Citizen E-participation: The Experience of LABMET in the Metropolitan City of Cagliari

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Abstract. The importance of digital transition for Europe's growth and economy cannot be overstated. One of the key components of digital transition is e-participation. In Europe, e-participation has been viewed as a way to increase the legitimacy of public institutions and rebuild trust among citizens. Efforts to integrate information and communication technologies into state processes have been identified as good e-participation practices in European countries. The Metropolitan City of Cagliari has taken a step forward by implementing Decidim within LABMET. LABMET is an experimental metropolitan innovation laboratory promoting citizen engagement in decision-making. LABMET participated in the "OpenGov Project: Methods and Tools for Open Administration", launched by the Department of Public Functions. LABMET can serve as a model for other European cities seeking to embrace digital transition and promote citizen participation.

Keywords: Decidim · città metropolitana di Cagliari · e-participation · Italian Digital Agenda

The European Digital Agenda represents one of the seven pillars of the Europe 2020 strategy [16]. The Digital Agenda aims to leverage the potential of information and communication technologies (ICT) to foster innovation, progress, and economic growth, with the development of the single digital market as its primary objective. Within the European Digital Agenda framework, Italy has developed a national strategy, identifying priorities and intervention methods, as well as the actions to be carried out and measured based on specific indicators, in line with the scoreboards of the European Digital Agenda. The Italian Digital Agenda was developed in partnership with the Conference of Regions and Autonomous Provinces; this agenda aims to revolutionize the country's digital landscape. The Italian Strategy for Ultra-Broadband and the Strategy for Digital Growth 2014–2020 are critical components of this plan, and they are designed to meet the objectives of the Digital Agenda [14].

The Italy Digitale 2026 Plan (Agenda Digitale Italiana) aims to make the country's public administration more digitally accessible. The Italian government has allocated 27% of the resources in its National Recovery and Resilience Plan (PNRR) towards the digital transition of the country.

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1 PNRR

In the PNRR, ample space is dedicated to digitalization, both of the public administration and of the production system [6].

Mission 1 of the PNRR concerns digitalization, innovation, competitiveness, and culture. Its general objective is "the innovation of the country in a digital key, thanks to which to trigger a real structural change", and it sets out some broad sectors for intervention:

1. Digitalization and modernization of public administration
2. Justice reform
3. Innovation of the production system
4. Implementation of broadband
5. Investment in tourism and cultural heritage.

The intervention lines of the mission are developed around four design components:

1. Digitalization
2. Innovation and security in public administration (PA)
3. Digitalization, innovation, and competitiveness of the production system
4. Tourism and culture 4.0.[1].

The total resources allocated to Mission 1 amount to 40.32 billion euros, in addition to 0.8 billion euros from React-EU and 8.74 billion euros from the Complementary Fund, making a total of 49.86 billion euros.

Digitalization, which is one of the transversal themes of the plan, also recurs in the other missions involving different sectors:

- Educational programmes, the skills of teachers and students, and administrative functions and building infrastructure of schools (Missions 2 and 4).
- Healthcare, hospital infrastructure, medical devices, personnel skills and updating (Missions 5 and 6).
- Technological advances in agriculture, industrial processes, and the tertiary sector (Missions 2 and 3).

The first component of Mission 1, which concerns the digitalization, innovation and security of the PA, is divided into three sectors of intervention: digitalization of the PA, modernization of the PA, and organizational innovation of justice.

The total allocation for the component's interventions amounts to 11.75 billion euros distributed across seven investments and three reforms.

The plan focuses on two main pillars: the digitalization of public administration and the development of high-speed networks. The program includes five ambitious goals: disseminating digital identity and skills; bridging the digital literacy gap; bringing 75% of public administrations onto cloud services; delivery of 80% of essential public services online; and provision of ultra-high-speed broadband to every household and business.

[1] https://temi.camera.it/leg18/temi/tl18_informatizzazione_delle_pubbliche_amministrazioni.html

The Italian government has allocated three billion euros to fund the initiative, and the total budget for digital infrastructure and enabling of cloud migration is 1.9 billion euros.

1.1 E-government and E-participation

The future of civic engagement is characterized by both technological innovation as well as new technological user practices that are fuelled by trends towards mobile, personal devices; broadband connectivity; open data; urban interfaces; and cloud computing [5].

E-government or digital administration refers to the use of ICT in administrative processes with the aim of making the action of public administration more efficient, improving the quality of public services provided to citizens, and reducing costs for the community. Local governments have been able to enhance citizen participation and engagement with society through the use of ICT, which has presented an avenue for new initiatives and tools [13].

