit them when they are ready.

4.1.3 Summary

The following table summarizes these four processes, including a brief description, organization approach and promoters, main benefits and physical and online tools used.

⁶² Tanum, Ø., Reeves, K., Næss, K. S., & Mjøen, K. (2019). +CityxChange Deliverable D3.1 Framework for Bold City Vision, Guidelines, and Incentive Schemes
<https://cityxchange.eu/knowledge-base/framework-for-bold-city-vision-guidelines-and-incentive-schemes/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Citizen participation Playbook	
Co-creation of Urban Interventions	
Description	A co-creating process in which citizens, researchers, professionals and private stakeholders can plan and design physical interventions in cities.
Organization	Top down participative process, initiated by municipalities.
Benefits	Bring participation early in the process instead of traditional consultation while maintaining the technical quality and feasibility of the selected projects. Increase citizen engagement during the ideation and implementation phases and minimize opposition.
Physical Tools	1. Narrative Tours ; 2. Co-design Workshops ; 3. Focus Working Groups ; 4. Public Engagement Events ; 5. Go & Find Citizen Actions ; 6. Mapping
Online Tools	1. Collaborative Text ; 2. Online Debate ; 3. Online Mapping ; 4. Online Voting ; 5. Accountability ; 6. Online Proposals
Collaborative Legislation	
Description	Collaborative process in which citizens can actively participate in preparing municipal legislation and action plans.
Organization	Top down participative process, initiated by municipalities.
Benefits	Increased understanding by citizens of municipal competencies, available resources and action plans to solve city issues and challenges. Gather wide political support backed by citizen engagement. Helps to minimize polarized positions on controversial topics.
Physical Tools	2. Co-design Workshops ; 3. Focus Working Groups ; 4. Public Engagement Events
Online Tools	1. Collaborative Text ; 2. Online Debate ; 4. Online Voting ; 5. Accountability
Participatory Budgeting	
Description	Citizen participatory process in which the local community decides how to allocate part of a municipal budget. Initiated in South America in the 1980s, participatory budgeting is now been used in over 1500 cities ⁶³ .
Organization	Top down participative process, initiated by municipalities.
Benefits	It makes budgeting procedure more transparent as information can be accessed by anyone at any time. Citizens become experts within their

⁶³ Ganuza, E., & Baiocchi, G. (2012). "The Power of Ambiguity: How Participatory Budgeting Travels the Globe," *Journal of Public Deliberation*: Vol. 8 : Iss. 2 , Article 8. Retrieved January 14, 2020, from <https://www.publicdeliberation.net/jpd/vol8/iss2/art8/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

	own municipality, and are able to contribute with their knowledge. It increases understanding of the budget formulation & implementation.
Physical Tools	2. Co-design Workshops ; 3. Focus Working Groups ; 5. Go & Find Citizen Actions ; 7. Gamification
Online Tools	1. Collaborative Text ; 2. Online Debate ; 4. Online Voting ; 5. Accountability ; 6. Online Proposals ; 7. Participatory Budgeting
Citizens' Proposals	
Description	Enables direct and bottom-up citizen participation in which any individual and/or organization can submit an initiative to municipalities.
Organization	Bottom up participative process, initiated by citizens.
Benefits	Proposals can be submitted throughout the year, not having fixed deadlines allows communities to submit better proposals.
Physical Tools	2. Co-design Workshops ; 3. Focus Working Groups ; 5. Go & Find Citizen
Online Tools	1. Collaborative Text ; 2. Online Debate ; 3. Online Mapping ; 4. Online Voting ; 5. Accountability ; 6. Online Proposals

Table 4.1.3 Citizen Participation Playbook summary by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.2 Process 1: Co-creation of Urban Interventions

This participative process allows citizens to co-create urban interventions in cities. This process describes an alternative to traditional consultation processes in which citizens can only participate at the very end, by bringing co-creation mechanisms at an early phase of the whole process.

The outcome of this process is an urban intervention project –either as a result of an open call or shortlisted internally– which has been analyzed by a technical committee and voted by citizens in a consultation process. In both cases the project would give response to a brief agreed by all stakeholders –citizens, local government, researchers and private stakeholders–

Case Study: Plaza España

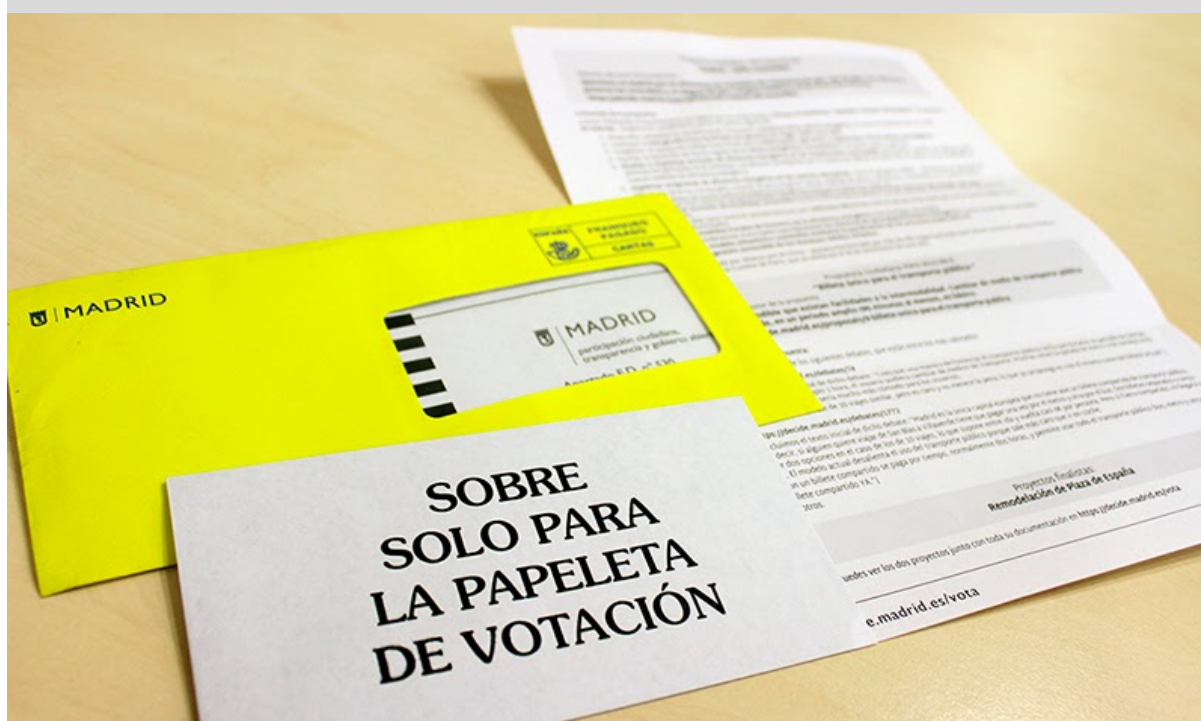


Figure 4.2.0 Plaza España voting ballot (Source: elmundo.es⁶⁴)

The Plaza España's project⁶⁵ (DecideMadrid, 2019) of DecideMadrid is one of the most participative processes done in Madrid City for an intervention in urban

⁶⁴ Bécares, R (2017, February 13). El Mundo - Las urnas salen desde hoy a las calles de Madrid. Retrieved January 22, 2020, from <https://www.elmundo.es/madrid/2017/02/13/58a09a31468aebb1398b45b0.html>

⁶⁵ Decide Madrid (2019, January 28). Remodelación de Plaza España. Retrieved October 11, 2019, from <https://decide.madrid.es/proceso/plaza-espana-informacion>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

space with a total of 240k votes, where 140k were by postal, 80k online and 20k at voting tables. Some of the key elements of the process were:

The first step was to gather a multidisciplinary working group (neighbours associations, urbanists, hotel managers, technical staff from Madrid City Council, etc.) to decide the key questions that need to be resolved to define the new Plaza España. Any citizen from Madrid could answer them and the most voted answer were part of the obligatory rules of the international competition of the remodelling of the Plaza España. This first step was very helpful to engage citizens from the beginning and gain their trust.

Also, citizen consultations were made on reliable projects. A technical committee analysed very deeply the proposals before becoming projects into the consultation process. The technical committee was formed by the university, civil servants, etc. to select those projects that are viable for the citizen participation phase. Five of the projects were selected and developed, after that, two of them were the finalists and citizens decide between the two which one was going to be implemented. This point was helpful to again increase citizens' trust in the whole participatory process.

Most of the voting tables were installed on the streets during weekends and assisted by a network of volunteers from the Madrid's City Council, or even for a group of engaged citizens willing to do it. Voting by postal was very expensive to do, however, many citizens were engaged in this participation process and surely in others to come in the future.

The duration of the participatory process ranges from two and a half months in the simpler versions of this process for interventions of small range with no open call, to 9 to 12 months in the most complex version for big urban interventions with open calls with numerous proposals.

The process "Co-creation of urban interventions" allows greater participation and raises greater consensus than traditional procedures such as architectural competitions or simple consultation processes. Citizens are involved at a very early stage of the process and in key initial steps such as the brief definition and further validation. Wide consensus is achieved as projects voted by citizens have been previously shortlisted by a technical committee ensuring technical and financial viability.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

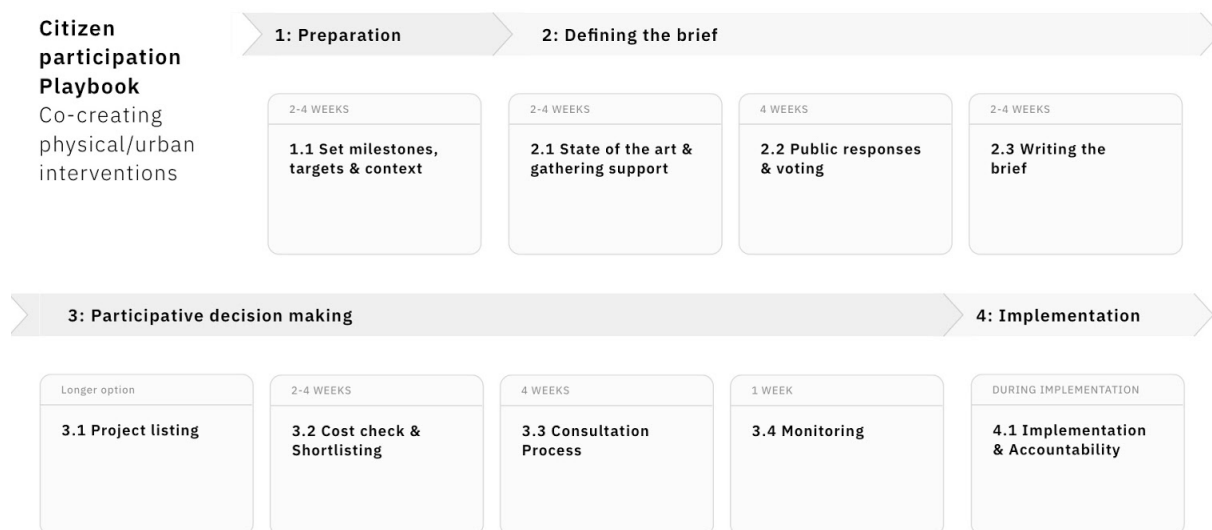


Figure 4.2.1 Co-creation of Urban Interventions Summary by +CityxChange

The process “Co-creation of Urban Interventions” is divided into four main phases:

- Phase 1: Preparation
- Phase 2: Defining the brief
- Phase 3: Participation decision making
- Phase 4: Implementation

4.2.1 Phase 1: Preparation

The preparation phase sets the procedure, milestones, targets & context of the whole participatory process. The desired outcomes for this phase are the definition of target participation rates and how they will be measured, as well as the research, compilation and/or preparation of all the necessary context material for the urban intervention. This context material shall include reports on all the different topics affecting the intervention area such as planning, environmental impact, socioeconomic, mobility and more.

This phase will usually take between 3 to 6 weeks based on the complexity and scale of the urban intervention and it is led by the Council project team responsible for the participatory process.

It is recommended to compile in a single report all previous projects, initiatives, public debates (including press and media coverage), open calls, architectural competitions, and more being generated around the intervention area over the years. This report will provide the necessary context for all the stakeholders along the process.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.2.2 Phase 2: Defining the brief

A robust brief agreed by all the stakeholders and that have been subjected to a public open debate is crucial when intervening in cities. This phase will ensure that the brief is co-created by all the stakeholders and prioritized in an open participatory process. The desired outcome of this phase is a document that defines precisely the objectives and priorities of the new urban intervention.

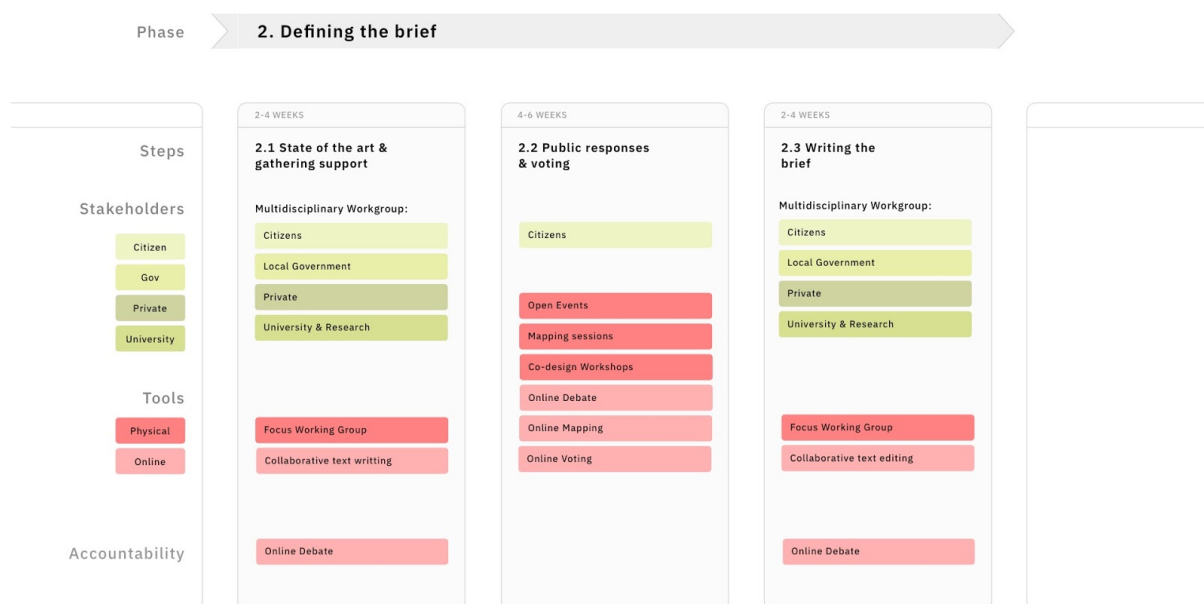


Figure 4.2.2 Phase 2. Defining the brief by +CityxChange

The phase has three distinctive steps:

- 2.1 State of the art and gather support
- 2.2 Public response and voting
- 2.3 Writing the brief

4.2.2.1 Step 2.1 State of the art and gather support

A *Multidisciplinary Workgroup* is defined by the *Project Team* and decides a set of key questions that need to be addressed by the urban intervention. This multidisciplinary workgroup has to represent all the stakeholders defined in the *Quadruple Helix Innovation Model*: Citizens via neighbours and sectoral associations, local government via the project team and technical staff from the different departments affected by the urban intervention, Private stakeholders represented by local business and professional bodies and Research via University researchers and other research institutions.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Multidisciplinary Workgroup sets up a number of *Focus Working Group* meetings to decide the set questions, minutes are recorded and published for accountability purposes. *Collaborative Text* online tool is used to draft, discuss and decide this set of questions.

Accountability is ensured by the publication of the *Focus Working Group's* minutes. An online debate space is provided so general discussions about the intervention can happen in parallel to sense the pulse of citizens about the urban intervention, *Multidisciplinary Workgroup* moderates the online debate.

The estimated duration of this step is between 2 and 4 weeks. The outcome of this step will be a set of key questions which will be answered and weighted by the general public in the next step.

4.2.2.2 Step 2.2 Public responses and voting

General public answers these questions and weights the different answers using votes. This step is open to everybody –people impacted by the new urban intervention, people interested in the process, other informal groups, individual experts, etc...–

Open Events are held in public forums to create face to face debate around the urban intervention. *Mapping Sessions* help to understand the complexities of the brief and audit geospatial features. Also, *Co-design Workshops* are useful to generate robust answers created by diverse sensibilities and expertises. An *Online Debate* space is provided in which questions are answered and citizens comment on each answer, project team moderates this space. For urban interventions some of the questions and answers could be better understood by using *Online Mapping*. *Online Voting* is provided so answers can be voted and weighted, similar answers can be grouped together by the project team.

Accountability on this step is ensured by using *Online Debate* and *Online Voting* tools, the general public can trace all the different answers, debate generated around them and votes received.

The estimated duration of this step is between four and six weeks. The outcome is a set of weighted answers by the general public that will be included as part of the official brief.

4.2.2.3 Step 2.3 Writing the brief

Most voted answers are included as part of the official brief of the urban intervention. This brief is written by the *Multidisciplinary Workgroup* defined in the previous step. It is important that the brief reflects as accurately as possible the results of the previous steps as well as including all the technical aspects considered by the *Multidisciplinary Workgroup* so the final text balances citizens and experts considerations.

Multidisciplinary Workgroup sets up a number of *Focus Working Group* sessions to write the brief, minutes are recorded and published for accountability purposes. *Collaborative Text* online tool is used to draft, discuss and write the brief.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Accountability is ensured by the publication of the *Focus Working Group's* minutes. An online debate space ensures parallel general debate around most voted answers, *Project Team* moderates the online debate.

The estimated duration of this step is between two and four weeks. The outcome is the official brief for the new urban intervention.

4.2.3 Phase 3: Participative Decision Making

Based on the defined brief in the previous stage, a number of projects are listed –either via an open call or through an internal selection process depending on the timescale and available resources for the participatory process– Later, these projects will be analyzed by a technical committee and shortlisted. These shortlisted projects will then be subjected to a consultation process in which citizens will vote for the winning project. The outcome will be a selected project which has been validated by a technical committee and approved by the general public.

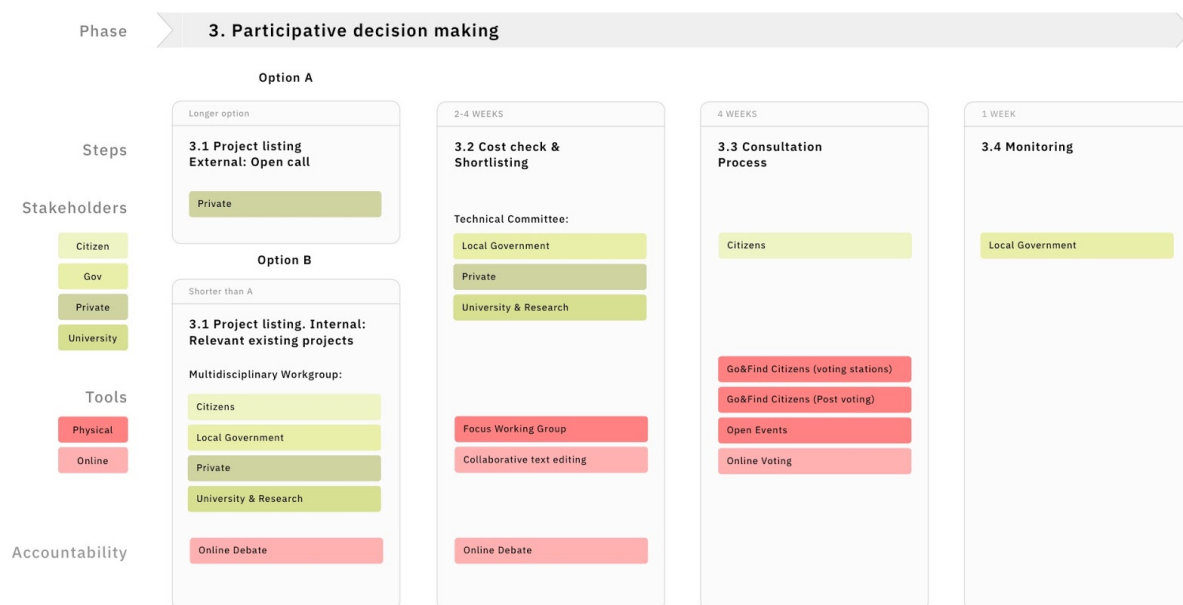


Figure 4.2.3 Phase 3. Participative Decision Making by +CityxChange

The phase has four steps:

- 3.1 Project listing
 - Option A. External: Open Call
 - Option B. Internal: Relevant existing projects
- 3.2 Cost-check and shortlisting
- 3.3 Consultation process
- 3.4 Monitoring



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.2.3.1 Step 3.1 Project listing

A list of projects responding to the brief could be achieved by two alternative processes:

The first one, an *Open Call* in which professionals prepare and submit projects. This option will ensure more innovative responses to the brief, on the other hand, more time is required for the preparation and submission of projects. Also, an open call requires more resources and administrative efforts than an internal process. Depending on the urban intervention complexity and scale, this open call could be staged into two phases so only a preselected number of projects are developed further.

The second option is an *Internal Process* in which the *Multidisciplinary Workgroup* lists all the relevant ongoing or planned projects for the intervened area –the report prepared in phase 1 should include an extensive list of relevant projects that could be matched against the agreed brief– This option is shorter and simpler but it will limit innovation on the responses. Also, national and/or regional legislation may require an open call or public competition.

Accountability is ensured by informing citizens on reasons for one or the other option –budget and time constraints, pre existing projects matching the brief, etc– *Project Team* moderates this online debate.

Duration of this step varies greatly depending if it is done either as an external or as an internal one. The outcome is a list of projects responding to the brief.

4.2.3.2 Step 3.2 Cost-check and shortlisting

A *Technical Committee* analyses the feasibility of each project submitted on the open call or via the internal process and shortlists a group of projects to be voted in the consultation process. This *Technical Committee* is formed by technical staff from the local government, independent experts and researchers.

The *Technical Committee* sets up a number of *Focus Working Group* meetings to shortlist the projects, minutes are recorded and published for accountability purposes.

Accountability is ensured by the publication of the *Focus Working Group's* minutes. Duration of this step varies greatly depending on the number of projects subjected to analysis, normally between two and four weeks. The outcome is a shortlist of feasible projects to be voted in the consultation process.

4.2.3.3 Step 3.3 Consultation process

A wide consultation process is put in place with different physical and online voting tools to select the winning project that will be implemented. Quantitative participation is very important at this step, the consultation process needs to reach as many citizens as possible. It is important to allocate adequate resources to ensure this.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

A number of physical tools are used in this step including physical voting stations on specific days installed in streets and/or public buildings with high footfall. Also, Open events held in public forums can foster debate around the different projects. Finally a postal voting campaign can be very effective to reach out to a wider audience, especially for those who will not use online voting tools but it is quite resource intensive. Online voting is a key tool in this step to facilitate a private, verifiable and trusted voting process.

The estimated duration of a consultation process is between three and four weeks. The outcome is a winning project voted by a significant number of citizens.

4.2.3.4 Step 3.4 Monitoring

Participation rate is measured and compared against targets defined on phase 1. Used procedures are analyzed and new implementations and improvements are suggested. All the feedback is looped into the next participatory process.

4.2.4 Phase 4: Implementation

Maintaining citizens engagement after the participatory process and during the project implementation phase is crucial. The participatory process' project team is responsible for keeping the public updated on project implementation progress. In periods of apparent inactivity, caused by legal, technical and/or administrative delays, it is of great importance that citizens are informed when things take longer than expected.

An online milestones tool is able to keep track of project progress and updates in a user friendly and simple way. General public is able to comment on the updates.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.3 Process 2: Collaborative Legislation

Collaborative legislation is a participatory process in which citizens can actively participate in preparing legislation and action plans.

The outcome of this process is legislation supported by a wide public debate that has received feedback by other political groups within the local council and evaluated by a technical committee. The legislation gives response to a set of questions agreed by all stakeholders –citizens, local government, researchers and private stakeholders–

Case Study: Air quality and climate change plan for the city of Madrid



Figure 4.3.0 Collaborative Legislation: Póster Plan de Calidad de Aire y Cambio Climático
(Source: Madrid City Council Website⁶⁶)

Citizen engagement started as early in the process as possible for the Air Quality and Climate Change Plan. The city council prepared a first draft including 15-20

⁶⁶ Ayuntamiento de Madrid (2019). Plan de Calidad del Aire y Cambio Climático. Retrieved January 17, 2020, from <https://www.madrid.es/portales/munimadrid/es/Inicio/Movilidad-y-transportes/Incidencias-de-Trafico/Plan-de-Calidad-del-Aire-y-Cambio-Climatico-Diario-Madrid/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

open questions as a way to start the conversation with citizens and ask them questions.

They held meetings with citizen associations, social collectives, ecologist groups, other institutions, citizen representatives, business collectives, trade unions and more to explain the goals of the plan and gather as many suggestions and improvements as possible in order to get the greatest agreement. Also this questionnaire was made available online for any citizen in order to continue the dialogue in the neighbourhoods.

Next, the contributions and improvements coming from the participatory process were incorporated into the draft Air quality and climate change plan and presented to the political groups of the city council in order to gain as much as possible support on this initial document.

After that, a citizen participatory process was open during a month in which any citizen could suggest improvements, modifications or contribute to the proposal of the plan. Once all of them were analyzed then the plan was approved.

Consul's debate module was used as the online debate space to compile all the conversations in which 6250 answers and comments were accounted for. The quality of the suggestions and comments coming from the citizens was high and productive. Since comments are weighted by vote those that were self-centered did not progress to the highest positions.

The duration ranges from two and a half months to 8 to 12 months depending on the technical complexity of the legislation and the capacity to gather wider political support within the local government.

Collaborative legislation allows greater participation and raises greater consensus than one-sided legislation or legislation based on simple consultation processes. Citizens are involved at a very early stage of the process and in key initial steps such as the problem definition and further revisions and comments. Wide consensus is achieved as legislation is open to all council parties' feedback and amendments if those are aligned with citizens most voted answers.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

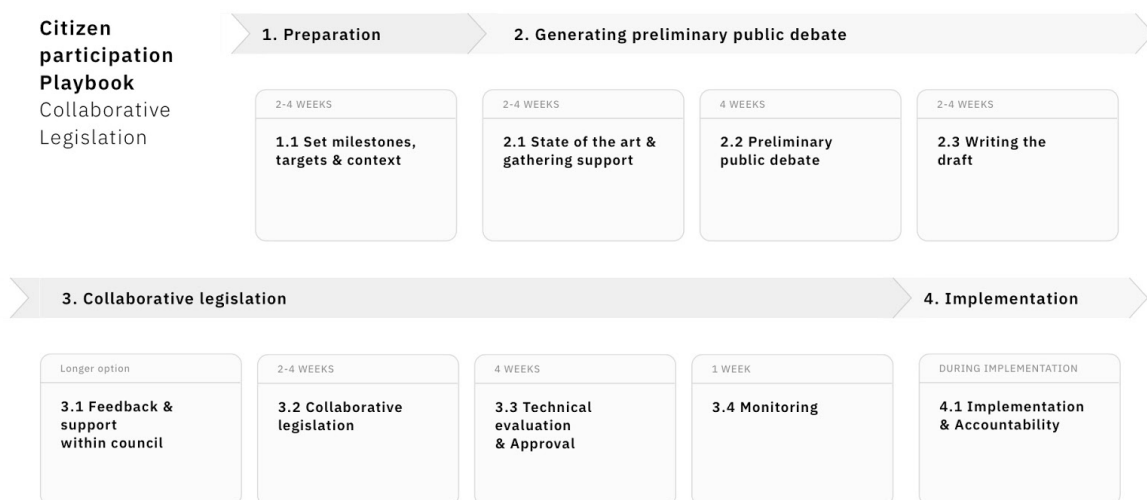


Figure 4.3.1 Collaborative Legislation Summary by +CityxChange

The process is divided into four main phases:

- Phase 1: Preparation
- Phase 2: Generating preliminary public debate
- Phase 3: Collaborative legislation
- Phase 4: Implementation

4.3.1 Phase 1: Preparation

The preparation phase sets the procedure, milestones, targets & context of the whole participatory process. The desired outcomes for this phase are the definition of target participation rates and how they will be measured, as well as setting the objectives for the new legislation to be developed including: regional, national and international legal frameworks. Bold City Visions Goals and other political agreements on the subject such as electoral programmes have to be considered.

This phase will usually take between 2 to 4 weeks and it is led by the Council project team responsible for the participatory process.

4.3.2 Phase 2: Generating preliminary public debate

A wide open public debate is key for creating resilient legislation that will reach the widest possible political consensus. This phase will ensure that an open public debate is created around an initial questionnaire previously agreed by all the stakeholders. The desired outcome of this phase is draft legislation supported by this questionnaire's best answers.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

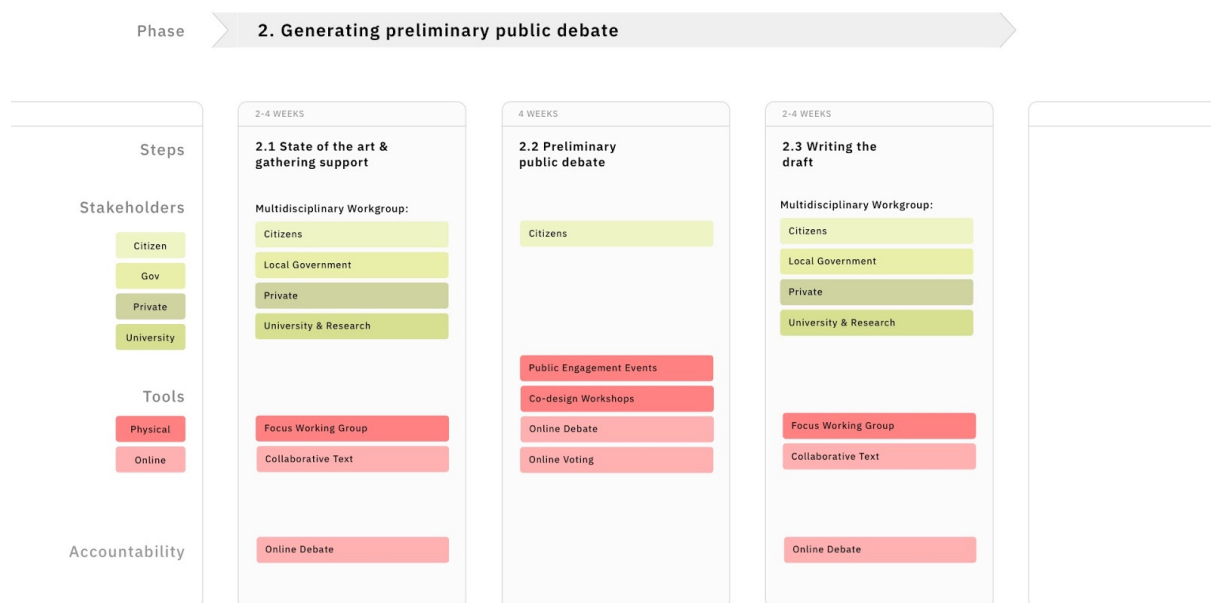


Figure 4.3.2 Phase 2: Generating preliminary public debate by +CityxChange

The phase has three distinctive steps:

- 2.1 State of the art and gather support
- 2.2 Previous public debate
- 2.3 Writing the draft

4.3.2.1 Step 2.1 State of the art and gather support

A *Multidisciplinary Workgroup* is defined by the *Project Team* and prepares a questionnaire of 15 to 20 questions which seeks to explain the goals of the new legislation, gather suggestions and alternatives, and find the greatest agreement on the main elements. This multidisciplinary workgroup has to represent all the stakeholders defined in the *Quadruple Helix Innovation Model*: Citizens via neighbours and sectoral associations, local government via the project team and technical staff from the different departments affected by the urban intervention, Private stakeholders represented by local business and professional bodies and Research via University researchers and other research institutions.

Multidisciplinary Workgroup sets up a number of *Focus Working Group* meetings to decide the questionnaire, minutes are recorded and published for accountability purposes. *Collaborative Text* online tool is used to draft, discuss and decide this set of questions.

Accountability is ensured by the publication of the *Focus Working Group's* minutes. An online debate space is provided so general discussions about the new legislation can happen in parallel to sense the pulse of citizens about the new legislation, *Multidisciplinary Workgroup* moderates the online debate.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

The estimated duration of this step is between 2 and 4 weeks. The outcome of this step will be a questionnaire which will be answered and weighted by the public in the next step.

4.3.2.2 Step 2.2 Previous public debate

This questionnaire kickstarts a public debate before drafting the legislation. General public answers the questionnaire and weighs the different answers using votes. This step is open to everybody –people impacted by the new urban intervention, people interested in the process, other informal groups, individual experts, etc...–

Open Events are held in civic spaces and public forums to create face to face debate around the new legislation. Also, *Co-design Workshops* are useful to generate more robust answers created by diverse sensibilities and expertises. An *Online Debate* space is provided in which questions are answered and citizens comment on each answer, the project team moderates this space. *Online Voting* is provided so answers can be voted and weighted, similar answers can be grouped together by the project team.

Accountability on this step is ensured by using *Online Debate* and *Online Voting* tools, the general public can trace all the different answers, debate generated around them and votes received.

The estimated duration of this step is four weeks. The outcome is a set of weighted answers by the general public that will be included as part of the legislation draft.

4.3.2.3 Step 2.3 Writing the draft

Most voted answers are included as part of the first draft of the new legislation. Since comments are weighted by vote, those that were self-centered did not progress to the highest positions. This draft is written by a *Technical Committee* appointed by the *Multidisciplinary Workgroup*. The *Technical Committee* is formed by Technical staff from the Council, external experts and researchers.

The *Technical Committee* sets up a number of *Focus Working Group* sessions to draft the new legislation, minutes are recorded and published for accountability purposes. *Collaborative Text* online tool is used to draft, discuss and write the brief.

Accountability is ensured by the publication of the *Focus Working Group's* minutes. An online debate space ensures parallel general debate around most voted answers, *Project Team* moderates the online debate.

The estimated duration of this step is between two and four weeks. The outcome is the first draft of the new legislation.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.3.3 Phase 3: Collaborative legislation

This phase is designed to gather political and citizen support as well as technical validation for the new legislation. The outcome of this phase will be a final text for the new legislation supported by other political groups within the Council, with wide citizen participation and validated by a technical committee.

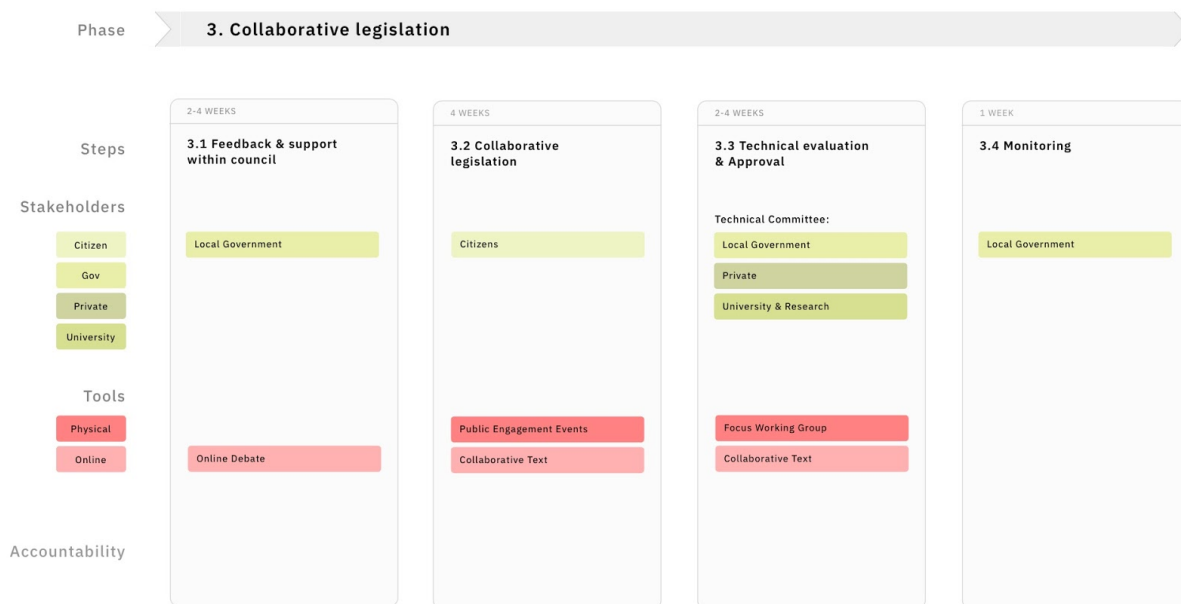


Figure 4.3.3 Phase 3: Collaborative Legislation by +CityxChange

The phase has four steps:

- 3.1 Feedback and support within council
- 3.2 Collaborative legislation
- 3.3 Technical evaluation and approval
- 3.4 Monitoring

4.3.3.1 Step 3.1 Feedback and support within council

The first draft is presented to all political groups within the Council in order to gain as much support as possible on the initial draft. Suggestions are incorporated if aligned with citizens most voted answers from the previous phase.

Accountability is ensured by informing citizens on different political groups views and suggestions on the *Online Debate* space. *Project Team* moderates this online debate.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.3.3.2 Step 3.2. Collaborative legislation

New Legislation Draft is published and open to citizens to comment. Comments are made online over the draft directly allowing answers to those comments and votes. A wide deliberative process is put in place. *Open Public Events* held in public forums foster debate around the legislation draft. *Online Text Commentary* is a core tool in this step to facilitate organized, verifiable and structured participation.

The estimated duration of a consultation process is between three and four weeks. The outcome is a draft legislation subjected to a wide debate process with additional suggestions made by citizens.

4.3.3.3 Step 3.3 Technical evaluation and approval

All contributions made in the previous step are analyzed by the *Technical Committee*. The *Technical Committee* sets up a number of *Focus Working Group* meetings to evaluate and incorporate all contributions. Accountability is ensured by the publication of the *Focus Working Group's* minutes. Duration of this step is between two and four weeks. The outcome is a new legislation approved by the council.

4.3.3.4 Step 3.4 Monitoring

Participation rate is measured and compared against targets defined on phase 1. Used procedures are analyzed and new implementations and improvements are suggested. All the feedback is looped into the next participatory process.

4.3.4 Phase 4: Implementation

Maintaining citizens engagement after the participatory process and during the legislation approval phase is crucial. The participatory process' project team is responsible for keeping the public updated on legislation approval progress. In periods of apparent inactivity, caused by legal, technical and/or political delays, it is of great importance that citizens are informed when things take longer than expected.

An accountability tool is able to keep track of project progress and updates in a user friendly and simple way. General public is able to comment on the updates.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.4 Process 3: Participatory Budgeting

Participatory budgeting is a citizen participatory process in which the local community decides how to allocate part of a municipal budget. Participatory budgeting allows communities to identify, discuss, and prioritize public spending.

Case Study: Presupuestos Participativos Madrid

**¡¡100 MILLONES!!
PARA HACER
MADRID. VOTA
LOS PROYECTOS
CIUDADANOS
DE LOS
PRESUPUESTOS
PARTICIPATIVOS
EN DECIDE.
MADRID.ES**

Figure 4.4.0 Participatory Budgeting Poster by Madrid City Council (Source: DecideMadrid)

Each year since 2017 Madrid has allocated 100 million Euros per year for participatory budgeting, including 70 million for local projects and 30 million for citywide projects out of a total general budget of approximately 5 billion euros each year. By doing so, Madrid together with the city of Paris is leading the way on Participatory Budgeting in Europe⁶⁷ (Wampler, 2017).

One of the key elements of Madrid's Participatory Budgeting process is the preparation of proposals in which different public forums are organized to discuss with citizens how to spend the budget wisely and submit better proposals.

⁶⁷ Wampler, B., McNulty, S., & Touchton, M. (2017). Participatory Budgeting: Spreading Across the Globe. October 13, 2017, <https://www.opengovpartnership.org/stories/participatory-budgeting/>.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Also Madrid's Participatory Budgeting process introduces a previous step before the final voting of proposals in which citizens are asked to gather support around their proposals. This step has two goals, firstly it generates a weighted list of proposals which ensures that the technical committee will be able to evaluate in depth those proposals with wider support among citizens reducing evaluation times. Secondly, it gives citizens the chance to gather further support around their proposals facilitates further citizen engagement and self-organization activities.

This process has generated a stronger civil society, an improved transparency and greater accountability.⁶⁸ (Vayenas, 2019)

The outcome is a list of projects sorted by citizen support. All the projects included have been previously received a significant citizen support via a preliminary support campaign and achieved technical validation from a panel of experts.

The duration ranges from six to twelve months depending on the allocated budget and the number of proposals to be evaluated by the technical committee.

The benefits of Participatory budgeting are to be found in the processes of information, consultation and accountability⁶⁹ (Knopp, 2013). It makes budgeting procedures more transparent as information can be accessed by anyone at any time; it can be linked, and it works like an archive. Through the consultation phase citizens become experts within their own municipality, and are able to contribute their knowledge. Participatory budgeting also increases understanding of the budget formulation and implementation phases.

⁶⁸ Vayenas, C (2019). Procivis - How to Spend It: A Focus on Participatory Budgeting. Retrieved March 22, 2019 from <https://procivis.ch/2019/03/22/how-to-spend-it-a-focus-on-participatory-budgeting/>

⁶⁹ Knopp, A (2013). What benefits does participatory budgeting deliver?. Retrieved January 14, 2020, from <https://www.buergerhaushalt.org/en/article/what-benefits-does-participatory-budgeting-deliver>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

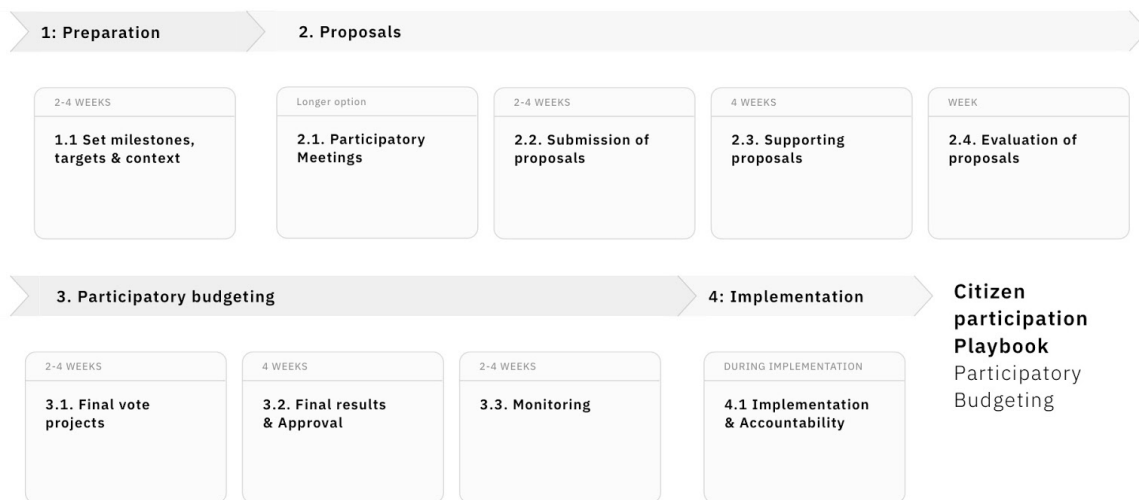


Figure 4.4.1 Participatory Budgeting Summary by +CityxChange

The process is divided into four main phases:

- Phase 1: Preparation
- Phase 2: Proposals
- Phase 3: Participatory budgeting
- Phase 4: Implementation

4.4.1 Phase 1: Preparation

The preparation phase sets the procedure, milestones, targets & context of the whole participatory process. The desired outcomes for this phase are the definition of target participation rates and how they will be measured. A steering committee, representative of the community, creates the rules of the participatory budgeting process in partnership with council officials to ensure that the process is inclusive and meets local needs.

This phase usually takes between 2 to 4 weeks and it is led by the Council project team responsible for the participatory process.

