

Internet voting for open government: what, why, and how to introduce it in local communities¹

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1. Introduction

A number of local communities in Europe have introduced elements of transparency, participation, and accountability in their municipalities. Still, given the abundance of available data and civic engagement forms, there is always a potential for further development. This is especially promising with the help of the open government framework that encourages the introduction of innovative and digital technologies. One notable tool is *internet voting* (i-voting) since it is able to empower people with a more direct and influential voice in local policy making. Thereby, this paper suggests some concepts and models of open government and i-voting, provides several examples, outlines preconditions, discusses risks, and offers recommendations for introducing i-voting and enhancing open government. This brief is designed as a source of ideas for advancing open government and i-voting in local communities.

2. Why open government and i-voting?

Open government is both a governance framework and an international initiative. According to the OECD, open government is “a culture of gov-

ernance based on innovative and sustainable public policies and practices inspired by the principles of transparency, accountability, and participation that fosters democracy and inclusive growth.”² Such an approach is embodied by the Open Government Partnership (OGP) — the organisation of reformers inside and outside of government working to transform how government serves its citizens, consisting of 76 countries and 106 local governments, and thousands of civil society organisations.³ The value of open government is that it has shaped policy making and implementation as more collaborative, innovative, and effective.

The very development and delivery of open government policies can be further strengthened by digital democracy tools such as ‘internet voting’. Internet voting (i-voting) is defined by e-Estonia as a system that “allows voters to cast their ballots from any internet-connected computer anywhere in the world.”⁴ In such wording, i-voting is equivalent to online voting and includes mobile voting. This differs from such variety of a more generic term of e-voting as e-voting via an electronic voting machine inside a polling station.

¹ This is the ‘local scale’ version of the open government and internet voting policy brief series. For the versions focused on national and EU scales please see <https://www.europeandigital.org/> and <https://ecas.org/>.

² OECD. (2016). Open Government: The Global Context and the Way Forward. <https://doi.org/10.1787/9789264268104-en>.

³ OGP. (2023). About Open Government Partnership. <https://www.opengovpartnership.org/about/>.

⁴ e-Estonia. (2023). e-Democracy & open data. <https://e-estonia.com/solutions/e-governance/e-democracy/>.

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The key advantage and challenge of i-voting is the possibility to cast vote outside a polling station thereby saving time, resources, and enfranchising voters in remote locations. Being a universal instrument, i-voting can be utilised not only for elections but also for advisory and binding participatory policy making.

3. Open government model

The core components of open government are transparency, participation, and accountability. They are described in OGP Local Handbook as follows:⁵

- Transparency assumes that “government-held information (including on activities and decisions) is open, comprehensive, timely, freely available to the public, and meets basic open data standards (e.g., raw data, machine readability) where formats allow.”
- Public participation and inclusion entail that “governments seek to mobilize citizens to engage in public debate, provide input, and make contributions that lead to more responsive, innovative and effective governance.”
- Public accountability requires that “rules, regulations, and mechanisms in place call upon government actors to justify their actions, act upon criticisms or requirements made of them, and accept responsibility for failure to perform with respect to laws or commitments.”

Whereas transparency is a government responsibility, participation is the institutionalised possi-

bility for the active public to influence public policy, accountability can be viewed as a two-way feedback loop between the public and the government.

These cornerstone aspects can be weaved into any thematic policy area, including but not limited to inclusion, civil society, public integrity, public service, digital governance, and green transition.

Within the OGP framework, open government policies are ideally co-created, co-decided, co-implemented, co-monitored, and co-evaluated by authorities, active civil society, and citizens. This is supposed to increase consensus and trust among stakeholders, establish a joint mandate and responsibility for reform delivery, institutionalise the dialogue between the government and the public, supplement government capacity with expert contribution and wide popular input, as well as enhance the quality and legitimacy of programmes and their delivery.

