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### **The Future of Government 2030+: A Citizen-Centric Perspective on New Government Models**

The Future of Government 2030+: A Citizen Centric Perspective on New Government Models project brings citizens to the centre of the scene. The objective of this project is to explore the emerging societal challenges, analyse trends in a rapidly changing digital world and launch an EU-wide debate on the possible future government models. To address this, citizen engagement, foresight and design are combined, with recent literature from the field of digital politics and media as a framework. The main research question of the project is: How will citizens, together with other actors, shape governments, policies and democracy in 2030 and beyond? Throughout the highly participatory process, more than 150 citizens, together with CSO, think tank, business and public sector representatives, as well as 100 design students participated in the creation of future scenarios and concepts. Four scenarios have been created using the 20 stories emerged from citizen workshops. They served as an inspiration for design students to develop 40 FuturGov concepts. Through the FuturGov Engagement Game, the project's ambition is to trigger and launch a debate with citizens, businesses, civil society organizations, policy-makers and civil servants in Europe.

# **The Future of Government 2030+**

## **A Citizen Centric Perspective on New Government Models**

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2019

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**Responsibility for the information and views set out in this report lies entirely with the authors.**

## EXECUTIVE SUMMARY

The Future of Government 2030+ A Citizen Centric Perspective on New Government Models project brings **citizens to the centre** of the scene. The objective is to explore the emerging societal challenges, analyse trends in a rapidly changing digital world and launch an EU-wide debate on the possible future government models. To address this, the project adopts a **novel approach that combines citizen engagement, foresight and design**<sup>1</sup> while being rooted in recent literature from the field of digital politics and media.

Our future-oriented perspective looks at possible societal, technological and economic changes to identify enablers for new forms of government from 2030+ onwards. The project intentionally does not look at path-dependencies of today's governmental institutions. On the contrary, it **opens up the imagination** by exploring new future forms of government that are driven by the needs of diverse stakeholders. This leads to the main question of the project:

*How will citizens, together with other actors, shape governments, policies and democracy in 2030 and beyond?*

Putting citizens in the centre, not only is an opportunity to rethink government formats, and individual relationships with the state and institutional ways of working, it also allows us to enter into a discussion about what types of governments we might seek in the future by focusing our exploration on possible future interactions and experiences.

Throughout the highly participatory process, more than **150 citizens, including CSOs, think tanks, public sector and business representatives, and 100 design students together with academic staff**, participated in the creation of future scenarios and concepts. More than **20 stories** emerged from citizen workshops held in **6 EU Member States** and **40 concepts** were produced by students.

Four scenarios have been created: **DIY Democracy** (characterised by decentralisation of power and self-organized communities), **Private Algocracy** (giant digital companies hold the power over citizens and governments), **Super Collaborative Government** (with high collaboration and co-creation between citizens, governments and other stakeholders) and **Over Regulatocracy** (characterised by over-protection by the government through the creation of too many regulations with the help of technology). These scenarios, along with the design concepts of new interactions with government produced by design students, are used as **tools for reflection**, to explore new possibilities and challenge preconceived ideas about government today. This allows us to assess the **redistribution of power relations** between societal actors and political institutions.

Through the use of the **FuturGov Engagement Game**, the project's ambition is to **trigger and launch a debate** engaging citizens, businesses, civil society organisations, policy-makers, civil servants, and others, throughout Europe. By immersing themselves in an **open-dialogue** and **role-playing** game, the participants can **identify challenges, opportunities and interlinkages** among actors and stakeholders, enhance their understanding of how the **decision-making** process can be improved, either in general or on selected issues/themes specifically.

The project shows the need for traditional roles of government and public administration to adjust to emerging and future needs of societies. Besides the already existing initiatives such as e-government and open government, **novel approaches must be tested and embraced**. They could lead to better informed policy making and higher quality services. Using the insights produced throughout the project, and our engagement game to spark discussion with diverse stakeholder groups in the final stages of the project, proved to be interesting, useful and insightful. The **focus on citizens, and students in particular**, was important in order not to have a biased view on public services and processes.

<sup>1</sup> All these approaches are explained in detail in Section 1

The project demonstrated that **technology is perceived as a strong driver** by different stakeholders in society. Besides many opportunities brought by it, **complex ethical and legal issues** need to be dealt with by the government, businesses and citizens. Many participants in this project expressed the need **for democratic governments and Europe to protect their citizens** and continue developing with the **respect of human rights**. This is the only way to restore **trust in the political institutions and processes**.

The evidence from this project suggests that the **dialogue between citizens and institutions** is a priority that should be cultivated further, in order to understand better citizens' concerns and offer solutions that respond to people's actual needs. There is a general feeling among citizens with whom we talked that their voice is not heard by policy makers and that their opinion does not count, despite the fact that citizens are those electing policymakers. The evidence has also showed that the increased responsibility, solidarity and social capital could act as a powerful force in a society.

Therefore, a recommendation is to more systematically introduce **new practices and innovative strategies** to governments in order for them to tackle emerging challenges. Integrated **design approaches, and forward thinking** improve the work of governments and public sectors. The **development of a highly participatory culture** with the **inclusion of citizens in co-creation and co-design** of policies could increase the legitimacy and efficiency of the government and consequently contribute positively to our democratic societies. **Futures literacy** together with **cyber and data literacy** and the promotion of **creative and critical thinking** are needed to be able to face different **future challenges in society**.