4.4.2 Phase 2: Proposals

Well thought and feasible proposals define the foundation for successful participatory budgeting processes. This phase will ensure previous debate between all the stakeholders as well as a preliminary voting led by citizens that will minimize the necessary resources for the appropriate technical evaluation of the proposals. The outcome of this phase is a list of proposals made by citizens which has been validated technically and economically by a panel of experts.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

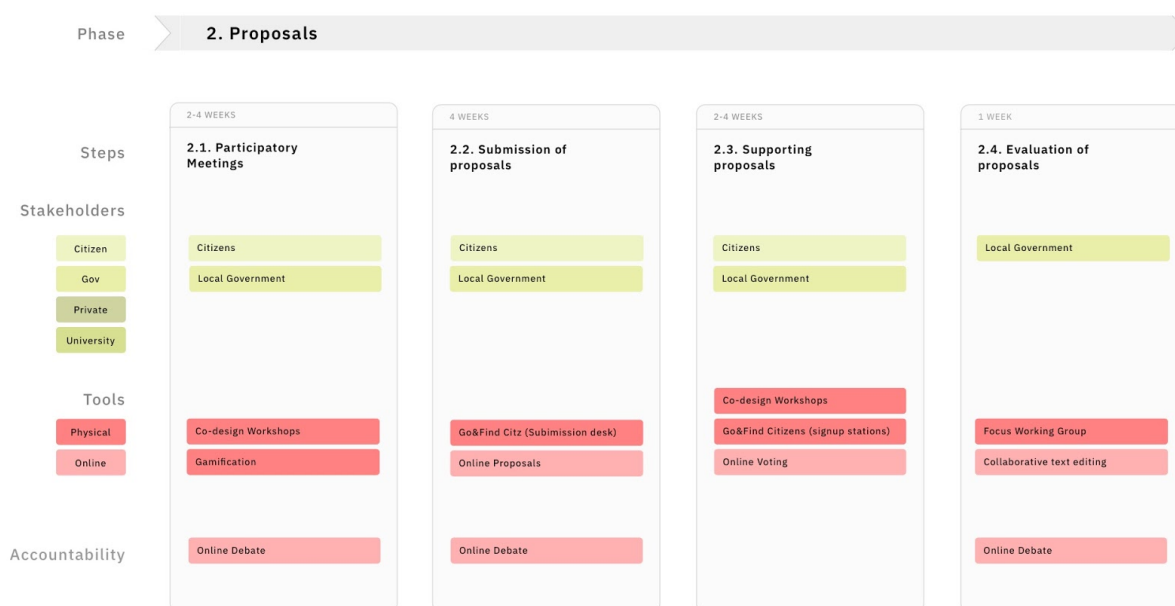


Figure 4.4.2 Phase 2: Proposals by +CityxChange

The phase has four distinctive steps:

- 2.1 Participatory meetings
- 2.2 Submission of proposals
- 2.3 Supporting proposals
- 2.4 Evaluation of proposals

4.4.2.1 Step 2.1 Participatory meetings

Citizens share and discuss ideas for proposals. A number of *Co-design Workshops* are hosted in civic spaces and public forums to discuss how to spend the budget wisely. *Gamification* is a powerful tool at this step as it facilitates the comprehension of complex processes like municipal budgeting as well as brainstorm ideas for proposals.

Accountability is ensured by providing an *Online Debate* space in which citizens can debate ideas for proposals openly. This online debate is moderated by *Project Team*.

The estimated duration of this step is between 2 and 4 weeks. The outcome of this step is helping citizens to understand municipal budgeting better and to develop initial ideas for proposals.

4.4.2.2 Step 2.2 Submission of proposals

Any citizen can submit a proposal with a budget. Proposal can be submitted using a dedicated *Online Proposal* tool as well as via physical *Submission Desk* located in spaces such as Citizens Observatories, Council premises or other civic and public spaces. All proposals



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

are visible to the public on the online space. Project team can suggest to authors of similar proposals to group together in order to reach wider citizen support on the next step.

Accountability is ensured by providing an *Online Debate* space in which citizens can comment on the published proposals asking for further clarification and details. This online debate is moderated by *Project Team*.

The estimated duration of this step is between 2 and 4 weeks. The outcome of this step is a public list of proposals with an estimated budget.

4.4.2.3 Step 2.3 Supporting proposals

This is an intermediate step to prioritize the proposals that will be reviewed by a technical committee. Most supported proposals will move to the final voting phase after their viability evaluation.

Co-design Workshops are hosted in civic spaces so citizens can design and carry on successful supporting campaigns. *Sign-up Campaigns (Go & Find Citizens)* are organized by citizens to gather support around their own proposals. *Online Voting* is provided so proposals can be voted and weighted.

Accountability on this step is ensured by using *Online Voting* tools, the general public can trace all the different proposals, debate generated around them and votes received.

The estimated duration of this step is between 2 and 3 weeks. The outcome of this step is a public list of proposals weighted by public votes.

4.4.2.4 Step 2.4 Evaluation of proposals

Most voted proposals are evaluated making sure that are valid, viable and legal (i.e. council has competencies on the subject). Also a more precise budget estimation is made for each proposal. Approved proposals become projects for the next step. Refused proposals are published together with an evaluation report.

Multidisciplinary Workgroup sets up a number of *Focus Working Group* meetings to evaluate the proposals, minutes are recorded and published for accountability purposes. *Collaborative Text* online tool is used to write and draft the proposals report.

Accountability is ensured by providing an *Online Debate* space in which citizens can be kept updated on the progress of the evaluation. This debate is moderated by *Project Team*.

The estimated duration of this step is between six weeks and four months depending on the number of submitted proposals. The outcome of this step is an approved proposal shortlist with a budget.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.4.3 Phase 3: Participatory budgeting

Once a list of feasible proposals with wide citizen support is ready the participatory budget phase starts. A voting process is the key step of this phase in which citizens are able to decide which projects are included in the budget. Later most voted projects are sorted and the final budget proposal is ready for council approval and its inclusion in the city yearly budget.

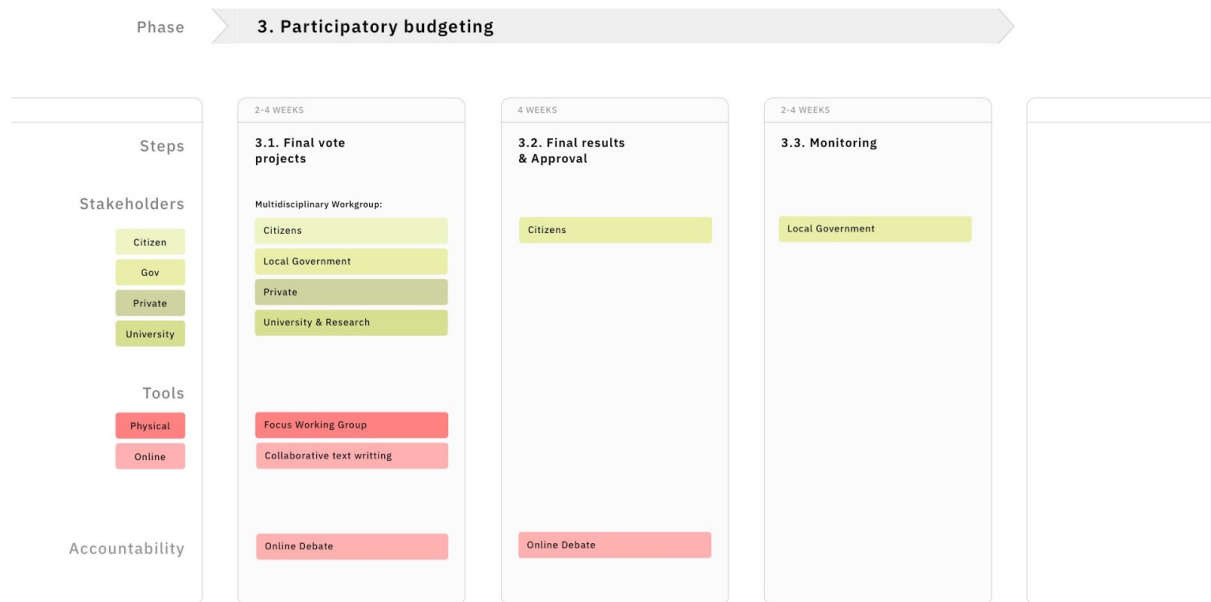


Figure 4.4.3 Phase 3: Participatory Budgeting by +CityxChange

The phase has three distinctive steps:

- 3.1. Project voting
- 3.2. Final results and approval
- 3.3. Monitoring

4.4.3.1 Step 3.1. Project voting

In this step each citizen can vote for as many projects as they want until the total budget is met. It is not mandatory to spend all the budget and each citizen can only cast one vote on how the total budget should be spent. Citizens can change their vote during the voting period.

Physical *Voting Stations (Go & Find Citizens)* installed on specific days in streets and public buildings with high footfall. *Online voting* is a key digital tool in this step to facilitate a verifiable, manageable and trusted voting process.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Accountability is ensured by the *Online Voting* tool which keeps real time information on the votes casted for each project.

The recommended duration of this step is four weeks.

4.4.3.2 Step 3.2 Final results and approval

All projects are ordered by number of votes. Projects are selected in descending order, checking that the next added project does not go beyond the total budget for the participatory budgeting process, if this happens project is ignored and the next one is considered.

Note that there are multiple variations of selection procedure so it is important that the procedure is discussed in the Preparation Phase together with council officials, citizens, and researchers and consultants on participatory budgeting so the process is inclusive and meets local needs.

The estimated duration of this step is two weeks. The outcome of this step is an approved participatory budget included in the city general budget and approved by the council.

4.4.3.3 Step 3.3 Monitoring

Participation rate is measured and compared against targets defined on phase 1. Used procedures are analyzed and new implementations and improvements are suggested. All the feedback is looped into the next participatory budgeting process.

4.4.4 Phase 4: Implementation

Maintaining citizens engagement after the participatory budgeting and during the implementation phase is crucial. The participatory process' project team is responsible for keeping the public updated on projects implementation progress. In periods of apparent inactivity, caused by legal, technical and/or administrative delays, it is of great importance that citizens are informed when things take longer than expected.

An online milestones tool is able to keep track of project progress and updates in a user friendly and simple way. General public is able to comment on the updates.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.5 Process 4: Citizens' Proposals

Citizens' proposals enable direct and bottom-up citizen participation in which any individual and/or organization can submit an initiative to the City Council to carry them out. Citizen's proposals require support from other citizens, and if they reach sufficient support, they are put to a public vote. The proposals approved in these citizens' votes are accepted by the City Council as they were their own and carried out as part of the Council action plan.

Case Study: Madrid 100% sostenible



Figure 4.5.0 Voting Campaign for Citizen Proposals in Madrid 2017 (Source: Eldiario.es⁷⁰)

Since 2015 in Madrid there is the possibility of submitting proposals to the council about any topic that matters citizens such as social rights, mobility, health, urbanism, environment, etc... Anyone can submit a proposal, there is no need to be registered in the city, but only official Madrid's residents can vote on the proposals. Also, organizations and collectives can submit proposals but only individuals can vote for them.

⁷⁰ Caballero, F (2017, February 12). - Eldiario.es Comienza la gran consulta ciudadana. Retrieved January 17, 2020, from <https://www.eldiario.es/madrid/Comienza-consulta-ciudadana>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

One of the most successful citizen proposals is “Madrid 100% sostenible”. The proposal was created by Alianza por el Clima, an alliance of more than 400 organizations including ecologist groups, workers unions, science and research institutes and consumer groups.

The proposal includes 14 points to enable a city scale energy transition including actions on mobility, energy efficiency, environmental monitoring, behavioural change, taxes and urban development. The ideas were developed collectively using physical events and online debate spaces. After achieving the required support of 1% of the registered population (27.662) the proposal was selected for the public voting process in which was supported by almost 190.000 registered voted.

After the voting, the proposal was analysed by a technical committee and these 14 points were detailed into 101 specific actions to be carried by Madrid City Council for the implementation of the proposal.

The duration ranges from six to twelve months depending on the allocated budget and the number of proposals to be evaluated by the technical committee.

The outcome of this participatory process is a citizen led initiative which has been prepared collaboratively through physical events and online debate spaces. The initiative has gathered significant previous support in citizens led campaigns and later ratified in a public voting process. Finally the proposal has been evaluated by a technical committee and detailed into actionable items that can be executed by the council.

One of the key elements of successful citizens’ proposals is that proposals can be submitted throughout the year at any time. Not having fixed deadlines allows communities to submit better proposals which have been widely discussed and developed thoroughly. The proposals that have gathered the required minimum support during the year are subjected to public vote which can be aligned with other voting process such as [participatory budgeting public voting](#) and [urban interventions public voting phase](#).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

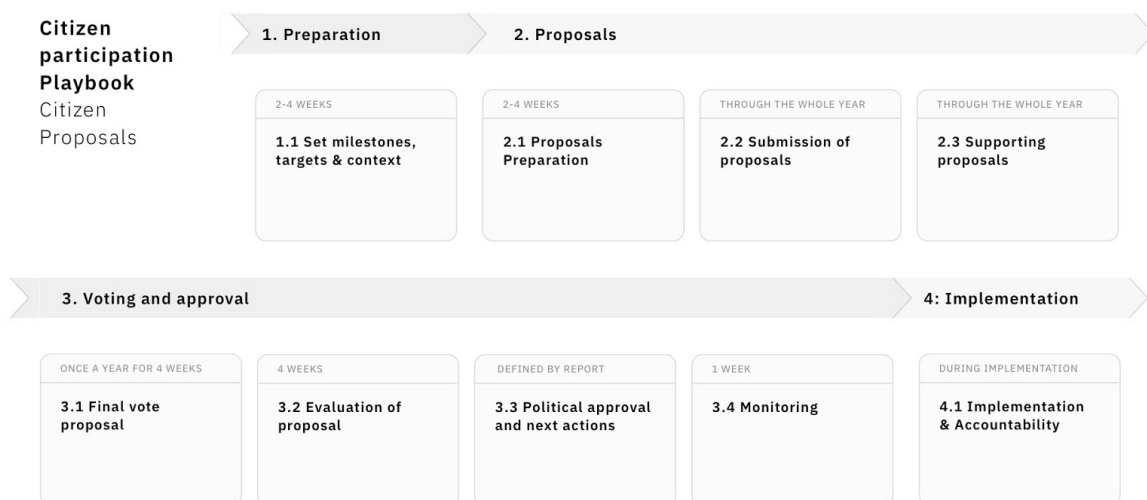


Figure 4.5.1 Citizen Proposals Summary by +CityxChange

The process is divided into four phases:

- Phase 1: Preparation
- Phase 2: Proposals
- Phase 3: Participatory budgeting
- Phase 4: Implementation

4.5.1 Phase 1: Preparation

The preparation phase sets the procedure, milestones, targets & context of the whole participatory process. The desired outcomes for this phase are the definition of target participation rates and how they will be measured. A *Steering Committee*, representative of the community, creates the rules of the participatory process in partnership with council officials to ensure that the process is inclusive and meets local needs. If this is the first time that proposals are implemented the steering committee has to design collaboratively the rules of the proposal process –i.e. % of support required to pass the support phase, timing and schedules–

Steering Committee sets up a number of *Focus Working Group* meetings to decide the proposal process rules, minutes are recorded and published for accountability purposes. *Collaborative Text* online tool is used to draft, discuss and decide this set of questions. Accountability is ensured by the publication of the *Focus Working Group's* minutes.

This phase usually takes between 2 to 4 weeks and it is led by the Council project team responsible for the participatory process.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.5.2 Phase 2: Proposals

Self organized citizens and communities are key for successful citizen's proposals. This phase is key for getting the well thought and feasible submissions as well as getting sufficient support from the rest of the community to subject the proposal to a public vote in the next phase. The outcome of this phase is a feasible proposal created by citizens which has been endorsed by a significant percentage of the registered population.

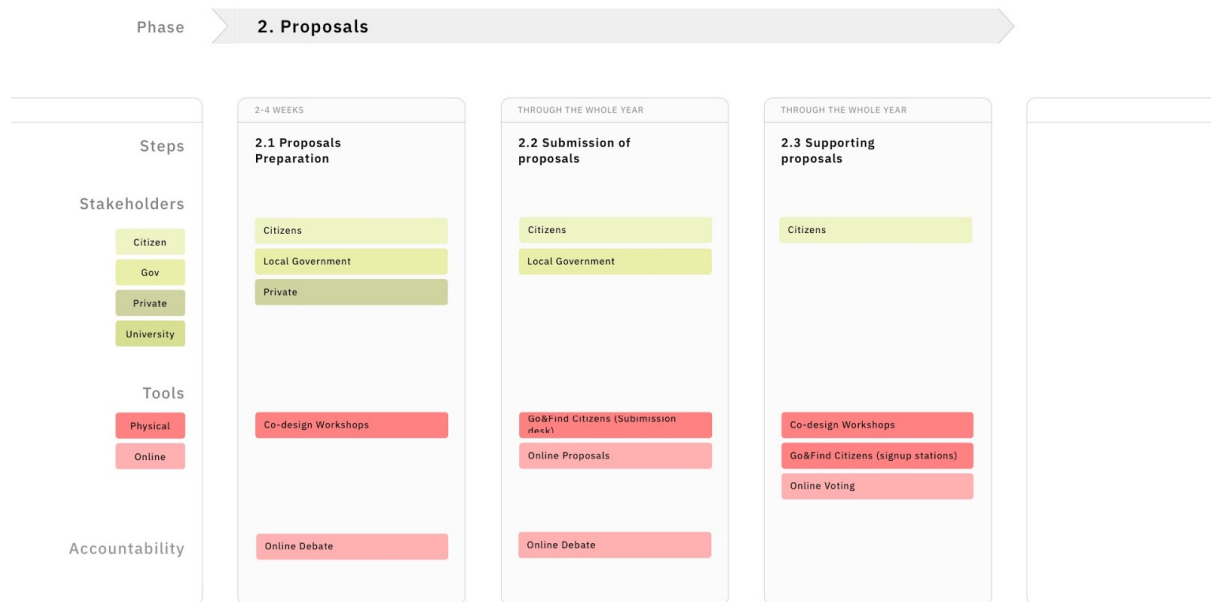


Figure 4.5.2 Phase 2: Proposals by +CityxChange

The phase has three distinctive steps:

- 2.1 Proposals preparation
- 2.2 Submission of proposals
- 2.3 Supporting proposals

4.5.2.1 Step 2.1 Proposals preparation

Before submitting a proposal citizens can attend workshops in which the process is explained and tips are shared in order to design and communicate their proposals successfully.

A number of *Co-design Workshops* are hosted in civic spaces and public forums to discuss how to spend the budget wisely. These workshops can be grouped with other engagement activities, as proposals have no specific deadline and can be submitted at any time.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Accountability is ensured by providing an *Online Debate* space in which citizens can debate ideas for proposals openly. This online debate is moderated by *Project Team*.

4.5.2.2 Step 2.2 Submission of proposals

Any citizen can submit a proposal. Proposal are submitted using a dedicated *Online Proposal* tool as well as via physical *Submission Desk* located in spaces such as Citizens Observatories, Council premises or other civic and public spaces. All proposals are visible to the public on the online space. Project team can suggest to authors of similar proposals to group together in order to reach wider citizen support on the next step.

Accountability is ensured by providing an *Online Debate* space in which citizens can comment on the published proposals asking for further clarification and details. This online debate is moderated by *Project Team*.

Submission can happen throughout the whole year. The outcome of this step is a continuously updated public list of proposals.

4.5.2.3 Step 2.3 Supporting proposals

This is an intermediate step to prioritize the proposals that will be reviewed by a technical committee. In order to move to the next phase proposals have to be supported by a minimum percentage of the population. This percentage is set by the *Steering Committee* in the preparation phase.

Co-design Workshops are hosted in civic spaces so citizens can design and carry on successful supporting campaigns. *Sign-up Campaigns (Go & Find Citizens)* are organized by citizens to gather support around their own proposals. *Online Voting* is provided so proposals can be voted and weighted.

Accountability on this step is ensured by using *Online Voting* tools, the general public can trace all the different proposals, debate generated around them and votes received.

Support can happen throughout the whole year. The outcome of this step is a public list of proposals supported by a minimum percentage of the population.

4.5.3 Phase 3: Voting and Approval

Once a proposal has been supported by a minimum percentage of the population set in the preparation phase the voting and approval phase starts. A voting process is the key step of this phase in which citizens are able to vote for or against the proposal. If the proposal gets more positive votes than negative ones it will be evaluated by a technical committee that will detail the necessary actions to implement the proposal.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

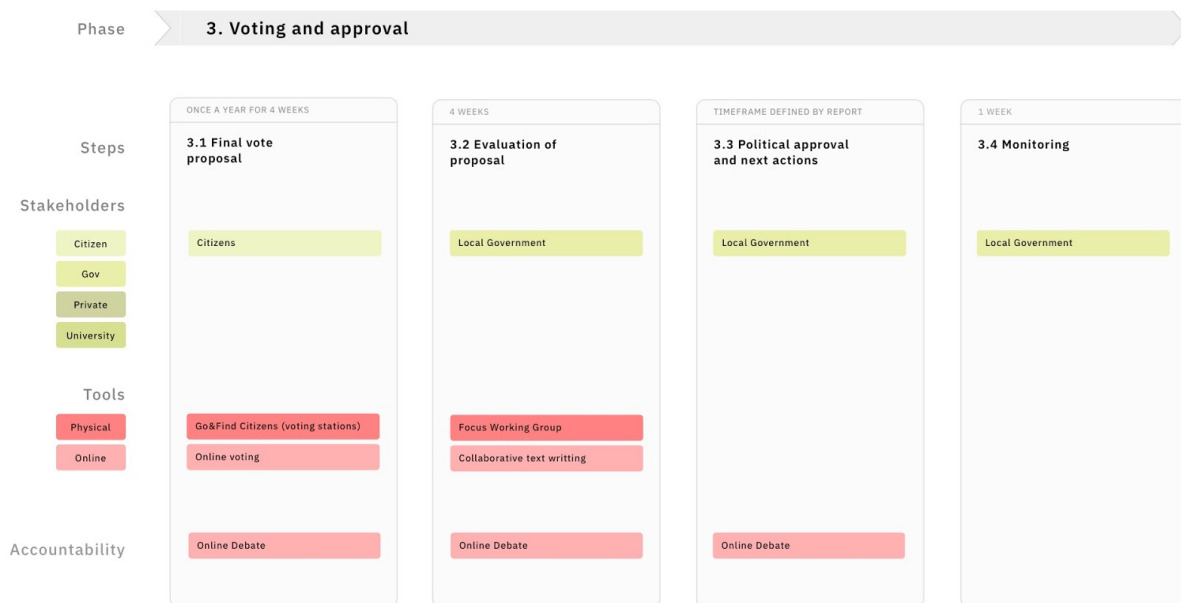


Figure 4.5.3 Phase 3: Voting and approval by +CityxChange

The phase has four distinctive steps:

- 3.1 Final vote proposals
- 3.2 Evaluation of proposals
- 3.3 Political approval and next actions
- 3.4 Monitoring

4.5.3.1 Step 3.1 Final vote proposals

Once a year and for a period of four weeks, citizens can vote for or against the proposals that reached the minimum support until that date. If there are more positive than negative votes the proposal will move to the evaluation phase.

Physical *Voting Stations (Go & Find Citizens)* installed on specific days in streets and public buildings with high footfall. *Online voting* is a key digital tool in this step to facilitate a verifiable, manageable and trusted voting process.

Accountability is ensured by the *Online Voting* tool which keeps real time information on the votes casted for each project.

The recommended duration of this step is four weeks.

4.5.3.2 Step 3.2 Evaluation of proposals

Those proposals which get more positive than negative votes are analyzed by a *technical committee*. A technical report is produced making sure that each of these proposals are



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

valid, viable and legal –i.e. Council has competencies on the subject– A budget estimation for the proposal is also prepared by the *Technical Committee*. The technical report also describes the course of actions needed and the timeframe for implementation.

Technical Committee sets up a number of *Focus Working Group* meetings to evaluate the proposals, minutes are recorded and published for accountability purposes. *Collaborative Text* online tool is used to write and draft the proposals report.

Accountability is ensured by providing an *Online Debate* space in which citizens can be kept updated on the progress of the evaluation. This online debate is moderated by *Project Team*.

The estimated duration of this step is between six weeks and four months depending on the number of submitted proposals. The outcome of this step is an approved proposal shortlist with a budget.

4.5.3.3 Step 3.3 Political approval and next actions

Once the technical report has been published and the proposal is considered viable the council assumes the proposal as their own and proceeds with its implementation.

4.5.3.4 Step 3.4 Monitoring

Participation rate is measured and compared against targets defined on phase 1. Used procedures are analyzed and new implementations and improvements are suggested. All the feedback is looped into the next participatory process.

4.5.4 Phase 4: Implementation

Maintaining citizens engagement after the participatory budgeting and during the implementation phase is crucial. The participatory process' project team is responsible for keeping the public updated on projects implementation progress. In periods of apparent inactivity, caused by legal, technical and/or administrative delays, it is of great importance that citizens are informed when things take longer than expected.

An online *Accountability tool* is able to keep track of project progress and updates in a user friendly and simple way. General public is able to comment on the updates.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.6 Catalog of Physical Tools for Citizen Participation

Each physical tool described in this chapter has different target groups, methodologies and requires different levels of participation from citizens. Together they form a comprehensive toolkit for implementing all the different participatory processes described in the playbook which integrates with a similar set of online tools described in [Chapter 5](#).

They range from private focus working groups with selected stakeholders to massive public engagement events open to everyone. From co-design workshops to create collectively using structured processes to gamification to unlock creativity through play. From narrative tours and mapping sessions in which participants discuss, learn and gather information from our cities through direct observation to go and find actions in which participation actions are brought directly to citizens.

Catalog of Physical Tools for Citizen Engagement and Participation	
Physical Tool	In which Participatory Process is used
1. Narrative Tours	1. Co-creation of Urban Interventions
2. Co-design Workshops	1. Co-creation of Urban Interventions 2. Collaborative Legislation 3. Participatory Budgeting 4. Citizens' Proposals
3. Focus Working Group	1. Co-creation of Urban Interventions 2. Collaborative Legislation 3. Participatory Budgeting 4. Citizens' Proposals
4. Public Engagement Events	1. Co-creation of Urban Interventions 2. Collaborative Legislation
5. Go & Find Citizen Actions	1. Co-creation of Urban Interventions 3. Participatory Budgeting 4. Citizens' Proposals
6. Mapping Sessions	1. Co-creation of Urban Interventions
7. Gamification	3. Participatory Budgeting

Table 4.6.0 Summary of physical tools used in the Citizen Participation Playbook by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.6.1 Tool 1. Narrative Tours

Narrative tours are more than just walks around the neighbourhood; they are a moving conversation stimulated by looking around, commonly on foot or bike.

Narrative tours allow community members and local authorities to better understand together their neighbourhood and exchange ideas.



Figure 4.6.1 Narrative Tour, Limerick's 2019 CityEngage week (Source: Adaptive Governance Lab Elective, School of Architecture, University of Limerick)

Objectives

- Increase citizen engagement and participation
- Getting to know about our neighbourhood
- Identify what is working and not on our surroundings
- Discuss possible changes and solutions
- Introduce new or ongoing initiatives in the neighbourhood and find new members and supporters



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Implementation

1. Preparation: Engage people in the event who are already working or concerned about the tour topics (professional associations, private business, etc.). Defining a clear purpose of the activity and keeping the process open to anyone are key for a successful citizen engagement in the activity.
2. Communication: combine physical (posters in the neighbourhood and civic buildings) and digital strategies (social networks, mailing, newspapers).
3. Delivery:
 - Practice your tour beforehand deciding the exact route, points of interest and resting stops, creating a structure for the conversation as you walk.
 - Keep a record of comments and suggestions allowing time for questions during the tour. Bring recording devices to note comments, histories and experiences shared by participants.
 - Prepare for other public events taking place at the same time and have a backup route. Consider name-tags or ice-breakers exercises if the group is small to encourage participation.
 - Ensure at least one group member wears a high visibility jacket or sign. Make sure there is a suitable guide - participant ratio (between 1-6 and 1-10). Volunteers should have their roles understood.
4. Feedback: collect feedback from participants and send them updates about the work progress. Maintaining citizen privacy rights is a must.

External references

- Open house⁷¹ (Open House, 2019): free tours for showcasing outstanding architecture for all to experience.
- Jane's Walks⁷² (Jane's Walks, 2019): community-led walking conversations inspired by Jane Jacobs.
- Walking Café⁷³ (Smarter Together, 2019): tour in a specific area followed by a pop-up-café in public space.

⁷¹ Open House (2019). Open House Worldwide. Retrieved November 15, 2019, from <https://www.openhouseworldwide.org/>

⁷² Jane's Walk (2019, June 6). Jane's Walk. Retrieved November 15, 2019, from <https://janeswalk.org/>

⁷³ Smarter Together (2019, January 7). D5.22 Co-design processes. Retrieved November 19, 2019, from <https://www.smarter-together.eu/file-download/download/public/1015>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.6.2 Tool 2. Co-design Workshops

Co-design workshops are public participatory events where people can work together through challenges, discuss issues, find consensus and create things. Citizens and end-users are actively involved in the design and development of final products or services. This process follows a demand-driven approach encouraging participation and motivation, which also ensures that the final measures will be successfully implemented.



Figure 4.6.2 Citizen Sensing Lab Workshop October 2019, Limerick (Source: Limerick City and County Council)

Objectives

- Inform and activate end-users and citizens.
- Receive feedback from end-users and citizens.
- Incorporate end-users and citizens early in the development of briefs, action plans and proposals.
- Co-create solutions together with end-users and citizens



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Implementation

1. Preparation Stage: the open sessions will need planning, materials and good facilitation, they will yield a lot when done well and the results can be shown to others to stimulate more engagement.
 - Identify the engagement community: end-users and citizens; keep the participation open to anyone.
2. Communication:
 - Design a community-wide advertising campaign; combine physical (posters in the neighbourhood and civic buildings) and digital strategies (social networks, mailing, newspapers).
3. Delivery:
 - Location: choose a well known location and celebrate it during weekends or evenings to ensure participation.
 - Facilitation: Foster open participation and transparency.
4. Feedback:
 - Collect feedback from participants and send them updates about the work progress after every session.
 - Maintaining citizen privacy rights is a must.

External references

- Smarterlabs in Living Lab Bellinzona⁷⁴ (Dijk et al. 2019): citizens were involved in co-designing a smartphone app aimed at promoting individual behaviour change.
- Citizen sensing lab at Fab Lab Limerick is a series of regular workshops to introduce, develop and co-create a community around open source environmental digital sensors in Limerick as part of the +CityxChange project.

⁷⁴ Dijk, M., van Heur, B, Boussauw, K., da Schio, N., Chemin, L., Cassiers, T., ... Castri, R. (2019, March 20). SmarterLabs D5.1 – Report on synthesis and implementation guidelines for “smarter” Living Labs https://static.uni-graz.at/fileadmin/projekte/smarterlabs/downloads/SmarterLabs_WP5_D5.1_Report_on_synthesis_and_implementation_guidelines.pdf



4.6.3 Tool 3. Focus Working Groups

Focus working groups are private sessions bringing together groups such as NGOs, business associations, experts groups, citizens, community working groups and research institutions focusing on a common purpose. This cooperation is crucial to build citizen's trust in the participatory process.



Figure 4.6.3 SOM Metadecidim Assembly, Barcelona (Source: Metadecidim⁷⁵)

Objectives

- To define the starting questions to be asked to citizens regarding their needs and opinions (early engagement).
- To select the most suitable citizen proposals to be developed based on viability and technical reports.
- To define the draft objectives of a new or updated legislation.
- To define procedures, project schedules & target participation rates for participatory processes.

⁷⁵ Metadecidim (2019). Welcome to the Community - Metadecidim. Retrieved November 17, 2019, from <https://meta.decidim.org/processes/welcome>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Implementation & Timeline

1. Preparation:
 - Define clear objectives of the sessions, timeline and outcomes.
 - Identify expert groups.
 - Define how their involvement will affect final measures; provide capacity building if need be.
2. Communication:
 - Contact identified target stakeholders; ask them if other interested groups might be included in the process and contact them as well (open and inclusive process).
3. Delivery:
 - Location: choose a well known location and celebrate it during weekends or evenings to ensure participation.
4. Feedback: collect feedback from participants and send them updates about the work progress after every session (foster transparency and continuous engagement). Maintaining citizen privacy rights is a must.

External references

- Experts Panels, Committee Meetings, Coalition Groups.
- SOM Metadecidim⁷⁶ (Metadecidim, 2020) is a working group where citizens can think, prioritize development lines, decide on improvement projects and discuss the uses and future possibilities of the Decidim platform.

⁷⁶ Metadecidim (2020). SOM Metadecidim. Retrieved January 14, 2020, from <https://meta.decidim.org/assemblies/eix-comunitat>



4.6.4 Tool 4. Public Engagement Events

Planning and delivering public events requires meticulous preparation and a great number of resources, from selecting the suitable venue to an effective communication campaign to attract participants. However, these events are a great opportunity to educate and engage citizens regarding an issue in their surroundings, and make them become active and engaged members of their community.

Public events are a great way of gaining credibility and integrity when starting a project (early engagement) or presenting final results.



Figure 4.6.4 Limerick's 2019 CityEngage Week. (Source: Limerick City and County Council)

Objectives

- Make people aware of and interested in the problem (awareness campaigns).
- Inform/educate citizens about a specific challenge.
- Empower and motivate citizens to take action (behaviour change).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Implementation & Timeline

1. Preparation Stage: the public event can include workshops, hands-on demonstrations (outdoors or indoors), showrooms, etc., which are targeted for different groups. Collecting contributions is crucial for further evaluation of citizen perceptions.
 - Key aspects: well designed facilitating sessions (visual and playful resources); organize small and targeted groups for each activity (children, elderly's, etc.); consider rewards in exchange for citizen contributions; contact private companies to participate in activities.
2. Communication: city-wide advertising campaign; combine physical (posters around the city including civic buildings) and digital strategies (social networks, mailing, newspapers).
3. Delivery:
 - Location: choose a well known location; celebrate it on a weekend to ensure participation;
 - Schedule: plan at the same time and place that other popular community events (markets, fairs, etc.).
4. Feedback:
 - Collect feedback from participants; add their contact details to newsletter for announcing further related activities (continuous engagement).
 - Maintaining citizen privacy rights is a must.

External references

- Education day⁷⁷ (Smarter Together, 2019): to target children, who try our in a playful way numerous workshops provided by different organizations and held at an early state of the project to gain credibility and integrity.
- Limerick's September 2019 Citizen Engagement Week.

⁷⁷ Smarter Together (2019, January 7). D5.22 Co-design processes. Retrieved November 19, 2019, from <https://www.smarter-together.eu/file-download/download/public/1015>



4.6.4 Tool 5. Go and Find Citizens

“Go and Find Citizens” activities improve citizen perception and trust in public institutions since they show a proactive attitude and real interest in getting in touch with them. This kind of actions last a day or so and are based on going directly to find citizens instead of waiting for them to come to us (public institutions). They could be implemented using different methods, such as: (1) street stalls installed into another event, pop-up installation or the street; (2) voting stations located in lively public spaces where people pass by everyday; (3) mobility points such as busses stopping in strategic places around the city; (4) proposal submission desk installed on the street or inside a public space or event; and lastly, (5) voting by postal post.



Figure 4.6.5 Voting stations. Presupuestos Participativos Madrid 2017 (Source: DecideMadrid⁷⁸)

Objectives

- Capture citizens opinions
- Connect and empower citizens
- Collect votes of citizens
- Collect citizen proposals within a participatory process

⁷⁸ DecideMadrid (2017, February 18). Guía rápida para votar. Retrieved February 17, 2020, from <https://diario.madrid.es/decidemadrid/2017/02/18/guia-rapida-para-votar-el-fin-de-semana-de-lagran-votacion-ciudadana/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Implementation & Timeline

1. Preparation: creativity is important when implementing “Go and Find Citizen Actions” in order to attract citizens attention overall when boring or less interesting topics are presented.
 - Key aspects: a well designed tour including strategic points with high footfall; to ease the process of providing citizens contributions (opinions, responses to surveys, proposals, etc.); resources need to be accounted for to perform the post-processing of citizen contributions and for making them open and available to anyone.
2. Communication: announcing the action on social networks and mailing; using colourful and attractive resources for the installation (stalls, buses, desks,...); approach citizens in an informal and friendly manner.
3. Delivery:
 - Location: choose a location and time with high footfall; plan at the same time and place that other popular community events (markets, fairs, etc.); install it on an empty shop or an unloved patch of space for awaken citizens curiosity.
4. Feedback:
 - provide brochure with details about where to find final results of the action (transparency)
 - provide information for subscribing to newsletter and which are the social network profiles available (continuous engagement).

External references

- SIMmobil program⁷⁹ (SmarterTogether, 2017): the mobile information and communication lab of the Smarter Together project.
- The InstaBooth⁸⁰ (QUT Design Lab, 2015): a telephone booth-inspired portable structure that captures citizens’ past stories and present opinions, particularly opinions regarding the use and design of public spaces.

⁷⁹ SMARTER TOGETHER (2017, October 11). Das SimMobil. Retrieved November 21, 2019, from <https://vimeo.com/237700242>

⁸⁰ QUT Design Lab (2015). The InstaBooth. Retrieved November 21, 2019, from <https://research.qut.edu.au/designlab/projects/instabooth/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.6.6 Tool 6. Mapping Sessions

Mapping sessions are events which gather a group of citizens and record with them their observations of an area. They are useful for community groups wanting to change aspects of their neighborhoods or for a research group to start a discussion with citizens on urban issues. Mapping sessions include community auditing sessions, incidents reports and crowdsourced mapping sessions.



*Figure 4.6.6 Mapping. Community Mapping Laneways, Limerick's 2019 CityEngage week
(Source: Limerick City and County Council)*

Objectives

- To collect and analyse the public opinions within the city fabric.
- To record the public's opinions first hand and in-situ using online mapping tools or analog input devices.
- To display the data visually and discuss the data with the public.

Implementation & Timeline

- Preparation:
 - Target audience: the more diverse the target audience, the richer the data will be.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- Venue: Meet the participants in an adequate venue to conduct the introduction for the session.
- Communication:
 - The goals of the event should be clearly outlined.
 - Promotional media should be clear and concise, containing all the information needed to attend the workshop and gear (rain jackets for a guided walk, smartphone for mapping app, ect...).
- Delivery:
 - Timeline. 1. Introduction: Outline the goals for the session. Ensure guests are able to install, use and understand the chosen tools for the mapping tour. 2. Tour: Assist participants when giving tours. Engage and record information both mutually and through the App. 3 Analysing results: Set a designated time and meeting point to gather results. Allow for an open discussion. 4. Reflection: Discuss if the goals were achieved and what can be done to improve the event.
 - Tools: Online Mapping Tools, allow individuals to upload data such as comments, videos and images to an interactive map and pin that data to a location. Analog tools are also useful.
 - Tour: Tour leaders are to be trained on how to guide members of the public safely. Account for participants with disabilities. Guide the participants in their observations. Map as much as possible.
 - Discussion and Analysis: Arrange a meeting point, depending on the weather you could have the discussion on location. Keep the data collected unbiased, it is easy to unconsciously skew the data.
- Feedback: collect feedback from participants and send them updates about the work progress after every session (foster transparency and continuous engagement). Maintaining citizen privacy rights is a must.

External references

- Iconoclasistas. Manual of Collective Mapping⁸¹ (Iconoclasistas, 2016). Critical Cartographic resources for territorial processes of collaborative creation.

⁸¹ Iconoclasistas (2016). Manual of Collective Mapping. Retrieved January 17, 2020, from http://www.academia.edu/28625755/Manual_of_Collective_Mapping._Critical_cartographic_resources_for_territorial_processes_of_collaborative_creation_2016



4.6.7 Tool 7. Gamification

The use of techniques and familiar elements of *play*, often board games, digital games or family games to engage groups - particularly members of the public or focus groups. Gamification can be a very effective technique to work on complex concepts and bring together a wide diversity of stakeholders, bringing together top-down decision makers together with bottom-up stakeholders. These activities can also be useful exploring the impact of urban developments, actions plans and municipal policies.⁸²



Figure 4.6.7 Gamification. City Energy Game, Limerick's 2019 CitiEngage Week
(Source: Limerick City and County Council)

Objectives

- Improve the understanding of scenarios and the roles of different stakeholders.
- Make complex concepts and challenges more accessible.
- Discuss decision-making processes and get to know the citizens.
- Reach groups that otherwise would not engage in participatory processes.

Implementation

⁸² Tan, E. (2017). Play the city: Games Informing the Urban Development. Retrieved February 10, 2020, from <https://www.playthecity.nl/page/15793/games-informing-the-urban-development>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- Preparation:
 - State clearly the aims of the game, target groups and its outcomes. Choose the right medium (board game, role playing, digital game, physical game, etc...) based on this initial evaluation.
 - What can be observed, evaluated? Characters? Objectives? Themes? Challenges?
 - Rules need to be carefully designed to contemplate as many scenarios as possible. Consider bringing game designers and researchers to ensure it is engaging and fun to play. Adapting well known games can facilitate participants engagement and the understanding of the game rules.
- Delivery:
 - Facilitation is the most important skill in this process. The facilitator will establish the rationale of the game; put the participants at ease; Pace the interactions, and determine when to add new details or spend more time with the current situation.
- Feedback:
 - Collect feedback from participants, and offer an opportunity for discussion, evaluation of the results with observers.
 - Review the rules each time the game is played and adjust them according to participants feedback

External references

- *Zwerm*, social play in the city : project by Thomas Laureyssens, Ghent (BE)
- *CityEnergyGame*, students of the School of Architecture, UL (<https://wikifactory.com/@ger/introduction-and-overview>)
- Play the City. Serious gaming for smart and social cities <https://www.playthecity.nl/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

4.7 Communication & Accountability

Communication is a highly important driver for maintaining citizen engagement. Regular online and offline communication with the community (citizens, professionals, researchers, private stakeholders, etc.) about the progress and the challenges of the participatory project is crucial. The following communication actions (or a combination of them) should be implemented during the complete participatory process in a continuous (from beginning to end), open and transparent manner.

Particular communication actions to be performed in order to maintain engagement:

- Regularly update the website.
- Send monthly or weekly newsletter.
- Organize information events for the general public:
 - Mobile units providing information around the city/neighbourhood.
 - Brochures available on civic buildings.
 - City walks, open house events and others.
- Organize informative visits to schools, professional associations, etc. to provide general project information adapting the material and group dynamics to each target group.

Sharing information with citizens is essential for the end-user acceptance of the final solutions and the long-term quality and outcomes of the measures:

- Publish reflection on developed contents and results coming out in working sessions with citizens, community members, professional public or others.
- Publish contributions to evaluation of projects: use-cases, questionnaires, surveys, satisfaction of local residents, voting results, etc.
- Share studies developed about the issues or places to be considered in the participatory sessions with citizens: viability costs, environmental studies, mobility studies, socio/economic/demographic analysis, historical studies, urban and others.

Providing capacity building of citizens helps to reduce conflicts between citizens and public institutions, make well-considered and collaborative decisions and define the final actions that will make these decisions a reality. Capacity-building of civil servants is also fundamental in topics about open government strategies:



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- Organize workshops or seminars oriented to a general public: awareness campaigns, diy workshops and others.
- Organize training oriented to civil servants about open data, digital participation, citizen engagement and others.

Communication and Accountability mechanisms during the project's implementation phase and once the participatory process has finished is normally understated but it is key for creating truly engaged communities. Note that it is as important to publish the progress as well as the reasons for the lack of progress to keep communities engaged in future processes.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5 +CityxChange participatory platform

Three workshops, see [Chapter 8.3 Annex C](#), individual questionnaires and interviews, see [Chapter 8.2 Annex B](#), with LHCs and FCs were facilitated as part of T3.2 to exchange ideas between LHCs, FCs and the other WP3 partners, to understand the communities and the different demonstration areas of each city, to share existing good practices and challenges regarding citizen participation and to brainstorm target groups and themes for the participatory processes, the results of these activities are summarized in [Chapter 3.3 Understanding the context from each participant city](#).