4. I-voting varieties

I-voting is a technical and administrative procedure that can be applied to multiple democratic formats. Of the myriad of varieties of online participation forms that can be strengthened with i-voting, in this section we will focus on only few typical ones. Our approach to digital democracy instruments is based on our own re-interpretation of the encompassing yet requiring a revision Council of Europe’s Indicative Guide on Generic tools and policies for an electronic democracy.⁶

⁵ Open Government Partnership. (2021). OGP Local Handbook. <https://www.opengovpartnership.org/wp-content/uploads/2021/01/OGP-Local-Handbook-English.pdf>.

⁶ Krimmer, R. and M. Kripp. (2009). Indicative Guide No.1 to Recommendation Rec(2009) 1 of the Committee of Ministers to member states on e-democracy. Generic tools and policies for an electronic democracy. Council of Europe. https://www.researchgate.net/publication/275098217_Indicative_Guide_1_Electronic_Democracy_e-democracy_Recommendation_CMRec_2009_1_Adopted_by_the_Committee_of_Ministers_of_the_Council_of_Europe_on_18_February_2009_and_Explanatory_Memorandum.

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Of all democracy forms, probably, the most widespread are elections. It is reasonable to distinguish between elections to public offices (e.g., parliament, presidency vested with formal decision-making authority) and elections to civic posts (e.g., members of civic councils at ministries and government agencies with only advisory voice).

Furthermore, people can vote not only to elect persons, but also to voice their policy preferences. Such voting can take the form of a referendum for approving or disapproving policies or laws (often requiring a certain voter turnout threshold and with binding results), for participatory budgeting projects (allocating funds for development projects, mandatory for implementation), or for clarifying public opinion (for example, via non-binding polls) or expert views (for example, via non-binding surveys).

All these civic participation varieties were originally in-person or paper-based. But due to utilising digital technologies and a real-time internet connection, i-voting is able to amplify them by increasing civic participation rates.⁷ To classify the viewed i-voting types, we propose two core dimensions of differentiation: voting for persons versus policies and binding versus advisory voting

(see Table 1 below).

In relation to open government, the most relevant option is i-voting for choosing policies. Advisory varieties of i-voting, such as i-expert surveys and i-public opinion polls can evolve into binding i-voting such as i-voting for participatory budgeting projects and referenda. Similarly, experimentation with i-elections to civic posts like members of civic councils at government agencies or managerial positions in political parties can lay the foundation for prospective i-elections to the public offices of presidents and the members of parliament.

5. Open government and i-voting: stats and cases

As of April 2023, there were as many as 35 OGP Local members in Europe⁸ (see Figure 1 below). Seven of them are of regional scale (Aragon, Basque Country, Catalonia, Northern Ireland, Scotland, Valencian Community, and Zilina Region) and 28 are of city (Glasgow, Hamburg, and Paris) or town (other 25 local communities) scale. However, altogether they represent only half (14 out of 28) European national OGP members — a rather limited number considering the existence of thousands of local communities in Europe. That could be explained by OGP Local being a relatively new initiative.

Table 1 Selected i-voting varieties

I-voting types	Binding	Advisory
Electing persons	I-elections to public offices	N/A
	I-elections to civic posts	
Choosing policies	I-referenda	I-public opinion polls
	I-participatory budgeting	I-expert surveys

⁷ Goodman, N. and L.C. Stokes. (2020). Reducing the Cost of Voting: An Evaluation of Internet Voting's Effect on Turnout. *British Journal of Political Science*, 50(3), 1155–1167. <https://doi.org/10.1017/S0007123417000849>;

Germann, M. (2021). Internet voting increases expatriate voter turnout. *Government Information Quarterly*, 38(2), 101560. <https://doi.org/10.1016/j.giq.2020.101560>.

⁸ OGP. (2023). OGP Local. <https://www.opengovpartnership.org/ogp-local/>.