E-participation is part of the e-government toolbox. E-participation has been recognized as an effective means for governments to engage with citizens and promote transparency and accountability. By leveraging digital technologies, governments can provide citizens with greater access to information and decision-making processes [7].

A growing body of research suggests that e-participation is becoming more widely used to interact with citizens and governments and deepen collaboration between them. E-participation aims to give individuals greater access to data and services, and it encourages their involvement in policy development, ultimately elevating citizens' rights and benefitting society [7]. E-participation is significant for policy-making [8] as well as for urban planning [4].

Over the past few years, there has been significant growth and an emerging e-participation research area [12]. E-participation concerns the extension and transformation of participation in societal democratic and consultative processes mediated by information and ICT [11]. According to the UN,[2] e-participation is about fostering civic engagement and open, participatory governance through ICT.

Several platforms offer the possibility to discuss ideas, participate in online consultations, and interact directly with policy-makers. Among them, Decidim is becoming one of the most employed. Decidim is a participatory democracy platform that allows citizens to participate in the decision-making process in their communities. Decidim is a digital platform for citizen participation. Created in 2015, it is a free/libre, open, and safe technology, and it is based on transparency, collaboration, and citizen empowerment. Various organizations, cities, and countries worldwide have adopted the platform, including NGOs, universities, trades unions, cooperatives, and neighbourhood associations [15].

Decidim is a public commons, free, and open digital infrastructure for participatory democracy [2]. Several research studies have focused on Decidim, especially in the Catalan context [1, 3, 10] (Fig. 1).

[2] https://publicadministration.un.org/en/eparticipation.

2 Case Study

2.1 The Metropolitan City of Cagliari (MCC)

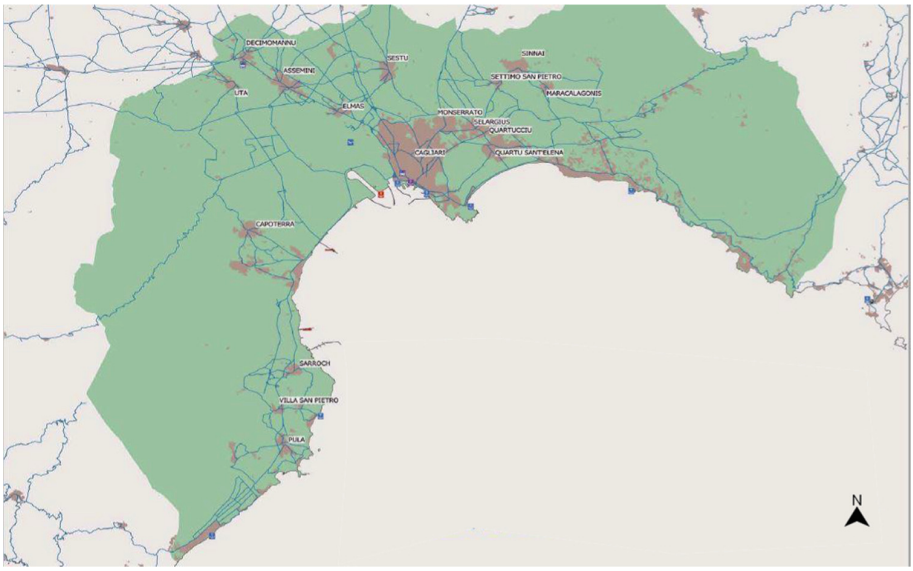

Fig. 1. Map of the Metropolitan city of Cagliari

The MCC is the only metropolitan city in Sardinia. It was established on 4 February 2016 by Article 17 of the regional law, n. 2 "Reorganization of the system of Local Autonomies of Sardinia", replacing the Province of Cagliari from 1 January 2017 (Resolution of the Regional Council, 25 October 2016, n. 57/12) [19].

Its capital is the city of Cagliari and it incorporates 17 municipalities: Assemini, Cagliari, Capoterra, Decimomannu, Elmas, Maracalagonis, Monserrato, Pula, Quartu Sant'Elena, Quartucciu, Sarroch, Selargius, Sestu, Settimo San Pietro, Sinnai, Uta, and Villa San Pietro.

It has a population of 419,022 inhabitants [17] and covers an area of 1,248 km^2. It is the only Italian metropolitan city established by creating a new aggregation of the capital and its conurbation according to the logic of a metropolitan area, and not by simply changing the name of the old province [9].