Through these activities, we came to the conclusion that a single +CityxChange Participation Platform would not be suitable for all LHCs & FCs. The reasons supporting this decision are:

- Each city has different needs for the citizen participatory platform: TK is looking for an integrated solution, LCCC and MAI just commissioned proprietary consultation tools, MP and SMO do not use any dedicated participatory platform but general purpose tools, and finally SB relies on consultants who used their own proprietary tools.
- Each city has different available resources: some of the cities are too small (VORU, SMO) and have a small amount of resources to successfully maintain a citizen participatory platform and others could benefit from an integrated solution (TK, LHC, MAI, SB).
- Each city has different levels of experience on citizen participation: some cities do not have much previous experience running participatory processes or their previous participation rates are low. Therefore before committing to an integrated participatory platform it is imperative that pilot projects are done using quick and affordable tools (for example using SaaS solutions)

Therefore the initial idea of developing a single platform suitable for all cities is not feasible. The decision is to focus on the features needed in each step of the participatory processes described in the Playbook and offer a range of existing open source applications to accomplish each step. Each of these tools are described in detail in [Chapter 5.1 Catalog of Online Tools for Citizen Engagement and Participation](#). The recommendations in [Chapter 6](#) define the basis for LHCs and FCs to start testing the most suitable tools in their respective cases. Further meetings with each city during the implementation phases in WP4, WP5 and WP6 will be used to choose and test them. This process has already started.

These digital tools range from complete suites for an integrated approach to a city wide citizen participatory platform such as Consul and Decidim –described in detail in [Chapter 5.2](#)– to particular tools for performing individual steps of the citizen participatory process –online debates, collaborative text-editing, online voting and more–. Therefore the city that is already commissioned or has purchased some of these tools can integrate others to develop the whole participatory process.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.1 Catalog of Online Tools for Citizen Engagement and Participation

Seven online tools have been identified in order to implement all the different participatory processes described in the +CityxChange participatory playbook. This catalog of online tools together with the [Catalog of Physical Tools for Citizen Participation](#) provides an integrated and synchronized approach to citizen participation capable of adapting to the notable diversity of the LHCs and FCs participating in +CityxChange.

The catalog describes each tool highlighting its key characteristics, and a set of recommended applications –differentiating between single purpose apps and suites– based on the extensive analysis of more than 35 online participation applications compiled in [Chapter 8.1 Annex A](#). An important feature existing on these recommended apps is a well documented API and robust login system to allow a granular citizen verification system. All the recommended single purpose apps allow to seamlessly integrate with existing municipal infrastructure login systems. Recommended Online Voting apps and Suites have more advanced features and can be integrated with existing register and census systems.

Catalog of Online Tools for Citizen Engagement and Participation	
Online Tool	In which Participatory Process is used
1. Collaborative Text	1. Co-creation of Urban Interventions; 2. Collaborative Legislation 3. Participatory Budgeting; 4. Citizens' Proposals
2. Online Debate	1. Co-creation of Urban Interventions; 2. Collaborative Legislation 3. Participatory Budgeting; 4. Citizens' Proposals
3. Online Mapping	1. Co-creation of Urban Interventions 4. Citizens' Proposals
4. Online Voting	1. Co-creation of Urban Interventions; 2. Collaborative Legislation 3. Participatory Budgeting; 4. Citizens' Proposals
5. Accountability	1. Co-creation of Urban Interventions; 2. Collaborative Legislation 3. Participatory Budgeting; 4. Citizens' Proposals
6. Online Proposals	1. Co-creation of Urban Interventions; 3. Participatory Budgeting 4. Citizens' Proposals
7. Participatory Budgeting	3. Participatory Budgeting

Table 5.1.0 Catalog of Online Tools Summary



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.1.1 Tool 1. Collaborative Text

The capacity of writing texts collaboratively is a key tool for every participatory process and it is used extensively in different stages of the process such as writing minutes at in-person meetings, writing drafts at focus working groups or brainstorming at co-design workshops.

Single purpose apps offer real time collaboration with the ability of having several people editing the content at the same time as well as integrated chat and comment features for easier collaboration. Suites provide a more structured approach staging the different phases of the collaborative writing process.

Characteristics	
<ul style="list-style-type: none"> • The ability to highlight parts of the text and associate a thread of comments and votes is necessary for collaborative legislation. • Structured tagging, metadata and filtering (preparation stage, external document linking, version history and user tracking) are important features. • While real-time writing can facilitate some tasks is not a crucial feature. 	
Recommended Apps	
Single Purpose Apps	Notes
Etherpad	<ul style="list-style-type: none"> - Robust API - Free servers available run by NGOs and governments
CodiMD	<ul style="list-style-type: none"> - SaaS Option - Innovative features (integration with cloud services, math formulas, charts and slides)
Suites	Notes
Decidim	Via the Participatory Text and the in-person meeting components: <ul style="list-style-type: none"> - Participatory texts are defined as an ordered collection of proposals that make up a document with complete text. - In-person meeting component allows to track and manage meetings, registrations and minutes of in-person meetings.
Consul	Via the Collaborative Legislation module: <ul style="list-style-type: none"> - Three basic modes debate, proposals and drafting: these modes provide a structured approach for writing text collaboratively.

Table 5.1.1 Collaborative Text Summary by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.1.2 Tool 2. Online Debate

Online debate tools facilitate the discussion of ideas, moderation different opinions and its evaluation. Used together with physical events such as co-design workshops, focus working groups and public engagement events, they allow an asynchronous, searchable and moderated space for citizen participation and engagement. It is important to note that adequate resources need to be allocated for moderation of these online civic spaces.

Single purpose apps offer simple set up and maintenance and are a great way to pilot new participation processes. Some of these apps offer innovative features such as the use of machine learning to facilitate moderation when resources are limited. Suites offer an holistic approach with common user interface and integrated signup.

Characteristics	
<ul style="list-style-type: none"> • Robust moderation tools for flagging inadequate comments, rewarding civic behaviour and banning bad uses and spam. • Notifications tools for receiving updates on subscribed topics, mentions or replies. 	
Recommended Apps	
Single Purpose Apps	Notes
Discourse	- SaaS Option & Sign-up integration
Polis	- Innovative features (machine learning)
Allourideas	- SaaS Option & Innovative features (pairwise method)
Suites	Notes
Decidim	Via the discussions and debates and comments components: - Debates can be opened on questions and specific issues established by administrators or participants. - Comments are a special component associated with debates designed to encourage deliberation.
Consul	Via the Debates module: Users can vote for or against the debates. All debates have a comments section. Comments are also voted. Institutional representatives have verified profiles in order to respond to comments.

Table 5.1.2 Online Debate Summary by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.1.3 Tool 3. Online Mapping

Online mapping tools are used predominantly in the earlier stages of the participatory process to support physical mapping events and help to understand complex urban issues, generate debates on our physical environment and audit geospatial features of our cities and communities.

Single purpose apps offer a featured rich environment, highly customizable that can be adapted to mapping sessions, auditing events and as a report tool. Robust report features allow you to export data in both visual friendly and interchangeable formats. Current suites do not provide dedicated online mapping components or modules, although some elements within the apps such as proposals and discussions can be geolocated.

Characteristics	
<ul style="list-style-type: none"> Flexibility to create different types of mapping events: structured surveys and auditing, crowdsourcing events, incident reports... Clean user interface with mobile app versions Robust I/O features for creating visual reports, importing and exporting data 	
Recommended Apps	
Single Purpose Apps	Notes
Ushahidi	<ul style="list-style-type: none"> - SaaS Option & feature rich - Highly adaptable to mapping sessions
Fixmystreet	<ul style="list-style-type: none"> - SaaS Option & feature rich - Specialized tool, difficult for other mapping sessions
OSM 2.0	<ul style="list-style-type: none"> - Feature rich & Part of big OSS project - Generalistic tool, needs adaptation to civic tech
Suites	Notes
Decidim	No dedicated mapping component: Proposals can be geo-located and categorized but they do not have specific features for mapping sessions.
Consul	No dedicated mapping module: Discussions on the debate module can be geolocated and labeled but they do not have specific features for mapping sessions.

Table 5.1.3 Online Mapping Summary by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.1.4 Tool 4. Online Voting

Online voting is a key element in any participatory process and fosters citizen engagement as it makes voting simpler, more affordable and convenient. All the participatory processes described in the playbook require tools to organize several voting processes. While some of them can be implemented solely using online vote –weighting proposals or defining the most important aspects of a brief– binding voting process need to be inclusive and an integrated online/physical voting process should be implemented.

Single purpose apps are able to provide secure and reliable voting without complex set up and management as some of them are offered as SaaS solutions. On the other hand voting modules in suites offer advanced features such as single user signup and granular permissions or the ability to manage physical and online voting using the same tool.

Characteristics	
<ul style="list-style-type: none"> Online voting is more affordable than physical voting (voting stations, postal vote) so it can be run more often. Voting apps provide a reasonable level of security while maintaining privacy. They provide more flexibility in designing the voting process (multiple votes per user, geographic restricted votes, etc...) Less resources required in the counting process. 	
Recommended Apps	
Single Purpose Apps	Notes
Helios Voting	- SaaS Option but not featured rich
Agora/nVotes	- SaaS Option but unclear Open Source license
Suites	Notes
Decidim	Via the Support/votes and endorsements component: <ul style="list-style-type: none"> - Number of votes per citizen can be limited or not - Participatory budgeting is a special form within this component which limits the votes by spending amount
Consul	Via the polls module: <ul style="list-style-type: none"> - Combining physical and digital voting for integrated voting processes. "Restricted by geozone" voting processes.

Table 5.1.4 Online Voting Summary by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.1.5 Tool 5. Accountability

Online accountability tools are a key element in any participatory process. It is used once the participatory process has finished to publish all the progress during the implementation phase. The importance of this tool is often understated but it is key for creating engaged communities and successful participatory processes. Note that it is as important to publish the progress as the reasons for the lack of progress in the implementation phase to keep communities engaged in future participatory processes.

Existing Content Management Systems (CMS) within the council can be used to publish updates on implementation so no additional tools are needed for implementing this feature. Although suites offer a much more effective interface as milestones and timeline views are associated to projects and proposals so it is simple to track projects progress and keep interested citizens informed through their integrated notification systems.

Characteristics	
<ul style="list-style-type: none"> • Milestones and Timeline views provide a clear interface to understand progress during the implementation phase. • Comments feature so citizens can express their opinions on progress updates. • Subscription and notification of progress updates. 	
Recommended Apps	
Single Purpose Apps	Notes
Existing Content Management System	- Existing CMS system in the organization can be used for this purpose.
Suites	Notes
Decidim	Via the result-monitoring component: - The monitoring component represents the level of implementation of the projects. Statuses can be updated through a CVS, or manually by the administration interface.
Consul	Via the milestones section: - The Milestones section is used to publish the evolution of the project once the participatory process has finished.

Table 5.1.5 Accountability Summary by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.1.6 Tool 6. Online Proposals

A flexible and reliable online submission tool is necessary for three of the participatory processes described in the playbook. In co-design urban interventions can be used as a submission tool for open calls, in Participatory Budgeting is used for submitting proposals for pre selection and in Citizens' Proposals is the main channel for submitting initiatives.

Online proposals can be implemented with online submission forms that exist in common CMSs and probably the organization already has a similar functionality. Suites provide extended functionality such as debate forums associated with the proposal, voting features and advance managing features that facilitates citizens to browse through proposals and admin to manage the different stages of each proposal.

Characteristics	
<ul style="list-style-type: none"> • Flexible submission form for proposals: rich text, images, links and attachments. • Publication and management of proposals with the ability of tagging, groups, categories and search. • Voting features to gather support around proposals and create weighted lists. 	
Recommended Apps	
Single Purpose Apps	Notes
Existing Online Forms in CMS	- An online submission form from the existing CMS system in the organization can be used for this purpose.
Online Collection software	- Developed by the European Commission - No theming or API. Difficult to integrate
Suites	Notes
Decidim	Via the Initiatives space and the proposals component: <ul style="list-style-type: none"> - Initiatives allow citizens to make proposals and collect the requisite number of signatures and/or endorsements. - Support attachments, rich text, images and geolocation. Also support version history & duplication detection.
Consul	Via the proposals module: <ul style="list-style-type: none"> - Support attachments, rich text, images and geolocation. - Milestones feature so a progress timeline is visualized showing the current status of the proposal.

Table 5.1.2 Online Proposals Summary by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.1.7 Tool 7. Participatory Budgeting

The participatory budgeting is a specialized online tool to conduct the voting phase in participatory voting processes. This tool facilitates greatly the voting process with similar benefits of the online voting tools and other specific features such as the ability to limit citizen votes by spending amount.

Single purpose apps such as PB Stanford offer several voting methods to minimize bias. On the other hand suites allow greater flexibility highly integrated with the previous and following stages of the process such as project evaluation tools and customizable phases. It is worth mentioning that during our research we have identified numerous consultants in Europe (listed in the [8.1 Annex](#)) providing participatory budgeting services using their own proprietary tools.

Characteristics	
<ul style="list-style-type: none"> • Similar functionality than online voting adding the ability to limit citizen votes by spending amount. • Additional features for proposal submissions, review, support and evaluation can be found in suites. 	
Recommended Apps	
Single Purpose Apps	Notes
PBStanford	Innovative features with several voting methods to avoid bias. Supported by academic research.
Suites	Notes
Decidim	Via the Support/votes and endorsements component: - Participatory budgeting is a special form within this component which limits the votes by spending amount.
Consul	Via the participatory budgeting module: - A dedicated module within the app that allows great flexibility when designing the process with customizable phases and groups. - Granular user management for organizing projects evaluation within the module.

Table 5.1.7 Participatory Budgeting Summary by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.2 Online Software Suites for Citizen Participation

The research on Open source platforms for citizen participation see [Chapter 8.1 Annex A](#) analyzed five applications in the Suites category. Suites represent a more recent approach to civic tech in which extended functionality allows an integrated solution for citizen participation which gives great flexibility when designing and implementing different types of participatory processes.

From these five applications studied, two of them, Consul and Decidim, have been selected for further analysis as they offer most of the functionality needed for the implementation of the +CityxChange Participatory Playbook described in [Chapter 4](#). In the current chapter each of these two tools are described in detail along with some lessons learned on the use of these suites by municipalities. Consul and Decidim are the recommended tools for those cities looking for an integrated solution of online tools for citizen participation. Finally, a comparison between Consul and Decidim has been included in order to understand the similarities and differences between both.

5.2.1 Consul

Consul⁸³ (Consul, 2019) is open government and e-participation web software originally developed by the Madrid City government, implemented in Madrid under the name “DecideMadrid”⁸⁴ (Ayuntamiento de Madrid, 2019). Consul allows institutions and organizations to carry on the most important direct citizen participation processes existing nowadays. It includes: citizen proposals, votings, participatory budgets, collaborative legislation, public debates, collective interviews, and sectoral processes (specific processes with particular specifications, as urban redevelopments or highly complex normative). Since 2015, 362,702 users have registered and participated in more than 5,000 debates, while more than 21,000 proposals have been made and more than 4 million votes generated⁸⁵.

Next there is a list of processes that can be done in Consul. A more detailed explanation of the phases for each participation process can be found here⁸⁶ (Consul, 2019). Additionally, there is a complete user guide here⁸⁷ (Consul, 2019). A complete list of tutorials regarding communication strategies, participatory budgeting, a guide for administrations, polling stations and more can be found at Consul’s website.

⁸³ Consul (2019). CONSUL. Retrieved October 11, 2019, from <http://consulproject.org/>

⁸⁴ Ayuntamiento de Madrid (2019). Decide Madrid. Retrieved October 11, 2019, from <https://decide.madrid.es/>

⁸⁵ United Nations Public Administration Network (2018, May 25). Documents: 2018 Winners. Retrieved October 11, 2019, from <http://workspace.unpan.org/sites/internet/layouts/mobile/dispform.aspx?List=691145ee%2Dd828%2D42e1%2D80a4%2Dc007f54e9ee7&View=0a4712bf%2De571%2D4b28%2D9bbc%2Ddd8086c05003&ID=11772>

⁸⁶ Consul (2019). Open Software for Citizen Participation. Retrieved October 11, 2019, from http://consulproject.org/docs/consul_dossier_en.pdf

⁸⁷ Consul (2019). Download CONSUL Use Guide. Retrieved October 11, 2019, from http://consulproject.org/docs/consul_use_guide_en.pdf



- **Debates:** The debate module is interesting for any citizen to start a thread about any subject. Debates can be valued and commented on by everybody and the most important issues are highlighted by showing them first in the list.
- **Proposals:** Consul allows for any citizen to create proposals and gather support. Besides text, the proposal could include images, videos, tags or links. When a proposal obtains the necessary level of support then it gets to be voted on.
- **Participatory Budgeting:** Participatory budgeting is divided into three main phases: first creation of the proposal (anyone in the city could create one), second citizens support the proposals, prioritizing those that are more interesting to them, and third the city council evaluates the proposals that have received the most support.
- **Voting:** Secure voting in Consul can be done in citizen proposals or in debates. Both digital and face to face voting is possible in Consul.
- **Collaborative Legislation:** Citizens can add comments on draft regulations. This way any legislative text can be shared with the public to receive comments on any particular part of it.

Name	Consul
URL of the project	http://consulproject.org
URL of the repository	https://github.com/consul/consul/
URL of a demo	https://demo.consulproject.org/
Description	CONSUL is a complete citizen participation tool for an open, transparent and democratic government.
Language	Ruby
Framework	Ruby on Rails
Start date	2015-07
Current version	0.19 (2019-01)
# of contributors	101
Popularity	830
Activity	Active development (2019-11)
License	GNU Affero GPL v3
Responsive	Yes
Localization	Yes



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

5.2.1.1 Open source

Consul is an open source platform, all its code can be used by any person or entity. Open source software (OSS) has been explicitly recognized as a key driver towards achieving ambitious governmental digitisation goals by 2020.

The Tallinn Declaration on eGovernment at the ministerial meeting during Estonian Presidency of the Council of the EU on 6 October 2017⁸⁸ (EC, 2017), makes the following calls within point 5) Interoperability by default:

- **Make more use of open source solutions and/or open standards when (re)building ICT systems and solutions (among else, to avoid vendor lock-ins), including those developed and/or promoted by EU programmes for interoperability and standardisation, such as ISA;**
- **Make ICT solutions owned by or developed for the public administrations more readily available for reuse in the private sector and civil society, for example, by developing and publishing terms and conditions on how third parties may reuse the solutions.**
- **Consider strengthening the requirements for use of open source solutions and standards when (re)building of ICT systems and solutions takes place with EU funding, including by an appropriate open licence policy – by 2020.**

The ISA² Programme⁸⁹ (EC, 2016), mentioned within the excerpt, was launched in November 2015. This program supports the development of digital solutions that enable public administrations, businesses and citizens in Europe to benefit from interoperable cross-border and cross-sector public services. It has 54 actions⁹⁰ (EC, 2016) focused on the development of digital solutions in the area of interoperability.

The action Promoting sharing and reuse of IT solutions⁹¹ (EC, 2016), the European Collaborative Platform and catalogue: Joinup was developed by the European Commission. A platform that gives the opportunity to share and reuse IT solutions, good practices with other professionals across Europe and beyond, as well as easily find and download already

⁸⁸ European Commission (2017, October 6). Tallinn Declaration on eGovernment. Retrieved October 11, 2019, from https://ec.europa.eu/newsroom/document.cfm?doc_id=47559

⁸⁹ European Commission (2016). About ISA². Retrieved October 11, 2019, from https://ec.europa.eu/isa2/isa2_en

⁹⁰ European Commission (2016). AISA² Actions. Retrieved October 11, 2019, from https://ec.europa.eu/isa2/actions_en

⁹¹ European Commission (2016). Promoting sharing and reuse of IT solutions. Retrieved October 11, 2019, from https://ec.europa.eu/isa2/actions/promoting-sharing-and-reuse-interoperability-solutions_en



developed solutions. Consul⁹² (Joinup, 2019) is included in this catalogue since two years ago and is shortlisted by the jury for the Sharing and Reuse Awards 2019 within the category of “Open source software with the biggest impact on citizens or businesses”.

The jury for the Sharing and Reuse Awards 2019:

Justification: Consul demonstrates a very impressive degree of political and social impact and user-centricity, with particular evidence of a vibrant community. The solution also put forward an ideal Open Source Software layout and has been installed multiple times in many countries, mostly cities, both small and large, including metropolises such as New York.

5.2.1.2 Communication

Madrid City Council has developed several communication guides in their effort of understanding their participation environment. For example, there is a “Consul Communication Guide” for the administration at Consul’s website. This very comprehensive guide gives recommendations at different stages of the project: before launching the participatory platform, daily communication and dissemination and communication campaigns contemplating both online and offline advertising actions. The analysis of the target audience is a key step for defining each campaign (size, distribution of the weight by type of media, etc.). It also includes a definition of KPIs for measuring the success of the actions.

5.2.1.3 Adoption within the organization

Madrid’s City Council participation department experienced a great change which came with the new political party in charge in 2015. In order to get staff on board during the participatory process, technical analysis was made more relevant and present during the process. Now there are more than 100 technical staff assessing proposals to validate their feasibility. If a technical staff gives a negative regarding a proposal then a justification has to be developed. In this way, Consul meets all the technical requirements to meet the transparency and openness of this process. There are challenges regarding training of civil servants: a monitoring team is required in order to supervise the work performed.

Satisfaction surveys are conducted regularly to assess citizen engagement. To the question “Is your city council listening to you? The answer YES has increased in the last four years from 20% to 50%.

It is worth mentioning that Consul’s development team has a different way of working than the rest of Madrid’s City Council, they work remotely and contribute by using Git.

⁹² Joinup (2019). Consul. Retrieved October 11, 2019, from [https://joinup.ec.europa.eu/rdf_entity/http e f fwww cdecide ces fen f](https://joinup.ec.europa.eu/rdf_entity/http%3A%2F%2Fwww.cdecide.ces.fen.f)



5.2.2 Decidim

Decidim⁹³ (Decidim, 2019) is a free open-source participatory democracy for cities and organizations that helps citizens, organizations and public institutions self-organize democratically at every scale. Decidim has been developed by the Barcelona City government under the name “Decidim Barcelona”⁹⁴ (Decidim, 2019). It includes strategic planning, participative processes, participatory budgeting, assemblies, initiatives and citizen consultations, and networked communication.

Since its launch in 2016, 31.608 people have joined the platform, making 13.877 proposals, casted 197.889 votes or support to proposals, and 9.824 proposals have been turned into public policy so far. There are more than 50 institutions and organizations that have installed and used Decidim amongst city councils, regional governments, cooperatives, associations and NGO networks⁹⁵ (Barandiaran, 2019).

URL of the project	https://decidim.org/
URL of the repository	https://github.com/decidim/decidim
URL of a demo	https://try.decidim.org/
Description	The participatory democracy framework. A generator and multiple gems made with Ruby on Rails.
Language	Ruby
Framework	Ruby on Rails
Start date	2016-08
Current version	0.20.0 (2019-01)
# of contributors	64
Popularity	607
Activity	Active development (2019-11)
License	GNU Affero GPL v3
Responsive	Yes
Localization	Yes

⁹³ Decidim (2019). Decidim. Retrieved June 5, 2019, from <https://decidim.org/>

⁹⁴ Decidim (2019) Decidim Barcelona. Retrieved June 5, 2019, from <https://www.decidim.barcelona/>

⁹⁵ Barandiaran, X (2019) The experience of decidim.barcelona. Retrieved June 5, 2019, from <https://www.oidp.net/docs/repo/doc551.pdf>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Decidim is organized in participatory spaces⁹⁶ (Decidim, 2019) for citizens to make proposals and decisions:

1. **Participative processes:** Participatory processes can be defined as divided into stages, each one of the stages will include title, description, start date and end date. The participatory process configuration tool enables the simple activation and deactivation of stages and their components. This configuration tool is one of the most powerful tools of Decidim, enabling total flexibility in designing the participatory processes based on its unique characteristics (participation forms, citizen realities, etc.). Some examples are: participatory budgeting, a strategic planning process, collaborative legislation or urban space intervention.
2. **Assemblies:** Participatory or government assemblies can be defined in Decidim. The participant groups will be defined as well as a map with a calendar showing where the assemblies will take place, general characteristics (open/close, transparent, level of participation, ...), register attendance information and more. This feature is of great help for allowing collective self-organization.
3. **Initiatives:** The initiatives participatory space allows citizens to collaboratively create proposals, collect endorsements, define their goals, discuss, debate and disseminate. Video tutorials are available to citizens for learning how to make proposals. A minimum number of votes will be required by the city council for its processing. If accepted the corresponding procedure will start.
4. **Consultations:** The Consultations module enables to carry out a voting procedure regarding a particular topic/question, as well as get voting results published. The management and verification of users is completely integrated into this module.

Decidim has a set of available components shared by the participatory spaces to enrich its functionalities, these components are: proposals, participatory texts, results (decision taken by a voting process or by meetings, or others), monitoring results, proposals endorsement/votes, comments, informative pages, discussions and debates, surveys, in-person meetings, conferences, blogs, newsletter, search engine and sortitions (a system that guarantees randomness and avoids manipulation of results).

The following actions can be carried out by looking at Decidim's platform from the participants perspective, participants are able to:

- Navigate and search information
- Create proposals, debates and others
- Vote, support or sign regarding a consultation question, proposal or initiative (signatures can be audited and attributed to a participant, supports cannot, in order to prevent coercion, while votes involve higher cryptographic guarantees than supports).
- Comment on proposals, debates, results, etc.
- Endorse any comments

⁹⁶ Decidim (2019). Features. Retrieved October 9, 2019, from <https://decidim.org/features/>



- Follow other participants
- Sign up for a meeting

The metadecidim community collaborates in the design of the platform and the building of the Decidim project. It is an active and open community, and a key element in the Decidim project's success. Their main communication channel is at meta.decidim.org, which is an instance of Decidim itself. They annually organize DecidimFEST, a meeting of the metadecidim community for publicly presenting the latest version of the platform, including working sessions, hackathons and specialized conferences.

5.2.3 Comparison between Decidim and Consul

Decidim and Consul are the two most successful examples of the recent wave of citizen participation technologies and because of this they have some similarities:

- With more than 5 years of development they are mature platforms which use modern web app technologies and development frameworks.
- Developed and maintained by municipalities themselves using in-house development teams and open up development using widespread open source development strategies and governance models (shared development using open Github repositories, vibrant communities with annual meetups and conferences, extensive user and technical documentation and more)
- Design to be used by other municipalities and organizations in order to create enough critical mass around each project so they can benefit from distributed developer teams and diverse open source ecosystems working around the project.
- Both projects have received international Awards on innovation in citizen participation and open source in civic tech.

To facilitate the comparison between each software, a number of tables have been included. The original information was published in this article from Decidim's blog⁹⁷ (Barandiaran, 2019) Authors were part of the Decidim's founder team so comparison might gravitate in favor of Decidim. It is also important to note that the origin of decidim is actually a "fork" of the Consul project and initially Barcelona municipality adopted Consul for their participation platform so some authors see Decidim as a project initiated by some limitations found in the software architecture of Consul.

⁹⁷ Barandiaran, X (2019). Comparison of Decidim and Consul. Retrieved January 13, 2020, from <https://decidim.org/blog/en/2019-01-14-consul-comparison/>



Comparison between Decidim and Consul		
Participatory Spaces or Modes	Decidim	Consul
Configurable participatory processes	yes	no
Direct initiatives or proposals	yes	yes
Collaborative legislation	only as process	yes
Participatory budgets	only as process	yes
Participatory organisations	yes	no
Off-line voting	no	yes
Conferences	yes	no
Participatory Components or Mechanisms	Decidim	Consul
Proposals	yes	yes
Discussions and debates	yes	yes
Meetings	yes	no
Results monitoring	yes	yes
Comments	yes	yes
Surveys	yes	yes
Newsletter	yes	yes
Other features	Decidim	Consul
Version control for proposals and results	yes	no
Electronic voting gateway	yes	yes
Notifications for proposal followers	yes	yes
Admin documents	yes	yes
Integration with social networks	yes	yes
Architecture	Decidim	Consul
Free and open source software	yes	yes
Modular (with RoR engines)	yes	no
Multitenant	yes	no
Defined public roadmap	yes	yes



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Community	Decidim	Consul
Defined public roadmap	yes	yes
Community space	yes	yes
Community space with own software	yes	no
Regular community meetings	annual & monthly	annual
Physical reference space	yes	yes
Democratic governance of the project	yes	no
Democratic Innovation Laboratory	yes	yes
Number of active installations	46	55
Number of languages available	18	28

Table 5.2.3. Summarized comparison between Consul and Decidim (Source: Decidim development team in <https://decidim.org/blog/en/2019-01-14-consul-comparison/>)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

6 Conclusions

The +CityxChange Citizen Participation Playbook provides a complete step-by-step reference guide for local authorities to run participatory processes in LHCs and FCs to co-design PEBs and PEDs. The +CityxChange Citizen Participation Playbook is based on six best practices for effective citizen participation distilled from the analysis of previous experiences on citizen participation shared by smart city projects, EU initiatives and other European organizations (NGOs, municipalities and experts), and the insights of LHCs and FCs on citizen participation through collaborative sessions, questionnaires and interviews.

The Citizen Participation Playbook is not a mere catalog of physical and online participatory tools, but a detailed roadmap of four distinctive citizen participatory processes: Co-design of urban interventions, Collaborative Legislation, Participatory budgeting and Citizens Proposals. Their description includes phases, steps, stakeholders and outcomes, and it is supported by a catalog of physical tools and a set of online tools (Participatory Platforms).

The catalog of physical tools together with the set of online tools provides an integrated and synchronized approach to citizen participation capable of adapting to the notable diversity of the LHCs and FCs participating in +CityxChange.

The present chapter describes the next planned steps for the implementation of the Citizen Participation Playbook linking the deliverable with other tasks within the project. The chapter concludes with a summary of recommendations derived from understanding the context of each city and the collaborative work done through T3.2 workshops, which serves as a starting point for the implementation of the playbook in WP4, WP5 and WP6.

6.1 Next steps

Next steps for the implementation of the Citizen Participation Playbook are:

- The starting point of the process are the recommendations included in [section 6.2](#) of present chapter which have been developed together with each city.
- The Citizen Participation Playbook will be fully explained to each city followed by a working session to discuss which processes are the most appropriate in each case within the tasks defined in WP4, WP5 and WP6. This has already started, the framework was presented in WP3 and WP4 meetings on Feb 4th and 5th 2020.
- Most suitable physical tools from the catalog will be selected for defined steps of the participatory processes. Most suitable online tools from the Participatory platform will be selected based on the existing online tools and resources in each city.

How the Playbook links with other tasks, deliverables and WPs is described through sections 6.1.1 to 6.1.4



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

6.1.1 WP3 CommunityxChange

- Early engagement using activities from the “Catalog of Physical Tools for Citizen Engagement” would be included in Task 3.3 Development of a learning framework targeting the Next Generation of Smart Citizens. Also, online tools described in “+Cityxchange Participatory Platform” will be part of D3.4 : Framework for DPEB learning and education.
- Early engagement using activities from the “Catalog of Physical Tools for Citizen Engagement” would be included in Task 3.4 Creation of a Framework for Positive Energy Champions. The activities will be part of D3.5 : Framework for a Positive Energy Champion network.
- “Process 4: Citizen proposals” from the Playbook would provide the guideline for the development of a methodology for open calls for the design and prototype of local RES and eMobility solutions within Task 3.5 Framework for Innovation labs towards DPEB solutions. Also, D3.6 : Framework for DPEB Innovation Labs will ensure that the Innovation Labs can be integrated with the participatory processes described in “+CityxChange Participatory Playbook”.

6.1.2 WP4 +Limerick

- “Process 2: Collaborative Legislation” would be used within BVC Framework to prioritize which SDGs are more important to local stakeholders and the translation into direct actions plans within Task 4.2 Municipality-led Bold City Vision and the implementation of D4.7 : Limerick 2050 Vision, Integrated Action Plan and Digital Guide.
- Early engagement from stakeholders using activities from the “Catalog of Physical Tools for Citizen Engagement” would be part of the calendar of community participation events within Task 4.3 Community-led open innovation. Also, the “+Cityxchange Participatory Platform” would provide the engagement tools within D4.8 : Limerick Citizen Observatory.
- “Process 4: Citizen proposals” from the Playbook would provide a step by step process for Open Calls within Task 4.5 Implementation of an Innovation Playground. These open calls will provide the implementation to test RES solutions that would be documented within D4.10 : Limerick Innovation Lab Solutions Catalogue 2.
- “Process 2: Collaborative Legislation” would be used to co-design community investment models to encourage more building owners to join the Community Grid within Task 4.7 Implementation of a Community-Grid within the Limerick PEB. The experiences gathered on this process would be documented in D4.12 : Community Grid Implementation Guide.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- “Process 3: Participatory budgeting” would be used to demonstrate the potential of different investment models to create DPEBs Task 4.11 Sustainable Investment. PB together with other tested investment models would be described within D4.15 : Limerick Energy Investment Models White Paper.

6.1.3 WP5 +Trondheim

- “Process 2: Collaborative Legislation” would be used within BVC Framework to prioritize which SDGs are more important to local stakeholders and the translation into direct actions plans within Task 5.2 Bold City Vision and the implementation of Guidelines. D5.7 : +Trondheim 2050 Bold City Vision and Guidelines
- “+CityxChange Participatory Platform” would be used for setting up a digital platform “Playable Trondheim” for increased citizen understanding, ownership and active participation within Task 5.3 Citizen Observatories. Deliverable D5.8 : +Trondheim Citizen Observatory will document the implementation process carried on this task.
- “Process 3: Participatory budgeting” would be used to demonstrate the potential of different investment models to create DPEBs Task 5.5 Implementation of an Innovation Playground. The experiences gathered on this process would be documented in D5.10 : Trondheim Innovation Lab Solutions Catalogue.

6.1.4 WP6 +Followers

- “+CityxChange Citizen Participation Playbook” will be part of the +CityxChange portfolio of community co-creation measures developed in WP3 to promote the development of DPEBs to support actions in Task 6.3 CommunityxChange. The experiences gathered on these processes would be documented in D6.3: Report on community participation and playground results.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

6.2 Recommendations

A set of recommendations are defined in this section for each city to be applied when developing their +CityxChange citizen participatory processes. They define the basis for LHCs and FCs to start testing the most suitable tools (physical and online) in their respective cases. Further meetings with each city during the implementation phases in WP4, WP5 and WP6 will be used to choose and test them. This process has already started.

6.2.1 LHC Limerick City and County Council (LCCC)

Community
<ul style="list-style-type: none"> DA has high vacancy rates, so many of the DA users may live outside the DA. This can create a sense of detachment from the rest of the city towards the DA. Recommended that when identifying target groups for participatory processes this circumstance has to be considered. Recommendation to keep organizing physical events within the DA. Also it is recommended to set up a permanent physical location (citizen observatory) within the DA. Not enough socioeconomic data for the DA seems to be available. Recommended more detailed analysis of the DA. Chapter 3.2.2.
Participatory processes
<ul style="list-style-type: none"> Significant efforts have been made to strengthen citizen participation in the initial stages of the process by presenting +CityxChange using a wide range of physical actions such as Public engagement events, Narrative Tours, Gamification and Mapping sessions (Community auditing is considered as a type mapping session. Other forms of mapping sessions are incidents reports or crowdsourced mapping sessions). Recommendation to integrate these actions in complete participatory processes with outcomes clearly communicated to citizens. See Chapter 3.2.3 Recommendation to implement “Process 1: Co-creation of Urban Interventions” described in the Playbook to urban development projects within +CityxChange –i.e. Installation of tidal Turbine– to increase citizen engagement and participation rates.
Participatory Platform
<ul style="list-style-type: none"> Limerick launched in May 2019 mypoint.limerick.ie as an effort to centralize their consultations and surveys. The software is SaaS powered by Civiq.eu. Recommendation to use this platform for +Cityxchange participation process. The platform may not cover all the necessary online tools for running the



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

process described in [Chapter 4](#), additional SaaS tools may be used to add features such as [Online debates](#), [Online Mapping](#) or [Accountability tools](#)

Communication and accountability

- Despite its historic importance and period architecture DA and in general Limerick Georgian Quarter remains relatively unknown by the rest of the city. Recommended a strong communication strategy to align DA with innovative PEB and PED solutions.

6.2.2 LHC Trondheim (TK)

Community

- TK is a large organization and engages with multitude of local and regional stakeholders but information appears to be disconnected between departments or not easily identifiable. Recommendation of creating a centralized and open directory of stakeholders including representatives from universities/research institutions, citizen associations, government and business. See [Limerick Public Participation Network](#) for a reference of a centralized open directory; a step forward from this implementation would be connecting the participatory platform with a contact management system so project teams could segment audiences based on their previous engagement; as of today Decidim hasn't got this feature.

Participatory processes

- TK has plenty of experience in citizen participation. Interviews with TK denotes that participation methodologies differ from each department, this may impact on engagement as citizens have to get acquainted with different methods and procedures depending on the area they are engaging with. As +Cityxchange requires a multi departmental approach an standardization effort is recommended so participatory processes run within +Cityxchange follow a similar structure, schedule and methodology (See [Chapter 4. Citizen Participation Playbook](#)).

Participatory Platform

- [Consul](#) has been tested by TK during 2019. TK is also testing [Decidim](#) based on the recommendations made during T3.2 because of its multi tenancy feature which would allow to share resources with other municipalities, its modular architecture, the assemblies module and a more resilient governance structure. See [Chapter 5.2.3 Comparison between Consul and Decidim](#)

Communication and accountability



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- A well planned digital communication strategy is already in place. Numerous websites created for different participatory processes can result in citizen uncertainty about how to communicate through the right channels. We recommend a centralizing & standardization approach regarding the communication strategy on citizen participation.
- There are numerous departments running participatory processes. However, information about participation metrics are not easily available or shared. A nonintegrated approach also hinders accountability as it makes it more difficult to keep track on progress during the implementation phase. We recommend the use of [Decidim and its accountability module](#) to simplify this process.

6.2.3 Alba Iulia (MAI)

Recommendations

Community

- Not much socioeconomic data for the DA seems to be available. Recommended more detailed census analysis of the DA. [Chapter 3.2.2 Define the community](#)
- DA is mostly populated by non-residential buildings, so most of the DA users may live outside the DA. Recommended that when identifying target groups for participatory processes this circumstance has to be considered. [TK DA1 Sluppen-Tempe](#) has similar characteristics, same strategies could be used.
- 21.2% of the city population are early retired. Recommended participatory actions to take this into consideration with emphasis on physical actions such as [co-design workshops](#) and [public engagement events](#).

Participatory processes

- Consider to make more emphasis on [Front loading](#), [continuous engagement](#) and [Co-design](#) strategies for your participatory process.
- Consider implementing the [Co-creation of Urban Interventions](#) process to urban development projects within +CityxChange to increase citizen engagement and participation rates.

Participatory Platform

- MAI are about to start a new development for a participatory budgeting tool: we recommend to review [Decidim](#) tool for running participatory budgeting instead of developing a brand new platform. Available resources could be used to integrate processes such as [citizens' proposals](#) and collaborative legislation.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- A Local Community Barometer tool is already developed and could be used within +CityxChange, as the project is still in testing phase we would need additional information on schedules for more precise recommendations.

Communication and accountability

- Sufficient online communication systems are in place. We recommend integrating [physical actions](#) with existing online tools.

6.2.4 Město Písek (MP)

Recommendations

Community

- A lack of representation from universities/research institutions and private partners is perceived. Recommendation is to identify regional universities and local private stakeholders to match the quadruple helix model, see [chapter 3.2.6 co-design](#), see [chapter 3.2.6 co-design](#).

Participatory processes

- High employment rates and a significant percentage of over 65 citizens can cause a lack of representation of citizens under 65 years old in physical events. Recommendation on using [Go & find citizens](#) actions together with existing public debates and presentations, also checking participants diversity on current events.

Participatory Platform

- Písek does not have an integrated platform for running participatory processes. We recommend implementing [Decidim](#) for an integrated solution (citizen consultation, voting, participatory budgeting, collaborative legislation); this could be coordinated by the Smart Písek municipal group.

Communication and accountability

- An online communication strategy is already in place through social networks, discussion forums and website announcements. Recommendation to strengthen outdoor communication campaigns as only 54% of the citizens (national data) are social media users.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

6.2.5 Sestao Berri (SB)

Community

- A lack of representation from universities/research institutions and private partners is noted. Recommendation is to identify regional universities and local private stakeholders to match the quadruple helix model, see [chapter 3.2.6 co-design](#), see [chapter 3.2.6 co-design](#).
- DA has challenging unemployment rates and population in risk of social exclusion. Recommendation to coordinate all the engagement activities with the social intervention group. Also to make emphasis on face to face activities see [Go & find citizens](#), [Public engagement events](#), [Narrative tours](#) and [Gamification](#).

Participatory processes

- Sestao Berri already has a community development plan for the demonstration area that was developed using a citizen participatory process facilitated by specialist consultants. We recommend an accountability strategy during the implementation phase of the plan. See [Chapter 4.6 Accountability](#)
- The social intervention group of the city council is a fundamental element in communication with the community and should continue supporting the development of collaborative urban processes. Recommendation to facilitate training on citizen participation processes (physical and online tools) to them.

Participatory Platform

- Sestao has already run participatory budgeting only using physical voting stations. We recommend using an online [PB tool](#) to improve management and accountability of the participatory budgeting process. In any case physical voting stations would still be necessary due to the characteristics of the DA but a PB online tool will simplify management and evaluation of proposals..
- An integrated participatory platform may be useful for improving accountability and increasing citizen trust. However due to the characteristics of the DA, high online participation rates are not expected in the short term but better accountability will bring benefits in the mid term, also as part of overall digital transitions.

Communication and accountability

- Recommendation to strengthen social media communication as well as outdoor communication. Topics apparently less appealing –they attracted less participants in previous events than other topics– for citizens such as participatory process for DA development plan should be presented using



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

creative activities and attractive resources for achieving effective engagement, such as bringing the activities to the citizen instead of waiting for them. See [Go & find citizens](#)

6.2.6 Smolyan (SMO)

Community

- A lack of representation from universities/research institutions and private partners is noted. Recommendation is to identify regional universities and local private stakeholders to increase stakeholder diversity, see [chapter 3.2.6 co-design](#)
- Not much available socioeconomic data for the DAs in comparison with the detailed data on buildings and infrastructure. Recommended more detailed census analysis of the DAs, see [Chapter 3.2.2 Define the community](#).
- New Horizons is a NGO working specifically on citizen participation in the region. Recommendation to bring them into SMO +CityxChange participatory processes.

Participatory processes

- Consultation processes are already in place for Municipal Development Plan and Plan for Urban Regeneration and Development. Recommendation to extend citizen participation beyond consultation with the introduction of pilot processes such as "[Co-creation of Urban Interventions](#)", "[Collaborative Legislation](#)" and "[Participatory Budgeting](#)" within the +CityxChange project.

Participatory Platform

- The use of an integrated participatory platform would be beneficial, until now SMO have performed ad-hoc online surveys for consultations. A stable option would increase citizen engagement.

Communication and accountability

- City population density is the lowest with all cities resulting in a potentially very few citizens residing in DAs (see community chapter) such low numbers would allow direct communication strategies with DA residents.
- All DAs have high footfall leisure, cultural and administrative public facilities. Recommended physical communication campaigns in those facilities as a cost effective way of reaching the general public.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

6.2.7 Vöru (VORU)

Community

- A lack of representation from universities/research institutions is noted. Also no NGOs or other local associations were identified during workshops. Recommendation is to identify missing stakeholders in the quadruple helix model, see [chapter 3.2.6 co-design](#)
- Vacant dwellings are significant in the DA. [LCCC DA](#) has similar characteristics so similar communication and participation strategies could be implemented.

Participatory processes

- Physical public meetings are organized for gathering ideas and suggestions from citizens, no specific online or physical tools have been described.
- Sustainable energy action plan could benefit from a integrated participatory process such as described in [Chapter 4.2 Collaborative Legislation](#)

Participatory Platform

- Existing reporting mapping tool does not show significant usage in the city. Recommended testing SaaS tools in participatory processes within +CityxChange as a way of measuring potential impact of an integrated solution.