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Figure 1 OGP national members in Europe

(source: OGP Data Dashboard, <https://www.opengovpartnership.org/data-dashboard/>)



Although many European cities do practice elements of open government (e.g., by publishing open data, conducting e-consultations, engaging locals in participatory budgeting, etc.), the OGP Local framework is the opportunity for a more systematic, competitive, and therefore streamlined opening government.

A prominent case of both open government and i-voting at the local level can be found in Ukraine. In 2021, two Ukrainian towns won two of three international Open Government Partnership (OGP) Local Innovation Awards: Khmelnytskyi won

the first prize and Vinnytsia gained the third place.⁹ Both towns practice i-voting for choosing local development projects in the framework of participatory budgeting, which is then mandatory for local authorities to implement. Participatory budgeting is a decision-making process through which citizens deliberate and negotiate over the distribution of public resources.¹⁰ This outstanding form of deliberative and direct democracy has demonstrated multiple positive effects on community: increased quality of life, citizen empowerment, and the efficiency of local self-governance.¹¹

⁹ Transparent Cities. (2021). 2021 Special Edition. <https://transparentcities.in.ua/en/news/daidzhest-rehionalnykh-novyn-special-edition>.

¹⁰ Wampler, B. (2007). A Guide to Participatory Budgeting. In A. Shah (Ed.), *Participatory Budgeting* (pp. 21-54). Washington, DC: IBRD / WB. <https://siteresources.worldbank.org/PSGLP/Resources/ParticipatoryBudgeting.pdf>.

¹¹ Khutkyy, D. and K. Avramchenko. (2019). Impact Evaluation of Participatory Budgeting in Ukraine. https://www.researchgate.net/publication/337783495_Impact_Evaluation_of_Participatory_Budgeting_in_Ukraine.

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Apparently, i-voting and OGP Local have a great potential for further development and are worth scaling up to other communities, as e-participation methods have been shown to bring multiple benefits to both citizens and policy-makers – to improve civic education, engage specific target groups such as young people, enhance trust and legitimacy in institutions.¹²

6. Prerequisites for introducing i-voting

For a proper and secure introduction of i-voting, a number of conditions should be met.

Institutionally, the very political system should meet solid rule of law and democracy standards – i-voting in an autocracy or a captured state would most probably lead to rigged elections and cement the existing regime by effectively hiding power abuse. In contrast, a system of checks and balances in a democracy would ensure a secure, trustworthy, and competitive i-voting.

Technologically, there should be an efficient, trustworthy, and widespread technical readiness, resilience, and connectivity. This includes high degrees of computerization, internet coverage, and cybersecurity on the sides of both voting administrators and voters. In other words, the voting administration should be able to conduct i-voting, while the voters should have the technical possibility to vote. Otherwise, i-voting would be either technically vulnerable or confined to a narrow group of digitally privileged public.

In the *human capital* aspect, the digital skills of both voting administrators and voters should be well-developed. This is necessary for them to be able to make use of this e-participation opportuni-

ty. Conversely, i-voting may be underused, misused, or increase the digital divide meaning the gap between digitally privileged citizens and digitally vulnerable groups.

Moreover, there should be a *consensus* among the majority of the political elite, experts in the field, and the public about the introduction of i-voting. Political leadership in establishing one more democratic format is necessary for making it happen, civil society expertise is important for ensuring checks and balances as well as civic monitoring, while wider popular support is essential for the acceptance, take-off, and legitimation of i-voting procedures and outcomes.

7. I-voting-related risks and countermeasures¹³

Due to its digital nature, i-voting is potentially susceptible to multiple *technical risks* related to hardware, software, human error, and misuse. These include technical system malfunctioning, malicious hacking by in-country or out-country state or non-state agents, inaccurate or corrupt voter registers with missing or fake records, misidentification of eligible voters and fake voters, corrupt vote recording, storage, and counting.

To *prevent* these, conducting a rigorous feasibility study, ensuring reliable i-voting system functioning, introducing cyber security measures, increasing human capacity, warranting accurate voter registers, identification reliability, verifiability, and accountability, as well as progressing from advisory to mandatory forms is recommended.