# 1 EXPLORING GOVERNMENTS OF THE FUTURE

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## 1.1.Introduction

The rapid growth of social inequalities, migration, and the use of new digital technologies to communicate and exchange or access information, deeply affect both the political participation of European citizens and the relationship between citizens, businesses and governments which are key pillars for an inclusive, peaceful and prosperous democracy. The **transformation of society** is accelerated by new omnipresent digital technologies. It increases the demands for **openness and participation but also for more responsibility, accountability and transparency of all actors in the society**. Positive and negative effects of this transformation need to be further assessed and potential threats to democratic system prevented.

It is important to think and anticipate how institutions need to adapt but also how democracy can be renewed and preserved for the future. In this context, the **shift in power relations** in decision making, new forms of democracy, governance and public value generation need to be considered. Through discussion of individual experiences, needs, expectations, hopes and fears, alternative pictures of the future can be depicted. In this way, it is possible to **explore the uncertainties of future developments and to open up the discourse for plausible futures** beyond imaginaries of policy makers, businesses or experts. If the requirements for future governments are identified by citizens and broader audience, government layouts and working modes could be rethought and a **discussion on how governments might look like** in the future could be launched in society at large.

For almost two decades, the European Commission has pushed governments to be more open, more transparent and more collaborative. As a part of Lisbon Agenda, launched in 2000, e-Europe initiative (2000-2002) tried to ensure that “the European Union fully benefits from the changes which the information society is bringing” (European Commission, 2005). Some of its main goals were to foster participation and social inclusion and reduce digital inequalities in the information society.

The following e-Europe initiative’s (2002-2005) focus was on the modernisation of public bodies, creation of e-government and fostering of e-inclusion (European Commission, 2005). One of three main pillars of i2010 initiative (2005-2010) was the eGovernment, defined as inclusion, better public service and better quality of life based on the creation of a European information society (European Commission, 2007). The Malmo declaration, signed in 2009, represents a commitment of EU ministers to develop eGovernment (online public services) more accessible, interactive and customized for citizens and businesses by 2015. This declaration, with all related preparatory work and follow-up debate, was a cornerstone in shifting the focus from eGovernment to Open Government.

In 2010, a new Digital Agenda for Europe was adopted by the European Commission, which promotes e-inclusion (the inclusion of digital technologies by potentially disadvantaged groups of people) (European Commission, 2010a). Two important follow ups of Malmo Declaration were the Belgian Presidency Conference on Open Government organised in December 2010 and a document produced by DG CNECT in 2013 “A vision for Public services”. The vision looks at public services delivered in an open and collaborative government model, based on one hand on collaboration, transparency and participation and on the other on open data, open services and open decisions.

The current eGovernment Action Plan (2016-2020) is the political instrument to advance the modernisation of public administrations across the European Union, building on the i2010 initiative and the eGovernment Action Plan 2011-2015. At its core is the digital transformation of government, with further modernisation of public administration, seamless cross-border mobility and enhanced digital interactions.

A new ministerial declaration on eGovernment was signed in Tallinn in 2017 . Built upon the Action plan, the European Union Heads of States put modernisation of public services and user centricity as their main priorities. The Tallinn ministerial declaration marks a

new political commitment towards ensuring high quality and efficiency of digital public services and innovative government, based on “user-centricity principles”. Therefore, the goal is to improve the life of citizens and businesses and develop more productive society with less administrative burden, easier access to public services and digital interaction.

Different strategies have been developed at international level as well. The OECD developed a legally non-binding Recommendation on Digital Government Strategies in 2014 (OECD 2014). This Recommendation requested governments to implement strategies that ensure greater transparency, openness and inclusiveness, that encourage the participation of public, private and civil society stakeholders in policy-making and service-design and delivery. There are other initiatives in this field as well. For example, the Open Government Partnership brings together government reformers and civil society leaders to make governments more inclusive, responsive and accountable. The partnership is based on voluntary commitments through an independent reporting mechanism; this mechanism allows all stakeholders to track the progress in participating countries. Collaborative cross-country learning is an important element of the partnership. United Nations Department of Economic and Social Affairs (UNDESA) with their UN eGovernment survey is another organization whose goal is to advance e-government through identifying trends towards global e-government developments and new demands in the public sector.

Based on the previous initiatives of the European Commission, DG CNECT contacted the JRC EU Policy Lab in the first half of 2017 with the proposal to conduct a research study that would look at the future of government 2030 and beyond. Taking up on the challenge of creating not only a desk research work, but a project that would lead to high level debates, the JRC EU Policy Lab multidisciplinary team co-designed a tailored methodology together with DG CNECT. Unlike other similar projects and initiatives, the novel approach that was proposed and implemented was to build and conduct the entire project based on citizens’ and young people’s input and participation.

This specific perspective ensured that the project would bring an added value to the area of both policy and research. To achieve this, different foresight, design and citizen engagement methods were combined, while the project is grounded in recent literature from the field of political science.