Communication and accountability

- Recommendation to strengthen social media communication as well as outdoor communication campaigns. Topics apparently less appealing for citizens such as Sustainable energy action plans should be presented using creative activities and attractive resources for achieving effective engagement. See [Go & find citizens](#), [Public engagement events](#), [Narrative tours](#) and [Gamification](#)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

7 References

- EU Smart Cities (2017). Manifesto on Citizen Engagement. Retrieved August 30, 2019, from https://eu-smartcities.eu/sites/default/files/2017-09/EIP-SCC%20Manifesto%20on%20Citizen%20Engagement%20%26%20Inclusive%20Smart%20Cities_0.pdf
- Locality (2018). Neighbourhood Plans Roadmap. Retrieved August 29, 2019, from https://neighbourhoodplanning.org/wp-content/uploads/NP_Roadmap_online_print_friendly.pdf
- Eurocities (2016, June 2). Smarter cities: city-led, citizen-focused - www.eurocities.eu. Retrieved August 23, 2019, from http://nws.eurocities.eu/MediaShell/media/EUROCITIES%20stmt_smarter%20cities_june2016.pdf
- Lodewijckx, I. (2019, April 4). What is the Difference between Citizen Engagement and Participation?. Retrieved August 30, 2019, from <https://www.citizenlab.co/blog/civic-engagement/what/>
- Smarter Together (2020). Smarter Together. <https://www.smarter-together.eu/>
- EU MACS (2018). EU MACS. <http://eu-macs.eu/>
- SmarterLabs (2019). SmarterLabs. <https://smarterlabs.uni-graz.at/en/>
- EIP-SCC (2010). EIP-SCC. Retrieved February 12, 2020, from <https://eu-smartcities.eu/>
- European Commission (2020) "H2020 projects Smart Cities & Communities" <https://ec.europa.eu/inea/en/horizon-2020/h2020-energy/projects-by-field/879>
- Borsboom-van Beurden, J., Kallaos, J., Gindroz, B., Costa, S., & Riegler, J. (2019, July 15). Smart City Guidance Package Retrieved February 5, 2020, <https://eu-smartcities.eu/news/smart-city-guidance-package>
- Wyckmans, A., Vandevyvere, H., Gohari, S., Nielsen, B. F., Driscoll, P., & Ahlers, D. (2019, February 28). +CityxChange Deliverable D9.1 Framework for intra-project collaboration. <https://cityxchange.eu/knowledge-base/framework-for-intra-project-collaboration/>
- EU MACS (2018). Quadruple helix stakeholder engagement. Retrieved September 17, 2019, from <http://eu-macs.eu/outputs/livinglabs/panelmanagement/>
- Dijk, M., van Heur, B, Boussauw, K., da Schio, N., Chemin, L., Cassiers, T., ... Castri, R. (2019, March 20). SmarterLabs D5.1 – Report on synthesis and implementation guidelines for “smarter” Living Labs https://static.uni-graz.at/fileadmin/projekte/smarterlabs/downloads/SmarterLabs_WP5_D5.1_Report_on_synthesis_and_implementation_guidelines.pdf
- EU MACS (2018). European Market for Climate Services. Retrieved September 26, 2019, from http://eu-macs.eu/wp-content/uploads/2018/05/1_panelmatrix_stakeholders.pdf
- Ayuntamiento de Madrid (2016). Borrador de Plan de Calidad de Aire y Cambio Climático. Retrieved January 20, 2020, from <https://decide.madrid.es/legislation/processes/74>
- Locality (2018). Neighbourhood Planning. Retrieved September 26, 2019, from <https://neighbourhoodplanning.org/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- Locality (2018). How to consult with your community - Locality Neighbourhood Planning. Retrieved September 26, 2019, from <https://neighbourhoodplanning.org/toolkits-and-guidance/how-to-consult-with-your-community/>
- Consul (2018). Communication guide. Retrieved September 3, 2019, from http://consulproject.org/docs/consul_communication_guide_en.pdf
- Council of Europe (2017, October 6). Tallinn Declaration on eGovernment. Retrieved September 3, 2019, from https://ec.europa.eu/newsroom/document.cfm?doc_id=47559
- Ahlers, D., Brigg, D., Karatzoudi, K., & Wyckmans, A. (2019). +CityxChange Deliverable D11.7: Data Management Plan 2. Retrieved February 12, 2020, from <https://cityxchange.eu/knowledge-base/data-management-plan-2/>
- Open Knowledge Foundation (2019). What is Open Data? - The Open Data Handbook. Retrieved September 3, 2019, from <http://opendatahandbook.org/guide/en/what-is-open-data/>
- Vandenbroele, J. (2017, March 1). How can open data feed citizen engagement?. Retrieved September 5, 2019, from <https://www.citizenlab.co/blog/civic-engagement/how-can-open-data-feed-citizen-engagement/>
- Consul (2019). CONSUL. Retrieved August 30, 2019, from <http://consulproject.org/>
- EIP-SCC (2017). Manifesto on Citizen Engagement. Retrieved September 10, 2019, from https://eu-smartcities.eu/sites/default/files/2017-09/EIP-SCC%20Manifesto%20on%20Citizen%20Engagement%20%26%20Inclusive%20Smart%20Cities_0.pdf
- Lember, V., & Bransen, T. (2019, June 6). The potential impacts of digital technologies on co-production and co-creation Retrieved September 5, 2019, from <https://www.tandfonline.com/doi/full/10.1080/14719037.2019.1619807>
- Smarter Together (2019). Vienna. Retrieved September 26, 2019, from <https://www.smarter-together.eu/cities/vienna>
- ISO (2020). ISO/IEC CD TS 27570.2 - Information Technology - Security Techniques - Privacy guidelines for Smart Cities. Retrieved January 22, 2020, from <https://www.iso.org/standard/71678.html>
- EIP-SCC (2019, May 17). Citizen Centric approach to data. Retrieved September 10, 2019 http://eu-smartcities.eu/sites/default/files/2019-06/Citizen_centric_approach_to_data_GDPR_revisited
- Tanum, Ø., Reeves, K., Næss, K. S., & Mjøen, K. (2019). +CityxChange Deliverable D3.1 Framework for Bold City Vision, Guidelines, and Incentive Schemes <https://cityxchange.eu/knowledge-base/framework-for-bold-city-vision-guidelines-and-incentive-schemes/>
- Mural (2020). Mural homepage. Retrieved February 1, 2020, from <https://mural.co/>
- CiviQ (2020). CiviQ - Consultations & Opinion Insights. Retrieved February 1, 2020, from <https://civiq.eu/>
- Statistisk sentralbyrå (2019). Population - SSB. Retrieved February 1, 2020, from <https://www.ssb.no/en/befolkning>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- IUC (2018). Start up Information Alba Iulia. Retrieved October 3, 2019, from http://www.iuc.eu/fileadmin/user_upload/Regions/iuc_lac/user_upload/START_UP_INFORMATION_VF_EN_Alba_Iulia.pdf
- Alba Iulia Smart City (2019). Local Community Barometer. Retrieved October 3, 2019, from <https://albaiuliasmartcity.ro/en/proiect/public-barometer/>
- CZSO (2019). CZSO. Retrieved February 1, 2020, from <https://www.czso.cz/csu/czso/home>
- Pisecky Svet (2015, October 30). Občan versus politik.. Retrieved February 1, 2020, from <http://www.piseckysvet.cz/veci-verejne/video-c-2-z-besedy-obcan-versus-politik-smart-city-pisek>
- Smart Písek (2018, November 20). Představili Písek v roce 2025 - Smart Písek - Písek.eu. Retrieved February 1, 2020, from <https://smart.pisek.eu/index/aktuality/predstavili-pisek-roce2025.html>
- Cuartas, J. (2001, February 17). La siderurgia sustentó el poderío industrial vasco - El País. Retrieved January 24, 2020 https://elpais.com/diario/2001/02/17/economia/982364404_850215.html
- GRAO (2019). ГД ГРАО. Retrieved February 13, 2020, from <https://www.grao.bg/>
- National Employment Agency (2019). Агенция по заетостта. Retrieved February 13, 2020, from <https://www.az.government.bg/>
- Bertelsen, S., Livik, K., & Myrstad, M. (2019, July 31). +CityxChange DeliverableD2.1 Report on Enabling Regulatory Mechanism to Trial Innovation in Cities <https://cityxchange.eu/knowledge-base/report-on-enabling-regulatory-mechanism-to-trial-innovation-in-cities/>
- IAP2 (n.d.). Core Values, Ethics, Spectrum – The 3 Pillars of Public Participation Retrieved September 23, 2019, from <https://www.iap2.org/page/pillars>
- Hadzi-Miceva-Evans, K. (2010). Comparative Overview of European Standards and Practices in Regulating Public Participation Retrieved September 24, 2019, from <http://www.icnl.org/research/resources/ngogovcoop/compover.pdf>
- EUR-Lex (2012, October 26). Consolidated version of the Treaty on European Union. Retrieved September 23, 2019, from https://eur-lex.europa.eu/resource.html?uri=cellar:2bf140bf-a3f8-4ab2-b506-fd71826e6da6.0023.02/DOC_1&format=PDF
- Council of Europe (2009). Civil participation in the decision-making process. Retrieved September 24, 2019, from <https://rm.coe.int/16802eede1>
- Council of Europe (2017, September 27). Guidelines for civil participation in political decision making. Retrieved September 24, 2019, from <https://rm.coe.int/guidelines-for-civil-participation-in-political-decision-making-en/16807626cf>
- Council of Europe (2018, November 7). Transparency and open government. Retrieved September 24, 2019, from <https://rm.coe.int/transparency-and-open-government-governance-committee-rapporteur-andre/16808d341c>
- Better Regulation Executive Department for Business, Enterprise and Regulatory Reform, UK Government (2008, July). Code of Practice on Consultation. Retrieved September 24, 2019, from



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/100807/file47158.pdf
- Ganuza, E., & Baiocchi, G. (2012). "The Power of Ambiguity: How Participatory Budgeting Travels the Globe," *Journal of Public Deliberation*: Vol. 8 : Iss. 2 , Article 8. Retrieved January 14, 2020, from <https://www.publicdeliberation.net/jpd/vol8/iss2/art8/>
- Bécares, R. (2017, February 13). El Mundo - Las urnas salen desde hoy a las calles de Madrid. Retrieved January 22, 2020, from <https://www.elmundo.es/madrid/2017/02/13/58a09a31468aebb1398b45b0.html>
- Decide Madrid (2019, January 28). Remodelación de Plaza España. Retrieved October 11, 2019, from <https://decide.madrid.es/proceso/plaza-espana-informacion>
- Wampler, B., McNulty, S., & Touchton, M. (2017). Participatory Budgeting: Spreading Across the Globe. October 13. 2017, <https://www.opengovpartnership.org/stories/participatory-budgeting-spreading-across-the-globe/>.
- Vayenas, C. (2019). Procivis - How to Spend It: A Focus on Participatory Budgeting. Retrieved March 22, 2019 from <https://procivis.ch/2019/03/22/how-to-spend-it-a-focus-on-participatory-budgeting/>.
- Knopp, A. (2013). What benefits does participatory budgeting deliver?. Retrieved January 14, 2020, from <https://www.buergerhaushalt.org/en/article/what-benefits-does-participatory-budgeting-deliver>
- Open House (2019). Open House Worldwide. Retrieved November 15, 2019, from <https://www.openhouseworldwide.org/>
- Jane's Walk (2019, June 6). Jane's Walk. Retrieved November 15, 2019, from <https://janeswalk.org/>
- Smarter Together (2019, January 7). D5.22 Co-design processes. Retrieved November 19, 2019, from <https://www.smarter-together.eu/file-download/download/public/1015>
- Metadecidim (2020). SOM Metadecidim. Retrieved January 14, 2020, from <https://meta.decidim.org/assemblies/eix-comunitat>
- Smarter Together (2017, October 11). Das SimMobil. Retrieved November 21, 2019, from <https://vimeo.com/237700242>
- QUT Design Lab (2015). The InstaBooth. Retrieved November 21, 2019, from <https://research.qut.edu.au/designlab/projects/instabooth/>
- Iconoclasistas (2016). Manual of Collective Mapping. Retrieved January 17, 2020, from http://www.academia.edu/28625755/Manual_of_Collective_Mapping_Critical_cartographic_resources_for_territorial_processes_of_collaborative_creation_2016_
- Tan, E. (2017). Play the city: Games Informing the Urban Development. Retrieved February 10, 2020, from <https://www.playthecity.nl/page/15793/games-informing-the-urban-development>
- Ayuntamiento de Madrid (2019). Decide Madrid. Retrieved October 11, 2019, from <https://decide.madrid.es/>
- United Nations Public Administration Network (2018, May 25). Documents: 2018 Winners. Retrieved October 11, 2019, from http://workspace.unpan.org/sites/internet/_layouts/mobile/disppform.aspx?List=6911



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- 45ee%2Dd828%2D42e1%2D80a4%2Dc007f54e9ee7&View=0a4712bf%2De571%2D4b28%2D9bbc%2Ddd8086c05003&ID=11772
- Consul (2019). Open Software for Citizen Participation. Retrieved October 11, 2019, from http://consulproject.org/docs/consul_dossier_en.pdf
- Consul (2019). Download CONSUL Use Guide. Retrieved October 11, 2019, from http://consulproject.org/docs/consul_use_guide_en.pdf
- European Commission (2017, October 6). Tallinn Declaration on eGovernment. Retrieved October 11, 2019, from https://ec.europa.eu/newsroom/document.cfm?doc_id=47559
- European Commission (2016). About ISA². Retrieved October 11, 2019, from https://ec.europa.eu/isa2/isa2_en
- European Commission (2016). AISA² Actions. Retrieved October 11, 2019, from https://ec.europa.eu/isa2/actions_en
- European Commission (2016). Promoting sharing and reuse of IT solutions. Retrieved October 11, 2019, from https://ec.europa.eu/isa2/actions/promoting-sharing-and-reuse-interoperability-solutions_en
- Joinup (2019). Consul. Retrieved October 11, 2019, from https://joinup.ec.europa.eu/rdf_entity/http_e_f_www_cdecide_ces_fen_f
- Decidim (2019). Decidim. Retrieved June 5, 2019, from <https://decidim.org/>
- Decidim (2019). Decidim Barcelona. Retrieved June 5, 2019, from <https://www.decidim.barcelona/>
- Barandiaran, X. (2019). The experience of decidim.barcelona. Retrieved June 5, 2019, from <https://www.oidp.net/docs/repo/doc551.pdf>
- Decidim (2019). Features. Retrieved October 9, 2019, from <https://decidim.org/features/>
- Barandiaran, X. (2019). Comparison of Decidim and Consul. Retrieved January 13, 2020, from <https://decidim.org/blog/en/2019-01-14-consul-comparison/>
- Unboxed (2019). Petitions. Retrieved October 11, 2019, from <https://unboxed.co/product-stories/petitions/>
- OpenDemocracy (2017, March 4). Agora Voting/nVotes. Retrieved January 13, 2020, from <https://www.opendemocracy.net/en/can-europe-make-it/agora-votingnvotes/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8 Annexes

The Annex is divided into the following subsections:

- Annex A: Open source platforms for participation (46 pages) This annex is the complete analysis of digital platforms to facilitate citizen participation in city making governing processes, making special emphasis on the implementation of these processes within the +CityxChange project.
- Annex B: LHCs and FCs responses to questionnaire regarding participatory processes. This annex compiles the answers from LHC and FC. First, defining the context for each LHC and FC regarding their citizens. Second, identifying their participatory processes, communication strategies, target groups and overall citizen participation rates.
- Annex C: Results of workshops: Understanding the community & Citizen participatory processes. This annex includes all the digital whiteboards generated during the remote workshops described in [3.3.9](#), [3.3.10](#) and 3.3.11.
- Annex D: Citizen Participation Playbook Diagrams. Full resolution diagrams of the four participatory processes described in [Chapter 4](#).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1 Annex A: Open source platforms for participation

This chapter analyzes a range of digital platforms to facilitate citizen participation in city making governing processes, making special emphasis on the implementation of these processes within the +CityxChange project.

8.1.1 Scope

For this analysis open source tools have been prioritized, meaning projects using licenses available by the [Open Source Initiative](#). These licenses allow an exhaustive analysis of the software so they can be studied from an user perspective and all his/her different roles: final user, administrator, moderator as well as the modification and distribution of the code.

Additionally a number of proprietary tools are included in the analysis based on their relevance within the +CityxChange project, in case they have been previously used by any of the follower cities or have a particular feature relevant within the study.

All the selected tools have been used either in practical governance scenarios at city and/or municipal scale or by other civic, social and political organizations. An additional chapter will be included on "proof of concepts" and other interesting projects at an early development stage.

8.1.2 Methodology

The information of each tool will be presented using the following structure:

1. Category
2. Metadata
3. Features
4. Technical features
5. Community
6. Analysis

Category

Categories have been created to group tools with similar functionalities. Current identified categories are:

- Debate
- Voting
- Proposals and prioritization
- Decision making
- Collaborative Mapping
- Participatory Budgeting
- Suites: Integrated set of tools for citizen participation



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

- Others

Metadata

A set of data in tabular form such as:

- Name of the application
- URL of the project
- URL of the repository
- URL of a sandbox or test installation
- Brief description of the application
- Programming language
- Framework libraries used in its development
- Start date of the project
- Current version analyzed
- Number of contributors
- Popularity of the project (if present in social coding platforms such as github)
- Activity of the project
- License
- Responsive design
- Localization and multi language support

Features

The most characteristic elements of each tool are identified using common terminology for all the analysis so similarities can be traced between applications.

Technical features

Technical aspects such as architecture, modularity, extensions through addons or plugins, design flexibility via themes, and other services needed to set up the tool such as webserver, app server, database server, email server, external services or required external APIs. One important feature that has been considered is a well documented API and robust login system (OAuth2 or similar) to allow a granular citizen verification system. All the selected single purpose apps have to seamlessly integrate with existing municipal infrastructure login systems. Shortlisted Online Voting apps and Suites have more advanced features and can be integrated with existing municipal register and census systems. (i.e. to check that the person voting is registered in the municipality).

Community

The resilience of the community maintaining these tools is crucial for determining its capacity for technical support, code quality and future developments.

Analysis

How the platform is used in practical governance scenarios, case references and what features are of special interest for the +CityXchange project.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

[From 26 different open source platforms analyzed, 7(+1) selected for further analyses and 3 shortlisted for detailed case study]

8.1.3 Open source tools analysed

A wide selection of 26 different tools covering very diverse participation processes have been considered. In order to make this selection as up to date and relevant to +CityxChange project a number of online resources have been studied:

- **Civic Stack** <http://www.civicstack.org/> Civic Stack is the place to discover and share civic open source tools so you can adapt them to different scenarios. Developed by Democracia en Red and Asuntos del Sur
- **OGP Toolbox** <https://ogptoolbox.org/> (offline during jan 2019 <http://web.archive.org/web/20170221015102/https://ogptoolbox.org/>) digital solutions to improve democracy. By Open Government Partnership and Etalab
- Pereira de Lucena, A. (2017) Análisis de plataformas de participación ciudadana y comunidades digitales. <https://www.gitbook.com/book/alabs/doc-civictech-apps/details> (Analysed Jan 2019)
- **Clarity Marketplace** is a catalogue of over 200 tools, platforms and applications within the Open eGovernment domain. Data will be transferred to <https://clarity-csa.eu/portfolio-classic-3cols> (Analysed Feb 2019)
- **Civicactivism** is a grassroots democracy toolkit for civil society in Northern Ireland and beyond. On 5th November 2008, the Big Lottery Fund (BIG) announced the formation of the Building Change Trust. The Trust has been awarded over £10 million to help develop Northern Ireland's voluntary and community sector by 2018. <http://civicactivism.buildingchangetrust.org/tools-directory>

Together with these online resources, a number of European Commission related projects have also been analyzed and studied to form the final selection of apps for analysis:

- **Joinup** is a collaborative platform created by the European Commission and funded by the European Union via the Interoperability solutions for public administrations, businesses and citizens (ISA2) Programme. It offers several services that aim to help e-Government professionals share their experiences with each other. We also hope to support them to find, choose, re-use, develop and implement interoperability solutions. <https://joinup.ec.europa.eu/> (Analysed Mar 2019)
- **D-CENT** Technologies for 21st Century democracy. A Europe-wide project developing the next generation of open source, distributed, and privacy-aware tools for direct democracy and economic empowerment. D-CENT ran from October 2013 to May 2016. It received funding from the European Union's Seventh Framework



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Programme for research, technological development and demonstration under grant agreement no 610349. <https://dcentproject.eu/>

- **E-Participation** is citizens' participation in policies and policy-making through the help of ICT tools. cofounded by the [Europe for Citizens programme](#) of the European Commission <https://euparticipation.org/>
- **EUth** With the experiences of 3 pilot projects and the expertise of 11 partners from 8 European countries, a digital European youth participation online platform will be built, which is tested and open to be used by administrations and youth organizations of any size and level to set up participative processes. <https://cordis.europa.eu/project/rcn/194594/> H2020- SOCIETAL CHALLENGES - Europe In A Changing World - Inclusive, Innovative And Reflective Societies
- **EMPATIA** The EMPATIA project was created to address these challenges by designing coherent participatory systems and tools to evaluate and optimize them. The project was based on a constant dialogue between research and practice, this website describes what we did and the lesson we learned along the way. The EMPATIA project was composed of a multidisciplinary consortium of partners with extended expertise in digital and physical participatory processes. This project has received funding from the European Union's Horizon 2020 <https://empatia-project.eu> <https://github.com/EMPATIA>
- **CLARITY** The CLARITY project supports European Member States in their pursuit for greater trust, transparency and efficiency within their open eGovernment initiatives and highlight best practice within this field. CLARITY project is a two year project, funded by the European Commission under the Horizon 2020 framework <https://clarity-csa.eu/>
- **EMPOWER** aims to encourage and enable the active participation of citizens that consume and produce energy in the electrical system. It is based on the insight that a significant reduction of greenhouse gas emissions and an increase of energy efficiency require radical changes in the way we produce and consume energy. This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement No 646476. <http://empowerh2020.eu/tag/deliverables/>
- **OpenBudgets** the project OpenBudgets.eu has developed a platform with 13 tools and 3 use-cases to upload, visualize, analyse public budget and spending data.. Moreover OpenBudgets has extensively tested the platform in three large scale trials, and paved the way for its future exploitation. OpenBudget.eu has received funding from the European Union's H2020 EU research and innovation programme under grant agreement No 645833 <http://openbudgets.eu/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Also, interviews and questionnaires have been conducted with representatives of all cities for including existing or planned citizen participatory tools relevant to specific cities during the project.

Open source tools analysed

Category	Description	Tools
A. Debate	To provide an online space for communities to discuss ideas, moderate different opinions and evaluate them	Loomio
		Discourse
		Polis
		Allourideas
B. Collaborative text	To write text collaboratively and write comments on sections of text so they can be used in collaborative legislation processes.	Etherpad
		CodiMD
C. Mapping	To create edit and track geolocated data collaboratively	Fixmystreet
		Ushahidi
		OSM T. Manager
D. Proposals	To create and manage proposals as well as online tools for citizens to support and discuss these proposals	e-petitions
		Online Collection Software ECI
E. Transparency	To provide accountability mechanisms for participatory processes so citizens can follow up the implementation of projects	Alaveteli
		SayIt
F. Participatory Budgeting	To support deliberation and decision-making processes in which citizens decide how to allocate part of a municipal or public budget.	Participatory Budgeting Stanford Platform
G. Voting	To organize elections protecting privacy and making voting end-to-end verifiable.	Helios Voting
		Agora Voting/nVotes
H. Suites	Combine several participatory tools/processes with an integrated user registration system and more sophisticated administration tools	Yourpriorities
		Openirekia
		DemocracyOS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

		Decidim (Chapter 5)
		Consul (Chapter 5)

Other tools analysed relevant to +CityxChange

Category	Description	Tools
H. Non-open source	These tools have been analyzed as they are used by lighthouse cities and follower cities. As they are not open source and can't be installed a more limited analysis has been made.	Civic.eu
		Maptionnaire.com
		Kuorum.org

Other tools found but not considered

Title	Description	Notes
Open source		
EMPATIA platform	Source code published in Github. No documentation available	Source code published in Github but no documentation available just a one page installation guide. No stars or commit progress
Pombola	Parliamentary monitoring app to allow citizens to keep an eye on the people in government. They make it easy to find out who represents you, what's being debated, and how members have voted	Very specific use, archive and track political representatives activities on parliaments and assemblies.
Openspending	Part of the OpenBudgets platform designed stakeholders working with fiscal data. Funded with a H2020 EU research grant agreement No 645833	A complete open source platform created to publish fiscal data in a visually rich, accessible and searchable way. Project scope goes beyond our research but it is recommended to use openspending platform if implemented in participants countries
Mocca	Modular Open Citizen Card Architecture is a project started by EGIZ for the implementation of a	Project scope goes beyond our research but it could be used to develop solutions (e-mobility, participation, participation) that



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

	free, modular, open-source Citizen Card	require citizen card technology using open source tech
CitySDK	Service development kit for cities and developers that aims at harmonizing application programming interfaces.	Project started in 2012, ended in 2015. Community do not seem to get much traction after that.
Writelt	App to create and send messages to public persons. A component of POPLUS project	Project is no longer under development.
Crowdsorcerer	A 5-minute guided interview designed to provide you case-studies and learnings about crowdsourcing tailored to your needs.	This Advisor builds on the experience of others and attempts to help decision-makers in the public and private sectors make an informed decision about when and how to use crowdsourcing.
Non-open source		
Placespeak	PlaceSpeak offers a full range of community engagement services both on and off line	Proprietary solutions
Wiremaze	Developer from Portugal specialized on eGovernment applications	Proprietary solutions
Democracy 21	Czech consultancy firm specialized on participatory budgeting and participatory processes	Proprietary solutions
Participare.io	Participatory budgeting tool developed by Change Tomorrow a portuguese startup founded by Wiremaze co-founders.	Proprietary solution



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.1 Loomio

The app focuses on the creation of debates and voting within groups and subgroups. Each group can be public (everyone can see the debate), private (only approved users can read and participate in the debate) or secret.

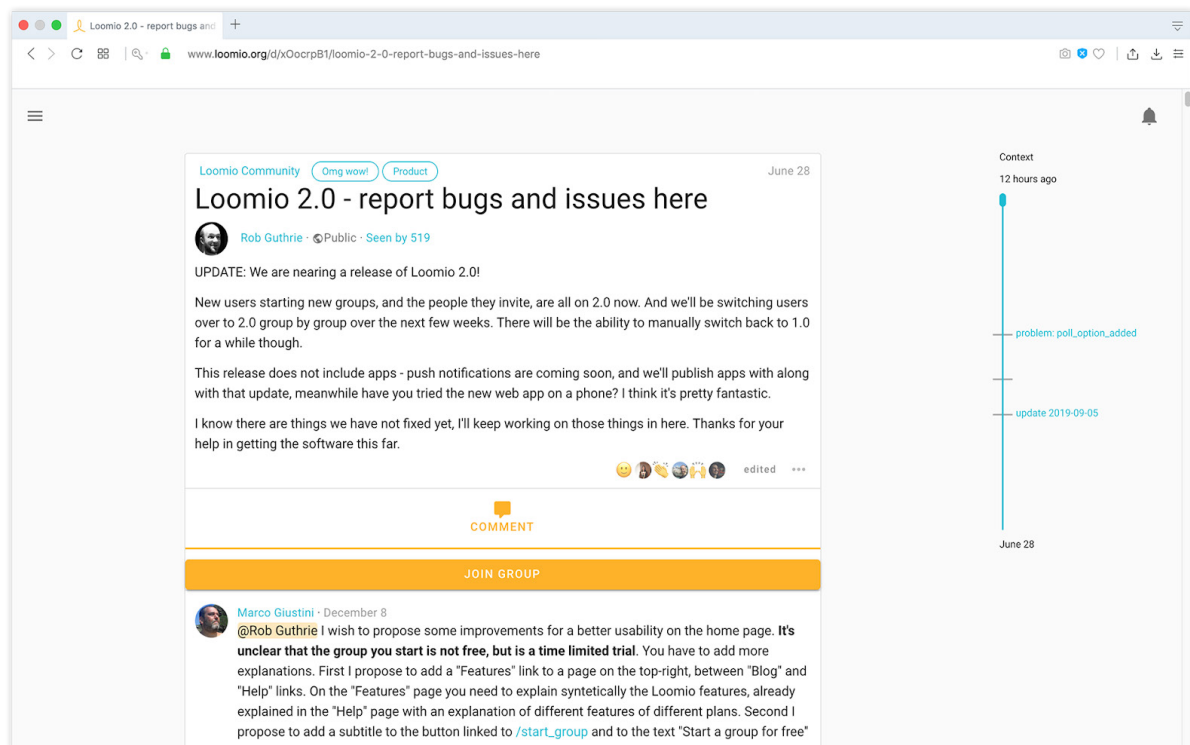


Figure 8.1.3.1 Loomio.org Example debate page (Source: Loomio.org)

Category

Debate

Metadata

Name	Loomio
URL of the project	https://www.loomio.org/
URL of the repository	https://github.com/loomio/loomio
URL of a demo	https://www.loomio.org/g/new
Description	Make inclusive decisions without meetings. Loomio is an app that helps people have discussions and make decisions together.
Language	Ruby
Framework	Ruby on Rails



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2012-09-20
Current version	1.9.138 (2019-08)
# of contributors	77 (2019-08)
Popularity	1854 stars in Github (2019-08)
Activity	Active development (2019-08)
License	GNU Affero GPL v3
Responsive	Yes
Localization	Yes

Features

- Discussion Threads. Post a topic for discussion, exchange information, link and attach files, mention people.
- Engagement Tools. Invite people's views and votes on a topic with a wide range of poll types.
- Decisions. Engage people in a Proposal to bring discussion to a clear outcome.
- Document. Searchable detailed record of engagement, discussion and decisions made.

Technical features

- It has a well documented plugin system to extend the application
- It has an API for external access
- Personalization and theming is very limited only allowing to add custom logos. There is no possibility of using custom stylesheets or adding static pages.

Community

Founded in 2012, Loomio is open source software, built by a worker-owned cooperative social enterprise. Loomio is based in Aotearoa New Zealand. Loomio is a social enterprise collectively owned by the people building it. Unlike a traditional profit maximising company, revenue is not an end in itself, but a means towards achieving a core social purpose. A worker-owned cooperative structure is a powerful way to live our values of collaboration and collective ownership.

Analysis

Loomio is a debate app that allows users to discuss their different points of view, interact between all of them as a network, share new information, reach consensus, focus conversations and improve users engagement.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Functionality is limited but effective and focused in solving a single goal. The app workflow is simple and clear and has interesting features such as being able to change or rectify votes to a proposal as a consequence of the debate process.

Is worth mentioning the quality of the software and its documentation due to the governance system created around the project, a worker-owned cooperative social enterprise and a clear business model (software as a service) which allows to create a resilient structure around it, proved by more than 7 years of active development.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.2 Discourse

The app focuses on the creation of debates and voting within groups and subgroups. Each group can be public (everyone can see the debate), private (only approved users can read and participate in the debate) or secret.

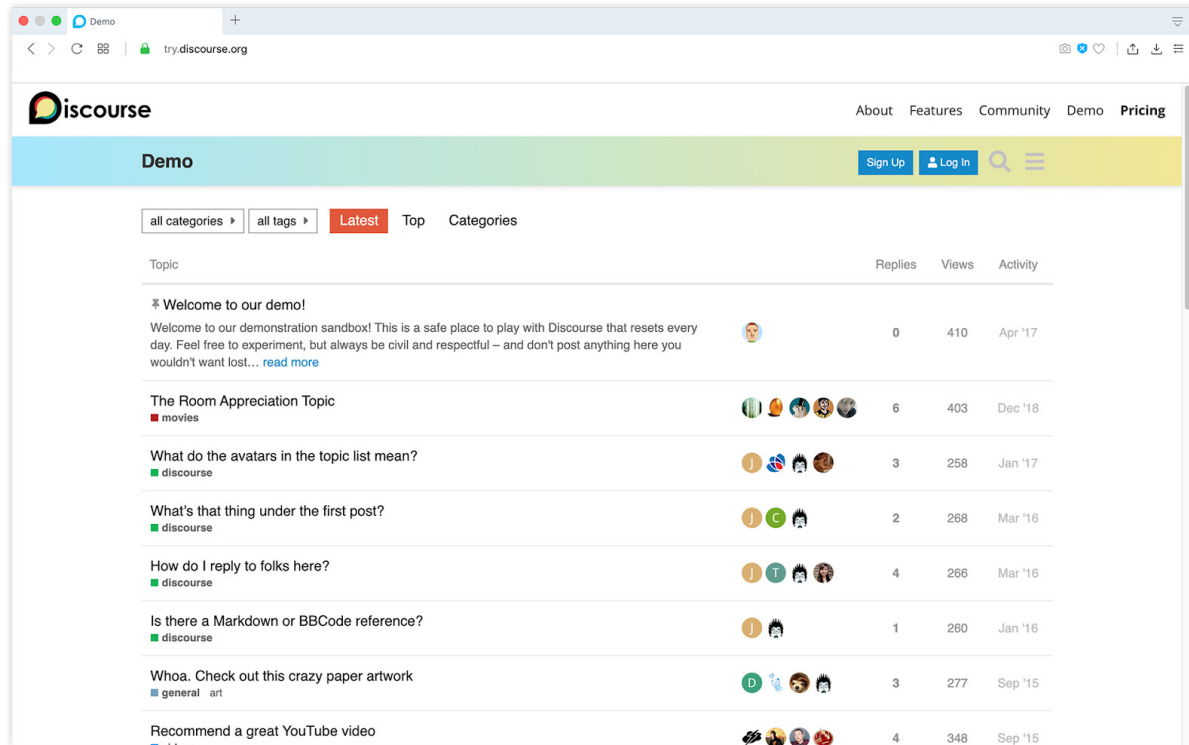


Figure 8.1.3.2 Discourse.org Demo page (Source: Discourse.org)

Category

Debate

Metadata

Name	Discourse
URL of the project	https://www.discourse.org/
URL of the repository	https://github.com/discourse/discourse
URL of a demo	https://try.discourse.org/
Description	Discourse is the 100% open source discussion platform built for the next decade of the Internet. Use it as a mailing list, discussion forum, long-form chat room, and more!



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Language	Ruby
Framework	Ruby on Rails
Start date	2011-10
Current version	v2.3.2 (2019-08)
# of contributors	699 (2019-08)
Popularity	28947 stars in Github (2019-08)
Activity	Active development (2019-08)
License	GPLv2
Responsive	Yes
Localization	Yes

Features

- Discourse is a simple, flat forum, where replies flow down the page in a line. Expand context at the bottom and top of each post, and also in quotes, to reveal the full conversation without losing your place. Dynamic notifications built-in
- Seamlessly integrate Discourse with your existing site's login system with easy, robust single sign on. Add chat integration, topic voting, Google AdSense, and more with our officially supported plugins. Incorporate Discourse into your site with complete confidence, the code is open source.
- Community oriented. As members become trusted regulars over time, they earn abilities to help maintain their community. Let the community suppress spam and dangerous content, and amicably resolve disputes. Built in Akismet spam protection and heuristics including new user sandboxing, user flag blocking, and standard nofollow. Encourage positive community behaviors through the included set of badges, or add your own custom badges.
- Accessibility. Discourse was designed for high resolution touch devices, with a built-in mobile layout. Emoji support and Translations for 25 languages and counting.

Technical features

- Login integration with external systems
- It has a system wide API for external access well documented
- It can be extended using plugins, created and maintained by the community.
- Personalization and theming is very powerful from colors and typography to low level theming (HTML, CSS and Javascript).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Community

Discourse is created by a limited company called *Civilized Discourse Construction Kit, Inc.* They started in 2013 with 3 co-founders and they are now a team of 33 spread all over the world with an all remote company structure. They define themselves as a hosting company. The product that they host and develop, Discourse, is 100% open source software and it is offered as a Software As a Service.

Analysis

Discourse is one of the most versatile open source debate tools. The wide range of functionalities allows to be used in many different contexts and not necessarily limited to the citizen participatory category. It has been successfully used to manage all sorts of online communities.

As a generalistic tool it might be difficult to implement it in a hybrid participatory process in which a close integration within online and physical strategies are necessary. Although it can be used as a simple yet effective way to support citizen participatory processes in which an online debate space is needed quickly and easily.

The project is led by a limited company and financed through a SaaS model which has facilitated a continued active development since its foundation in 2012.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.3 Polis

Polis works by creating a “conversation” that participants engage with by adding their opinions and voting on the opinions of others. Then machine learning methods uncover patterns in real-time—mapping out the entire conversation by visualizing correlations between opinions and participants, sorting participants into opinion groups, and surfacing areas of consensus and divisiveness.

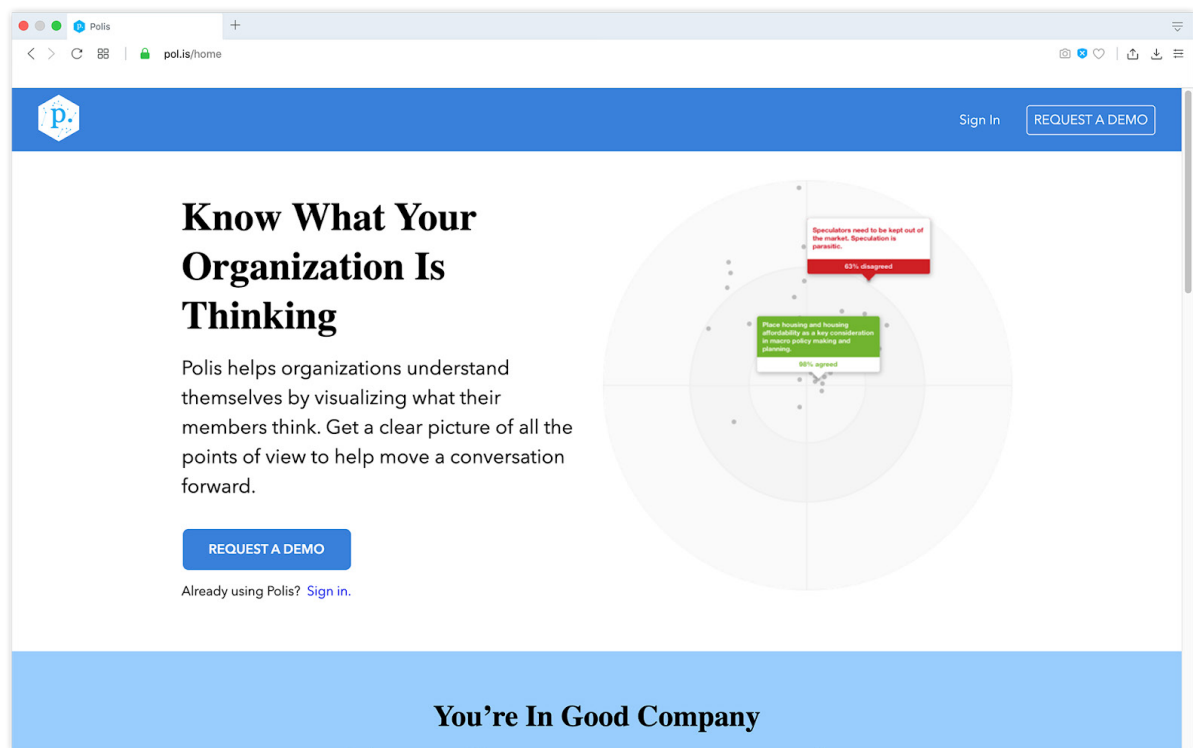


Figure 8.1.3.3 pol.is Homepage (Source: pol.is)

Category

Debate

Metadata

Name	pol.is
URL of the project	https://pol.is
URL of the repository	https://github.com/pol-is
URL of a demo	https://pol.is/demo
Description	Know what your organization is thinking
Language	Javascript



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Framework	Node.js
Start date	2012-10
Current version	-
# of contributors	15 (client) (2019-08)
Popularity	22 stars in Github (client) (2019-08)
Activity	Active development (2019-08)
License	GNU Affero GPL v3
Responsive	Yes
Localization	No

Features

- Polis is an AI-powered conversation platform used by companies, governments, nonprofits, and political parties around the world to inform decision-making. Polis combines quantitative and qualitative methods with advanced statistical methods to function as a state-of-the-art social research tool.
- Polis is best used to ask open-ended questions of a large group. With Polis, you can engage dozens to thousands of people in a meaningful conversation.

Technical features

- Although it is licensed as open source, installation documentation is not available and only a user guide is publicly available.
- For this reason we haven't been able to analyse the project in deeper detail.

Community

pol.is is conceived, maintained and managed by a private company Polis Technology Inc. Despite releasing the project as open source, lack of documentation does not facilitate to consolidate a community around the project.

Analysis

Pol.is offers an innovative approach to analyse open-ended questions of a very large group of people using unsupervised machine learning to find the underlying distribution of opinions within the conversation. To date (2019-06), it is difficult to evaluate the tool as we don't have good documentation but the project's novel approach could tackle one of the big challenges of citizen participation: how to scale up fluid participation for very large groups. Note that [Active-citizen](#) is also looking into AI applications for Civic tech.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.4 All our ideas

All Our Ideas is a research project that seeks to develop a new form of social data collection by combining the best features of quantitative and qualitative methods.

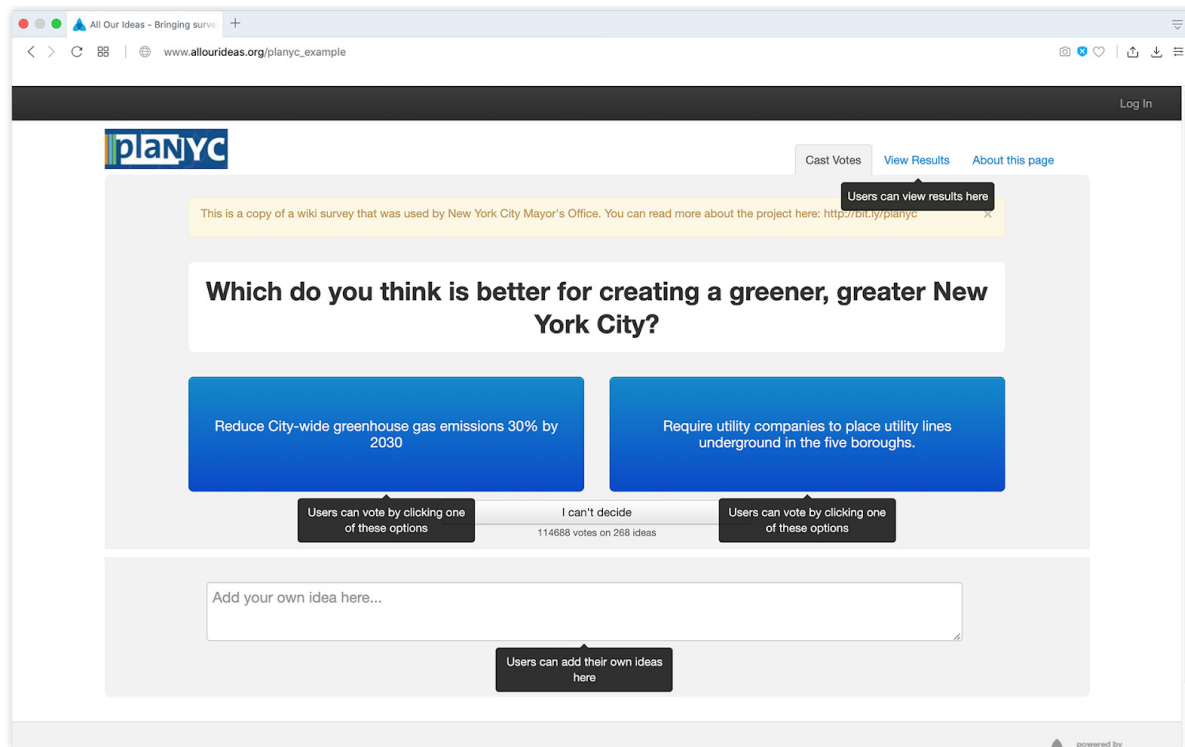


Figure 8.1.3.4 Allourideas.org Demo page (Source: Allourideas.org)

Category

Debate and decision making

Metadata

Name	All our ideas
URL of the project	http://allourideas.org/
URL of the repository	https://github.com/allourideas
URL of a demo	http://www.allourideas.org/planyc_example?guides=true
Description	Allows groups to collect and prioritize information in an open, democratic, and efficient process.
Language	Ruby
Framework	Ruby on Rails



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2009-07
Current version	V4.0.0 (2019-05)
# of contributors	11 (2019-05)
Popularity	122 stars in Github (2019-05)
Activity	Active development (2019-05)
License	BSD
Responsive	Yes
Localization	Yes

Features

- It allows to prioritize ideas through surveys, admin publish seed ideas and users can also propose their ideas as well. All ideas can be voted using the pairwise comparison method.
- Admins have flexibility on how participants can interact, add and vote ideas. The system has a flexible moderation system as well so ideas can be reported by users and hidden by administrators.
- The system has multiple visualization methods, word cloud, visual maps, timelines, so all the different ideas can be analyzed in detail.