Furthermore, there is a number of *political perils* of influencing voting design and development, voting administrators, and voters themselves.

¹² Lironi, E. (2016). European Parliament Policy Department for Citizens' Rights and Constitutional Affairs. Potential and Challenges of E-Participation at the EU Level. [https://www.europarl.europa.eu/RegData/etudes/STUD/2016/556949/IPOL_STU\(2016\)556949_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2016/556949/IPOL_STU(2016)556949_EN.pdf).

¹³ Khutkyy, D. 2020. Internet Voting: Challenges and Solutions. Policy Paper. https://europeandigital.org/files/19/Internet_Voting_Challenges_and_Solutions_ENG.pdf.

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Political problems include issue framing of a voting subject in media discourse or a voting ballot text, public opinion manipulation using bots, cyborgs, and trolls for opaque micro-targeting individual voters with personalised messages, legally excluding certain groups, such as digitally vulnerable ones, vote disclosure, group pressure, vote coercion, and vote buying.

To *address* them, it is advised to adjust online media regulation via legislative, enforcement, and civic action, safeguard voting secrecy, freedom, and integrity by introducing technical solutions, allowing multiple vote changes online, raising awareness, reporting, and enforcement, and add i-voting as an extra option to offline voting.

Finally, there are some *social challenges* of introducing i-voting. These embrace the preselection effect and confirmation bias that lead to group polarisation and create filter bubbles and distorted social reality, low trust towards democratic institutions that harms the legitimacy of voting results, routine voting and voter absenteeism due to the decreased symbolic value of the vote casting act. These can be *remitted* by civic education and awareness-raising campaigns.

8. Recommendations for enhancing participatory local open government

To advance open government, it is advised to:

- *Identify the needs and expectations of local communities* (e.g., via social media sentiment analysis, public opinion polls, and focus group discussions).

- *Consult experts about prospective areas of open government* in a local community (e.g., commission research or audit).
- *Discuss prospective initiatives of enhancing open government* among local authorities (at a strategic session, exchange visit, practical workshop, etc.).
- *Perform a multistakeholder problem and idea mapping* (e.g., in an online crowdsourcing, online forum deliberation, world café, or other formats).
- *Aim to augment open government in all areas* (transparency, participation, and accountability), although transparency might be the easiest, while accountability – the most difficult one.
- *Refer to the existing standards of transparency*,¹⁴ databases of civic engagement methods,¹⁵ and collections of open government tools.¹⁶
- *Consult OGP Local Handbook*¹⁷ for practical implementation guidelines.
- *Adjust project implementation* in the spirit of experimental democracy.
- *Assess impact, revise, and redesign* open government innovations regularly.
- *Ensure a good feedback loop and real impact* that guarantee citizens will clearly know the outcomes of i-voting processes and also the impact of their contributions on decision-making.
- *Add possibilities for citizens to declare their preferences* via offline voting, other non-digital means.
- *Anticipate human and financial resources* to thoroughly communicate about open government to ensure participation inclusiveness and diversity.

¹⁴ International Open Data Charter. (2023). Principles. <https://opendatacharter.net/principles/>;

5-Star open data. (2023). 5-Star open data. <https://5stardata.info/en/>.

¹⁵ Participedia. (2023). Participedia. <https://participedia.net/>; International IDEA. (2023). Direct Democracy Database. <https://www.idea.int/data-tools/data/direct-democracy>; Khutkyy, D. (2021). Digital Democracy Database. European Digital Development Alliance. <https://www.europeandigital.org/digital-democracy-database>.

¹⁶ OGP. (2023). OGP Toolbox. <https://ogptoolbox.org/en/>.

¹⁷ Open Government Partnership. (2021). OGP Local Handbook. <https://www.opengovpartnership.org/wp-content/uploads/2021/01/OGP-Local-Handbook-English.pdf>.

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