**The primary audience** of this report are policy makers, researchers and citizens that throughout this project showed interest in thinking of and creating possible futures and discussing the opportunities and challenges of different governance models.

## 1. 2. Our approach

### **A novel approach combining Foresight, Design and Citizen engagement.**

The EU Policy Lab, is a unique space for testing and experimenting new ways to respond to policy needs. As part of the Joint Research Centre, the EU Policy lab conducts research in innovative ways, harnessing the potential of several disciplines, under the main studies of Foresight, Behavioural Insights and Design for Policy. In the context of the FuturGov project, anticipatory, participatory and creative capacities of both Foresight and Design practices were tested. The team that led this research project consisted of foresighters, designers and political scientists.

#### *What is Foresight?*

**Foresight** is a discipline that offers a structured, systematic and systemic approach to gain valuable insights into the mid-to-long-term future possibilities.

The knowledge developed through foresight enables weighing up of different options, evaluating different courses of action to invest in possible futures and developing informed strategies towards shared objectives. Foresight makes it possible to identify the relevant forces that influence future developments, and how they interact to shape the future of a given system. In the face of uncertainty, foresight can be used to enhance preparedness and to improve resilience.

As we are experiencing high levels of complexities, uncertainties, changing and challenging contexts, gaining insights into the future and taking different perspectives as well as alternative possible future developments into consideration is of utmost importance.

### *What is design?*

**Design** thinking, service design, social design and other design-based approaches are increasingly being used within policy making, government services and social innovation,<sup>1</sup> resulting from growing recognition of their capacity to aid understanding and addressing contemporary public policy issues. With their focus on bringing people's experiences into view as they interact with systems, design opens up issues and provides an inventive experimental space to explore and assess potential solutions.

Design, as it is pursued at the EU Policy Lab, is used to; 1) reach out to and meaningfully involve different groups of people/stakeholders (people-centred), 2) respond to emergent and interrelated issues through the lens of how people experience them in their day-to-day lives (negotiating complexity and uncertainty) and, 3) experiment with new modes of knowledge creation (using visual representations and prototypes). As part of the Joint Research Centre's goal to provide insights and evidence for policy making, design works in collaboration with other disciplines to bring different perspectives into relation with one another, rooted in understanding people's lives and what current issues and new proposals mean for them. Design's added value is to crystallize change by generating material and digital objects that enable stakeholders to explore, assess and decide between competing interpretations of social issues and potential solutions.

### *What is citizen engagement?*

**Citizen engagement**, citizen participation or public engagement is a concept that emerged from Science and Technology Studies. It is a participatory process, with the goal of empowering citizens by involving them in decision making, which was traditionally reserved to more "powerful" actors in society, namely government, businesses and scientists. The concept of "extended peer community" (Funtowicz and Ravetz, 1990) means that citizens should be included in discussions when "stakes are high, values in dispute and facts uncertain". There are many ways to engage citizens in dialogues, eg. science cafes, focus groups, deliberative polls, citizen juries, scenario workshops, consensus conferences.

The overarching aim of the Future of Government project is to establish a dialogue on the possibilities and preparedness for a transformation of governments in the contemporary and future world. This dialogue has been carried out with a wider group of stakeholders including citizens, policy makers, civil society organizations, academia and further interested groups, through different steps as shown on Figure 1. Each step of the project provides tools for participants to become more conscious of how they use the future, futures literate (Miller, 2018). Being aware of anticipatory assumptions, opens up the possibilities of both the future and the present.

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1 For example, see Bason, C, ed. 2014. *Design for Policy*. Aldershot: Gower; Ehn, P., E. M. Nilsson, and R. Topgaard. 2014. *Making Futures: Marginal Notes on Innovation, Design, and Democracy*. Boston: MIT Press; and Manzini, E. 2015. *Design, when everybody designs: An introduction to design for social innovation*. Cambridge, MA: The MIT Press; Fisher, Tom and Gamman, Lorraine. Eds. 2019. *Tricky Design: The Ethics of Things*. London: Bloomsbury.