Technical features

- Responsive design but visual customization is limited.
- An API (pairwise-api) allows external applications to create surveys, ideas, present votes and analyze results.

Community

The All Our Ideas research group is led by the Department of Sociology at Princeton University. The project grew out of discussions about how to collect and prioritize the ideas of Princeton students. All Our Ideas was launched in February 2010.

Analysis

The most relevant aspect of this app is the use of the method of pairwise comparison, where multiple options are compared to facilitate the preferred election from the user. Another interesting aspect is that the project is led by the Department of Sociology at Princeton University so it has a strong research foundation on novel ideas for better and more democratic methods for large scale surveys. This also facilitates the resilience of the project proved with almost ten years of development at the moment. Finally its API allows other applications to use their pairwise comparison voting method.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.5 Etherpad

An open-source, web-based collaborative real-time editor, allowing authors to simultaneously edit a text document, and see all of the participants' edits in real-time, with the ability to display each author's text in their own color. There is also a chat box in the sidebar to allow meta communication. First launched in November 2008, the software was acquired by Google in December 2009 and released as open source later that month. Further development is coordinated by the Etherpad Foundation.

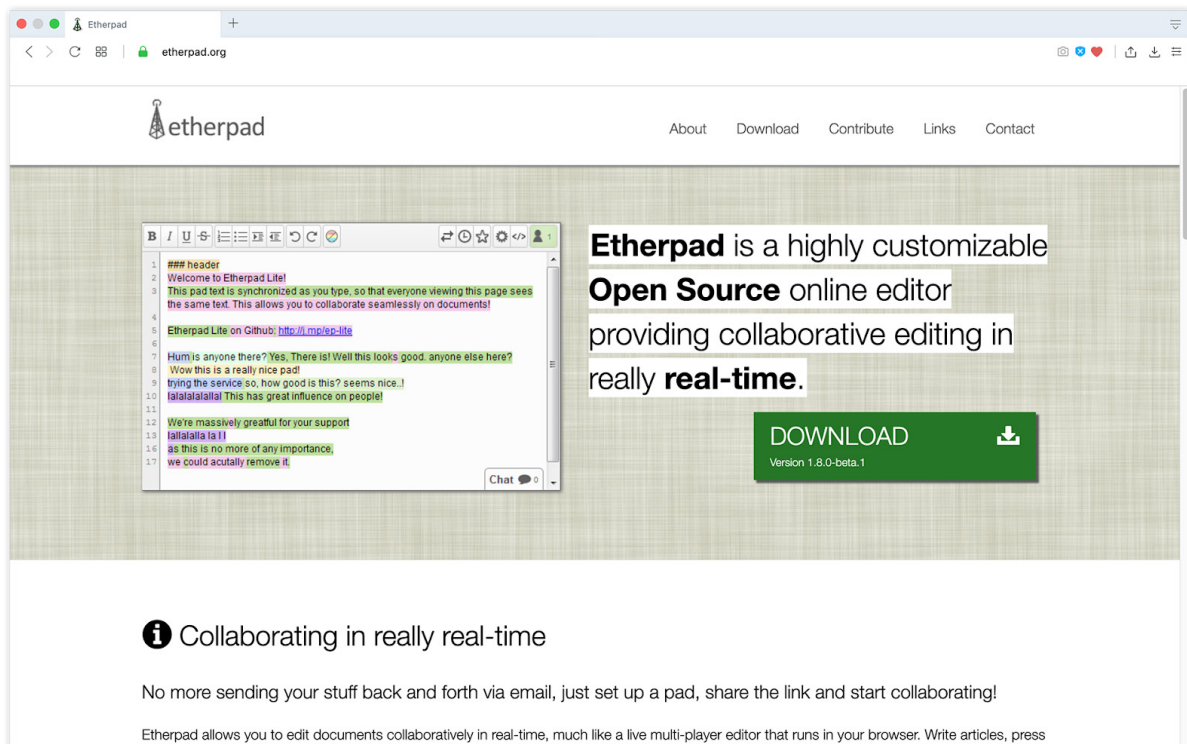


Figure 8.1.3.5 Etherpad.org Home page (Source: Etherpad.org)

Category

Collaborative text

Metadata

Name	Etherpad
URL of the project	http://etherpad.org/
URL of the repository	https://github.com/ether/etherpad-lite
URL of a demo	-
Description	Really real-time collaborative document editing



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Language	Javascript
Framework	Node.js
Start date	2011
Current version	v1.7.5 (2019-01)
# of contributors	205 (2019-08)
Popularity	8167 stars in Github (2019-08)
Activity	Active development (2019-08)
License	Apache 2.0
Responsive	Yes
Localization	Yes

Features

- Etherpad allows you to edit documents collaboratively in real-time, much like a live multiplayer editor that runs in your browser. Write articles, press releases, to-do lists, etc. together with colleagues, all working on the same document at the same time.
- All instances provide access to all data through a well-documented API and support import/export to many major data exchange formats.
- You don't need to set up a server and install Etherpad in order to use it. Just pick one of the publicly available instances that people from everywhere around the world have set up. Alternatively, you can set up your own instance.

Technical features

- API allows external web applications to manage the pads, users and groups and it has clients in the most popular programming languages (Ruby, Javascript, Python, Perl, PHP, Java, Objective-C, .NET, Go).
- Robust plugin architecture to extend the system

Community

Etherpad is created and maintained by The Etherpad Foundation, a non-profit organisation. It has been used extensively by civic, social and political organizations as an alternative to commercial software such as Google Docs and the like.

Analysis

Etherpad is a well established project with a resilient governance model and mature community of developers. It is a recommended solution for integrating real time collaboration text-editing features in any open source civic tech project.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.6 CodiMD

CodiMD lets you create real-time collaborative markdown notes. It is inspired by Hackpad, Etherpad and similar collaborative editors. This project originated with the team at HackMD and now forked into its own organisation.

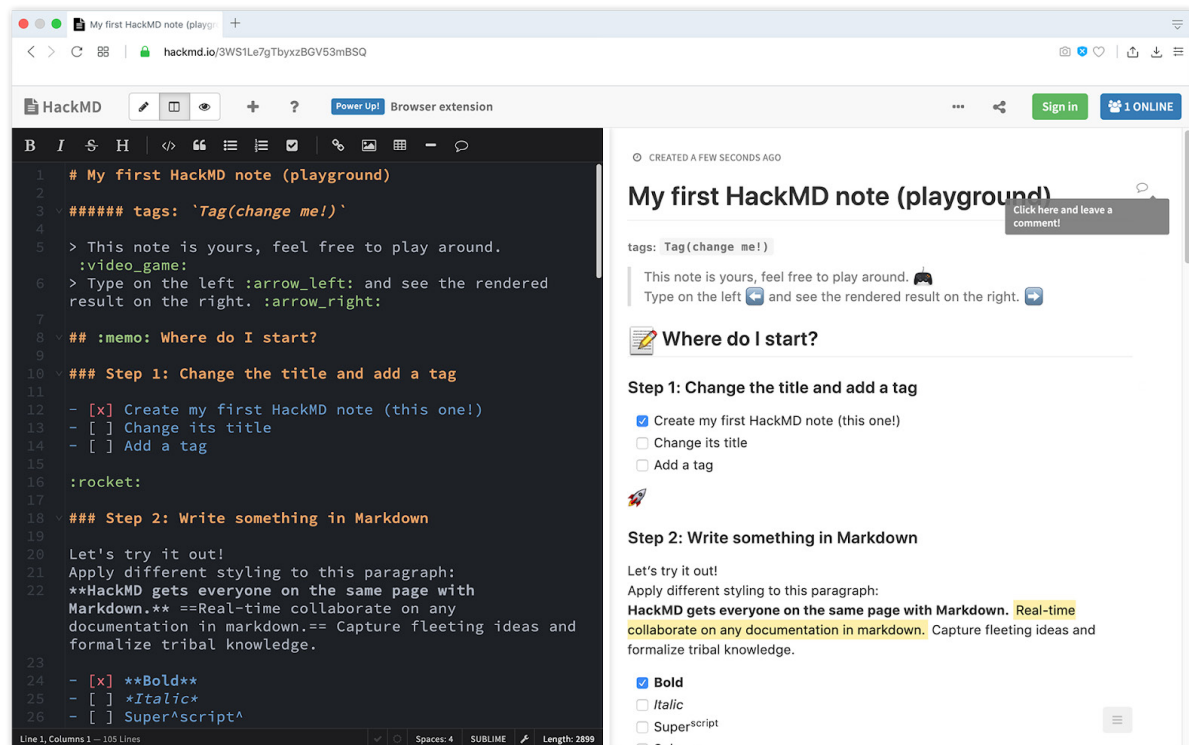


Figure 8.1.3.6 CodiMD Example (Source: hackmd.io)

Category

Collaborative text

Metadata

Name	CodiMD
URL of the project	https://hackmd.io/
URL of the repository	https://github.com/hackmdio/hackmd
URL of a demo	-
Description	Best way to write and share your knowledge in markdown
Language	Javascript
Framework	Node.js
Start date	2015



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Current version	v1.9.2 (2019-08)
# of contributors	121 (2019-08)
Popularity	5151 stars in Github (2019-08)
Activity	Active development (2019-08)
License	GNU Affero General Public License v3.0
Responsive	Yes
Localization	Yes

Features

- CodiMD is the free software version of HackMD, developed and opened source by the HackMD team with reduced features.
- CodiMD is perfect for open communities, while HackMD emphasizes on permission and access controls for commercial use cases.
- CodiMD is highly customizable, configuration options for networking, security, performance, resources, privilege, privacy, image storage, and authentication.

Technical features

- Robust Authentication features so it can be integrated with existing platforms

Community

CodiMD is created and maintained by HackMD, a company part of the taiwanese civic tech community that pushes information transparency, focusing on developing information platforms and citizens tools for participation. They are funded through donations and with a SaaS model for an extended feature version of CodiMD called HackMD.

Analysis

This project is not as well established as Etherpad but brings very interesting innovation to this category, especially on the automation for transforming written text into multiple formats (slideshows, books...) as well as the integration with commercial services and file formats.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.7 FixMyStreet

Is a free and open-source software framework by mySociety which enables anyone to run a website for aggregating and reporting street problems.

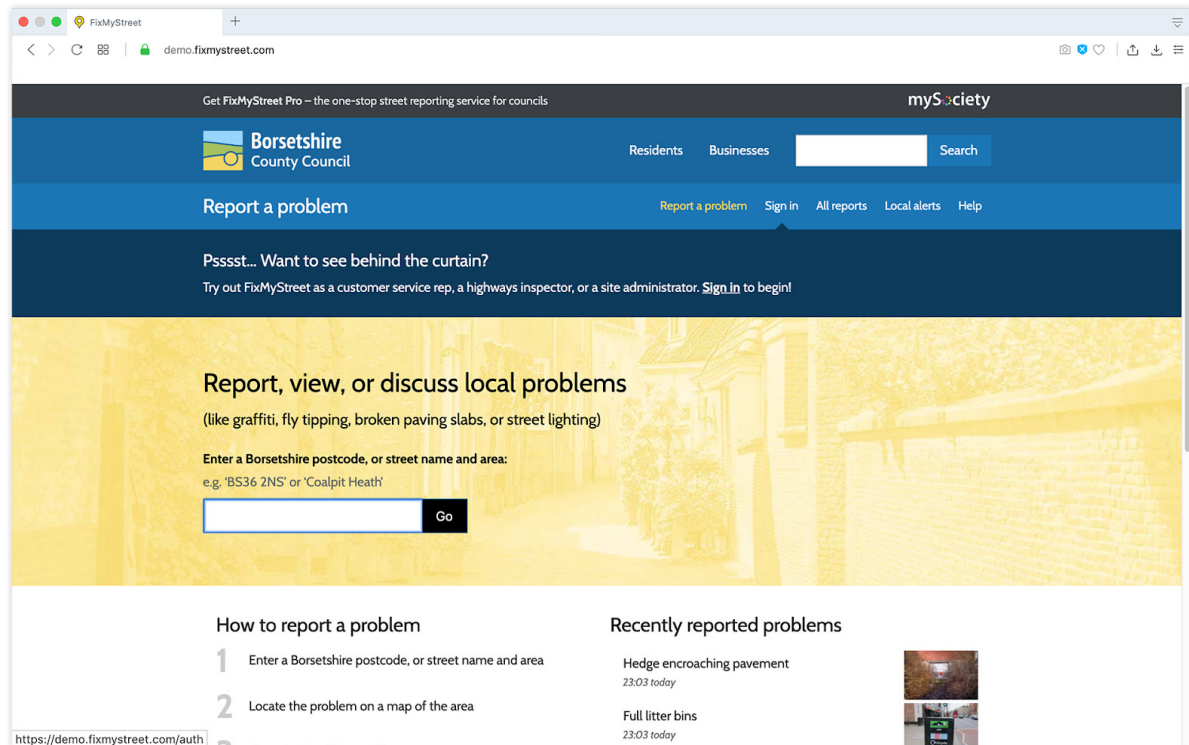


Figure 8.1.3.7 Fixmystreet.com Demo page (Source: Fixmystreet.com)

Category

Mapping

Metadata

Name	FixMyStreet
URL of the project	https://fixmystreet.org/
URL of the repository	https://github.com/mysociety/fixmystreet
URL of a demo	https://demo.fixmystreet.com/
Description	Map-based reporting platform
Language	Perl
Framework	Catalyst



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2012
Current version	v2.6 (2019-08)
# of contributors	39 (2019-08)
Popularity	403 stars in Github (2019-08)
Activity	Active development (2019-08)
License	GNU Affero GPL v3
Responsive	Yes
Localization	Yes

Features

- There is no registration needed for reporting, developers say that 70% of the users prefer not to register when reporting
- It allows users to send reports to the correct person, team, authority or contractor, based on location, category and priority.
- Open and transparent feedback tracking and mechanisms to track progress, show the work done and reduce duplicate reports

Technical features

- Use of Open Source technologies such as OpenStreetMaps and Open standards such as [Open311](#)
- Documented API and theming system

Community

FixMystreet is developed and maintained by mySociety, a not-for-profit social enterprise, based in the UK. Mysociety is a well known organization developing open source digital technologies that help people be active citizens, across the three areas of Democracy, Transparency, and Community.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.8 Ushahidi

Ushahidi is an open source web application for information collection, visualization and interactive mapping. It helps you to collect info from: SMS, Twitter, RSS feeds, Email. It helps you to process that information, categorize it, geo-locate it and publish it on a map.

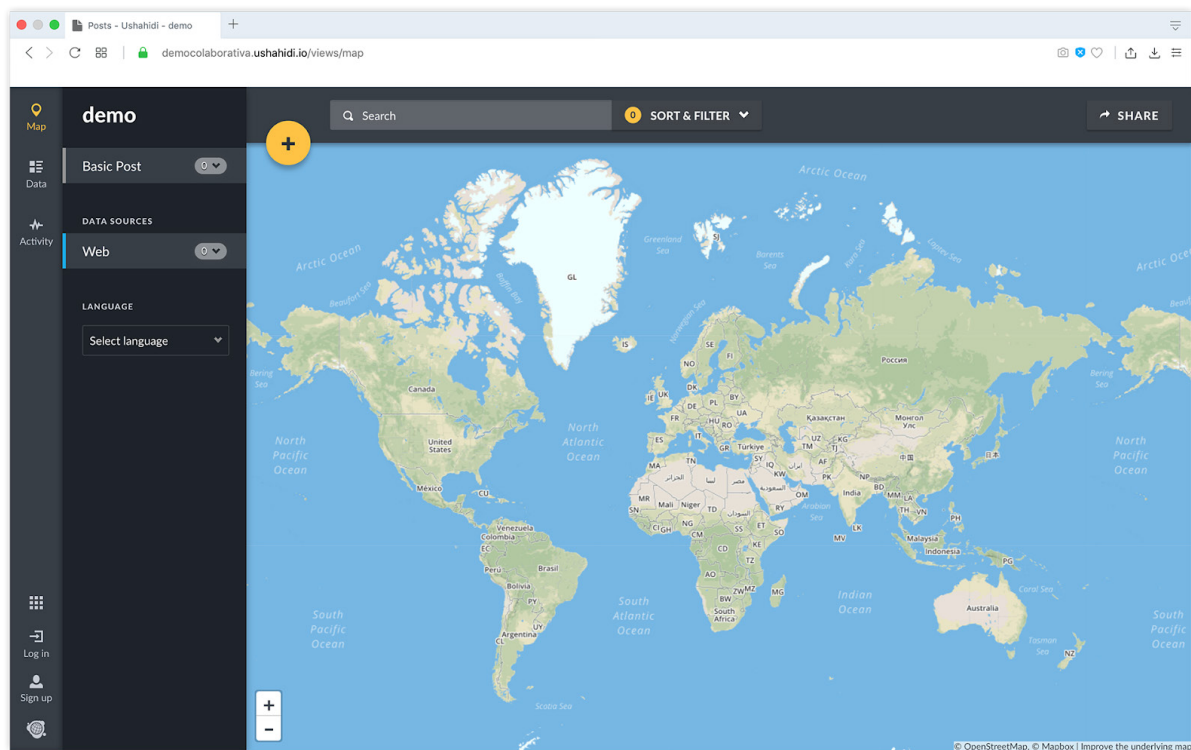


Figure 8.1.3.6 Ushahidi.com Demo page (Source: Ushahidi.com)

Category

Mapping

Metadata

Name	Ushahidi
URL of the project	https://www.ushahidi.com/
URL of the repository	https://github.com/ushahidi/
URL of a demo	-
Description	Map-based reporting platform
Language	PHP
Framework	Laravel



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2012
Current version	V3.6.3 (2019-08)
# of contributors	39 (2019-08)
Popularity	504 stars in Github (2019-08)
Activity	Active development (2019-08)
License	GNU Affero GPL v3
Responsive	Yes
Localization	Yes

Features

- Data collection. Receive reports from many sources, SMS, email, and Twitter. Custom surveys multiple data types with custom forms.iOS and Android apps
- Data management. Manage and triage reports with filters and workflows. Work together with multiple user roles to make sure everyone sees only what they need
- Data visualization. Map tiles including street and satellite provided by Open Street Maps, MapQuest, and more. Map and visualize data streams from third parties like Twitter, Twilio, SMSSync, Nexmo, FrontlineSMS, and email. Chart your work with configurable bar and timelines views

Technical features

- It has a robust theming and customization system as well as well documented API
- Detailed technical documentation, installation guides, user manuals, and community support forums

Community

Ushahidi is built and maintained by Ushahidi, Inc. a non-profit technology company with staff in nine countries whose mission is to help marginalized people raise their voice and those who serve them to listen and respond better. The organisation uses the concept of crowdsourcing for social activism and public accountability, serving as an initial model for what has been coined as "activist mapping"—the combination of social activism, citizen journalism and geospatial information. The application is actively used by dozens of different organizations and actively maintained by a wide community.

Analysis.

Ushahidi is one of the most popular open source apps for information collection, visualization and interactive mapping. It can be integrated with a wide range of technologies and adapted to many different workflows. It is a mature app maintained by a resilient organization and supported by a large community.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.9 OSM Tasking Manager

The Tasking Manager is a mapping tool designed and built for the Humanitarian OpenStreetMap Team's collaborative mapping process in OpenStreetMap. The purpose of the tool is to divide up a mapping project into smaller tasks that can be completed rapidly with many people working on the same overall area. It shows which areas need to be mapped and which areas need the mapping validated.

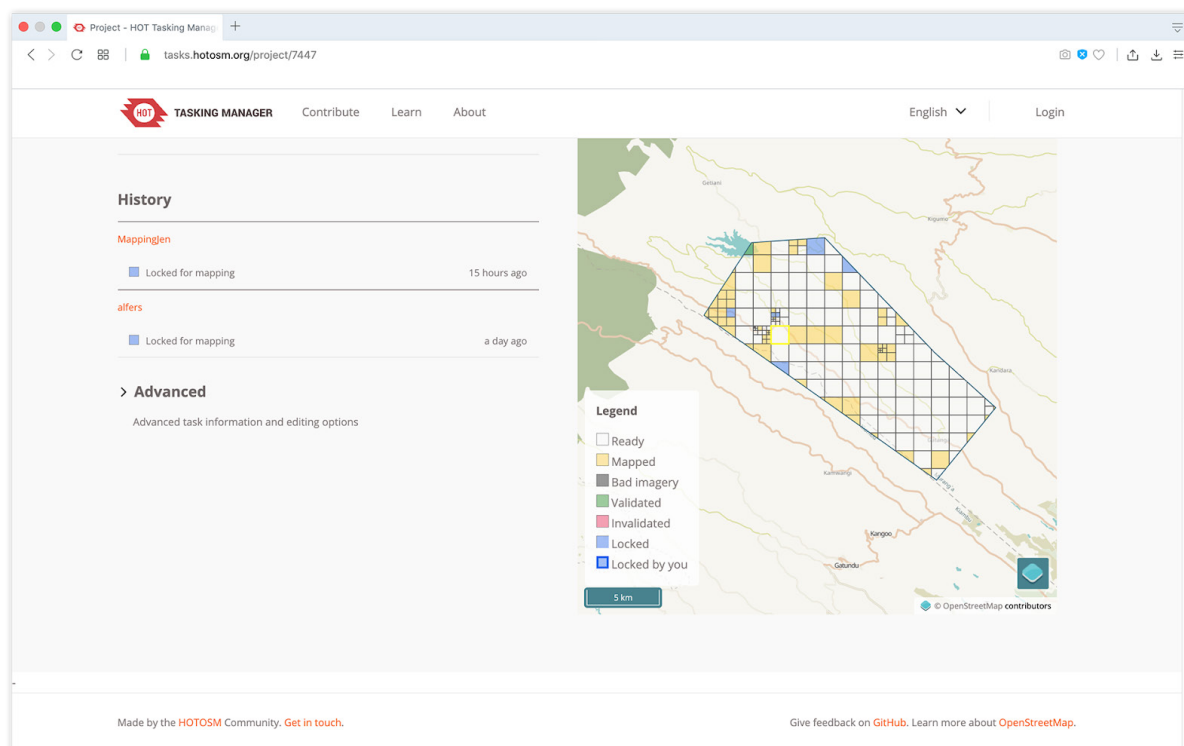


Figure 8.1.3.9 OSM Tasking manager Demo page (Source: hotosm.org)

Category

Mapping

Metadata

Name	OSM Tasking manager
URL of the project	https://tasks.hotosm.org/
URL of the repository	https://github.com/hotosm/tasking-manager
URL of a demo	-
Description	Join coordinated mapping projects using OpenStreetMap



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Language	Phyton
Framework	Flask
Start date	2012
Current version	v3.4.6 (2019-10)
# of contributors	59 (2019-08)
Popularity	403 stars in Github (2019-08)
Activity	Active development (2019-08)
License	BSD 2-Clause License
Responsive	Yes
Localization	Yes

Features

- It organizes the small Tasks into a larger group called a Project. It provides a user interface to find a Project and then Check-Out and Check-In the small Tasks so you can map them in
- Using the OpenStreetMap web based editor called the iD editor, building mapping is fairly easy.
- Validation is a second set of eyes reviewing initial mapping. This is usually done by using various tools to make sure the mapping does not have any technical mistakes

Technical features

- Docker images are available for fast deployment of new instances
- Theming is not well documented but possible. Well maintained developer documentation is scarce.

Community

The application is built and maintained by the Humanitarian OpenStreetMap Team. The development is very active as being part of OpenStreetMap, one of the largest open source initiatives. There are many instances of the application used by local OpenStreetMap communities around the world and it is widely used now outside its intended initial use of coordinating humanitarian mapping.

Analysis

Powerful application fully integrated with other OpenStreetMap applications such as the ID editor and part of one of the most successful open source projects. The application is supported by a large and resilient community and tested in real humanitarian mapping projects as well as local mapping communities. Mapping in OpenStreetMap has a learning curve and it is not as intuitive as other applications shown in the analysis.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.10 e-petitions

The UK Parliament petitions website (e-petitions) allows members of the public to create and support petitions for consideration by the Parliament of the United Kingdom.

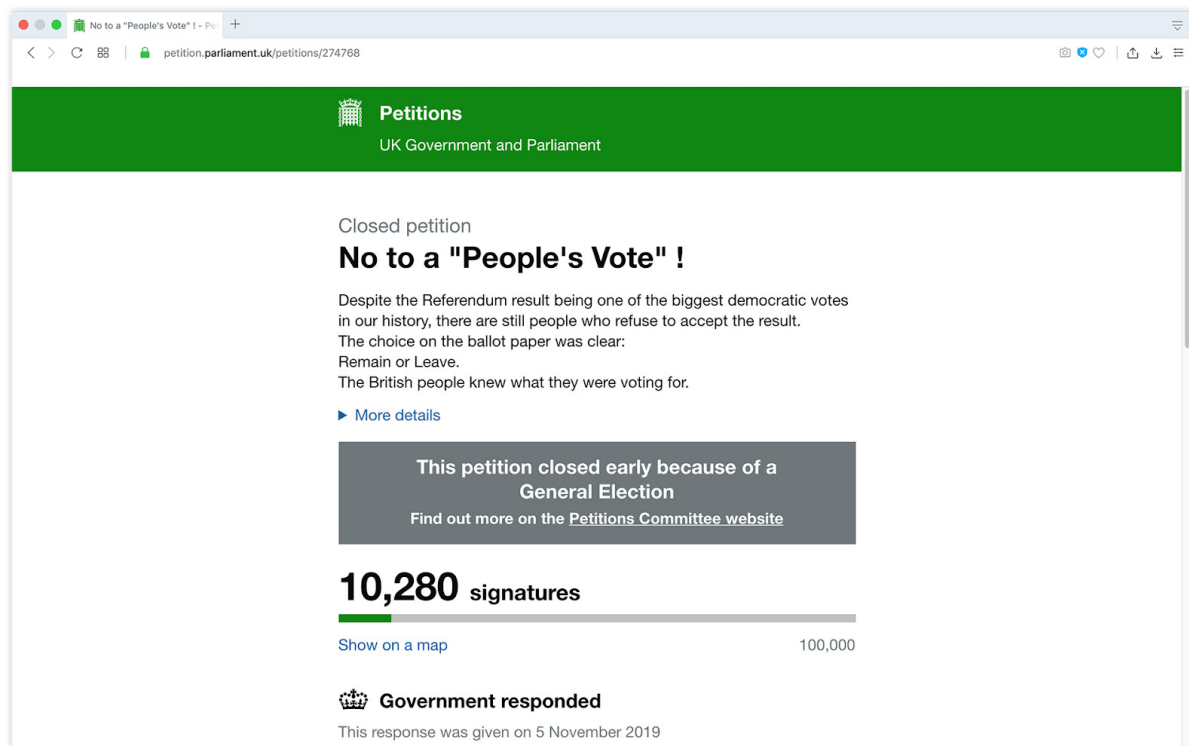


Figure 8.1.3.10 e-petitions demo page (Source: petition.parliament.uk)

Category

Proposals

Metadata

Name	e-petitions
URL of the project	https://petition.parliament.uk/
URL of the repository	https://github.com/alphagov/e-petitions
URL of a demo	-
Description	Map-based reporting platform
Language	Ruby
Framework	Ruby on Rails



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2015
Current version	v1.6.0 (2019-08)
# of contributors	35 (2019-08)
Popularity	251 stars in Github (2019-08)
Activity	Active development (2019-08)
License	MIT License
Responsive	Yes
Localization	Yes

Features

- It allows a non registered user to create a proposal, only facilitating its email, name, nationality and postal code. Internally it performs IP geolocalization to ensure that users are located within the country.
- Admin features to configure the proposals requirements. I.e minimum supporting votes, etc. When a proposal is created the user needs to get support of five people in order to get it published on the website and start gathering support.
- When creating a proposal there is an assistant to avoid duplicated proposals

Technical features

- Neither theming nor customization
- No documented API

Community

The application is created and hosted by Unboxed.co⁹⁸ (Unboxed, 2019) a digital consultancy firm from the UK. The code is open sourced with an MIT License and actively hosted in Github.com. The only known instance of the application is the one used by the UK parliament petition website. There is no evidence of a wider community apart from UK Government Digital Service Staff and Unboxed.

Analysis

E-petitions is an application full of features and tested in a demanding environment such as the UK parliament. The lack of API, open documentation and a templating and theming system limits real world implementations outside its primary use. Similar situation as Open Irekia which limits the impact of this app.

⁹⁸ Unboxed (2019). Petitions. Retrieved October 11, 2019, from <https://unboxed.co/product-stories/petitions/>



8.1.3.11 Online Collection Software ECI (Pending)

In the context of [European Citizens' Initiatives \(ECI\)](#), the Online Collection software (OCS) is a tool for online data collection. OCS enables citizens to support a given initiative and organizers to manage its operations. The tool also streamlines both data collection and its verification by the National Authorities. OCS respects the Regulation (EU) No 211/2011 and Regulation (EU) No 1179/2011 of the European Parliament and of the Council.

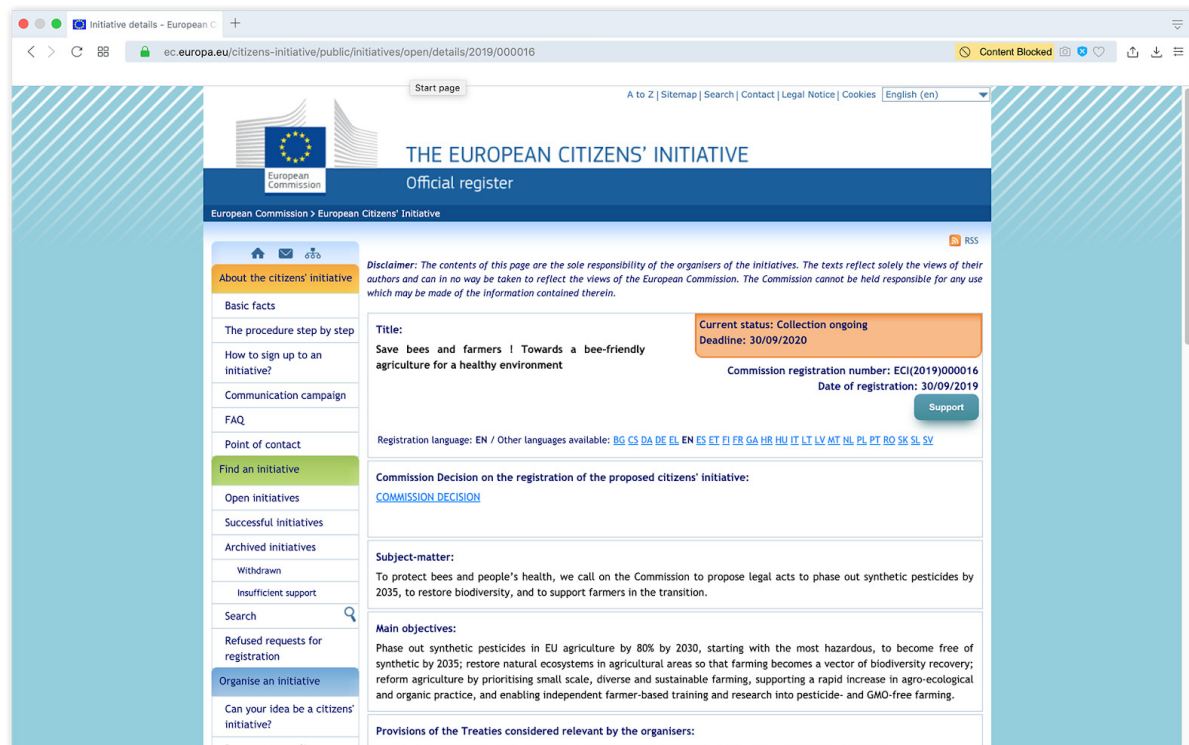


Figure 8.1.3.11 Online Collection Software Home page (Source: ec.europa.eu/citizens-initiative/)

Category

Proposals

Metadata

Name	e-petitions
URL of the project	https://joinup.ec.europa.eu/solution/eci-online-collection-software-ocs
URL of the repository	-
URL of a demo	https://eci.ec.europa.eu/ACC1/public/#/initiative
Description	Online Proposals



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Language	Java
Framework	-
Start date	-
Current version	-
# of contributors	-
Popularity	-
Activity	Active development (2019-08)
License	European Union Public Licence 1.2
Responsive	Yes
Localization	Yes

Features

- European Commission offers the possibility of having an OCS instance hosting for free the conditions are described in [this document](#)
- Complete user and installation guides are also available.

Community

The software is being developed internally by the European Commission as part of their platform. Code is being shared with an open source license as downloadable files but there is no public repository for shared development. There are no apparent signs of the software being used outside its primary use neither of an active community of developers around the project.

Analysis

The software would need significant adaptation to fit municipality needs in citizen participatory processes but offers a solution compatible with existing EU regulations and a useful template for designing online citizen proposals tool.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.12 Alaveteli

Alaveteli is free and open source software by mySociety to help citizens write Freedom of Information requests and automatically publish any responses. Alaveteli is described as "a project to create a free, standard, internationalised platform for making Freedom of Information (FOI) requests".

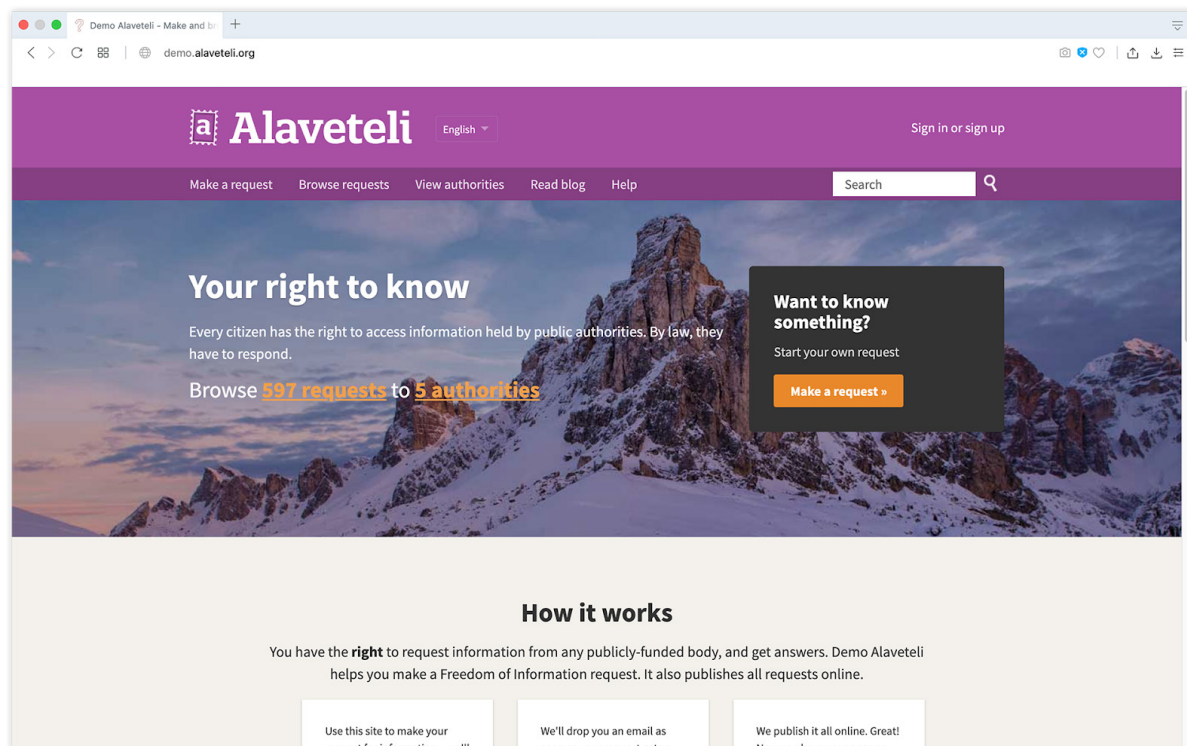


Figure 8.13.12 Alaveteli Home page (Source: alaveteli.org)

Category

Transparency

Metadata

Name	Alaveteli
URL of the project	http://alaveteli.org/
URL of the repository	https://github.com/mysociety/alaveteli
URL of a demo	http://demo.alaveteli.org/
Description	Provide a Freedom of Information request system for your jurisdiction
Language	Ruby
Framework	Ruby on Rails



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2010
Current version	v0.35.0 (2019-08)
# of contributors	47 (2019-08)
Popularity	268 stars in Github (2019-08)
Activity	Active development (2019-08)
License	GNU Affero GPL v3
Responsive	Yes
Localization	Yes

Features

- It allows a user to make a freedom of information petition to a specific authority as well as follow the answer to this request
- It allows other users to receive notifications when a petition has been made as well as following the petitions to a specific authority.
- Admin can manage bank holidays so legal timeframes can be considered. Also moderation of petitions, comments and sharing options are available.

Technical features

- Part of Mysociety ecosystem of participatory tools, easy integration with those tools
- It is possible to integrate with other tools via its API
- Customization is possible and it has a documented theme system

Community

Alaveteli is developed and maintained by mySociety, a not-for-profit social enterprise, based in the UK. Mysociety is a well known organization developing open source digital technologies that help people be active citizens, across the three areas of Democracy, Transparency, and Community.

Analysis

Alaveteli is being used in dozens of countries by both governments and NGOs. It has an active development and interesting features such as the management of holidays to comply with legal timeframes.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.13 SayIt

It's an open source tool for making transcripts easy to read, search and share on the modern internet. By making transcripts function better, the more people will end up learning about decisions and opinions that affect their lives.

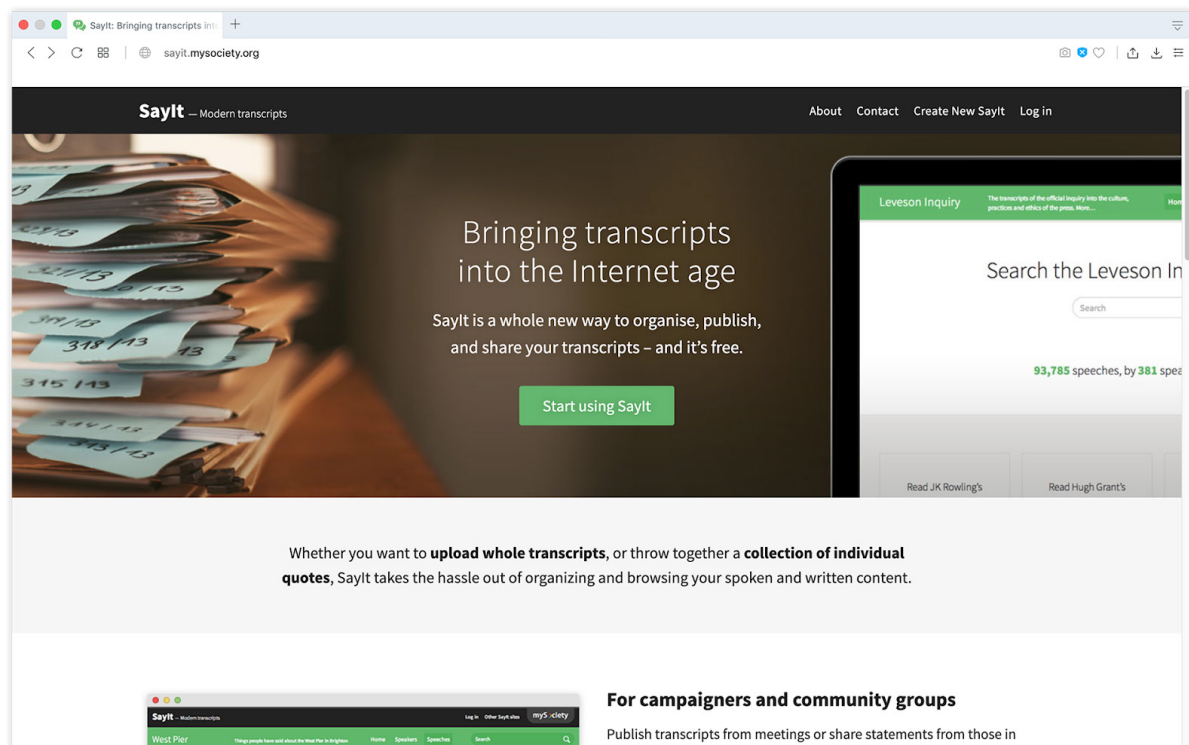


Figure 8.1.3.13 SayIt Home page (Source: sayit.mysociety.org)

Category

Transparency

Metadata

Name	SayIt
URL of the project	https://sayit.mysociety.org/
URL of the repository	https://github.com/mysociety/sayit
URL of a demo	-
Description	SayIt is an open source application to store transcripts and present them in a modern, searchable format
Language	Python
Framework	Django



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2014
Current version	v1.5 (2019-08)
# of contributors	11 (2019-08)
Popularity	87 stars in Github (2019-08)
Activity	Active development (2019-08)
License	GNU Affero GPL v3
Responsive	Yes
Localization	Yes

Features

- For campaigners and community groups. Publish transcripts from meetings or share statements from those in power.
- For councils and organisations that hold public meetings. Still publishing meeting transcripts on PDFs? SayIt makes it easier for your readers to find the parts that really interest them. Unlike PDFs, SayIt works beautifully on every device from a phone to a tablet to a desktop. And it's accessible for screen readers and assistive devices.

Technical features

- The code that runs SayIt is also a Populus Component, which means you can quickly host it on your own server, customise the look and feel, or build it into an existing website
- It is possible to integrate with other tools via its API
- Customization is possible and it has a documented theme system

Community

SayIt is developed and maintained by mySociety, a not-for-profit social enterprise, based in the UK. Mysociety is a well known organization developing open source digital technologies that help people be active citizens, across the three areas of Democracy, Transparency, and Community.

Analysis

SayIt provides an interesting alternative to organize, publish and share transcripts. Especially useful on public meetings in which PDFs do not provide adequate accessibility and searching capabilities.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.14 Stanford Participatory Budgeting Platform

Stanford Participatory Budgeting Platform allows cities, municipalities, states and foundations and other organizations to run a participatory budgeting (PB) election in which people can vote on the budget. The project is open-source and free.