2.2 The Metropolitan Strategic Plan

In July 2021, the metropolitan strategic plan was approved. The plan encompasses the development strategies of the metropolitan area for a medium-term period of 10–15 years. The plan consists of a strategic document, which summarizes the objectives, the process, and the forms of participation envisaged for implementation, and 13 projects relating

to system actions, five of which are identified as priorities. The five priorities are connected to the project ideas that emerged from the co-planning phase negotiated by the municipalities, which took place during 2021 [20] (Fig. 2).

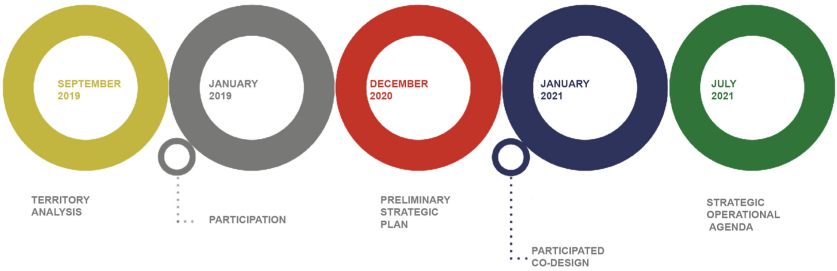

Fig. 2. Time line of Metropolitan strategic plan

2.3 *Anello Sostenibile*: The Sustainable Ring

L'anello sostenibile ("The sustainable ring") of the MCC is the primary action identified by the metropolitan strategic plan. Its objective is the construction of a sustainable infrastructure that connects the natural and urban areas of the 17 municipalities of the vast region. The sustainable ring is an integrated system of social, environmental, and transport infrastructures, interconnected thematically and geographically, and capable of producing sustainable urban regeneration on a metropolitan scale. In particular, the plan aims, through the innovative use of existing buildings and spaces, to create a network of green infrastructures and connections between wetlands, on the one hand, and a network of cultural and sporting services, on the other. In addition, numerous school and sports facilities and civic markets will be the subject of an energy optimization project aimed at saving energy and technological innovation. Many urban and extra-urban green areas have been created to mitigate heatwaves and the presence of pollutants; many places have been valorized and given back to the population, with significant involvement of the third sector (Fig. 3).

2.4 LABMET Platform: Metropolitan Innovation Laboratory – OpenGov

The MCC is one of the local administrations that has joined the OpenGov project,[3] which provides methods and tools for open administration and was launched by the Dipartimento della funzione pubblica (Department of Public Function) to disseminate and support open government methodologies in national and local public policies. The project aims to transfer the methodology and tools for the design of participatory processes, mainly using an open-source technological platform (decidim.org) for online consultation [18] (Fig. 4).

[3] https://open.gov.it/. The OpenGov project is funded under the PON Governance and Institutional Capacity 2014–2021, Axis I – Specific objective 1.1 "Increase transparency and interoperability and access to public data" – Action 1.1.1.

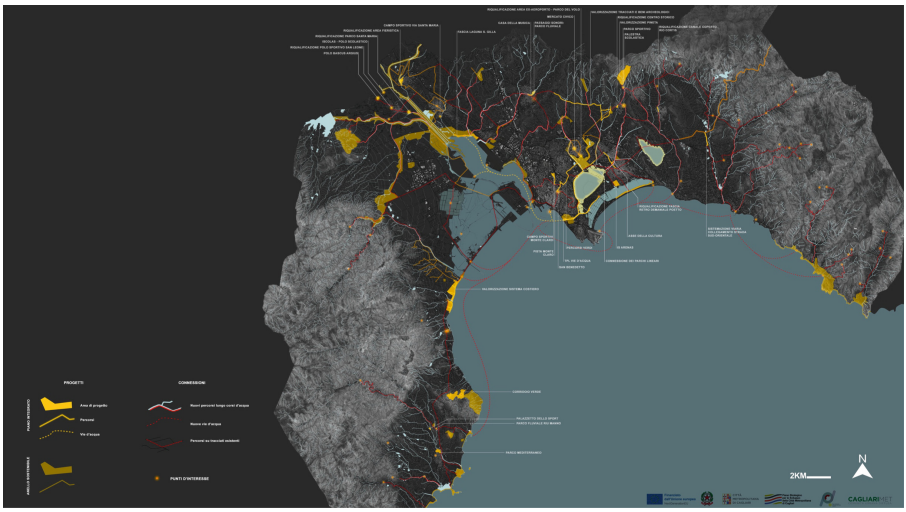

Fig. 3. Masterplan of Anello sostenibile.