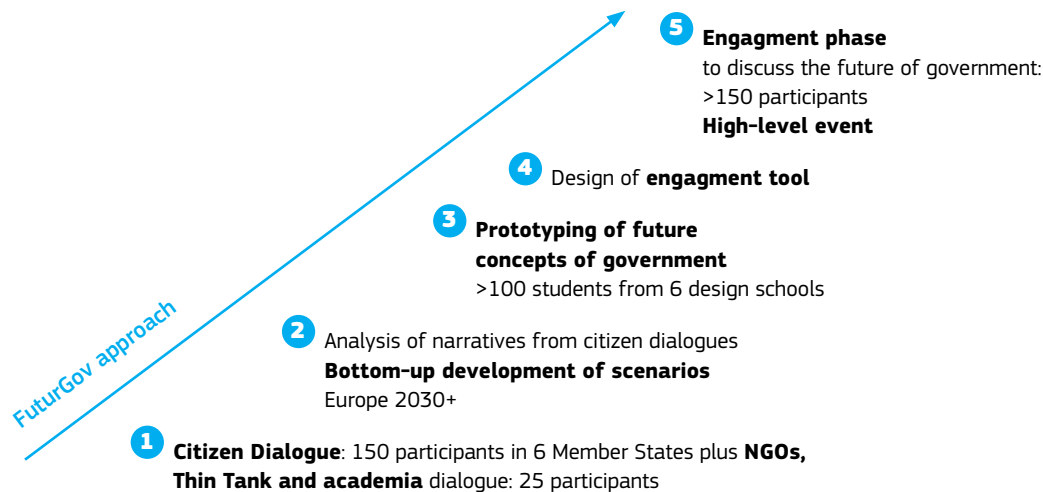


Figure 1: FuturGov project process

**Step 1 Dialogues with citizens and CSOs:** The JRC EU Policy Lab organised a series of workshops with citizens in six European Member States (Austria, Ireland, Malta, Poland, Spain, and Sweden), in parallel with a workshop with international civil society organizations, trade unions and think tanks in Brussels in the period between November 2017 to March 2018. The citizens' workshops were carried out by partner policy labs (see Annex 1) in collaboration with the EU Policy Lab team.

**Step 2 Bottom up scenarios:** The rich qualitative data obtained from the workshops in Step 1 that included insights into system maps of today and of the future, emerged relationships between different stakeholders and storyboards of the future situations, provided the foundation and structuring elements of a set of four future scenarios of the government in 2030+. The narratives were complemented with insights from the literature.

**Step 3 Future of Government Ideation:** The scenarios were a starting point and used as a brief for exploration and ideation about individuals' future interactions with governments. For this step, more than 100 students and research staff from six design schools (from Italy, Poland, Spain, Sweden, Switzerland, UK) delivered a broad range of design concepts, imagining future interactions between individuals and government. They explored the future role and shape of public and private institutions and new forms of relationship between citizens and government. We were especially interested in involving students across Europe in this project (although they were not all European), as the young generation will have a stake in tomorrow's government. By working

with design students, rather than public administration or political science students, we got an outside-in view on different models of government. The selected design concepts can be seen and commented on the EU Policy Lab blog.

**Step 4: Future of Government Engagement:** The last phase of the project focused on engagement. Our objective here was to use the insights generated by the project to develop a reflection tool to stimulate, enrich and further explore the discussion on the topic of the future of government beyond the life span of the project. The tool is a board game designed to immerse people in plausible futures in order to generate new relationships between the following categories of actors: citizen, government, businesses and influencers. The game is intended to stimulate conversations among the players who can be public servants, students and others.

The prototype of the game was developed through a series of testing workshops in several European locations to further fine tune future models of government, informed by the scenarios and the engagement tool (for the list of workshops, see Annex 4/3).

**Step 5: The high-level final event** at the European Parliament and the European Commission supports dialogue between European, national and local politicians and policymakers, NGOs, think tanks, academia and interested public. This event represents the beginning of a broader discussion about the future of government and the implications of this project's results.

The structure of this report follows the process described above. After the review of main literature used for the project that discusses some of the main political and societal issues connected to the principal theme of this project (Section 2), the report continues with presenting the results. Section 3 describes how workshops with citizens were used as an input for the creation of four future scenarios. The scenarios are explained in detail in Section 4. They served as a framework for students of design who produced more concrete concepts and prototypes of the future of government (Section 5). For the purpose of this report we selected six concepts produced by students from six different schools with whom we collaborated. Section 6 presents briefly the FuturGov game that has been developed and tested in the last stage of this project. We conclude by providing key insights from the project (Section 7) and policy recommendations (Section 8). The annexes provide more background information on different stages of the project, as well to list all our partners, students' concepts produced as a part of this project and FuturGov game testing sessions.

# 2 POWER RELATIONS, DEMOCRACY AND CITIZENSHIP: MAIN CHALLENGES



In this section, we are giving a short overview and definition of main concepts and current debates around the possible evolution of future government systems and the understanding of the changing relationships between citizens and governments. This provides a set up for the citizen workshops (Section 3), a basis of scenarios (Section 4) and the grounding of student concepts (Section 5). This overview starts with more general themes of open government, social innovation, democracy and participation. Then we focus more on citizenship, the impacts of technology and political economy of digital platforms. Our goal is not to provide a systematic literature review, but to present and define key issues that are important for understanding the future of government.

The last couple of decades have been marked by profound transformations in society and politics, with complex interactions between real and virtual, and citizens and digital technologies. This goes in hand with social and political instabilities, demographic change and new concepts of citizenship which are appearing (Vesnic-Alujevic et al, 2018). The societal, political, economic and technological changes are influencing citizens, businesses and governments. This is creating the conditions to rethink the relationships between the government and citizens and the business sector.

Mainly driven by hyperconnectivity, **individuals' values and identities and thereby their role in society are shifting**. Social networks offer new forms of far-reaching information and communication as well as location independent networking. This allows a broader information base (but without excluding rumours and misinformation) about policy-making as well as new relationships and new ways to influence power. It is important to stress that the lack of gatekeepers in digital media leads to more freedom of expression that is not necessarily beneficial for a society (eg. hate speech). Within recent years we have witnessed massive spread of disinformation in the past years massively spread through online channels that is highlighting a need for more regulatory frameworks that are up-to-date to deal with technological developments.