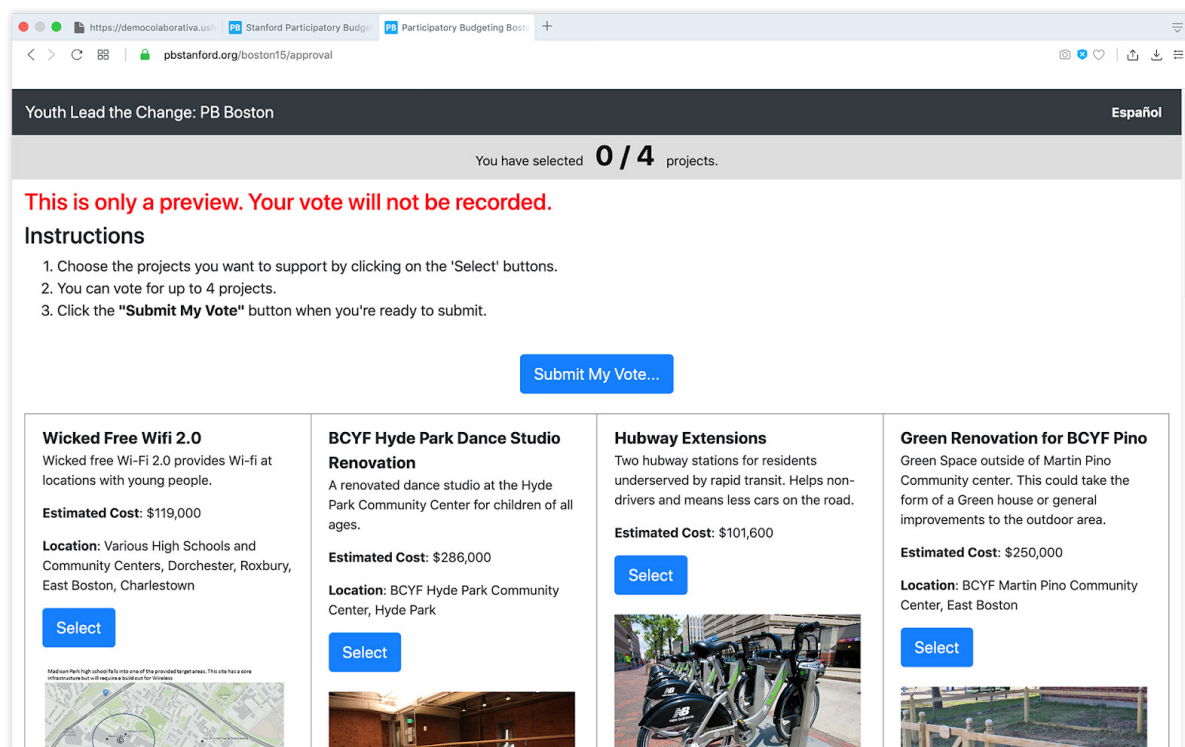


Figure 8.1.3.14 Stanford Participatory Budgeting Platform Demo page (Source: pbstanford.org)

Category

Participatory Budgeting

Metadata

Name	Stanford Participatory Budgeting Platform
URL of the project	https://pbstanford.org/
URL of the repository	https://github.com/StanfordCDT/pb
URL of a demo	-
Description	A platform for running online participatory budgeting elections
Language	Ruby
Framework	Ruby on Rails



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2016
Current version	v0.0.1 (2018-10)
# of contributors	1 (2019-08)
Popularity	14 stars in Github (2019-08)
Activity	Inactive development (2018-10)
License	GNU General Public License v3.0
Responsive	No
Localization	No

Features

- Stanford Participatory Budgeting Platform supports many voting methods, such as approval voting, knapsack voting, and ranked voting. It also supports remote voting.
- It has been used in more than 15 US cities to manage their participatory budgeting processes
- Analytics tools to explore the data and gain insight into the voters' preferences through visualization while protecting their privacy.

Technical features

- No API or theming features, it uses Bootstrap as UI framework so styles can be changed

Community

Stanford Participatory Budgeting Platform is made and maintained by the [Stanford Crowdsourced Democracy Team](#) at Stanford University. The research group does not seem very active since fall 2018. Based on Github contributions there is no active community behind the project.

Analysis

This project has been included in our research for two reasons: First, this one of the few Open Source tools for enabling participatory budgeting process and has been tested in real world scenarios. Second, coming from an academic research group it is the only tool that offers different voting methods (approval voting, knapsack voting, and ranked voting) to minimize bias from the voting process itself.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.15 Helios Voting

Helios offers verifiable online elections. Helios elections are private, no one knows how you voted; verifiable, each voter gets a tracking number, and proven, Helios is open-source, vetted by top-tier experts, and in use by major organizations. More than 2,000,000 votes have been cast using Helios.

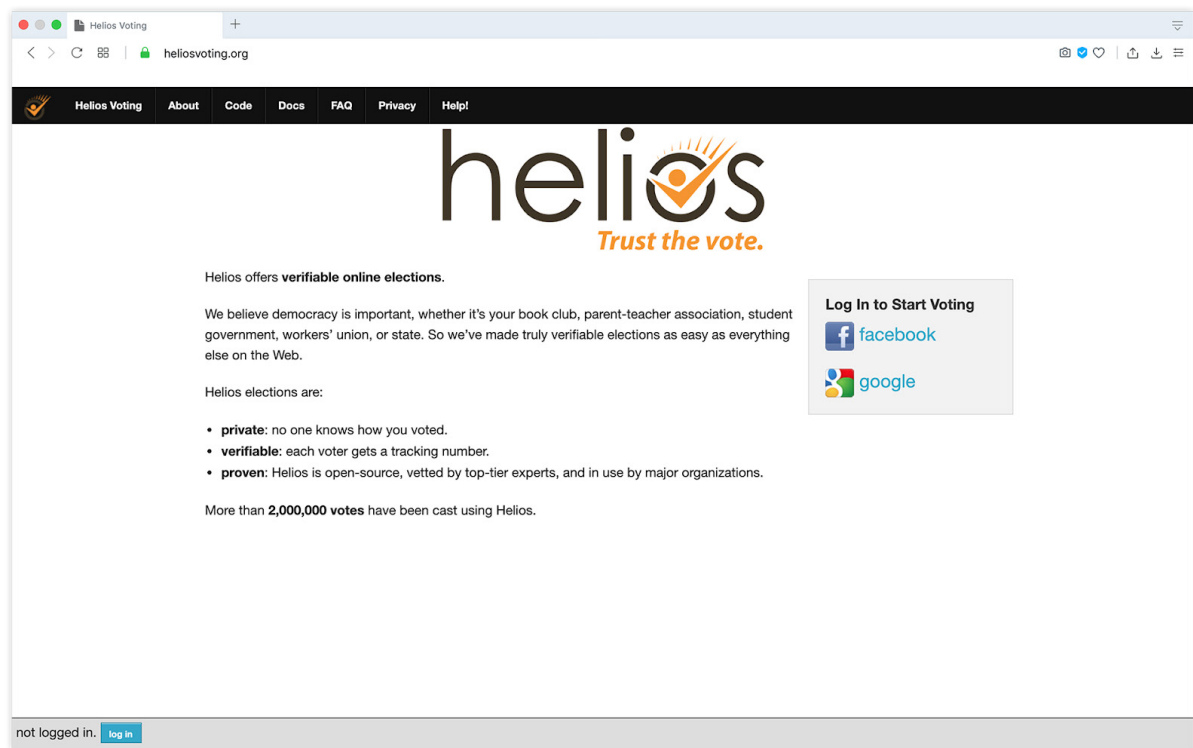


Figure 8.1.3.15 Helios Voting Home page (Source: heliosvoting.org)

Category

Voting

Metadata

Name	Helios Voting
URL of the project	https://heliosvoting.org/
URL of the repository	https://github.com/benadida/helios-server
URL of a demo	https://vote.heliosvoting.org/
Description	Helios is an end-to-end verifiable voting system.
Language	Python
Framework	Django



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Start date	2009-07
Current version	3.14 (2019-08)
# of contributors	18 (2019-08)
Popularity	428 stars in Github (2019-08)
Activity	Active development (2019-04)
License	Apache 2.0
Responsive	Yes
Localization	No

Features

- It allows admins to create a voting process with one or more questions and several options for each answer.
- Minimum and maximum number of selected votes
- Sort different options randomly for each user to avoid bias.
- Census management features.

Technical features

- Several authentication methods including Google and Facebook log in.
- No API or customization available,

Community

Helios Voting is maintained by Ben Adida, former researcher at Harvard University and Executive Director of VotingWorks, a non-profit organization building a secure, affordable, and delightful voting system and open source voting machines.

Analysis

Helios Voting has a limited functionality which can restrict its uses to pilots voting process before moving in to other solutions. The development has been slowed down recently in favor of VotingWorks, an open source solution for physical voting machines.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.16 Agora Voting/nVotes

Agora voting is a software that allows us to create secure online elections. The app is open source, security focused and adaptable with a modularized and flexible architecture.

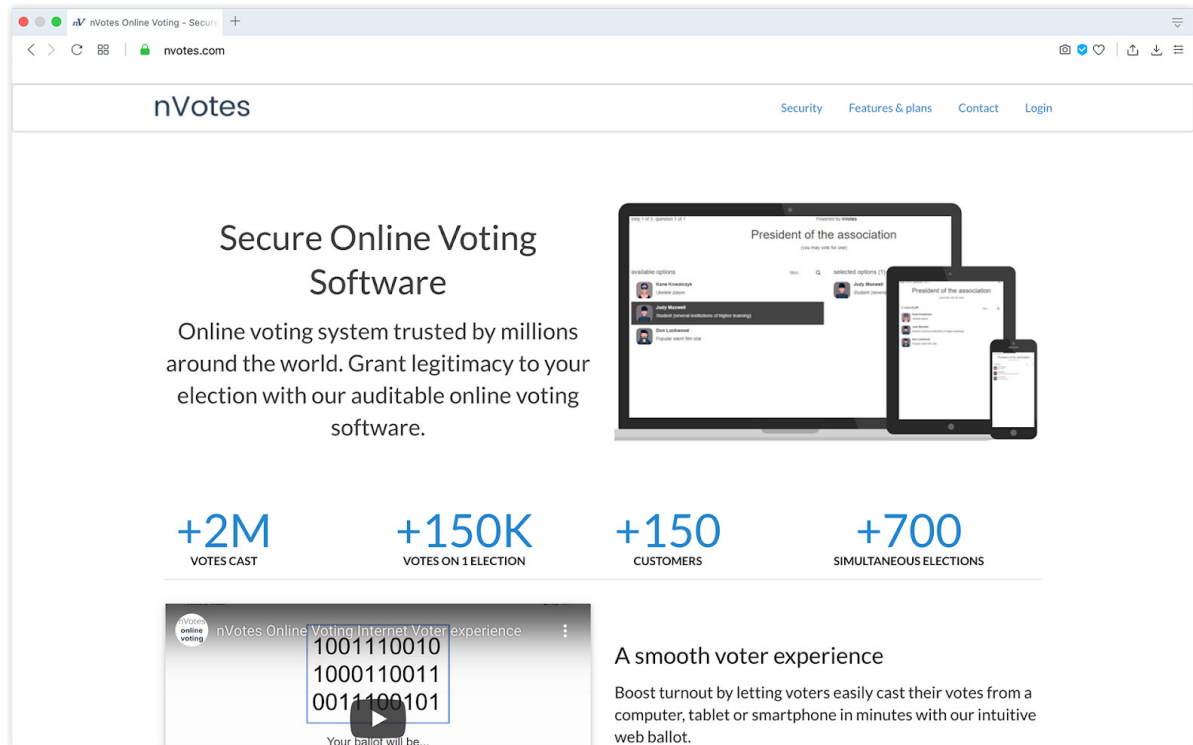


Figure 8.1.3.16 Agora Voting/nVotes Home page (Source: nvotes.com)

Category

Voting

Metadata

Name	Agora Voting
URL of the project	https://nvotes.com/nvotes-org
URL of the repository	https://github.com/agoravoting
URL of a demo	https://go.nvotes.com/booth/4000041/vote
Description	Open source, private, auditable, proven and flexible
Language	Javascript
Framework	Node.js
Start date	2015-10



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Current version	NA
# of contributors	NA
Popularity	NA
Activity	Active development (2019-04)
License	GNU Affero GPL v3 NOTE Agora Voting, unclear for nVotes
Responsive	Yes
Localization	Yes

Features

- It allows admins to create a voting process with one or more questions and several options for each answer.
- Minimum and maximum number of selected votes
- Sort different options randomly for each user to avoid bias.
- Census management features.
- It has different options for vote counting
- Feature rich (testing vote, embed images and links and more)

Technical features

- Theming and customization available

Community

During the research phase Agora Voting was rebranded as nVotes⁹⁹ (OpenDemocracy, 2017) and Agora Voting website now redirects to nVotes. While Agora Voting is an open source project and its repositories are updated actively, making it possible to clone them and install the software in our own servers, nVotes is unclear on its license for now and it is offered as a SaaS solution for running online secure voting process. Agora Voting has been used by dozens of organizations for the last five years.

Analysis

Agora voting has an extensive set of features for running online secure and verifiable voting process. The project seems to have been rebranded as a SaaS solution and license details remain unclear for now.

⁹⁹ OpenDemocracy (2017, March 4). Agora Voting/nVotes. Retrieved January 13, 2020, from <https://www.opendemocracy.net/en/can-europe-make-it/agora-votingnvotes/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.17 YourPriorities

Your Priorities is an online participatory social network, launched in 2008. Now yrpri.org is a web app that is easy to use and free to use. A host of municipal governments use YRPRI for participatory projects, such as crowdsourcing ideas or participatory budgeting. Civil Society organisations and NGOs also use the platform, including the Norwegian Consumer Authority, Forbrukerradet.

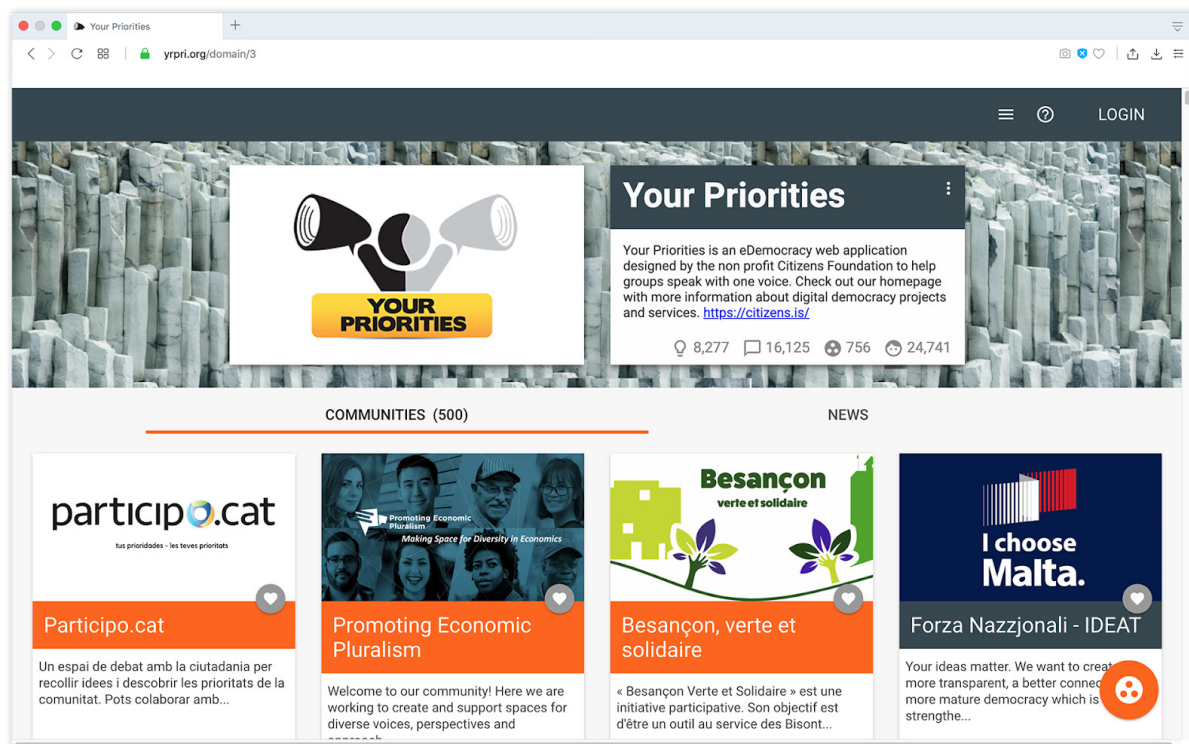


Figure 8.1.3.17 YourPriorities Demo page (Source: yrpri.org)

Category

Suites

Metadata

Name	Yourpriorities
URL of the project	https://yrpri.org/
URL of the repository	https://github.com/CitizensFoundation/your-priorities-app
URL of a demo	https://yrpri.org/domain/3
Description	Your Priorities is an eDemocracy web application designed by the non profit Citizens Foundation to help groups speak with one voice



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Language	Javascript
Framework	Node.js
Start date	2011
Current version	v8.5 (2019-08)
# of contributors	5 (2019-08)
Popularity	67 stars in Github (2019-08)
Activity	Active development (2019-08)
License	BSD
Responsive	Yes
Localization	Yes

Features

- Citizen participation social network for digital democracy and social innovation. Communities and groups for simple organization of any type of participation project. Crowdsourcing ideas about any subject. Effective debating system that is highly resistant to trolling and personal arguments. Users can submit ideas and debate points as text, audio or video. Users can prioritize ideas and debate points by voting them up or down.
- AI driven recommendation engine that recommends relevant posts to users.
- Localized in over 20 languages. Automatic Speech to Text conversion in over 20 languages.
- Assigns an automated toxicity score for all incoming content. Uses the open source Perspective API, developed by the New York Times, The Economist, Guardian, Google & others.

Technical features

- Built with Web Components, the client app is a progressive web app.
- Personalization is not documented. Basic theming can be done changing colors and uploading heading images in the main installation.
- No API or plugin architecture to extend the system

Community

Yourpriorities is created and maintained by the Citizens Foundation, a non-profit organisation based in Reykjavik, Iceland, since 2008. The Citizens Foundation was founded in the aftermath of Iceland's economic and trust collapse in 2008. The organization offers consultancy services on civic tech and participation consultancy, hosted electronic democracy solutions and participation software development. This app has been used by



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Reykjavik city council, the Estonian government and the National Health Service in the UK among many others.

Analysis

Yourpriorities is a well known project with more than 10 years of development and a resilient leading organization. Due to the lack of robust online documentation or community forums the app is difficult to use outside effectively the main installation <https://yrpri.org/>. Also is worth mentioning that the leading organization has been involved in novel research projects such as the use of Artificial Intelligence in civic tech funded through by Erasmus and the Chest FP7 project.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.18 Open Irekia

The Irekia project is the Basque Government's website for Open Government and online participation.

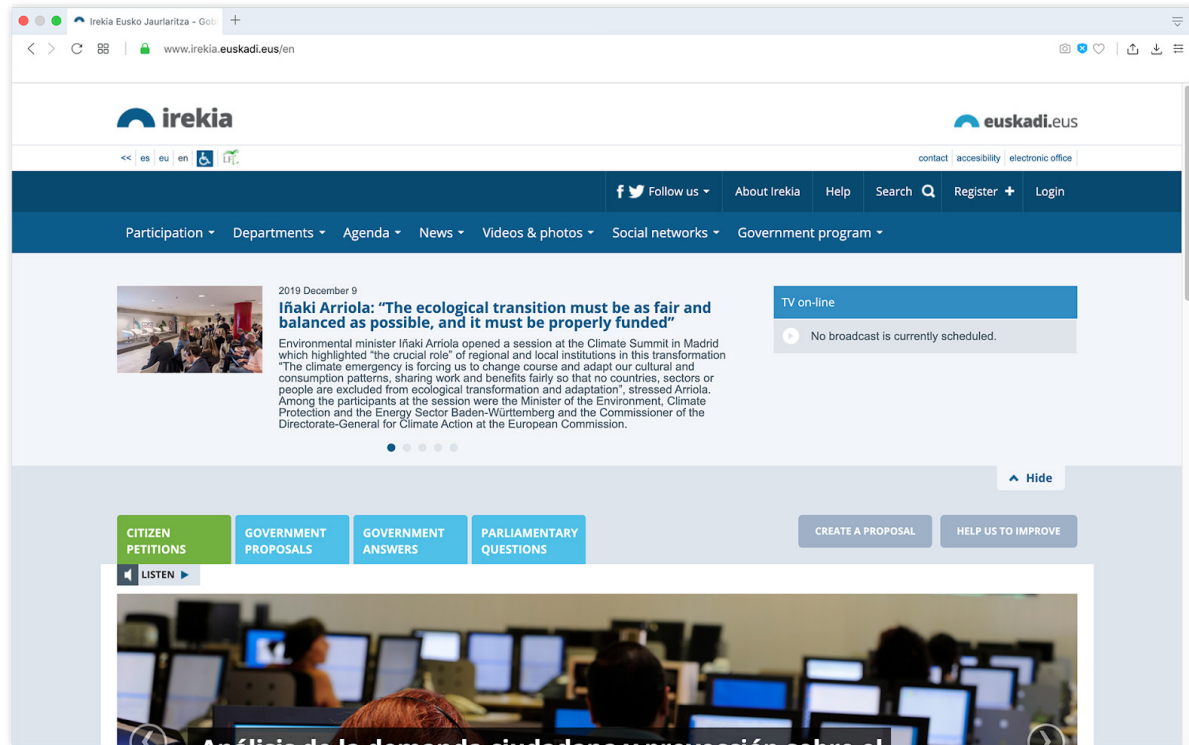


Figure 8.1.3.18 Open Irekia Home page (Source: irekia.euskadi.eus)

Category

Suites

Metadata

Name	Open Irekia
URL of the project	http://irekia.euskadi.eus/
URL of the repository	Shared as downloads no public repository available
URL of a demo	
Description	The Irekia project is the Basque Government's website for Open Government and online participation.
Language	Javascript
Framework	Node.js
Start date	2011-01



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Current version	v5.1 (2017-10)
# of contributors	-
Popularity	-
Activity	-
License	European Union Public Licence V.1.1
Responsive	Yes
Localization	Yes

Features

- Proposals (bottom-up) Citizens can create petitions to the institutions, make comments and vote them positively or negatively. The proposals feature also provides answer mechanisms by the institutions
- Consultations (top-down) the institution can initiate debates and hear citizens opinions about them.
- It incorporates an event agenda and CMS (content management system) capabilities.

Technical features

- It has no documented API
- Theming and customization is not possible without changing the app code, it has not been designed with reuse in mind.
- Documentation is not available in english.

Community

The code is not hosted in a repository but it can be downloaded through the Basque Government website as a binary file. This fact and the lack of support forums or other community engagement online spaces has not allowed a user community to be created around the project. The public code does not seem to be updated lately but the website is still very active as a Basque Government service so we assume that the code is maintained and updated regularly. Very few installations are active outside its original use.

Analysis.

We consider this project as a good case study of a project which despite the code being shared using open source licenses it has not been created as an open source project and does not take advantage of the development strategies that others open source projects in this analysis do benefit from. Further development and the creation of new features are limited by the difficulties of sharing the code without open repositories and a monolithic architecture that makes customizing the app difficult for third parties.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.1.3.19 DemocracyOS

Is an open-source software to be used as democratic participation platform. Citizens are able to vote on existing legislative projects being discussed in the local parliament; this allows more power to constituents to determine how the party's congressman will vote. The platform also acts as a space to propose and vote on new law proposals; they are then officially presented by the party's congressman if they meet a threshold of citizen support.

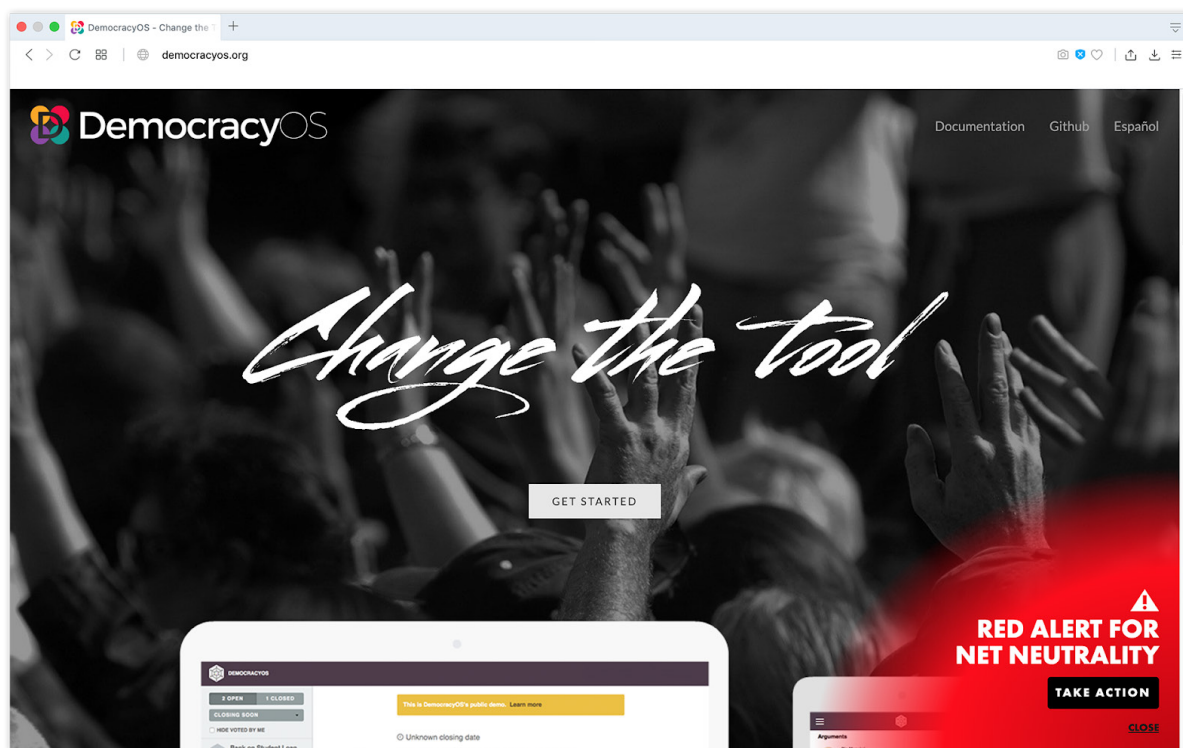


Figure 8.1.3.19 DemocracyOS Home page (Source: democracyos.org)

Category

Suites

Metadata

Name	DemocracyOS
URL of the project	http://democracyos.org/
URL of the repository	https://github.com/DemocracyOS/democracyos
URL of a demo	-
Description	An online space for deliberation and voting on political proposals. The software aims to stimulate better arguments and come to better rulings



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Language	Javascript
Framework	Node.js
Start date	2013-04
Current version	v2.11.16 (2018-12-19)
# of contributors	69 (2019-05)
Popularity	1689 stars on Github (2019-05)
Activity	Last commits 8 months ago
License	GNU Affero GPL v3
Responsive	Yes
Localization	Yes

Features

- Propose. Create your DemocracyOS in a click. Build proposals and be the change you want to see.
- Debate. Debate in a platform that rewards the best arguments and filters that noise that usually ends up calling the trolls.
- Vote. With a clear deadline, get everyone on board to reach a voted decision and avoid endless debates.

Technical features

- It has a documented API <http://docs.democracyos.org/develop/#web-api> to connect the app to other applications
- Theming and customization is not possible in a simple way, this difficulties its adaptation and reuse by third parties.

Community

DemocracyOS is developed by [Democracia en Red](https://democraciaenred.org/), a nonprofit organization based in Buenos Aires, Argentina. The NGO is funded mostly <https://democraciaenred.org/transparency> through donations and consulting services such as software development and coordination of participatory budgeting and other participatory processes. The project has a moderately active community around it and numerous instances of the app have been deployed by third parties

Analysis

DemocracyOS main limitation is the lack of basic theming and customization features so it can not be easily adapted by third parties to match their own graphic identity.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Is worth mentioning that many variations of the app have been tested in numerous citizen participatory processes from collaborative legislation, to participatory budgeting and public consultations. Newer projects such as Consul and Decidim may be more easily adaptable to the +CityxChange context.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.2 Annex B: LHCs and FCs responses to questionnaire regarding participatory processes

Next the answers to a questionnaire from LHC and FC are included and they are divided into two parts:

- Defining the context for each LHC and FC regarding their citizens: data is requested focusing on demographics and geographic characteristics regarding the demonstration area (or areas) where the +CityxChange citizen participatory processes will take place and the whole city area.
- Identify their participatory processes, communication strategies, target groups and overall citizen participation rates.

Based on the answers to the questionnaire and additional research, we will be drawing conclusions regarding the community where the engagement process will take place for each LHC and FC in order to target the widest range of people (see [3.3 Understanding the context from each participant city](#)).

8.2.1 Municipality of Alba Iulia (MAI): Responses to questionnaire

8.2.1.1 Defining the context

Area (km²)

Area of the demonstration area and the whole city.

103,6 km² - whole city, 2 km² - demonstration area
Source: Municipality

Population density (per km²)

Number of inhabitants per square kilometer in the demonstration area and the whole city.

721 inhabitants/km² - whole city level
Source: National Institute for Statistics

Number of dwellings by type of building in demonstration areas

Defined according to whether the building is residential (and the number of dwellings in that building) or non-residential. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

Non-residential, the Demonstration area contains mostly municipality buildings such as: educational facilities, schools, high-schools, technical college, football pitch, heating pump. Other buildings present in the DA are educational facilities belonging to the County Council and other institutions.

Occupancy status in demonstration areas



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Occupancy status of *conventional dwellings* (structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are either occupied, vacant or reserved for seasonal / holiday use). *Occupied conventional dwellings* are conventional dwellings which are the usual residence of one or more persons at the time of the census. *Unoccupied conventional dwellings* are conventional dwellings which are not the usual residence of any person at the time of the census. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

The DA in the case of Alba Iulia consists only of Unoccupied conventional dwellings.

Population by age group

Such as five-years group: under 15 years, 15 to 29 years, 30 to 49 years, 50 to 64 years, over 65. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

Under 15 years: 10.100,
15 to 29 years: 12.400,
30 to 49 years: 25.600,
50 to 64 years: 16.300,
over 65: 10.000.

Source: National Institute for Statistics

Population by current activity status

Such as employed or unemployed. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

28304 employed citizens in the whole city. No data for the DA

Population rate with access to the internet in the whole city

This refers to internet users. (You may use national or regional data if there is no municipal data available)

76% internet users (national data)

Population rate with profile on social networks

Please specify population rates for each social network if available. (You may use national or regional data if there is no municipal data available)

45.000 – Facebook accounts in Alba Iulia;
9.800.000 Facebook users at national level;
858.795 Youtube users at national level;
1.000.000 Instagram users at national level;
400.000 Twitter users at national level;
1.000.000 Snapchat users at national level.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

All statistics are from 2018.

Other relevant demographic information in the demonstration area

Such as the type of household in which a person lives, nationalities, ethnicities, etc.

42% live in apartments, 54.4% live in houses (data from 2015); 87,62% Romanians, 1,59% Hungarians, 0,18% Germans, other ethnicities 0,21%.

8.2.1.2 My citizen participatory processes

Does my institution perform citizen participatory processes?

Please briefly describe the two most relevant citizen participatory processes realized in your institution, including the following: phases, topic, type of participation², citizen participation metrics, lessons learnt, citizen surveys about the results of the participatory process, links and more.

The municipality implemented various citizen participatory processes in the last years. For example, the municipality created a map on its website where people can signal any problems/issues in the city that need to be addressed by the municipality or related bodies. For the same reason an online Channel was created on Facebook Messenger and via telephone where people can signal issues at the city level.

Moreover through the Smart City project the municipality installed WIFI hotspots within the Alba Carolina Citadel. In order to connect to the free WIFI the citizens need to answer a certain question related to the city.

Furthermore the municipality installed over 400 beacons all over the city in order to communicate with its citizens in a smart way and to send a message of public interest.

Through an EU project, Alba Iulia Municipality will develop an online participatory budgeting platform, along with defined actions and offline meetings to coagulate the community with a focus on the participatory budgeting subjects and to harvest citizen interests and needs.

Do you use an online participatory platform in your city?

Name and description (is it proprietary or open source?), pros and cons, and lessons learnt.

Yes, the ones mentioned above. We plan to start other ones this year in October.

How do you communicate with your citizens?

Provide what communication channels you currently use in your institution when developing a citizen participatory process. For example: press release, press conference, newsletter, social networks (Twitter, Instagram, Facebook, Youtube, Whatsapp and others), or outdoor campaigns (banners, signage in buildings, diptychs, digital screens and others).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

If available please also provide average metrics on citizen engagement for each communication channel.

Press releases, press conferences, social networks (over 10 channels of communication), smart surveys in 15 busses, e-Albalulia platform through the free WIFI installed in various parts of the city and through the E-Albalulia app + over 400 beacons spread all over the city.

www.apulum.ro the official website

www.viziteazaalbaiulia.ro the official blog – 400 unique visitors per day

<https://www.facebook.com/primariaalbaiulia/> 25,000 fans

<https://www.facebook.com/albaiuliasmartcity/> 3200 fans

<https://www.facebook.com/DispeceratPrimariaAlbalulia/> 4000 fans

<https://www.facebook.com/cetatealbaiulia/> 6,000 fans

<https://www.facebook.com/visitalbaiulia/> 20,000 fans

<https://twitter.com/visitalbaiulia>

<https://twitter.com/AlbaSmartCity>

<https://www.linkedin.com/company/22307845/admin/updates/>

<https://www.youtube.com/channel/UCmrOm12dsXHqcS3GpO0W2zw>

<https://www.instagram.com/visitalbaiulia/?hl=ro>

Smart Surveys: 14;

e-Albalulia app campaigns: 125.

Do citizens participate in your city?

Provide citizen participation rates in consultation, voting processes, open calls for citizen proposals, or any other participatory process organized by your institution.

Yes, through the Local Barometer to enquire citizens related to different issues at local level.

In the near future, through the online participatory budgeting platform.

Provide a list of associations or interest groups who you contact when organizing citizen participatory processes

This information will be of great help to identify target groups.

"1 Decembrie 1918" University Alba Iulia

Europe Direct Center Alba Iulia

Europe Direct Center - Center Region

Alba Communitarian Foundation

PAEM Alba Foundation

Skepsis Group Association

Alba County Council

Local Tenants Associations

Other NGOs

Are there any other third parties working on participatory processes in your city?



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

For example NGOs, private companies, associations, citizen assemblies, university department, or a specific department in your institution that we are not in contact with.

"1 Decembrie 1918" University Alba Iulia
Alba Communitarian Foundation
STP Alba (Local Public Transport)
Europe Direct Center Alba Iulia
Europe Direct Center - Center Region
Alba County Council

8.2.2 Sestao Berri (SB): Responses to questionnaire

8.2.2.1 Defining the context

Area (km2)

Area of the demonstration area and the whole city.

Area of demonstration: 0.0147Km2 Whole City: 3.5 Km2

Population density (per km2)

Number of inhabitants per square kilometer in the demonstration area and the whole city.

Demonstration area: 660 inhabitants (2018)/ 45 inhabitants/Km2
Whole City: 27,445 inhabitants (2018)/ 7,926.86 inhabitants/Km2 (2018)

Number of dwellings by type of building in demonstration areas

Defined according to whether the building is residential (and the number of dwellings in that building) or non-residential. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

There are several buildings in the demonstration area; and two of them are still empty but within a project to be occupied for a long time:

1. Old School of Apprentices of the old Iron Factory (Altos Hornos de Vizcaya)
2. Old Small Hospital of the Old Iron Factory (Altos Hornos de Vizcaya).

Some communities dedicated to residential housing, either municipal rental or property: One building in 2 La Bariega Street. Building formed by 20 dwellings and 2 more premises at the basement dedicated to trade or other activities.

One building in 21 Autonomia Street formed by 10 dwellings and 1 more premise at the basement dedicated to trade or other activities.

One building formed by 3 communities (Small Patronage) in 17 Juan Crisostomo Arriaga Street..formed by 10 dwellings and 2 more premises at the basement dedicated to trade or other activities. Another in 19 Txabarri St, formed by 15 dwellings and 2 more premises at the basement dedicated to trade or other activities. 21 Txabarri St, formed by 10 dwellings and 2 more premises at the basement dedicated to trade or other activities.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

One building formed by 7 communities (Large Patronage) in 15 Juan Crisostomo Arriaga, formed by 10 dwellings and one more premise at the basement dedicated to trade or other activities; 63 Los Baños St, formed by 19 dwellings and 2 more premises at the basement dedicated to trade or other activities.; 61 Los Baños St, formed by 10 dwellings and 2 more premises at the basement dedicated to trade or other activities.; 59 Los Baños St, formed by 10 dwellings and 2 more premises at the basement dedicated to trade or other activities; 22 Autonomía St, formed by 10 dwellings and 1 more premise at the basement dedicated to trade or other activities; 24 Autonomía St, formed by 10 dwellings and 2 more premises at the basement dedicated to trade or other activities; And 23 Txabarri St, formed by 10 dwellings and 1 more premise at the basement dedicated to trade or other activities.

One building formed by 4 communities: 25 Txabarri St, formed by 14 dwellings and 1 more premise at the basement dedicated to trade or other activities; : 27 Txabarri St, formed by 10 dwellings; : 29 Txabarri St, formed by 9 dwellings and 1 more premise at the basement dedicated to trade or other activities; 31 Txabarri St, formed by 14 dwellings and 1 more premise at the basement dedicated to trade or other activities.

One building formed by 2 communities: 31 Txabarri St, formed by 9 dwellings ; 31 Txabarri St, formed by 9 dwellings.

One building formed by two communities: 22 Los Baños, formed by 20 dwellings and 2 more premises at the basement dedicated to trade or other activities; 24 Los Baños, formed by 20 dwellings and 2 more premises at the basement dedicated to trade or other activities.

Occupancy status in demonstration areas

Occupancy status of *conventional dwellings* (structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are either occupied, vacant or reserved for seasonal / holiday use). *Occupied conventional dwellings* are conventional dwellings which are the usual residence of one or more persons at the time of the census. *Unoccupied conventional dwellings* are conventional dwellings which are not the usual residence of any person at the time of the census. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

The Occupancy status of conventional dwellings are increasing day by day due to some of them have been rehabilitated and being given these days:

BUILDING OCCUPANCY

Old School of Apprentices.....	0 0%
Old Hospital.....	0 0%
2 La Bariega.....	16 80%
22 Los Baños.....	19 95%
24 Los Baños.....	19 95%
21 Autonomía.....	10 100%
17 Juan Crisostomo Arriaga.....	9 90%



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

19 Txabarri.....	15	100%
21 Txabarri.....	10	100%
23 Txabarri.....	9	90%
24 Autonomía.....	9	90%
22 Autonomía.....	10	100%
59 Los Baños.....	9	90%
61 Los Baños.....	10	100%
63 Los Baños.....	19	100%
15 Juan Crisostomo Arriaga.....	10	100%
25 Txabarri.....	7	50%
27 Txabarri.....	8	80%
29 Txabarri.....	9	100%
31 Txabarri.....	12	86%
33 Txabarri.....	9	100%
35 Txabarri.....	9	100%

Population by age group

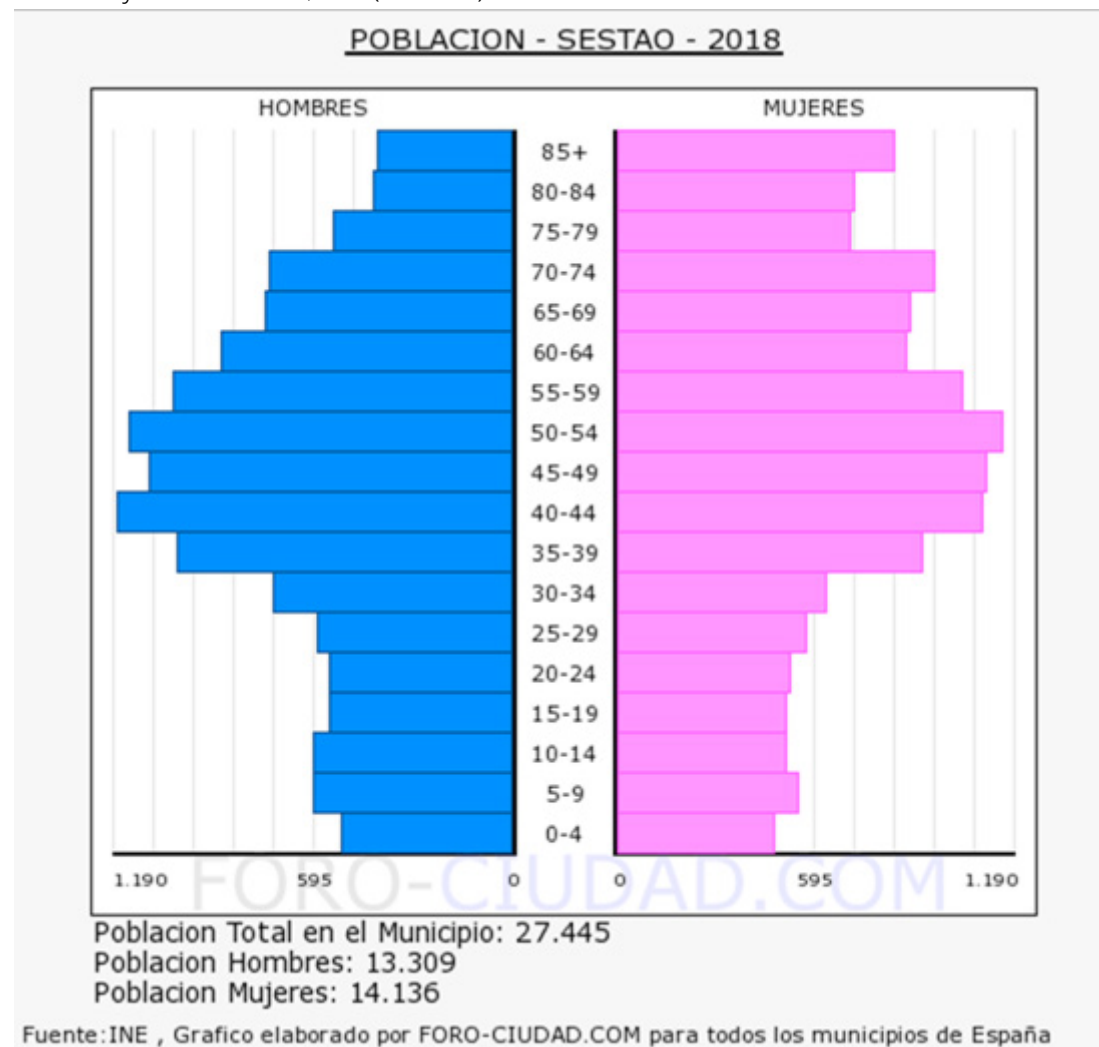
Such as five-years group: under 15 years, 15 to 29 years, 30 to 49 years, 50 to 64 years, over 65. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

Under 15 years.....	3,276	(11.94%)
15 years to 29 years.....	3,324	(12.11%)
30 years to 49 years.....	7,769	(28.31%)
50 years to 65 years.....	6,127	(22.32%)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Over 65 years.....6,949 (25.32%)



Population by current activity status

Such as employed or unemployed. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

WHOLE CITY
ACTIVITY STATUS EMPLOYED UNEMPLOYED
12,930 (47%) 10,604 (82%) 2,326 (18%)
From total pop. From total activity From total activity
DEMONSTRATION AREA (660 Pop.)
ACTIVITY STATUS EMPLOYED UNEMPLOYED
380 (57.58%) 274 (72%) 106 (28%)
From pop. From total activity From total activity

Population rate with access to the internet in the whole city

This refers to internet users. (You may use national or regional data if there is no municipal data available)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

The Data for internet users that could be got to was national:
Almost 43 million people in Spain are internet users (93% pop. in Spain)

Population rate with profile on social networks

Please specify population rates for each social network if available. (You may use national or regional data if there is no municipal data available)

Population rate with profiles on social networks are for national data:
There are 27.6 million people in Spain that use social network (60% of the population in Spain)
FACEBOOK.....24 million people
INSTAGRAM.....17 million people
TWITTER.....4.9 million people

Other relevant demographic information in the demonstration area

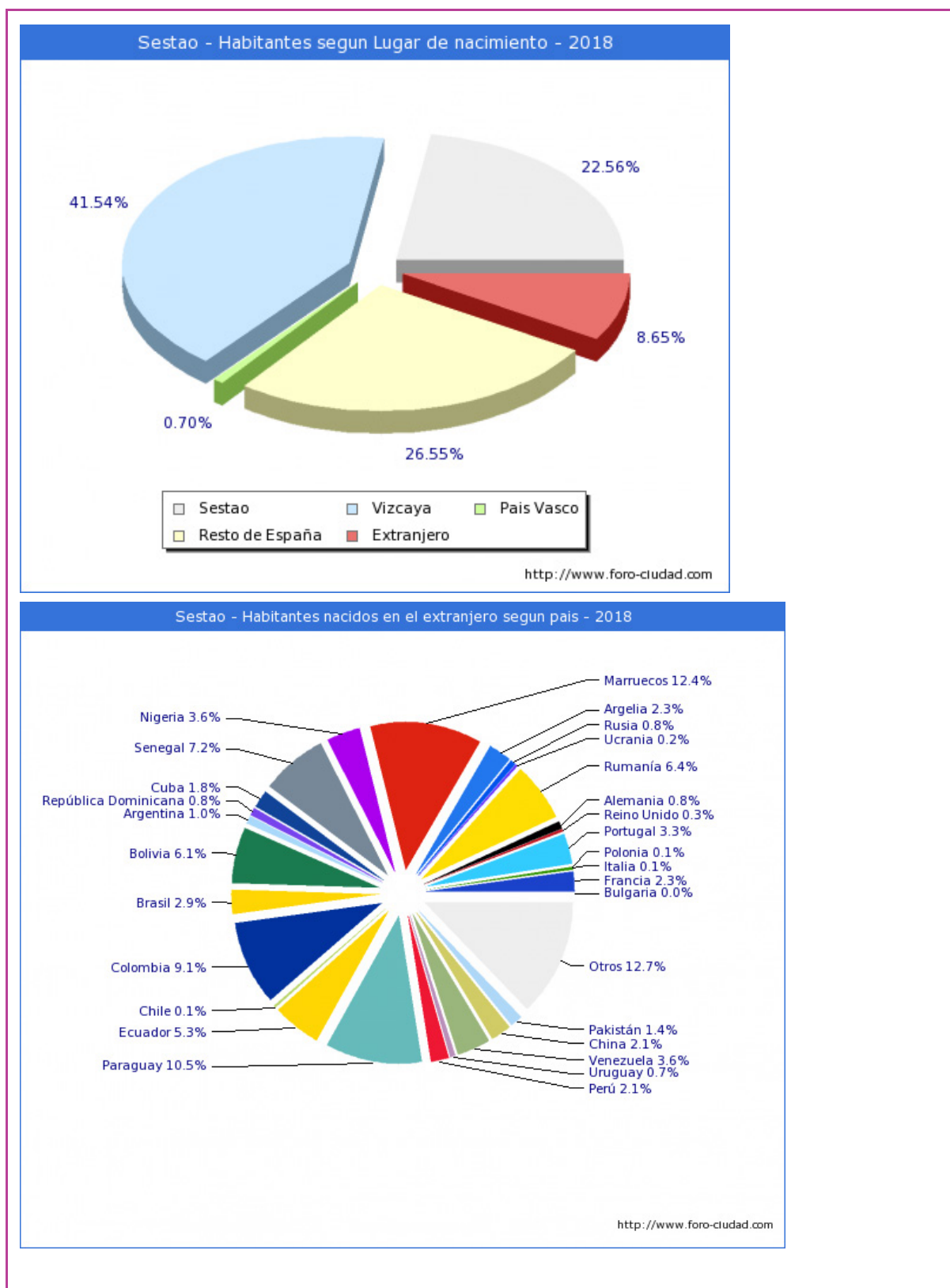
Such as the type of household in which a person lives, nationalities, ethnicities, etc.