Fig. 4. Decidim platform

The MCC decided to employ the Metropolitan Innovation Lab (LABMET) as a pilot project. LABMET is one of the leading activities of the strategic plan of the MCC.

LABMET provides for the population's involvement through opportunities for discussion and workshops activated on the open-source participation platform. In addition, it offers initial responses to the need for multi-institutional and multi-actor partnerships and shared knowledge, and it ensures the construction of durable urban policies and operational projects capable of adapting over time.

LABMET is designed to enable lasting, cross-cutting planning built with territorial actors and, above all, in a way that respects local realities. As such, it pursues the following objectives:

- Strengthen the participatory process with and among civil society actors
- Strengthen the metropolitan city's action in building strategic design and support for municipalities in the metropolitan area
- Involve all actors in innovative experimentation and co-design of common interaction spaces
- Involve all stakeholders in designing and implementing public projects and transformation policies.

The general objectives are to propose participatory methods and tools for public administrations within territorial planning, to implement skills, and to activate a direct line with local stakeholders. The specific goals are, initially, to build an atlas of local resources for the landscape and, subsequently, to develop guiding visions of urban transformation and to integrate the results into the feasibility project on the sustainable ring. The project led the MCC to acquire its own Decidim platform.

To address the primary aims of the project, over 50 participants were invited to contribute, including officials of the MCC and all 17 municipalities. In addition, several stakeholders were involved from various sectors: mobility, sport, sector associations, professional orders, and universities.

The project included teaching and laboratory activities. The training activities were carried out from December 2021 to March 2022 through four online seminars and webinars with around 30 participants. Learning moments were dedicated to:

- Principles of open government
- Involvement of citizens in public decisions as an aspect of transparency
- Open government data as an accountability tool.

After the seminar phase, five workshops with different focuses were conducted online. The topics of the workshops were:

- Sharing of local resources for the landscape and design of the atlas of resources
- Guiding ideas for MCC in 2026 and the role of the sustainable ring; construction of guiding visions
- Visions of the MCC in 2026 and design of the sustainable Cagliari 2026 scenario.

The participatory urban planning laboratory also enabled the transfer of planning methods and languages towards key subjects of public action so that the administrations could autonomously promote participatory paths.

Canale navigabile: **navigable canal**

The topic for the e-participatory consultation was the Terramaini – La Palma navigable canal project (Fig. 5).

The project offers new connection opportunities through the friendly use and exploration of the areas of the canals, gulf, and lagoons surrounding the city of Cagliari.

The general project of the waterways pursues the objective of offering alternative and sustainable mobility routes to connect the municipalities of Monserrato, Cagliari, Elmas, and Assemini. The theme of connection aims to develop new mobility services, create a

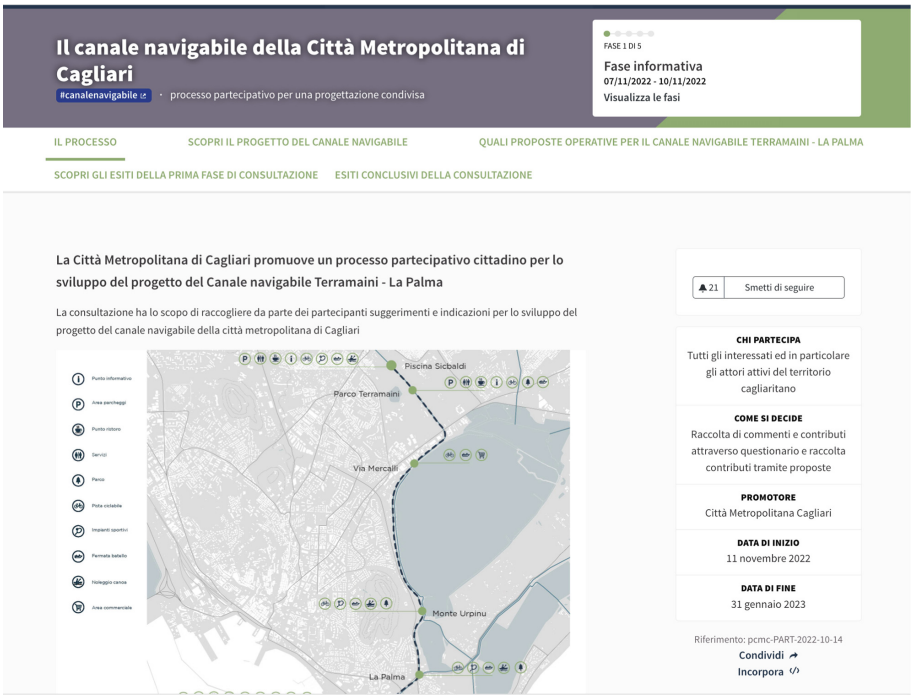

Fig. 5. MCC decidim platform

healthy life and new opportunities for recreation and enjoyment of nature, increase the permeability of the urban fabric, and develop intermodality. The central theme of the general project is to enhance the environmental resources of the territory, such as the salt pans of Molentargius, the park of Molentargius, and the pond of Cagliari, together with the salt pans of Macchiareddu and the lagoon of S. Gilla.