In the hyperconnected world, **one of the increasing commodities is ownership of individuals' data**, seen as a determinant of power. Data governance is an important challenge for every government. Based on the new business model of digital companies and new sources of profit making, users' data are harvested as a free commodity. This contributes to changing forms of democracy, public service design and policy making (Stehling et al, 2018). The data sharing between different platforms, raise important debates on privacy, security and trust (eg. Facebook Cambridge Analytica).

**New non-traditional forms of politics have arisen or changed** lately under the influence of digital environment. The so-called networked social movements have got an important role in politics – especially when the online actions are coordinated with the offline ones and with the possibility to become transnational (Castells, 2015). For example, political movements such as recent *Gilets jaunes* (in France and Belgium), *Climate marches* (in Belgium) or *#MeToo* (globally) have become more powerful and unpredictable. However, many authors are less optimistic in regard to the possibilities for more political engagement offered by “a capitalist, entertainment driven” Internet (Levy, 2016).

**Trust in political and social institutions and processes** is an important value that contributes to the efficient functioning of every democratic society. It connects citizens to institutions and increases the legitimacy and efficiency of democratic governments (Mishler & Rose, 2001; Godefroidt et al, 2015). Public trust in governments as well as politicians<sup>1</sup> is generally low in European countries<sup>2</sup> and voters' generational divide is very visible (Farrell

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1 It is believed that the trust generally decreases. For example, *the 2019 Edelman Trust Barometer compares trust people have in different societal actors and the majority of surveyed persons trust their employer (75%), compared to trust in NGOs (57%), business (56%) and media (47%) to do what is right (for more information, see: [https://www.edelman.com/sites/g/files/aatuss191/files/2019-02/2019\\_Edelman\\_Trust\\_Barometer\\_Global\\_Report.pdf](https://www.edelman.com/sites/g/files/aatuss191/files/2019-02/2019_Edelman_Trust_Barometer_Global_Report.pdf))*

2 In Edelman Trust Barometer Global Report (2019), the increase of trust in government has been noticed in China and is currently 84%.

and Goodman, 2013; Bartlett and Grabbe, 2015). Trust in digital companies is lately often seen as higher than trust in government (Edelman Trust Barometer Global Report, 2019), which is worrisome in the context of societal and common values.

The trust crisis impacts profoundly representative democracy. One of the reasons of political distrust among citizens, mentioned in the literature, is the malfunctioning of political institutions (Newton, 2001). For example, Nordic countries have the highest level of trust, long democratic tradition and the low level of corruption. Lowest levels of trust are seen in Southern and Eastern Europe, with more corruption (Van der Meer, 2017). Also, it is often assumed that trust depends on the institutional performances, dealing with public needs, citizens freedoms, fighting corruption etc. (Hutchinson and Johnston, 2011; Vesnic-Alujevic, 2016). Higher level of political trust means higher engagement of citizens in institutionalized forms of political participation (Hooghe & Marien, 2012). Also, more trust and satisfaction lead to better governance (Bouckaert & Van de Walle, 2003). European governments believe that digital transformation can foster the trust in governments by increasing the transparency, responsiveness, reliability, and integrity of public governance (Tallin declaration, 2017).

## 2.1 Open and innovative government

As already mentioned, in Malmo as well as Tallinn declaration on eGovernment, the focus is on *user-centricity*. This means that the government serves citizens who have natural claim to services as a benefit and right of citizenship, seen in its traditional form (Fasenfest, 2010).

**Creating innovative government** would provide easier access to public services and new ways for citizens to make their voices heard with an input concerning regulations, budgets etc. The trend of participatory government empowers citizens to co-design and co-deliver public services (Farrell and Goodman, 2013). With the convergence of public, private and social sectors, governments should oper-

ate at their intersections. Besides participatory budgeting (where citizens are invited to discuss the allocation of a usually small portion of budget), a good example is Iceland where 950 citizens were selected randomly to participate in drafting a new constitution (Farrell and Goodman 2013).

According to Misuraca and Viscusi (2016, p.15-16), some of the most important benefits of open government include the increased quality of policy making, increased collaboration between government and citizens and governmental bodies, more accountable governments, as well as increased knowledge and information of citizens.

**Open government** should be based on open data, open services and open processes. This brings both opportunities and challenges for public governance. It lies on principles of transparency (of government work), accountability (of government towards citizens) and participation (engagement of citizens in governmental policy processes) (McGee and Edwards, 2016; OECD, 2016). The concept is often used with different meaning to different stakeholders and reflects the priorities of a particular country. In other words, differences in governance systems influence how open government is implemented and consequently how it impacts democracies (Misuraca & Viscusi, 2016). Also, despite the very positive rhetoric around open government, we are still far from its realization. According to the Open data Barometer (2018), for instance, “After one decade into Open Data, leading governments have opened fewer than 1 in 5 datasets”<sup>3</sup>

On a more theoretical level, some scholars are optimistic when it comes to open government and believe that openness offers new possibilities and opportunities, but they need to be demonstrated. Others are sceptical and wary of such a rhetoric which does not coincide with practice. Instead, it opens a way “for a more politicised and explicitly normative treatment of open data, open governance or more open models of governance” (McGee and Edwards, 2016, p.6). Therefore, it is important to unpack meanings of transparency, accountability,

3 For more information, see <https://opendatabarometer.org/>



open data, open government, open governance and their mutual interconnectedness.