All the households in the demonstration area are flats buildings with an average of 10 living places 70m2 average; where people from many different countries, ethnicities and religions live.
The second graphic shows that almost half of the inhabitants in Sestao have been born in different places from in Bizkaia (the region where Sestao can be found) (blue),

- 22.56% of the population in Sestao have been born in Sestao (grey)
- 0.70% of the population in Sestao have been born in other places from the Basque Country (green)
- 26.55% of the population in Sestao have been born in other places in Spain (yellow)
- And 8.65% of the population in Sestao come from many other countries from the world (red)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.



8.2.2.2 My citizen participatory processes

Does my institution perform citizen participatory processes?



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Please briefly describe the two most relevant citizen participatory processes realized in your institution, including the following: phases, topic, type of participation², citizen participation metrics, lessons learnt, citizen surveys about the results of the participatory process, links and more.

During all the life of Sestao Berri, only one citizen participatory process has been realized. Many years ago a party between cultures was organized (gathering people from many countries showing their culinary culture, dresses, dances and so. The party was a success and a lot of people came from other cities.

Do you use an online participatory platform in your city?

Name and description (is it proprietary or open source?), pros and cons, and lessons learnt.

Not an online platform is used. As we are an institution working together 50% with the city council and 50% with the Basque Government institution, and that is why many of the acts of citizen participation are directed by the city council of Sestao, who have a citizen online platform.

How do you communicate with your citizens?

Provide what communication channels you currently use in your institution when developing a citizen participatory process. For example: press release, press conference, newsletter, social networks (Twitter, Instagram, Facebook, Youtube, Whatsapp and others), or outdoor campaigns (banners, signage in buildings, diptychs, digital screens and others). If available please also provide average metrics on citizen engagement for each communication channel.

There is a monthly physical bulletin (ensestao.com) that informs citizens about everything related to the city, and where our institution can also publish information.

Do citizens participate in your city?

Provide citizen participation rates in consultation, voting processes, open calls for citizen proposals, or any other participatory process organized by your institution.

Not too much.

Provide a list of associations or interest groups who you contact when organizing citizen participatory processes

This information will be of great help to identify target groups.

Asociación Iniciativa Gitana (Gypsy Initiative Association), Regional Centers and Neighborhood associations.

Are there any other third parties working on participatory processes in your city?

For example NGOs, private companies, associations, citizen assemblies, university department, or a specific department in your institution that we are not in contact with.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Apart from the associations that we have noted in the previous question, and the Council of the city of Sestao and the Basque Government, there is also CARITAS association that is in charge, among many other activities, to give support teaching cooking, languages, school support... To all those people with low resources.

8.2.3 Sestao Berri: Remote interview with Luis Carlos Delgado

The demonstration area is located in the Txabarri neighborhood, which consists of dwellings lacking accessibility and energy efficiency of around 70 square meters each. Low income and immigrant population occupies the dwellings. Banks also own many of the dwellings.

Sestao Berri has a team of social intervention who supports urban processes. This team is well known by the community and consists of three workers of the Sestao City Council. Sestao Berri has already performed a deep analysis of the community living in the Txabarri neighborhood through the work developed in a FP7 Smart Cities and Communities Project and a EU-Gugle (sustainable renovation models for smarter cities) project. As a result a sustainable renovation on the building façade and roof, and district-heating infrastructure was planned and executed (the first in the Basque Country).

Sestao Berri is planning to develop the resulting self-supply energy interventions by means of the +CityxChange project. Additionally, Sestao Berri has already a community development plan for the demonstration area for the next four years; this area contains two empty buildings for which a citizen participatory process has already been performed for deciding about their future uses. The results show a mix-use development. The online web of Sestao's City Council was used for publishing the meetings and results of the participatory process, a total of three meetings were held with around 50 attendees each.

Sestao City Council also has a participatory budgeting functionality in its website [Sestao Decide](#) and [FAQ proposals](#). 175000 euros were reserved in 2018 for citizen proposals. Citizens registered in Sestao can participate by filling out a form (online or by hand) including their name, address, email and a description of the proposal. Citizens submitted a total of 273 proposals (124 forms were submitted by hand and 79 online) [Results here](#) . After all proposals were received and analyzed, a list with the proposals included and excluded was published together with the reasons for exclusion. Finally a voting process was performed using a physical voting station located at a centric place on a particular day. A total of [556](#) votes were received.

Sestao City Council published a regulation on citizen participation in 2014.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.2.4 Smolyan (SMO): Responses to questionnaire

Name: Eftima Petkova

Role: Coordinator

Institution: Municipality of Smolyan

City: Smolyan

8.2.4.1 Defining the context

Area (km²)

Area of the demonstration area and the whole city.

134 sq. km is the whole city

Population density (per km²)

Number of inhabitants per square kilometer in the demonstration area and the whole city.

236 people per sq. km

Number of dwellings by type of building in demonstration areas

Defined according to whether the building is residential (and the number of dwellings in that building) or non-residential. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

The DA1 Old City Center covers around 282 000 m² including residential, public and business buildings.

The DA1 is chosen so that it focuses on an area in the central part of the city, close to the Old City Center, visited by many citizens, with already implemented EE and RES measures and high readiness to accommodate additional advanced EE/RES measures with only little additional investment, which is expected to be achieved early in the replication phase. The rationale for choosing sports buildings as a major intervention area is that they have dynamic occupancy, with specific energy demands, especially heating, cooling, temperature control, hot water, ventilation, lighting, and also of the use of sport equipment. The energy impact of sport facilities is growing due to the developing sport and leisure community and the increasing number of sport-oriented people highlighting the demand for the sport buildings to have better energy performance. So far the confirmed buildings have EE measures introduced, including RES installations. In DA1, the major task within +CityxChange is to increase the self-sufficient energy production and bring it to prosuming level forming a PEB, covering the demands for electricity for lighting in both sports buildings and for the surrounding training playgrounds as well as the domestic hot water in both buildings and for the swimming pool. The whole DA needs to have smart metering in place and its lighting refurbished and upgraded to smart, autonomous city lighting, with the option to add Wi-Fi and sensors to it.

Confirmed Demonstration Sites are:

1. The Sports Hall „Velichko Cholakov” is a 2611 m² sport hall for football, basketball, volleyball, weightlifting, fitness, table tennis and other sports visited by students and citizens. It is equipped with solar thermal installation covering the demand for



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

hot water in the building. It could accommodate PV installation to generate electricity for the lighting demands of the buildings.

2. The City Swimming Pool is a 2284 m² sport facility visited by students and citizens, working on a non-stop schedule throughout the year. Its high energy demands in terms of hot water make it imperative part of it to be produced by solar thermal installation, backed up with electrical boilers. It could accommodate both solar thermal and PV installation to generate heat and electrical energy for the swimming pool.
3. Training Stadium is a 28264 m² sport facility for soccer training of students, the local soccer team, and citizens. It is in demand of autonomous street lighting, with battery storage, to enable training sessions at dusk and in the evenings as in the winter season daylight time is relatively short.
4. Multifunctional Training playgrounds are a set of 5 Newly built small playgrounds, with a total area of 7357 m², aimed at students and local players to warm-up or have small sport sessions. The facility is refurbished and equipped with LED lighting which needs to be upgraded to autonomous.

Potential Additional demonstration sites to the DA are:

1. High school "Sv. Sv. Kiril I Metodii" is a nearby school which could serve as a promotion and raising awareness area for the students who train at the sports facilities. The school has the basic energy efficiency measures installed as change of windows and insulation. There could be specialised sessions on EE and RES education among the school staff and students alike to promote self-sufficient energy production and the environmental and climate benefits of it. Its area is 8748 m²; annual energy consumption is around 356 MWh (electricity and heating oil).
2. Kindergarten "Buratino"- a newly refurbished building next to the school.

DA2 – New City Center

The DA2 New City Center covers around 630 000m² including residential, public and business buildings. The area forms the new urban center with refurbished urban environment and elements, highly visible to local and tourists. It is in close proximity to DA1. The buildings are built in the period 1975-1985 and represent the typical for that time features of the socialist architecture and landmarks of the town we need to make them futureproof.

The DA2 is chosen to represent highly visited buildings, recognised by local and tourists alike. The buildings in this area are planned to have major EE and RES improvements introduced in the period 2018-2019 within the implementation of the Plan for Urban regeneration and development, with high readiness to accommodate new, innovative solutions and showcase intelligent smart technologies. The buildings have approved work designs for renovation and some of them even have issued construction permits. The rationale for choosing public buildings in this area is the significant visitor flow through them throughout the year – the Municipality Building is a place where more than 200 people work everyday as it accommodates the municipal administration, the administration of the Territorial Office of the National Revenue Agency, the Social Service and is visited by a significant number of people annually, the Planetarium, the Regional History Museum, the Art Gallery, The Regional Library and the City Theatre are major tourist locations gathering more than 50 000 visitors annually, the School is an education spot for pupils to learn about innovation, smart technology and eco-friendly measures. In



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

DA2, it is imperative to raise awareness on the actual energy costs and potential savings in these public buildings to the building managers and wide audience. Also, they could be inspiring examples for innovative transformation of space, because no considerable changes to them have been made to their initial conditions. In DA2, the major task within +CityxChange is to identify, design and upscale innovative replication interventions which will showcase the area as an inspirational PEB for locals and visitors. This also links to the citizen engagement parts, which have been designed into all DAs for at least one building. This area has a slightly lower readiness level than DA1, making it a good candidate to learn and still adapt parts of the plan from DA1 implementation for subsequent replication.

Potential buildings are:

1. The Planetarium is a landmark city building covering 2188 m², with an annual energy consumption of ar. 656,8 MWh (electricity and heating oil). The building is planned to have major refurbishment and improvements introduced in 2019 including insulation, change of windows, etc. and new equipment – construction permit is issued. Being the largest planetarium in Bulgaria, its transformation with innovative solutions will bring highly visible impact to visitors and tourists. The building is included in the Investment programme of the Municipality to be financed under the PA1 of OP “Regions in growth” (ERDF). The preparation of the project is in progress.
2. The Municipality building covers 36 000 m², with an annual energy consumption of 588 MWh (electricity and natural gas). The building’s key location makes it a good location for raising awareness among citizens and public building managers. The building has partial EE measures – changed windows.
3. The Regional Museum covers 6264.11 m², with energy consumption of 673 MWh (electricity, wood and coal) and is planned to have renovation in 2019-2020 with energy efficiency measures implemented - insulation, change of windows, roof, etc.
4. The Regional Library covers 3776 m² with annual energy consumption of 1705.1 MWh. It is planned to total renovation with instalment of energy efficiency measures within the frame of the Integrated Plan for Urban regeneration and development, but does not have secured financing at this moment – it is in the reserves list of the Investment programme. There is a construction permit for the planned EE measures.
5. The Art Gallery covers 2594 m² with annual energy consumption of 1377,6 MWh. The building is in the reserve list of the Investment programme of the Municipality for the implementation of the Integrated Plan for Urban regeneration and development. There is a construction permit for the planned EE measures.
6. The City Theatre covers 18962 m² and is planned to be renovated with energy efficiency measures introduced within the Integrated Plan for Urban regeneration and development until 2020. The theater has two-halls; Hall1 with a capacity of 680 seats and Hall 2 with a capacity of 100 seats. The annual energy consumption is 4140,03 MWh. The Theatre, the Museum, the art gallery and the library form the cultural complex of the town and are situated next to each other.
7. The Secondary school “Paisii Hilendarski” covers 11935 m² and has an annual energy consumption of 382 MWh (electricity and heating oil). Energy efficiency measures have been installed. The school has a swimming pool and solar panels installed for heating the water in the pool, but some upgrades will be useful. The place could serve as raising awareness and promotion spot for the young



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

students to learn how energy efficiency interventions and renewable energy sources along with behavioural change could have an impact on climate and environment.

DA3: Raikovo Replication site

The DA3 Raikovo Replication site covers a smaller area compared to the DA1 and DA2 including public buildings and facilities. The area is located in Eastern part of the city of Smolyan.

The DA3 is chosen to combine elements of the other DAs – a Stadium, Sports building, public kindergarten and Service Support building. In DA3, major task within +CityxChange is to successfully develop concept designs and action plans to replicate innovative smart solutions from DA1 and DA2 that will upgrade the existing buildings and facilities to PEB. The DA3 needs to be planned for comprehensive refurbishment and renovation as a PEB combining new EE and RES approaches and optimising existing facilities.

Potential Demonstration Sites are:

1. The Sports Stadium is a 28264 m² sports facility for official soccer games. It is in demand of intelligent autonomous lighting.
2. The Sports and Service Support building is used as a facility for the preparation of the playing teams. Its energy facilities need to be upgraded to self-sufficient energy production covering the demands of the building. The Service Support Building is an old, inefficient, unused facility which could be revitalized and renovated to high energy standards.
3. The Public Kindergarten is a public building covering 1269 m² with annual consumption of 274 MWh. There are energy efficiency measures introduced – insulation, change of windows.

Occupancy status in demonstration areas

Occupancy status of *conventional dwellings* (structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are either occupied, vacant or reserved for seasonal / holiday use). *Occupied conventional dwellings* are conventional dwellings which are the usual residence of one or more persons at the time of the census. *Unoccupied conventional dwellings* are conventional dwellings which are not the usual residence of any person at the time of the census. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

I think in the DA for Smolyan should be: Occupied conventional dwellings - conventional dwellings which are the usual residence of one or more persons at the time of the census.

Population by age group

Such as five-years group: under 15 years, 15 to 29 years, 30 to 49 years, 50 to 64 years, over 65. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

We have the age distribution statistics for the whole Smolyan Region (there are 10 municipalities in it and Smolyan is the regional centre of Smolyan Region):

Region	ALL	in the towns	in the villages						
Age	all	men	women	all	men	women	all	men	women
Smolyan Region	105421	50959	54462	59242	28488	30754	46179	22471	23708
0	685	369	316	429	219	210	256	150	106
1 - 4	2959	1440	1519	1826	883	943	1133	557	576
5 - 9	4056	2051	2005	2575	1304	1271	1481	747	734
10 - 14	4413	2310	2103	2737	1440	1297	1676	870	806
15 - 19	4174	2198	1976	2538	1304	1234	1636	894	742
20 - 24	2999	1576	1423	1749	915	834	1250	661	589
25 - 29	4696	2523	2173	2700	1390	1310	1996	1133	863
30 - 34	6414	3477	2937	3866	2013	1853	2548	1464	1084
35 - 39	7041	3775	3266	4281	2245	2036	2760	1530	1230
40 - 44	7498	3911	3587	4594	2350	2244	2904	1561	1343
45 - 49	7801	3955	3846	4617	2299	2318	3184	1656	1528
50 - 54	8488	4290	4198	4701	2295	2406	3787	1995	1792
55 - 59	9430	4672	4758	5219	2494	2725	4211	2178	2033
60 - 64	9661	4444	5217	5244	2395	2849	4417	2049	2368
65 - 69	8661	3801	4860	4576	2025	2551	4085	1776	2309
70 - 74	6519	2596	3923	3290	1343	1947	3229	1253	1976
75 - 79	4714	1792	2922	2122	827	1295	2592	965	1627
80 - 84	3157	1153	2004	1322	480	842	1835	673	1162
85 - 89	1551	489	1062	631	205	426	920	284	636
90 - 94	429	121	308	191	56	135	238	65	173
95 - 99	70	14	56	32	6	26	38	8	30
100 +	5	2	3	2	-	2	3	2	1

	Population 31.12.2017 г.			Population 31.12.2018 г.		
Town	all	men	women	all	men	women
Smolyan	27851	13298	14553	27505	13148	14357

Population by current activity status

Such as employed or unemployed. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

Smolyan is one of the towns where statistically the unemployment rate is not very high, but at the same time the salaries are low compared to other regions in Bulgaria.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Population rate with access to the internet in the whole city

This refers to internet users. (You may use national or regional data if there is no municipal data available)

Smolyan has a very good internet connection. The access to the internet in the city is 100 %.

Population rate with profile on social networks

Please specify population rates for each social network if available. (You may use national or regional data if there is no municipal data available)

We do not have these statistics but it is quite high for facebook , young people are also active on Youtube.

Other relevant demographic information in the demonstration area

Such as the type of household in which a person lives, nationalities, ethnicities, etc.

The households in the DA are family households mostly, Bulgarian nationality, we do not have different ethnicities, only a small percentage of roma population.

8.2.4.2 My citizen participatory processes

Does my institution perform citizen participatory processes?

Please briefly describe the two most relevant citizen participatory processes realized in your institution, including the following: phases, topic, type of participation², citizen participation metrics, lessons learnt, citizen surveys about the results of the participatory process, links and more.

We have performed a citizen participatory process when developing the Municipal Development Plan for 2014-2020 and the Plan for Urban Regeneration and Development. Different consultation groups have been formed in order to cover all spheres of development – they have made 3 work sessions each and after that the results have been discussed on a common “round table”. In the groups have been involved people with different professional backgrounds and also citizens as well as municipal experts.

When developing the municipal plan we have made an online platform where we asked the citizens to give their ideas for the future development. We have received a number of proposals but not massive participation.

We still need to develop and adopt the right methods for involving the citizens more actively in the participatory process.

Do you use an online participatory platform in your city?

Name and description (is it proprietary or open source?), pros and cons, and lessons learnt.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

We do not have a permanent platform. In some cases an online survey could be organized through the municipal website.

How do you communicate with your citizens?

Provide what communication channels you currently use in your institution when developing a citizen participatory process. For example: press release, press conference, newsletter, social networks (Twitter, Instagram, Facebook, Youtube, Whatsapp and others), or outdoor campaigns (banners, signage in buildings, diptychs, digital screens and others). If available please also provide average metrics on citizen engagement for each communication channel.

The Municipality has website: www.smolyan.bg

We also have a page on facebook: Община Смоля, which has nearly 1500 participants, which is not that much. The Mayor has its own profile, which is followed by 2400 people at the moment.

We have a digital screen on one of the main squares in the pedestrian zone of the city centre where we upload information and important messages.

Do citizens participate in your city?

Provide citizen participation rates in consultation, voting processes, open calls for citizen proposals, or any other participatory process organized by your institution.

The citizen participation is not as active as it could be.

The municipality organizes citizen consultations on important topics like the annual budget, report of the municipal budget, for taking a municipal loan, when developing internal ordinances on publicly important matters and others.

Provide a list of associations or interest groups who you contact when organizing citizen participatory processes

This information will be of great help to identify target groups.

It depends on the subject.

We announce it on our website and invite all interested parties.

We normally invite the relevant institutions, NGO-s in the relevant field, we hope for active young people and citizens with different backgrounds.

We also have consultative councils on different topics like: Consultative council at Tourism, Consultative Council on Youth development, there are also regional consultative councils that work for the regional development, culture, children and youth and others.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Are there any other third parties working on participatory processes in your city?

For example NGOs, private companies, associations, citizen assemblies, university department, or a specific department in your institution that we are not in contact with.

There are NGOs working on this topic.

One of the active NGOs in the field of citizen participation is New Horizons. They work on this topic on a long term basis.

New Horizons Association, an active representative of civil society structures in the Rhodope region:

- works for the formation and development of a well-functioning civil society in the "heart of the Rhodopes"
- supports the economic development of the region in line with EU policies and horizontal principles
- promote the involvement of citizens in the large European Community

8.2.5 Võru (VORU): Responses to questionnaire

Name: Tiina Hallimäe

Role: development adviser

Institution: Võru town Government

City: Võru (EE)

8.2.5.1 Defining the context

Area (km²)

Area of the demonstration area and the whole city.

Whole City 14 km²

Population density (per km²)

Number of inhabitants per square kilometer in the demonstration area and the whole city.

Whole City 845 inhabitants per km². Total 11831 inhabitants (1.05.2019)
We do not have statistics about the demo area.

Number of dwellings by type of building in demonstration areas

Defined according to whether the building is residential (and the number of dwellings in that building) or non-residential. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

There are 148 properties in the demo area. Including residential buildings 94, dwellings 749, non-residential buildings 69 and non-residential rooms 165.

Remark: in some properties estate there could be several two buildings – one is residential, the other is non-residential. There are also buildings where there are both dwellings and non-residential rooms in one building. Or in one building there can be both residential rooms and non-residential rooms. Do not summarize numbers.

75% of dwellings are actively in use.

Occupancy status in demonstration areas

Occupancy status of *conventional dwellings* (structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are either occupied, vacant or reserved for seasonal / holiday use). *Occupied conventional dwellings* are conventional dwellings which are the usual residence of one or more persons at the time of the census. *Unoccupied conventional dwellings* are conventional dwellings which are not the usual residence of any person at the time of the census. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

75% of dwellings are actively in use.

Population by age group

Such as five-years group: under 15 years, 15 to 29 years, 30 to 49 years, 50 to 64 years, over 65. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

There is no data available for the demo area. Statistics of whole town: up to 15 years 1785; 15-29 years 1409; 30-49 years 2152; 50-64 years 2391; 64+ years 3232

Population by current activity status

Such as employed or unemployed. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

There is no statistic about the town but in Võru region there are employed people 64,4% from employment age people, in Estonia 71,9%

Population rate with access to the internet in the whole city

This refers to internet users. (You may use national or regional data if there is no municipal data available)

In the Võru region 85 % of families have internet access (10 100 families). No data for town but estimation is that 95 % of families have access.

Population rate with profile on social networks



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Please specify population rates for each social network if available. (You may use national or regional data if there is no municipal data available)

Võru town Facebook 7999 engagers
Võru town newspaper – 6500 mailbox
Võru town instagram – 632 followers

Other relevant demographic information in the demonstration area

Such as the type of household in which a person lives, nationalities, ethnicities, etc.

In the Võru region, town and demo area most people are Estonians. No exact data for town.
In Võru region there lives 33876 inhabitants 95,85 are Estonians. 3,9% are Russians, 1,25% are other nationalities,

8.2.5.2 My citizen participatory processes

Does my institution perform citizen participatory processes?

Please briefly describe the two most relevant citizen participatory processes realized in your institution, including the following: phases, topic, type of participation², citizen participation metrics, lessons learnt, citizen surveys about the results of the participatory process, links and more.

Yes.
When we make bigger development plans there will be open public meetings where ideas and wishes from citizens will be gathered. Many participation actions are regulated by the law.
We also have infodesk in the municipality.
If we need to get feedback from citizens we use the town newspaper, Facebook.
For every day communication we use Facebook, Võru town newspaper (<http://www.voru.ee/et/voru-linna-leht1>), Võru infolists (e-mails), Võru web page www.voru.ee, press releases, Instagram, posters in outdoor infostands.

Do you use an online participatory platform in your city?

Name and description (is it proprietary or open source?), pros and cons, and lessons learnt.

Anna teada platvorm platform <http://www.anna-teada.ee/>
Facebook <https://www.facebook.com/Voru.linn>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

How do you communicate with your citizens?

Provide what communication channels you currently use in your institution when developing a citizen participatory process. For example: press release, press conference, newsletter, social networks (Twitter, Instagram, Facebook, Youtube, Whatsapp and others), or outdoor campaigns (banners, signage in buildings, diptychs, digital screens and others). If available please also provide average metrics on citizen engagement for each communication channel.

When we make bigger development plans there will be open public meetings where ideas and wishes from citizens will be gathered.

We also have infodesk in the municipality.

If we need to get feedback from citizens we use the town newspaper, Facebook. For every day communication we use Facebook, Võru town newspaper (<http://www.voru.ee/et/voru-linna-leht1>), Võru infolists (e-mails), Võru web page www.voru.ee, press releases, Instagram, posters in outdoor infostands. Although we have outdoor infostands.

Do citizens participate in your city?

Provide citizen participation rates in consultation, voting processes, open calls for citizen proposals, or any other participatory process organized by your institution.

It depends on the topic. For instance, when we had Võru town development vision meetings, approximately 120 people took part. When we had sustainable energy action plan meetings only 12 participated. When we made votes on Facebook, which kind of name should school had 921 people took part in it.

Provide a list of associations or interest groups who you contact when organizing citizen participatory processes

This information will be of great help to identify target groups.

People who live in demo areas

Organisation who run their business or organisation in demo areas

Service providers (electricity, heating, etc)

Municipality

Real estate developers

Potential new residents

Are there any other third parties working on participatory processes in your city?



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

For example NGOs, private companies, associations, citizen assemblies, university department, or a specific department in your institution that we are not in contact with.

Võru Development Centre (established by municipalities from Võru region).
There are no universities in our town.

8.2.5.3 Other relevant information

Please feel free to send us any other relevant information

Võru is a very small town. If there is a need to communicate we use simple channels – newspaper, fb, infodesk.

8.2.6 Mesto Pisek (MP): Responses to questionnaire

Name: Jiri Tencar

Role: Energetics Specialist

Institution: Smart Pisek, Organization Unit of City of Pisek

City: Pisek

8.2.6.1 Defining the context

Area (km²)

Area of the demonstration area and the whole city.

Pisek City - 63.23 sq. kilometres

Source: Czech Statistical Office – Annual statistical report of South Bohemian municipalities 2019

Population density (per km²)

Number of inhabitants per square kilometer in the demonstration area and the whole city.

Pisek City – 480 inhabitants per sq. kilometre

Source: Czech Statistical Office – Annual statistical report of South Bohemian municipalities 2019

Number of dwellings by type of building in demonstration areas

Defined according to whether the building is residential (and the number of dwellings in that building) or non-residential. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

In the city of Pisek are 3,383 residential buildings out of 4,271 buildings.

- 2,394 Houses
- 909 Residential buildings
- 80 other residential buildings

Source: Czech Statistical Office - National population and housing census 2011

Occupancy status in demonstration areas

Occupancy status of *conventional dwellings* (structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are either occupied, vacant or reserved for seasonal / holiday use). *Occupied conventional dwellings* are conventional dwellings which are the usual residence of one or more persons at the time of the census. *Unoccupied conventional dwellings* are conventional dwellings which are not the usual residence of any person at the time of the census. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

In the city of Pisek are 3,383 residential buildings:

- 12,481 occupied dwellings
- 942 unoccupied dwellings

Source: Czech Statistical Office - National population and housing census 2011

Population by age group

Such as five-years group: under 15 years, 15 to 29 years, 30 to 49 years, 50 to 64 years, over 65. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

Total no. of inhabitants: 30351

- 0 – 14 y/o: 4775 (15.7%)
- 15 – 64 y/o: 19239 (63.4%)
- 65+ y/o: 6337 (20.9%)

Source: Czech Statistical Office – Annual statistical report of South Bohemian

Population by current activity status

Such as employed or unemployed. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

The unemployment rate of the city is 1.7% in 2019.

Source: Czech Statistical Office – Annual statistical report of South Bohemian municipalities 2019

Population rate with access to the internet in the whole city

This refers to internet users. (You may use national or regional data if there is no municipal data available)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Frequency	Daily	At least once in last 3 months	Once in the lifetime
Inhabitants 16+ y/o Czech Republic	5,521,900 (63.1%)	6,891,600 (78.8%)	7,304,200 (83.5%)

Source: Czech Statistical Office – ICT usage by the households and individuals 2017

Population rate with profile on social networks

Please specify population rates for each social network if available. (You may use national or regional data if there is no municipal data available)

In the Czech Republic there are 5.7 million active user social sites which makes up 54 % of the population.

	Facebook	Instagram	LinkedIn	Snapchat	Twitter
Million users	5.3	2.3	1.6	0.62	0.39

Source: Online research January 2019

<https://doteckomanie.cz/2019/02/socialni-site-v-cesku-vyuziva-je-57-milionu-obyvatel/>

Other relevant demographic information in the demonstration area

Such as the type of household in which a person lives, nationalities, ethnicities, etc.

8.2.6.2 My citizen participatory processes

Does my institution perform citizen participatory processes?

Please briefly describe the two most relevant citizen participatory processes realized in your institution, including the following: phases, topic, type of participation², citizen participation metrics, lessons learnt, citizen surveys about the results of the participatory process, links and more.

Smart Pisek municipal group has increased the level of participation since its establishment.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

One of the initial projects was the foundation of Smart Písek, introduction and communication with citizens (citizen VS politician) about the Smart City concept.

<http://www.piseckysvet.cz/veci-verejne/video-c-2-z-besedy-obcan-versus-politik-smart-city-pisek>

The most recent example is the Smart mobility concept. The new public transportation network was created based on a survey. The whole draft concept was presented to the public and followed by a discussion with citizens. Smart Písek also posted an email address where comments could be sent. Those comments will be considered, implemented and eventually presented in the second draft of mobility concept which will be also presented and discussed with citizens.

<https://smart.pisek.eu/index/aktuality/predstavili-pisek-roce2025.html>

Do you use an online participatory platform in your city?

Name and description (is it proprietary or open source?), pros and cons, and lessons learnt.

No special platform; only Facebook, email and discussion forum.

How do you communicate with your citizens?

Provide what communication channels you currently use in your institution when developing a citizen participatory process. For example: press release, press conference, newsletter, social networks (Twitter, Instagram, Facebook, Youtube, Whatsapp and others), or outdoor campaigns (banners, signage in buildings, diptychs, digital screens and others). If available please also provide average metrics on citizen engagement for each communication channel.

Press releases are used for the most important affairs

<http://www.mesto-pisek.cz/tiskove-zpravy/ds-1009/p1=1012>

The news of all sorts (public presentations, projects' finalization, events, warnings etc) are posted on the following sites and in the printed journal:

<http://www.mesto-pisek.cz/>

<https://www.facebook.com/mupisek/>

<http://www.mesto-pisek.cz/zpravodaj/ds-1025/p1=7657> (City Journal)

Discussion forum is opened for communication with citizens, mostly related to questions related to infrastructure and fees

<http://www.mesto-pisek.cz/diskuze/>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Contact form related to Smart Písek activities:

<https://smart.pisek.eu/en/contacts.html>

Do citizens participate in your city?

Provide citizen participation rates in consultation, voting processes, open calls for citizen proposals, or any other participatory process organized by your institution.

Citizens participate through thematic survey (recent climate and water survey, public transportation survey etc), dozens of citizens also participate in public debates and presentations (Smart Mobility/Energy/ICT, introduction of SECAP etc.)

Provide a list of associations or interest groups who you contact when organizing citizen participatory processes

This information will be of great help to identify target groups.

Water and Greenery in Písek (Voda a zeleň v Písku) - A citizen group focused on environment topics in the city.

Píseckem, s.r.o. - Destination management for the region of Písek.

City Library Písek (Městská knihovna Písek) - Natural center of education and knowledge, supporting many local communities and groups.

Senior Point - Contact point/office seniors with large portfolio of activities and services.

Culture Centre - city company operating city cinema and culture centre building, providing support to many communities and citizen groups.

Are there any other third parties working on participatory processes in your city?

For example NGOs, private companies, associations, citizen assemblies, university department, or a specific department in your institution that we are not in contact with.

Píseckem, s.r.o. - Destination management for the region of Písek.

City Library Písek (Městská knihovna Písek) - Natural center of education and knowledge, supporting many local communities and groups.

Culture Centre - city company operating city cinema and culture centre building, providing support to many communities and citizen groups.

The Playful Gallery Sladovna - Important cultural organization.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.2.7 Limerick City and County Council (LCCC): Responses to questionnaire

Name: Rosie Webb

Role: Co Lighthouse City Manager

Institution: Limerick City and County Council

City: Limerick

8.2.7.1 Defining the context

Area (km²)

Area of the demonstration area and the whole city.

0.62 sq km = 352,790m² (87.176 acres)

Population density (per km²)

Number of inhabitants per square kilometer in the demonstration area and the whole city.

2386 people/ 0.62 sq km

Number of dwellings by type of building in demonstration areas

Defined according to whether the building is residential (and the number of dwellings in that building) or non-residential. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

1626 occupied dwelling units 320 vacant units

Occupancy status in demonstration areas

Occupancy status of *conventional dwellings* (structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are either occupied, vacant or reserved for seasonal / holiday use). *Occupied conventional dwellings* are conventional dwellings which are the usual residence of one or more persons at the time of the census. *Unoccupied conventional dwellings* are conventional dwellings which are not the usual residence of any person at the time of the census. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

Pending

Population by age group

Such as five-years group: under 15 years, 15 to 29 years, 30 to 49 years, 50 to 64 years, over 65. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Population by current activity status

Such as employed or unemployed. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

TOTAL	MALE	FEMALE	IRISH	0-19	20-34	35-60	60+
2583	1441	1142	1276	429	931	899	324
	55.80%	44.20%	49.40%	16.60%	36%	34.80%	12.50%

Population rate with access to the internet in the whole city

This refers to internet users. (You may use national or regional data if there is no municipal data available)

Pending

Population rate with profile on social networks

Please specify population rates for each social network if available. (You may use national or regional data if there is no municipal data available)

Pending

Other relevant demographic information in the demonstration area

Such as the type of household in which a person lives, nationalities, ethnicities, etc.

Pending

8.2.7.2 My citizen participatory processes

Does my institution perform citizen participatory processes?

Please briefly describe the two most relevant citizen participatory processes realized in your institution, including the following: phases, topic, type of participation², citizen participation metrics, lessons learnt, citizen surveys about the results of the participatory process, links and more.

City Engage. Info at this link:

<https://www.limerick.ie/council/services/business-and-economy/business-supports/living-limerick-city-engage>



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

City Riverway Engage

<https://adaptivegovernancelab.wordpress.com/events/2017-2/second-city-engage-week/>

Do you use an online participatory platform in your city?

Name and description (is it proprietary or open source?), pros and cons, and lessons learnt.

CiviQ platform, Proprietary.

General information about the company and their product is available here
<https://civiq.eu/>

This is SaaS (Software as a Service) solution, with Limerick's instance called MyPoint and available here: <https://mypoint.limerick.ie/>

The platform allows us to run public consultations on council proposals such as Development Plans, Local Area Plans, Strategies and Policies, Planning Applications etc. We can also conduct both internal and external surveys, while it also has a reporting tool that allows us to analyse responses received to all of the above.

We are at the very early stages of adoption of this platform, so it is impossible to comment on pros and cons and lessons learnt at this stage. It only went live in early May 2019 and to date we have only run one consultation on it, receiving zero submissions from the public on it. We plan to publish one or two more consultations on it next month and also run some internal and external awareness campaigns to let people know it is there and what it does, so hopefully after that we can comment more on what is good and bad about it.

How do you communicate with your citizens?

Provide what communication channels you currently use in your institution when developing a citizen participatory process. For example: press release, press conference, newsletter, social networks (Twitter, Instagram, Facebook, Youtube, Whatsapp and others), or outdoor campaigns (banners, signage in buildings, diptychs, digital screens and others). If available please also provide average metrics on citizen engagement for each communication channel.

Press releases, social networks, outdoor campaigns.

Do citizens participate in your city?

Provide citizen participation rates in consultation, voting processes, open calls for citizen proposals, or any other participatory process organized by your institution.

Zero submissions were received to the one consultation published on MyPoint to date. To get information on participation rates in other existing engagement channels, I spoke to Karen Burke in Planning. She advised that participation rates can vary according to the



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

issue at hand and also by the location of the issue, so it's difficult to quantify. In general submissions tend to come in via email, but in a lot of cases the citizen will have attended a public meeting in advance of that to get clarifications before submitting.

Provide a list of associations or interest groups who you contact when organizing citizen participatory processes

This information will be of great help to identify target groups.

Pending

Are there any other third parties working on participatory processes in your city?

For example NGOs, private companies, associations, citizen assemblies, university department, or a specific department in your institution that we are not in contact with.

PPN, University of Limerick, Georgian Society, Tidy Towns Groups from Neighborhoods and towns, various communities of interest depending on the topic for engagements

8.2.8 Trondheim Kommune (TK): Responses to questionnaire

Email: oyvind.tanum@trondheim.kommune.no

Name: Øyvind Tanum

Role: Head of smart city

Institution: Trondheim municipality

City: Trondheim

8.2.8.1 Defining the context

Area (km²)

Area of the demonstration area and the whole city.

1.2 km² (estimated demo for area) and 341 km² (city)

Population density (per km²)

Number of inhabitants per square kilometer in the demonstration area and the whole city.

3190 (city)

Number of dwellings by type of building in demonstration areas

Defined according to whether the building is residential (and the number of dwellings in that building) or non-residential. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

Not available



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Occupancy status in demonstration areas

Occupancy status of *conventional dwellings* (structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are either occupied, vacant or reserved for seasonal / holiday use). *Occupied conventional dwellings* are conventional dwellings which are the usual residence of one or more persons at the time of the census. *Unoccupied conventional dwellings* are conventional dwellings which are not the usual residence of any person at the time of the census. We have this info for LHCs and FCs entire municipalities coming from CensusHub2 and we would like to compare it with the demonstration areas.

Not available

Population by age group

Such as five-years group: under 15 years, 15 to 29 years, 30 to 49 years, 50 to 64 years, over 65. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

Data for the whole city:

Category	Men	Women
0-4	-5600	5390
5-9	-5753	5477
10-14	-5525	5228
15-19	-5479	5089
20-24	-8975	8260
25-29	-10242	8814
30-34	-8328	7364
35-39	-7209	6513
40-44	-6630	6031
45-49	-6638	6302
50-54	-6272	6115
55-59	-5308	5289
60-64	-4884	5037
65-69	-4242	4543
70-74	-3781	4139



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

75-79	-2361	2777
80-84	-1285	1809
85-89	-793	1318
90-94	-334	746
95-99	-43	208
100+	-3	25

Population by current activity status

Such as employed or unemployed. In the demonstration area and the whole city. Either percentage distributions or number of inhabitants.

Data for the whole city:

Age	Employed in %
15-74	67.7
15-19	27.9
20-24	59.2
25-39	79.3
40-54	84.4
55-66	69.4
67-74	16.3

Population rate with access to the internet in the whole city

This refers to internet users. (You may use national or regional data if there is no municipal data available)

98%

Population rate with profile on social networks

Please specify population rates for each social network if available. (You may use national or regional data if there is no municipal data available)

81%

Other relevant demographic information in the demonstration area

Such as the type of household in which a person lives, nationalities, ethnicities, etc.

<https://www.ssb.no/en/befolkning>

8.2.8.2 My citizen participatory processes

Does my institution perform citizen participatory processes?



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Please briefly describe the two most relevant citizen participatory processes realized in your institution, including the following: phases, topic, type of participation², citizen participation metrics, lessons learnt, citizen surveys about the results of the participatory process, links and more.

-The development of the new strategy for the central areas of Trondheim

A list of newer-ending participatory processes connected to the strategies for developing our central areas. 1 year process , both digital and physical

<https://sites.google.com/trondheim.kommune.no/framtidstrondheim> (translated)

- The process connected to stronger children communities

Using a sort of citizen assembly to create the new strategy - 1 year process

<https://www.trondheim.kommune.no/globalassets/10-bilder-og-filer/02-skoler/skoler-p-a-stavset-skole/stein-saks-papir-strategidokument.pdf>

- the community project Områdeløft Saupstad Kolstad

Area based community work focusing on mobilization, and quality of life in an area with different challenges. Lasting for almost ten years.

<https://www.trondheim.kommune.no/saupstadkolstad/>

-En blå tråd and the development of the Harbour area

4 year process - for instance : <https://hendelserpanyhavna.no/>

All of the above should be answered through an interview, to provide the right info.

Do you use an online participatory platform in your city?

Name and description (is it proprietary or open source?), pros and cons, and lessons learnt.

We are using different data based tools providing interactive mapping for different areas and challenges. We are also testing the use of Decidim. Furthermore a lot of tools are being used throughout the organisation for different kinds of participatory processes, we do not have information about all of them.

How do you communicate with your citizens?

Provide what communication channels you currently use in your institution when developing a citizen participatory process. For example: press release, press conference, newsletter, social networks (Twitter, Instagram, Facebook, Youtube, Whatsapp and others), or outdoor campaigns (banners, signage in buildings, diptychs, digital screens and others). If available please also provide average metrics on citizen engagement for each communication channel.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

We communicate with citizens through hundreds of different Facebook pages and websites, on a small and larger scale. All the different sectors have different ways, but we also have some general channels being used; the Trondheim kommune Facebook page, Instagram, Twitter and websites. Furthermore, we use Google Sites to launch info sites for different projects, and a lot of the sectors and units have their own Facebook and project pages. The newspapers in the city are important channels, as are the Trondheim 2030 new magazine run by the city itself. The whole functionality of communication in Trondheim city is being changed at the moment, with a large process internally.

The outcome of this might make it easier to have some clearer lines of communication.

Do citizens participate in your city?

Provide citizen participation rates in consultation, voting processes, open calls for citizen proposals, or any other participatory process organized by your institution.

As all the different processes are being run through different departments, there will not be possible to provide info about participation rates. This is an issue for us.

Provide a list of associations or interest groups who you contact when organizing citizen participatory processes

This information will be of great help to identify target groups.

As a municipality we are in contact with all or most associations and interest groups there is, in Trondheim City and the County. The list is never-ending, with a municipality organisation consisting of 14 000 people. The municipality of Trondheim covers all sectors, everything from child care to road works.

Are there any other third parties working on participatory processes in your city?

For example NGOs, private companies, associations, citizen assemblies, university department, or a specific department in your institution that we are not in contact with.

A lot, depending on the situation. Both design companies supporting processes, architect offices, a lot of different research groups, interest groups connected to climate or environmental work, student groups doing work through the University city collaboration.

As we are a huge organisation, it will not be possible or in your interest to be in contact with all the third party collaborators we have.

8.2.8.3 Other relevant information

Please feel free to send us any other relevant information



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

The size of the organization and the autonomy of it makes it hard to answer specifically on your open questions. This does not mean that there are not specific needs or ways to approach the topic through the Cityxchange project in Trondheim, it just means that we need to take another approach when we talk about participation in Trondheim.