The public consultation, conceived in four phases, aims to gather suggestions and indications from the participants for developing the navigable canal project of the MCC.

11/11/2022 – 10/12/2022

Phase 1 – Collection of feedback on the overall quality of the fairway project.

11/12/2022 – 11/01/2023

Phase 2 – Processing of the intermediate report relating to the feedback on the overall quality of the project.

11/01/2023 – 31/01/2023

Phase 3 – Collection of contributions and proposals for the waterway project.

01/02/2023 – 28/02/2023

Phase 4 – Preparation of the final consultation report on the fairway project.

The objectives of the participatory process are to:

1. Communicate and disseminate the planning strategy and the lines of intervention
2. Promote a citizen debate that allows the channel's vision to be understood in relation to the technical work of planning pre-feasibility

3. Facilitate the comparison and collection of information and proposals to complete the technical design work
4. Facilitate the monitoring of the elaboration process.

The key issues that the consultation addressed were:

1. Placement of stops
2. Stop functions
3. Type of piers
4. Implementation of the paths
5. Management
6. Main function.

The public consultation had a total of 45 contributions from eight different users (Fig. 6).



Fig. 6. Figure 5 MCC decidim platform

3 Conclusion

The experimentation process of the MCC within the OpenGov project is significant. It includes the participatory process using the Decidim platform and a training course regarding digital transition issues. Therefore, the metropolitan city, in addition to adopting digital tools, creates a culture of participation with the active involvement of the administrations.

The *canale navigabile* topic chosen for the experimentation of the participatory consultation is certainly of interest to citizens, but it is not too accessible regarding the direct impact on citizens' lives and is not fully comprehensible. The navigable canals are not typical of ordinary life conditions, although they have high potential for the city's urban development. They constitute a complex subject in which different administrative skills are necessary. Among the critical elements of the first experimentation, there was undoubtedly the tool's novelty and its use: accessing the Decidim platform requires

registration. Even though the LABMET project includes the 17 municipalities of the metropolitan city, the planning object of participation is in the Cagliari area and is specifically addressed to its citizens.

There were four phases of the consultation, and they followed the standard consultation times. However, it would be helpful to have more preliminary time to create a communication campaign linked to the Decidim tool to understand its true potential. Furthermore, it would have been appropriate to start the process through a face-to-face meeting on the specific theme of the waterway. The phases have all been managed online; the participatory processes managed with Decidim also include face-to-face meetings, and they build a hybrid path where face-to-face interactions are alternatives to sharing ideas and online proposals. Although a communication campaign was launched using social media tools, such as a dedicated Instagram page, citizens needed more involvement.

Critical issues were found regarding promotion and outside communication, as for all participatory processes. Specifically, there is a risk that only the citizens directly involved in the experimentation and the technicians know the project. On the other hand, the Decidim process has the peculiarity of foreseeing clarity and sharing results from its planning, for which intermediate reports have been developed during the different phases. Furthermore, this participatory approach has the advantage of continuing the project, which will see definitive and executive planning.

The OpenGov project has fully achieved its objectives. By the end of the process, the metropolitan city had its own Decidim platform, and in April 2023, a month after the end of the process, it has already launched a new participatory project for the candidacy of European Green Capital of 2025. However, pilot projects are often not continued once the activities have been completed.

Even from its initial phase, the project had some characteristics that enabled it to achieve results:

(i) The administration adheres to the project philosophy. It activates a series of experts within the organization who have followed the training activities during the pilot project phase and who will follow their implementation.
(ii) A strong territorialization of activities through assistance from the FORMEZ PA[4], in close collaboration with the metropolitan city. Furthermore, the pilot project was part of the activity of the institution's strategic plan, which had seen the involvement of institutional actors and civil society.

The MCC, representing 17 municipalities, has made available a tool for participation and activated a "culture of participation" that allows administrations to start participatory processes. LABMET can be a model for other European cities seeking to embrace digital transition and promote citizen participation.

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[4] Formez PA - Center for services, assistance, studies and training for the modernization of public administrations. www.formez.it.

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