**Accountability and transparency are central** concepts of democratic governments towards citizens they govern. They are considered essential in democratic societies (Hins and Voorhoof, 2007), as they make officials responsible towards citizens and their decisions open to public scrutiny. Without them, democracy would not be possible (Rossini and De Oliveira, 2016). Access to information and the protection of public interest are key in order for citizens to form their own opinion and develop critical thinking.

## 2.2 Social innovation and policy making 2.0

Rapid social change and technological innovation have also changed citizens' expectations of government delivery (Farrell and Goodman, 2013). Misuraca et al (2014) introduce the concept of Policy Making 2.0 as an umbrella term to indicate the role of open data and technologies to improve governance and policy making.

**Technology could bring new ways for social innovation<sup>4</sup> and reduce barriers** that existed before (while satisfying expectations of hyper-connected citizens that have become the majority, governments should not neglect those who are not "connected"). Some of these innovation opportunities in the public sector are better access to information, better interaction between citizens and the state and new forms of public engagement (Caulier-Grice et al, 2012).

The engagement and empowerment of citizens in relationship with the government is crucial for open governance systems. Broad participation of citizens in, for example urban decision-making has already been noticed by researchers of such practices in 1980s (Davies et al, 2011). However, the combination of social innovation and citizen engagement and participation through new technologies is

an emerging trend. Millard (2015) suggests co-creation of service design and delivery, as a way of interaction and exchange among different stakeholders and citizens and at the same time to improve services. Co-creation is important for social innovation in the public sector, because it helps creating services that meet citizens' needs (Voorberg et al, 2015). According to Voorberg et al (2015), social innovation and co-creation are key for the reform strategy for the public sector, because they contribute to the "creation of long-lasting outcomes that aim to address societal needs by fundamentally changing the relationships, positions and rules between the involved stakeholders, through an open process of participation, exchange and collaboration with relevant stakeholders including end-users" (Voorberg et al, 2015). An example of this is the study of Gagliardi et al (2019) who show how digital technologies contribute to the innovation in citizen engagement through the modernisation of processes and introduction of new services.

## 2.3 Democratic challenges

In contemporary societies, with the rise of polarizations, populism, anti-establishment parties, lack of political knowledge, distrust, growing inequalities and complex systems of voting and registration, we can say that **democracy faces many challenges** (Parvin and Saunders, 2018). It is believed that weak institutions, along with growing neoliberalism, are a key obstacle for sustainable development in future (Foresight study of German federal ministry for economic cooperation and development, 2018). The dissatisfaction of citizens is seen throughout Europe.

Parvin and Saunders (2018) argue that political inequality, decreasing traditional forms of political participation and the increasing power of non-majoritarian institutions are the most worrisome issues. They further claim that in democratic government, citizens should ideally be able to influence political agenda, based on political equality and individual liberties. However, interest groups and lobbyists who often act against public interest are those who have power.

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4 Social innovation consists of developing new products, services, models and solutions that are more effective and sustainable (Misuraca et al, 2017)

In the past decades, there have been many suggestions of how democracy could be changed or reformed from mass deliberations in the deliberative democracy model of Habermas (1997), through mini-publics and citizen juries (Fishkin, 1991) to the radical democracy approach (Laclau and Mouffe, 1985). All these theories are still broadly used and discussed among scholars but also other stakeholders.

**The debates between representative and participatory governance models have been growing** (Dalton et al, 2001). Recent debates often include the concept of liquid democracy, in which citizens can choose to either vote directly or choose their representatives, i.e. delegates who vote on their behalf on certain policy issues. The advantage would be the specific policy area representation which is impossible in representative democracy, where elected representatives vote on behalf of citizens on all policy issues. Liquid democracy is already present on smaller scales and in specific contexts, such as in some local governments or political parties (e.g. Pirate party) (Blum & Zuber, 2016)

According to scholars, the crisis of representative democracy could be solved through better inclusion of citizens, by giving them more direct power (Landemore, 2017). **More participatory spaces are needed through diverse forms**, such as referenda, group deliberations. For Fahny (2006), civic engagement and political action are central for democratic citizenship. People could reconnect with politics through deliberative processes and public engagement in form of citizen juries, deliberative polling and so on.

One of today's challenges is to recognize the difference between populist mobilization and participatory democracy. Although both have a non-elite approach to democracy, by privileging "ordinary" people and both are in tension with representative democracy, they are often seen as "incompatible" with each other. While the autonomy of popular sector doesn't exist in populist mobilization, popular control over decision-making processes is one of the conditions in participatory democracy (Hetland, 2014).

In this context and in combination with recent talks about the introduction of artificial intelligence (AI) in policy making, Hidalgo and his Collective Learning group of MIT Media Lab suggest that, since politicians do not represent their citizens well, the representative system could be replaced with direct democracy where everyone votes on every issue with the help of automation and algorithms voting based on our behaviour and preferences (VoteWatch Europe, 2018). There are many challenges in connection to such a proposal. The most important is potential loss of agency and possibility for free participation in public life (Yeung, 2016; Craglia et al, 2018).