Most of the relevant info about development in this field in Trondheim is connected to ongoing processes; through the different pilots, innovation districts and more. These are ongoing, but something that CxC needs to connect to, in order to succeed and not make new or confusing structure just for the purpose of it.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.3 Annex C: Results of workshops: Understanding the community & Citizen participatory processes

This annex contains the results of four collaborative sessions during June, July, August and September of 2019. All the digital whiteboards generated in three of them are included: Original PDFs sizes have been kept in order to be able to read all the content within the whiteboards and are included at the end of this chapter. Also a thumbnail version for each whiteboard is included within the text for reference:

8.3.1 Workshop results: Understanding Users 'Ensuring People Participate'

Theme: Participation Playbook: Understanding the Community. Held on June 18th, 2019 10:30am -12:30pm CEST. Remote workshop organised by +CityxChange.

8.3.1.1 Goals

Defining the community where the participation processes will take place for each LHC and FC in order to reach the widest range of people.

- To understand the community in each DA
- To share existing participatory processes & good practices
- To co-design citizen participatory processes

8.3.1.2 Participants

- Javier Burón and Magda Sánchez COL (facilitators)
- Rosie Webb, Corina Hanrahan and Kieran Reeves (LCCC)
- Gerald Walsh (UL)
- Alan Mee and Philip Crowe (SE)
- Kate Naughton (IESVE)
- Mladen Antolic (MPOWER)

8.3.1.3 Exercise 1: Interviews

Through this exercise we gained a better understanding of the community living in the DA for Limerick City. Subjective insights from participants living in each city are a source of useful information, and they will complement the demographic and socioeconomic data gathered from LHC & FC questionnaires and Eurostat data.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Exercise 1: Interviews
Let's get to know better the communities in the demonstration areas of each city.

1 Interviews
Interviews can tell us a lot about each demonstration area. Even a small sample of interviews can generate a wealth of data. One or two persons should be interviewed, one person should do the interviewing, and one person should take notes. Please avoid yes or no answers and elaborate.
Time: 10min

2 Observations
People centered
We are looking for information that is not in the census.
Demonstration areas or water areas that contains it
We are also interested in external observations

3 Share out
Let's present the results to the whole group
Time: 2min per interview

Confirmed attendees
Kate Naughton (SESVE)
Kieran Reeves (LCCC)
Cristina Harascan (LCCC)
Philip Crowe (SE)
Alan Mee (SE)

Unconfirmed attendees
Stephen Kinsella (LJL)
Gabiela Avram (LJL)
Gerard Walsh (LJL)
Rosie Webb (LCCC)
Kristin Solhaug Haess (TK)
Oyvind Tanum (TK)
Cristiana Fica (AIM)
Petr Brůha (MP)
Luis Carlos Delgado Ortiz (SB)
Efthyma Perikova (SMO)
Tiana Hallimae (VOR)
Lisa Moran (MPOWER)

Analysis + Takeaways
Review your interviews and your observations. Note patterns or insights here.

Figure 8.3.1 Workshop 1. Exercise 1: Interviews by +CityxChange

Topics	Key Aspects for Limerick City DA
DA perception	<ul style="list-style-type: none"> Lively are at day, and "abandoned" at night. It is an "entertainment quarter" so some streets are busy at night. Some buildings are in very bad condition. Accommodation is small flats and bedsit. Arty vibe. Cafe culture. High rise buildings, commercial and office areas. Prostitution and crime in some areas.
People living in the DA	<ul style="list-style-type: none"> Under social housing or rent supplement, mostly young people and few families. People living there are not engaged with community activities. 16.6% of people living in DA are 0-19 years of age. 2583 people living in the area, with a higher foreign national population than the rest of the city. Possibly low levels of education. Some isolated older people.
Active community groups in DA	<ul style="list-style-type: none"> #Liveable Limerick, Tidy Towns, Georgian Society, environmental cleanup groups, Limerick Open Navigation Group, open water swimming group, property owners.
Other information	<ul style="list-style-type: none"> Long history of businesses and professionals located in this area, new startups are setting up in DA as well.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.3.1.4 Exercise 2: Get to the bottom of the stack

The exercise goal is to gain knowledge on citizen participatory processes hosted in participant cities and other places (lessons learned, what worked or did not work, what would you do differently). Participants had to respond to the following questions individually, then they were presented and discussed. The most voted ideas are identified with (+) in the table.

Figure 8.3.2 Workshop 1. Exercise 2: Get to the bottom of the stack by +CityxChange

Questions	Answers
Make a list of the citizen participatory processes in which you have been involved as a promoter, participant or if you just heard about them. Include their location and goal.	<ul style="list-style-type: none"> Community Engagement Presentation. Community Survey for energy requirements in buildings. Crowdsourcing information via app. Model demonstrations and feedback sessions for Orkney Islands model. Livable Limerick, Limerick Spring, Limerick City Engage Projects, Limerick Co-lab group, Fab Lab, Makers Group, Ogonnelloe Community group. Organicity, Aarhus, Drimnagh IAP, Longford Nua, Reusing Dublin. Limerick City Development Plan 2010, Park Canal Scheme.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

	<ul style="list-style-type: none"> • City Riverway Engage, Riverway Design Enabling Review, IU Georgian Block Model, Community Mapping of Riverside, Community auditing of City Centre Streets, Co-design of Urban Solutions for Georgian Area. • Energy Efficiency in the public sector.
<p>Could you explain what worked well in these citizen participatory processes and why? E.g. communication using social network due to young community</p>	<ul style="list-style-type: none"> • To show a demo model of the community for easier understanding. • Survey answers gave useful community insight. (+) • App for gathering energy information from buildings. • Cross-institutional collaboration. (+) • Open process creates consistently strong and engaged groups. (+) • Work exchange and shared community goals. • Conversational data gathering. • Participatory mapping for observation and imagination with target interest groups. (+) • Offering digital and analogue methods for mapping. • Defining the engagement community. • Creative ideas: open drop in vacant shop not branded by the council. (+) • Public meetings. • Intergenerational Story Collecting. Collecting images/stories from heritage groups. (+) • Auditing simple things (litter, dereliction). • Pecha Kucha night to collect aspirations. • Primary School drawing workshops. • Segmentation based on behaviour.
<p>What did not work well in these citizen participatory processes and why? E.g. community meetings due to lack of early engagement</p>	<ul style="list-style-type: none"> • Lack of community engagement/feedback. • Lack of operational staff engagement. • 40% return on surveys. • Low uptake users of the app. • Difficult to get feedback from the community due to the technical process. • Difficult to gather individual contributions. (+) • Low use of tech due to limited time. • Lack of continuity (recession, slow political process) • Not a clear journey. (+) • Needs of constant support from social media sources. (+) • Public meetings did not engage citizens due to broad concepts and long process. (+) • Failure request for written submissions, easier to express in meetings. • Complex auditing takes more time. • Lack of support for digital tools. (+) • Broadcast formats are difficult to moderate. • Difficult to organize volunteer groups.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

<p>What would you do differently next time? E.g. to involve community from the beginning</p>	<ul style="list-style-type: none"> ● Improve advertisement campaigns. ● Send reminders to locals to get better survey feedback. (+) ● More face-to-face engagement activities. ● Easier questions in survey. ● Group oriented design of sessions. (+) ● Plan more time and better tech. ● Generate tangible results. ● Invest more in communication. ● Blend digital and analogue strategies. (+) ● Early engagement. (+) ● Agree on timeline for delivery. (+) ● Continuous engagement. ● Create a community dashboard to provide area focus.(+) ● Provide incentives for active residents. ● Develop constant citizen/civil workers capacity building.
--------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Participants were very active answering the questions and the results show valuable information with multiple best practices, pitfalls and lessons learnt identified, many of them shared by several participants (those marked with +).

8.3.1.5 Exercise 3: Design Studio

What actions would you take to make +CityxChange citizen participation processes more inclusive and engaging? This is the proposed question for the third exercise. The following table summarizes the answers.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Exercise 3: Design Studio
Let's solve two of the biggest challenges for successful citizen participation processes

0 Have everyone take a row in the table and place their name at the front of it.

TASK 1 What actions would you take to make +CityXChange citizen participation processes more inclusive and engaging?

1 BRAINSTORM (2 mins)	2 SKETCH (5 mins)	3 HIGHLIGHTS
<p>Alon Meir SE</p> <p>"Coffee Consultation Van" located in Colston Railway Station Square</p> <p>"You could fix a sack window on the van and show people from the street"</p>	<p>Sketch of a van with a sack window and people looking out.</p> <p>practical demo videos - what you can do</p> <p>animations or videos - stories</p>	
<p>Corina Hermans</p> <p>define a timeline of engagement at neighbourhood level (monthly or weekly)</p> <p>coherent social media campaign strategy</p> <p>invite very clear where the participation is and where it is not, where it can lead to certain things</p>	<p>need longitudinal aspect - for individual for a journey as a citizen and a Council (change)</p> <p>key challenges - get people to participate that would not normally pass any point - not congruent with that word - needs to be almost by accident getting a coffee sack in a park</p>	
<p>Philipp Crowe SE</p>		
<p>Gerold Wink UL</p> <p>Feedback / keep track - what a change people are being listened to in the long-term</p>	<p>Sketch of a building with a feedback loop.</p>	
<p>Kieran Reeves LOCC</p> <p>knock door-to-door</p> <p>respond and participate in the engagement with residents in the city centre</p>	<p>Operation Transformation TV programme for Neighbourhoods</p>	
<p>Kate Naughton ES</p> <p>Passport for Occupiers (behavioural) for energy transition</p> <p>Neighbourhood Passport for energy transition</p> <p>They have done a "Passport" for Wild Atlantic Way which could be a model</p>	<p>Sketch of a passport for energy transition.</p>	
<p>Rosie Webb LOCC</p> <p>Passport for energy transition assistance in getting a 10 year journey</p> <p>Open call platform for all residents can see what is going on and what people want to do</p> <p>Open call platform for all residents can see what is going on and what people want to do</p>	<p>Sketch of a passport for energy transition.</p>	
<p>Miriam Jelicic WFOUR</p> <p>Open call platform for all residents can see what is going on and what people want to do</p> <p>Open call platform for all residents can see what is going on and what people want to do</p>	<p>Sketch of a passport for energy transition.</p>	
<p>Energy Efficiency person of the month in the block / community</p> <p>Collect info about personal achievement</p> <p>Use community platform</p> <p>Info Sharing Space (UL, IU presentation)</p>	<p>Sketch of a passport for energy transition.</p>	

Figure 8.3.3 Workshop 1. Exercise 3: Design Studio by +CityXChange

Actions for inclusive and engaging +CityXChange citizen participation processes

- Design a coherent social media campaign strategy.
- Define a clear message about how citizen participation will affect final measures.
- Continuous feedback to citizens, encourage process transparency & journey definition.
- Use simple visualizations to explain the project to citizens (demo videos, animations to show stories, FAQ online, printed leaflet).
- Combine different citizen engagement strategies (knock door-to-door actions, social media, "Coffee Consultation Van", create neighbourhood passport for energy transition, open days, open info line, training programme for historic building retrofitting skills, tv programme for neighbourhoods, energy efficiency person of the month in a community).
- Provide an open data platform.
- Plan open calls for solutions.
- Define an information sharing space/place.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Participants proposed ideas combining digital tools and face-to-face engaging actions (more than one method to engage). Additionally defining a clear message and getting continuous feedback from citizens was also crucial for them.

8.3.2 Workshop results: Defining the participatory processes

Theme: Participation Playbook: Defining the participatory processes. Held on Wednesday, 24 July 10:30am -12:30pm CEST. Remote and onsite (Limerick) workshop organised by +CityxChange.

8.3.2.1 Goals

- Gathering collective knowledge on organizations that we should engage with.
- Define themes within +CityxChange participatory playbook and learn more about each city challenges.

8.3.2.2 Participants

- Javier Burón and Magda Sánchez COL (facilitators)
- Rosie Webb and Corina Hanrahan (LCCC)
- Gerald Walsh and Gabriela Avram (UL)
- Alan Mee (SE)
- Liviu Stanciu (MAI)

8.3.2.3 Exercise 1: Brainstorming local allies

This was a short warming up exercise to gather as many organizations –formal, informal, public, private, NGOs, industry, etc– that we should engage with during the +CityxChange project.

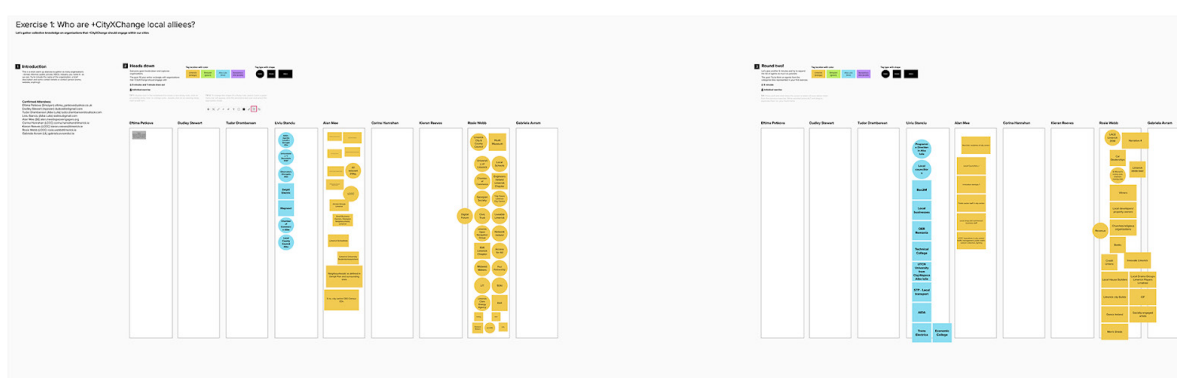


Figure 8.3.4 Workshop 2. Exercise 1: Who are +CityxChange local allies? by +CityxChange

Who are +CityxChange local allies?



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Alba Iulia (MAI)

- | | |
|------------------------------------------|-------------------------------------------------|
| 1. ALEA - Agenția Locală a Energiei Alba | 10. Box2M |
| 2. Universitatea "1 Decembrie 1918" | 11. Local businesses |
| 3. Observatoriu Energetic Alba | 12. OER Romania |
| 4. Delphi Electric | 13. Technical College |
| 5. Magnasci | 14. UTCN University from Cluj-Napoca Alba Iulia |
| 6. Chamber of Commerce Alba | 15. STP - Local transport |
| 7. Local County Council Alba | 16. AIDA |
| 8. Programme Direction in Alba Iulia | 17. Trans Electrica |
| 9. Local councillors | 18. Economic College |

Limerick City

- | | |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1. Chamber of Commerce Limerick | 30. General Motors |
| 2. Tidy Towns Limerick | 31. LCETB |
| 3. Active Ageing Limerick | 32. UHL |
| 4. People who share the Lanes, Limerick | 33. Non-Irish residents of city centre |
| 5. All relevant PPNs | 34. Local Councillors |
| 6. Limerick Chapter Georgian Society | 35. Innovation startups |
| 7. Building Owners Georgian Neighbourhood | 36. Public sector staff in city centre |
| 8. LCCC | 37. Local shop and commercial business staff |
| 9. Access Groups Limerick | 38. LCCC 'operatives in city centre', traffic management, public realm, rubbish collection, lighting |
| 10. Small Business Owners, Georgian Neighbourhood, Limerick | 39. LACE Limerick 2014 |
| 11. Limerick School Kids | 40. Narrative 4 |
| 12. Limerick University Students/researchers | 41. Car Dealerships |
| 13. Neighbourhoods' as defined in development plan | 42. Limerick 2030 DAC |
| 14. Hunt Museum | 43. St Michael's rowing club, shannon rowing club |
| 15. Engineers Ireland | 44. Vitners |
| 16. Digital Forum | 45. Local developers/ property owners |
| 17. Civic Trust | 46. Revenue |
| 18. Liveable Limerick | 47. Churches/religious organizations |
| 19. Limerick Open Navigation Group | 48. Banks |
| 20. Network Ireland | 49. Credit Unions |
| 21. RIAI Limerick Chapter | 50. Innovate Limerick |
| 22. Midwest Makers | 51. Local House Builders |
| 23. Paul Partnership | 52. Local Drama Groups Limerick Players Limetree |
| 24. LIT | 53. Limerick City Builds |
| 25. SEAI | 54. CIF |
| 26. Limerick Clare Energy Agency | 55. Dance Ireland |
| 27. Dell | 56. Socially engaged artists |
| 28. Analog | 57. Men's Sheds |
| 29. Uber | |



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

Target groups for engagement activities for Alba Iulia and Limerick City were gathered using a two round method: in a first round organizations were individually identified by each participant, after that one minute shared out per person and finally a second round again for identifying a few more organizations based on the shared ideas from each other. More than 75 different organisations were identified by participants of the workshop in a short period of time. This list is a great resource when defining the community for each city.

8.3.2.4 Exercise 2: Define and cluster projects

This second exercise focused on identifying specific projects that could benefit from a participatory approach. We asked them to keep in mind that participatory processes could be either top-down (lead by municipalities) or bottom-up (started and/or lead by citizens).

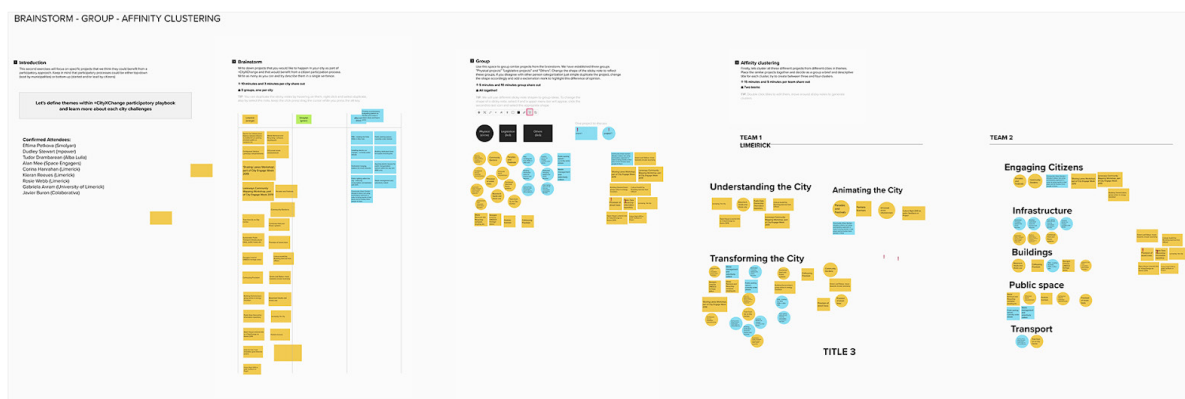


Figure 8.3.5 Workshop 2. Exercise 2: Brainstorm, group and affinity clustering by +CityxChange

Group	Projects Description
Physical	<p>Limerick:</p> <ul style="list-style-type: none"> ● Parades and Festivals. ● Community Gardens. ● Sustainable Public Transport Infrastructure. ● Electric Car Infrastructure. ● Combined Heat and Power systems. ● Basement Vaults and Areas use. ● Limerick Civic Trust renovation grant linked to project. ● Tram from UL to City Centre. <p>Alba Iulia (MAI):</p> <ul style="list-style-type: none"> ● Dedicated charging stations for smart bicycles. ● Building dedicated lanes for busses and bicycles. ● Public lighting within the city. ● Installing electric car charges. ● PEB - creating the first PEBs in Alba Iulia.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

	<ul style="list-style-type: none"> Acquiring electric busses for the public transportation system within the city and AIDA area.
Legislation	<p>Limerick:</p> <ul style="list-style-type: none"> Parklets licenses. Waste Removal and Recycling- compost. CoHousing Provision. Georgian Limerick UNESCO heritage status. <p>Alba Iulia (MAI):</p> <ul style="list-style-type: none"> Public parking spaces (MAI). Waste management and selectively collect.
Behavioural change	<p>Limerick:</p> <ul style="list-style-type: none"> 'Sharing Lanes Workshop', part of City Engage Week 2019 Laneways Community Mapping Workshop, City Engage Week 2019 <p>Alba Iulia (MAI):</p> <ul style="list-style-type: none"> Building a Community around an Urban Garden (MAI).
Others	<ul style="list-style-type: none"> Open House Limerick link to +CityxChange as theme 2019. Culture Night 2019 as public feedback on Project. Cultural Audit/City Branding exercise from URbact. Green Leaf Status- move towards circular economy. Public Data Ownership- information repository.

Specific projects in each city were categorised as legislation, physical intervention or other. Later debate introduced two new categories: “Behavioural change” and “Events”. Finally a clustering exercise proposed chapter titles for the participation playbook.

- Limerick team proposed: understanding the city, animating the city and transforming the city.
- FCs team proposed: engaging citizens, infrastructure, buildings, public space and transport.

8.3.3 Workshop results: Second edition

Theme: Participation Playbook: Understanding the Community and Defining the participatory processes. Conducted on Wednesday 4th September 10:30am -12:30pm CEST. Remote workshop organised by +CityxChange.

8.3.3.1 Goals

This workshop is a combination of the two previous ones. We organized a third workshop since some representatives from FCs and LHCs could not attend the previous ones.

This workshop has two main goals:

- To understand the community in each DA.
- Define themes within +CityxChange participatory playbook and learn more about each city challenges.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

By the end of the workshop we will have a greater understanding of LHCs and FCs communities in DA, as well as a greater understanding of participatory processes (themes typologies and more).

8.3.3.2 Participants

Representatives from three FC attended this workshop: Mesto Písek (MP), Võru (VORU) and Smolyan (SMO):

- Jiří Tencar (Mesto Písek)
- Tiina Hallimäe (Võru)
- Maria Bogotlieva (Smolyan)
- Nadya Foteva (Smolyan)
- Javier Burón (COL) and Magda Sánchez (COL)

8.3.3.3 Exercise 1: Interviews

Interviews can tell us a lot about each demonstration area. Even a small sample of interviews can generate a wealth of data. In this exercise, one or two persons were interviewed, one person did the interviewing, and one person took notes.

Topics	Key Aspects for Mesto Písek (MP) DA	Key Aspects for Smolyan (SMO) DA
DA perception	-	<ul style="list-style-type: none"> • All three DA are lively.
People living in the DA	<ul style="list-style-type: none"> • People over the age of 65 • Families with social background. • Same characteristics as for the rest of the city. 	<ul style="list-style-type: none"> • DA1: older than average, same income as for the rest of the city, family houses with a long history. • DA2: younger than average, slightly higher income than the rest of the city, young families. • DA3: school and kindergarten are present in the area, family houses with a long history.
Active community groups in DA	<ul style="list-style-type: none"> • Residents over the age of 65. • Creative professionals. 	-
Other information	-	-



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.3.3.4 Exercise 2: Define and cluster projects

Specific projects in each city were categorised as legislation, physical intervention or other. After that a clustering exercise proposed chapters for the participation playbook.

Group	Projects Description
Physical	<p>Město Písek (MP):</p> <ul style="list-style-type: none"> • Citizen survey about transportation and parking issues in the city. • Creative workshops with transportation and parking issues. • Discussions with citizens, heritage authority & energy providers on PE. <p>Smolyan (SMO):</p> <ul style="list-style-type: none"> • Citizen survey about improving the neighbourhood's future developments. <p>Voru (VORU):</p> <ul style="list-style-type: none"> • Research about how to bring people to the city center. • Idea generation events about how to bring people to the city center.
Legislation	<p>Smolyan (SMO):</p> <ul style="list-style-type: none"> • Gather focus group to initiate discussions (citizens, experts in EE, RES and legislation). • Capacity building: develop good practices in other cities. • Engage citizens who are users of sport facilities and residents to gather feedback. <p>Voru (VORU):</p> <ul style="list-style-type: none"> • Research on possible obstacles in regulations (heritage protection, etc.). • Organize meetings with house owners, heritage agencies and service providers to discuss energy-efficient renovations.
Others	<p>Město Písek (MP):</p> <ul style="list-style-type: none"> • Creative workshop for citizens on sustainability benefits. • Citizen survey on climate change impact with focus on energy & water. • Information session on positive energy concept. <p>Smolyan (SMO):</p> <ul style="list-style-type: none"> • Information campaign in all three DAs. <p>Voru (VORU):</p> <ul style="list-style-type: none"> • Interviewing DM citizens to understand building conditions.

Finally a clustering exercise proposed chapter titles for the participation playbook: two direction into flow, collecting information from citizens and participatory design.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.3.4 Workshop results: WP3 Workshop Trondheim

Themes: D3.1 presentation and feedback session. D3.2. Development of Citizen Participation Playbook and Platform (T3.2 + corresponding demo activities in LHC/FC): Status, timeline, process & joint understanding (COL (online) + all) Conducted on Tuesday 20th August 9:30am -12:30pm CEST. Location: Bytorget, Trondheim

8.3.4.1 Participants

UL: Helena Fitzgerald, Gerard Walsh

SE: Philip Crowe, Alan Mee

LCCC: Rosie Webb

TK: Øyvind Tanum, Kristin Næss, Silja Rønningsen (partly) , Bjørn-Ove Berthelsen (partly)

NTNU: Annemie Wyckmans, Dirk Ahlers, Desiree Brigg, Konstantina Karatzoudi (online),, Savis Gohari, Eivind Junker (partly), Andrew Perkis, Jan Ketil Rød, Alenka Temeljotov-Salaj, Bradley Loewen (partly), Anthony Bukulo (partly), Coline Senior, Carmel Lindkvist (partly), Letizia (partly), Brita Fladvad Nielsen (partly), Tone Merete Aasen (partly); David Collins; COL: Javier Buron (remote)

8.3.4.2 D3.1 presentation and feedback session

T3.1 is about creating a framework that will support cities to create their bold city vision. One of our KPIs is that 7 cities need to get their bold city visions approved. How to deal with the complexity of urban systems in creating such a vision? How do we link what is happening in the project, to the SDGs? From the city perspective, linking to global policies. Main processes in the BCV framework:

- Standardisation
- Policy development
- Innovation partnerships
- Organisational development
- Citizen engagement
- Project development

How to connect policy development and engagement?

Inclusive process - how to link the operationalisation of the BCV to the other tasks?

KS: These bullet points are not moving at the same time. Some are more advanced, or there are more windows of opportunity for another bullet point at the moment. It is important to know, however, how each point is going to move forward. Sorting the activities we do into a system, into a strategic level. Planners tend to look at this process top down, long-term processes, formal processes bound by law. To sort out how the different sectors in a public organisation understand each other, is quite a big task. A lot of negotiations. If you then add a layer of participation, this makes the process much more complicated. Using digital tools can help to make things more tangible. Check when time frames of the different points collide - maybe this is a good time to organise something together, e.g. a festival?



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

ØT: This kind of process jumps between the different points, it makes no sense to create a rigid framework. System level - creating the BCV framework. Process design and principles - guidelines for an inclusive process, linking the deliverables. Methods and tools - the different deliverables.

BF: Understanding the connection points between what is visible for the citizens, and what is not. Service design. In order to solve the complex challenges, we need to find a way to feed citizen needs into the service design, to what is behind the desk.

AM: very useful presentation, it makes it easy to understand the process behind the BCV. The story is very useful. This will influence how we think about the innovation playground framework. And link this with the development of policy in Limerick

RW: also, to make sure it links to citizen engagement, how to make the timelines connect

ØT: compromise between making it useful, or delivering the task that was described

KN: if you see across the cities, in terms of everything we need to change in the world, the framework makes sense. It is a good theoretical/abstract framework. We do need to make it work in practice. It is just quite far from the every-day municipal planning.

PC: We could put tracing paper on top of the framework and integrate the other tasks into them - some only work with engage-design-activate, others work with Accelerate.

RW: ISOCARP's workshops to bridge WP3 with WP4-5 have been quite useful, in particular for the cities to have them at the same time. we are going to need a brigade of people to help translate this framework towards local communities. Developing lines of community engagement processes. Co-design workshops with inter-generational participation, etc. How would this actually be used by citizens? How can digital tools help here?

8.3.4.3 D3.2 Development of Citizen Participation Playbook and Platform

- What will this deliverable achieve? Which activities are necessary to achieve this?
- Who will be involved in which activities, and when? What are important milestones?
- Important competencies/resources to include from the contributing partners?
- How will the deliverable be structured?
- How is it related to other tasks?

In the minutes-notes, we'll add additional comments, which will be merged into the T3.2 document afterwards. Integrated framework to take the best of digital tools and traditional methods.

Some cities have a long history of participation, others are quite new. Some do not have a structured process for citizen participation in place. COL wants to create a framework that can deliver towards these different groups.

COL explained how they have been developing the subtasks with the involved partners.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

KN: what is the definition of the terms, what is the boundary for citizen participation for the state of the art? Lots of different things and fields are involved.

KN: D3.1 has frameworks and vocabulary that should be used in T3.2 as well to better align, e.g. the matrix discussion on how to divide between social media, web and civic tech (workshop with TK and SE). There is not a single digital platform, the tools, systems, infrastructure will change all the time. How can this matrix thinking be integrated into T3.2?

KN: Discussing functionality, not only specific tools/platforms. We want to make a strong case for open source. Municipalities still need capacity/capability to run systems inhouse, which they often do not have. Even the threshold of starting with it is really high. Everyone wants to implement digital tools, but it is difficult to start in-house. They are used to buying the competence, and for open source they need to have capacity in-house. Which tools provide the best user experience and user interface? Some interfaces are so simple that people have a hard time understanding them. People are expecting things to look nice, glossy and attractive to use.

JB: This type of process of engaging the citizens and selecting the best tools, also requires a lot of capacity from the citizens, it demands a lot of attention.

DA: Make sure that WP3 digital tools also need to be connected to WP1 overall data architecture for the cities. And check whether the platform will run against third party suppliers (especially when citizen data / census systems are involved)

Integration should both mean the technical integration of tools, but also the integration within city ecosystems and strategies in the meaning of D3.1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

8.4 Annex D: Citizen Participation Playbook Diagrams

Full resolution versions of the four participatory processes described in [Chapter 4](#). Original PDFs have been attached and a thumbnail version is included below for reference:

1 Citizen participation Playbook Co-creating physical/urban interventions

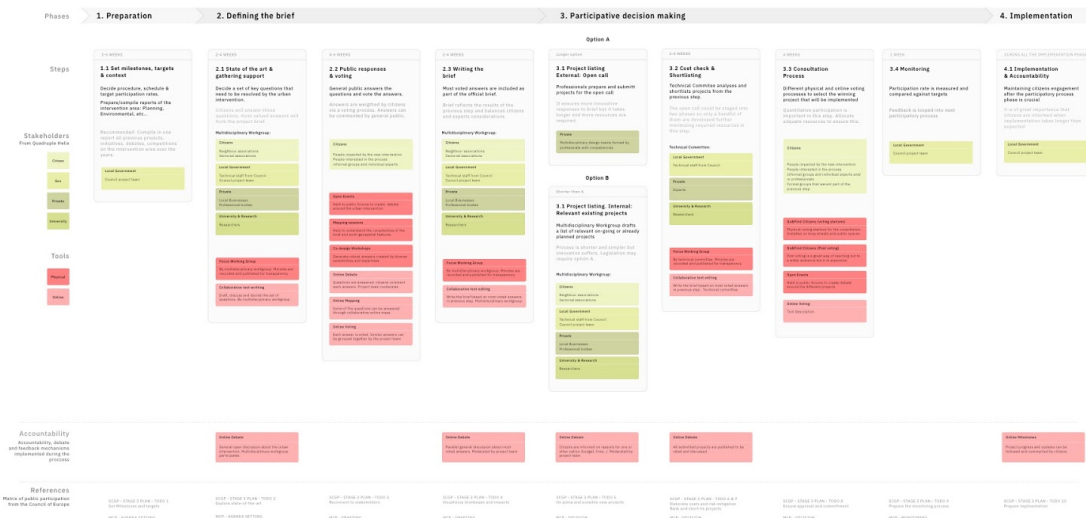


Figure 8.4.1 Co-creation of Urban Interventions full diagram by +CityxChange

2 Citizen participation Playbook Collaborative legislation

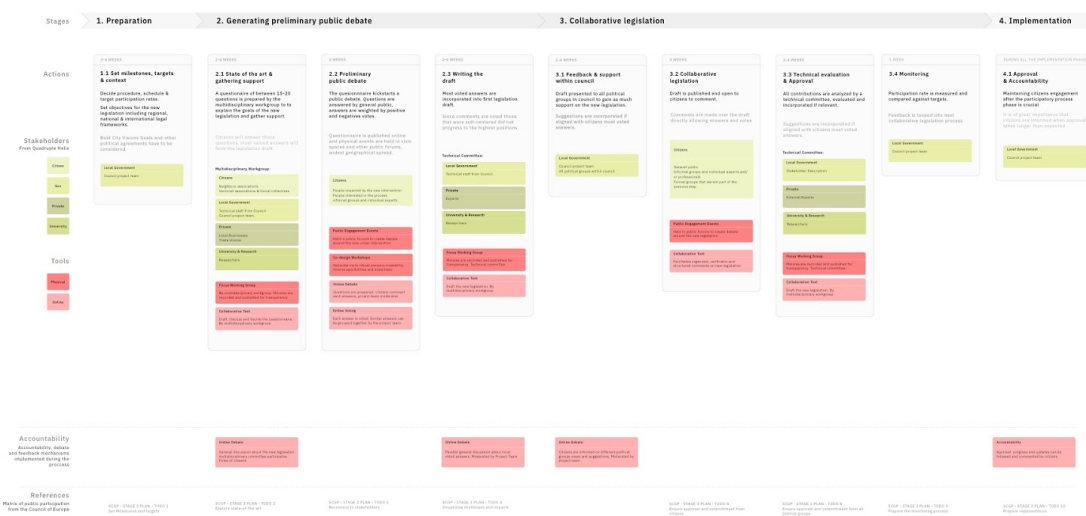


Figure 8.4.2 Collaborative Legislation full diagram by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

3 Citizen participation Playbook

Participatory budgeting



Figure 8.4.3 Participatory Budgeting full diagram by +CityxChange

4 Citizen participation Playbook

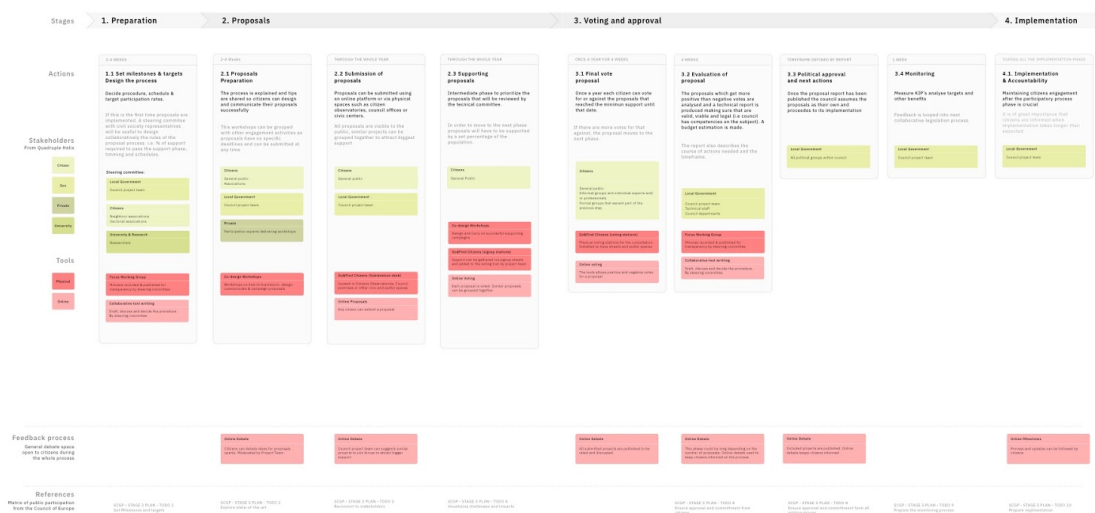


Figure 8.4.4 Citizen Proposals full diagram by +CityxChange



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 824260.

1 Citizen participation Playbook

Co-creating physical/urban interventions

Phases

1. Preparation

2. Defining the brief

3. Participative decision making

4. Implementation

Option A

[illegible]

Accountability

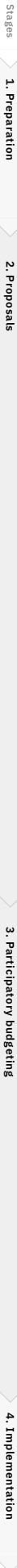
accountability, debate and feedback mechanisms implemented during the process.

References

Matrix of public participation
from the Council of Europe

3 Citizen participation Playbook

Participatory budgeting



Actions	2-4 WEEKS	Duration	4-6 WEEKS	3-5 WEEKS	6-14 WEEKS, depending on # of proposals	4 WEEKS	2 WEEKS	1 WEEK	DURING ALL THE IMPLEMENTATION PHASE
	1.1. Set milestones & targets, Design the process Decide procedure, schedule & target participation rates. A steering committee, representative of the community, creates the rules in partnership with the city council. The process is inclusive and opens local needs to be taken into account.	2.1. Participatory Meetings Through meetings and online tools, citizens share and discuss ideas for projects and use of specific city district. Meet, share and exchange proposals, define the foundation for successful participatory budgeting processes	2.2. Submission of proposals In this phase any citizen can propose a project or service for the district. All proposals are visible to the public, a table projects can be grouped together to attract the biggest support	2.3. Supporting proposals Intermediate phase to provide the proposals and will be reviewed by the steering committee. Advise the citizens and support them to improve their proposals and engagement. Most supported proposals are then visible for evaluation	2.4. Evaluation of proposals Most voted proposals are evaluated and budgeted. Approved proposals become the basis for the implementation phase and the steering committee and the city council are involved with a evaluation report.	3.1. Final vote projects During this phase each citizen votes on the projects as they want to be implemented. Each budget is visible so each citizen can decide how the total budget can be spent during the voting period.	3.2. Final results & Approval All projects are ordered by number of votes. From this list projects are selected in descending order of votes. The city council budget for the year, to be approved by the council. Once approved, all included projects are published	3.3. Monitoring Participation rate is measured and compared against targets Feedback is passed into the next participatory budgeting process	4.1. Implementation & Accountability Maintaining citizens engagement across the participatory process It is of great importance that citizens are informed when implementation takes longer than expected
Stakeholders From Quadruple Helix	Steering committee: Citizens Local Government Council project team Citizens Business associations Sectoral associations Citizens Neighbour associations Sectoral associations University & Research Institutions	Citizens Business associations Sectoral associations Local Government Council project team Citizens Business associations Sectoral associations	Citizens General public Local Government Council project team	Citizens General public Local Government Council project team	Local Government General public Business associations Council departments Academic institutions Citizens General public and individual experts and professionals Local Government Council project team Private sector Academia	Local Government All political groups within council Citizens General public and individual experts and professionals Local Government Council project team Private sector Academia	Local Government All political groups within council Local Government Council project team	Local Government Council project team	
Tools	Focus Working Group Project steering & facilitated by representatives in steering committee Collaborative tool voting Only citizens and decide proposals by sharing committee	For design workshop Workshop of ideas with commitment to projects and how to spend money jointly Facilitation Workshop of ideas with commitment to projects and how to spend money jointly Facilitation Workshop of ideas with commitment to projects and how to spend money jointly	Online proposals Any citizen can submit a proposal with a budget	Online voting Any citizen can submit a proposal with a budget	Focus Working Group Project steering & facilitated by representatives in steering committee Collaborative tool voting Only citizens and decide proposals by sharing committee Online evaluation Workshop of ideas with commitment to projects and how to spend money jointly Online evaluation Workshop of ideas with commitment to projects and how to spend money jointly	Online evaluation Workshop of ideas with commitment to projects and how to spend money jointly Online evaluation Workshop of ideas with commitment to projects and how to spend money jointly Online voting Any citizen can submit a proposal with a budget	Local Government Council project team Local Government Council project team	Local Government Council project team	

Accountability The accountability, deliver and feedback mechanism implemented during the process	Online data Data collected in each district can be used to inform the steering committee and the city council	Online data Data collected in each district can be used to inform the steering committee and the city council	Online data Data collected in each district can be used to inform the steering committee and the city council	Online data Data collected in each district can be used to inform the steering committee and the city council	Online data Data collected in each district can be used to inform the steering committee and the city council	Online data Data collected in each district can be used to inform the steering committee and the city council	Online data Data collected in each district can be used to inform the steering committee and the city council	Online data Data collected in each district can be used to inform the steering committee and the city council	Online data Data collected in each district can be used to inform the steering committee and the city council
----------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------

References Mainst of public participation from the Council of Europe	SGDP - STAGE 1 P.M.A. - 1000 1 MCP - MONITORING	SGDP - STAGE 2 P.M.A. - 1000 2 MCP - MONITORING	SGDP - STAGE 3 P.M.A. - 1000 3 MCP - MONITORING	SGDP - STAGE 4 P.M.A. - 1000 4 MCP - MONITORING	SGDP - STAGE 5 P.M.A. - 1000 5 MCP - MONITORING	SGDP - STAGE 6 P.M.A. - 1000 6 MCP - MONITORING	SGDP - STAGE 7 P.M.A. - 1000 7 MCP - MONITORING	SGDP - STAGE 8 P.M.A. - 1000 8 MCP - MONITORING	SGDP - STAGE 9 P.M.A. - 1000 9 MCP - MONITORING
------------------------------------------------------------------------------------	----------------------------------------------------	----------------------------------------------------	----------------------------------------------------	----------------------------------------------------	----------------------------------------------------	----------------------------------------------------	----------------------------------------------------	----------------------------------------------------	----------------------------------------------------

https://councilofeurope.eu/participatory-budgeting/

4 Citizen Participation Playbook

Stages

1. Preparation

2. Proposals

3. Voting and approval

4. Implementation

Actions

1.1 Set milestones & targets
Design the process
Decide procedure, schedule & target participation aims.

Stakeholders
From Quaternary level

Citizens

Our

Private

University

Tools

Physical

Online

2-4 WEEKS

2-4 WEEKS

THROUGH THE WHOLE YEAR

THROUGH THE WHOLE YEAR

ONCE A YEAR FOR 4 WEEKS

4 WEEKS

THROUGHOUT THE YEAR BY REPORT

1 WEEK

THROUGHOUT THE IMPLEMENTATION PHASE

2.1 Proposals
Preparation
The process is explained and tips are given as citizens can design and submit their proposals successfully.

This workshop can be grouped with civil society representatives and implemented. A steering committee collaborates every 10 weeks if a proposal process, i.e. % of support and feedback, is set up from the beginning and schedules.

Citizens
General public
Academy
Local Government
Council project team

Citizens
Higher associations
Neighbourhood groups
University & research
Institutions

Private
The support is given during workshops

Online
The support is given during workshops

Citizens
General public
Academy
Local Government
Council project team

Private
The support is given during workshops

Online
The support is given during workshops

Citizens
General public
Academy
Local Government
Council project team

Private
The support is given during workshops

Online
The support is given during workshops

Citizens
General public
Academy
Local Government
Council project team

Private
The support is given during workshops

Online
The support is given during workshops

Local Government
Council project team
Technical staff
Council departments

Private
The support is given during workshops

Online
The support is given during workshops

Local Government
All political groups within council

Local Government
Council project team

Local Government
Council project team

3.3 Political approval
and next actions
Once the proposal report has been published the council assumes the procedures to its implementation

3.4 Monitoring
Measure KPIs, analyse targets and other results
Feedback is brought into next collaborative legislation process

4.1 Implementation
& Accountability
Monitoring citizens engagement after the participatory process
It is of great importance that citizens are informed when implementation takes longer than expected

Implementation takes longer than expected

Feedback process
General debate space
open to citizens during
the action process

References
Main: 4
From the Council of Europe

SCOP - STAGE 1 P.M.A.N. - 2000 1
See the action and the action

SCOP - STAGE 2 P.M.A.N. - 2000 2
European state and the action

SCOP - STAGE 3 P.M.A.N. - 2000 3
European state and the action

SCOP - STAGE 4 P.M.A.N. - 2000 4
European state and the action

SCOP - STAGE 5 P.M.A.N. - 2000 5
European state and the action

SCOP - STAGE 6 P.M.A.N. - 2000 6
European state and the action

SCOP - STAGE 7 P.M.A.N. - 2000 7
European state and the action

SCOP - STAGE 8 P.M.A.N. - 2000 8
European state and the action

SCOP - STAGE 9 P.M.A.N. - 2000 9
European state and the action

SCOP - STAGE 10 P.M.A.N. - 2000 10
European state and the action