## 2.4 Political participation

Participation, which could make democracy stronger, is in decline in many countries (Parvin and Saunders, 2018). While according to some, citizens should have a duty to participate in the democratic life (e.g. the participation in the elections is compulsory in Belgium, Greece and Luxembourg), others believe that it should not be forced. Disengagement is mostly connected to the belief of citizens that the system is corrupt, politicians act immorally and they are not able to impact political systems (Tillyris, 2018). Because of the distrust and dissatisfaction, citizens do not want to engage more (Hibbing and Theiss-Morse, 2002).

An important characteristic is that age divide in political participation is still very apparent (Fahny, 2006; Briggs, 2017). For example young people vote much less than the older generations (e.g. in 2009 EP elections, the turnout of 18-24 was 29% compared to 50% amongst 55+ years old; in 2017 French elections 30% of under 35 years old did not vote compared to 16% above 60 years old). Besides elections, according to Fahny (2006), the so-called millennial generation is less likely to engage in any kind of formal politics, such as belonging to a party or engage in a political activity. This shows how politicians have disconnected from young people by not paying enough attention to their needs and issues that impact them (Fahny, 2006, Delli Carpini, 2000). At the same time, they are more inclined towards protest politics, where they can fight for the issues

that interest them (Briggs, 2017).

The normative concept of legitimacy means the justification of political authority or political power – democratically elected government is, thus, accountable, to citizens (Rawls, 1993, Ripstein, 2004). Elections are considered as mechanisms through which political decisions are held accountable. Drawn upon Habermas' (1990, 1996) concept of deliberative democracy, citizens' participation is needed for the democratic legitimacy of a state, because it leads to reaching ideally justified decisions for society. Political decision is considered legitimate if it has an equal participation of all relevant persons – thus, it is dependent on participation (Pateman, 1970; Petit, 2012). Through its mechanisms political decisions are connected with citizens' preferences and the production of outcomes citizens care about (common good); in parallel, decision makers are accountable to citizens via elections (Boedeltje & Cornips, 2004). The so-called deliberative turn brought about a bigger place for citizens in democratic governance (Dryzek, 2000). However, this idea is not new; in fact, in the *Social contract* Rousseau had already claimed that legitimate decisions should reveal the general will of citizens and reflect common good. It is, therefore, important to consider how citizen inclusion in policy making could contribute to democratic legitimacy.

**The active participation of the public in political processes is considered to be the key part and foundation of any democratic process** (Splichal, 1998; Howard, 2006). It can have possible benefits on decision-making and policy formation “because the public can contribute information and knowledge from their store of diverse, collective experience and expertise which might otherwise remain private and unutilised; because deliberative citizens employing fair, equal and inclusive rules of discourse, are more likely to reach just policy conclusions” (Coleman and Blumler, 2008, p.17).

Another advantage of deliberative democracy is that participants in a face-to-face discussion change their attitudes toward being more ideologically consistent, more politically effi-

cient, but also having greater trust in elected officials and obtaining greater political knowledge (Fishkin and Luskin, 1999, as cited in Gastil, 2000, p.359). Therefore, deliberation can, at the same time, increase political efficacy among participants and stimulate political engagement (Gastil, 2000). However, it is often stressed in literature that the participation of a large group of citizens in collective conversations is questionable as well as the competences of the participants and their ability to discuss complex policy issues (Coleman and Blumler, 2008). The problem of reaching a consensus in society has been further elaborated by Chantal Mouffe (2008) and her concept of radical democracy and agonistic pluralism. Although not opposed to deliberation, the concept suggests that the society consists of constant conflict and continuous negotiations of differences, based on unequal power relations – thus, a consensus is impossible to reach. However, in the same context, Ploger (2004) calls for openness, temporary solutions and respect for difference, which is much needed in this world of uncertainties.

## 2.5 Citizenship and activism

We can start by asking ourselves who is a citizen (vs. non-citizen)? and what does it mean to be a citizen? In the age of migration explosion, if we live in a country whose citizenship we don't possess (e.g. a Swedish living in Italy), are we considered to be one of its citizens? What civil, political and social rights do we have? Are we free of citizen obligations (e.g. tax paying)? Are we allowed to actively participate in and shape political institutions of that state? **In the age of digital technologies, supranational states and hyper-connectivity across borders, could citizenship be limited to belonging to a specific political community of a single state with which we can identify?**

The notion of a *citizen* first appeared in ancient Greece, where the citizen had an active participation in the community life and there was no separation between the private and public sphere. However, the citizenship had an exclusive aspect as it was bound to a specific group of people. In early capitalism, new economic

structures made a clear distinction between family and production. The economy was not related to family productions anymore, but had become a public exchange system, and activities that were previously associated with the notion of home appeared in the public sphere. That contributed to the advancement of the concept of citizenship. In the modern era, a citizen is also a member of a political community with his rights and duties, although citizenship evolved further after the creation of the nation states.

The progress of citizenship started with citizens obtaining basic legal rights in the XVIII century. It continued with the establishment of political citizenship in the XIXth century and social citizenship, formed in the XXth century (Marshall, 1950). Therefore, the traditional notion of citizenship means a sort of “membership” status in a political community i.e. the state, where rights and duties are “voted, upheld and enforced through the rule of law” (Cammaerts, 2007, p.2) but also to be active in the political life of their own community (Pares I Maicas, 2010). Despite the longstanding debates between republican (civic self-rule as seen in Rousseau’s work, where active participation in deliberation and decision making, which makes laws legitimate) and liberal model of citizenship (based on legal status and individual rights as a way to control the government), nowadays it is crucial to discuss the political agency.

In his normative definition of citizenship, proposed in his seminal study *Citizenship and the Social Class*, Marshall (1950) focuses on legal status and discusses citizenship as consisting of civil, political and social rights. More recently, citizenship is often seen as a dynamic and fluid concept that “evolved from the struggle for equal political and social rights for all” and is influenced by globalisation, transnational entities such as the EU and new digital technologies. The more “fixed” notions of citizenship had to change due to time-space compression (Cammaerts and Van Audenhove, 2005, p.179). Similarly, Coleman and Blumler (2008) suggest a more fluid notion of citizenship consisting of legal (duties and rights) and political dimension of citizenship (where three kinds of participation are important: infor-

mation gathering, deliberation and efforts to impact public policies and decisions), as well as affective dimension (feelings of belonging, loyalty, solidarity). There is a close connection of citizenship to the construction of identities, which is related to emotions and experiences and the idea of belonging together (Harju, 2007).

Participation in the institutional life of society and the state and the attached rights and duties as well as the institutionalization, protection and allocation of certain values and resources by public authorities can be considered as central issues of modern citizenship (Hernes, 1988).

The link between a nation state and citizenship has been questioned by many authors, especially with the appearance of “unbounded” notions of citizenship such as transnational, cosmopolitan or net citizenship (e.g. Cammaerts and Van Audenhove, 2005; Sujon, 2008). This new “more flexible form of citizenship” (Patemann, 1998, p.56) is considered as “a form of identification, a type of political identity; something to be constructed, not empirically given” (Mouffe, 1993, p.56).

The technologically mediated citizenship consists of different concepts and practices, that connects it to digital technologies (Sujon, 2008). The links between citizenship and technologies are broad and could include discussions centred around civil society, media literacies, social movements, public spheres, local and transnational spheres, or the government (Sujon, 2008). While the technologies contribute to the reshaping of civil practices and re-articulation of civil, political and social rights, it is questionable how much they replace its previous forms or only expand existing dimensions in a normative way that helps formalizing technological collectivities (Sujon, 2008, p.210-212).

It is important to have **informed citizenship and built capacities for participatory and deliberative practices** described above. Also, citizenship should go beyond the minimal concept of citizen, but should comprehend a sense of collective agency and responsibility for common goods (Holmes, 2011).

With the changes in society and behaviour and the expectations of citizens, **new voices and a variety of agents in the public sphere have emerged**. Activism is often seen as resistance to political elites and is needed for a vibrant public sphere and any democratic state, as it keeps the public debate alive (Clark, 2000). This also means that through activism, citizens can hold governments and the state accountable. Online activism is different to offline: some authors oppose collective to connective action (Bennett and Segerberg, 2012). The digital environment has produced new and different forms of engagement. While some state that this type of activism is limited to weak activism and online deliberation, in forms such as clicktivism and slacktivism (Morozov, 2011), others believe that new actions and actors could lead to the revitalization of political practices and efficiency of politics (Halupka, 2014; Castells, 2015).

**A vibrant public sphere and citizens' participation in the governance of society have remained one of the essential aspects of democratic societies** (Holmes, 2011; Vesnic-Alujevic et al, 2018). The involvement of citizens is critical to open government reforms and greater citizen participation in the policy cycle (OECD, 2016). For the moment, citizens increasingly start to be included in policy making at local level, through different initiatives. For example, citizen assemblies in the Netherlands serve as a place to deliberate on community issues (Chwalisz, 2015).

Although some say that there is a crisis of citizenship based on dissatisfaction of citizens with formal politics (seen also through the success of populist parties throughout Europe, but also globally) and low social capital (Putnam, 1990), the notion of “disconnected” citizen (Coleman, 2005) is not a new phenomenon. Almost 100 years ago, Lippmann (1922) compared an average citizen to a “deaf spectator”. Also, there are many non-formal ways citizens can express their opinions and search for alternative models. Further on, the inclusion of citizens should be encouraged by the state.

## 2.6 Opportunities and risks brought by new technologies

Technological advances in the past decade have paved the way for their current and foreseeable importance in economy and society. Increasing computational speed and power, coupled with availability and ubiquity of data flowing in and out of our devices, homes, work or public spaces, have enabled the collection, processing and analysis of large volumes of data. Today, **governments face different opportunities and risks in connection to ubiquitous technologies**, such as artificial intelligence (AI), big data and the Internet of Things (IoT).

Many data scientists claim today that AI and data science could improve the provision of public services and inform policy-making at all levels of government, as well as help solve wicked policy problems (Turing institute). The A.I gets integrated into public policies through strategic planning, predictive analytics and integrated data sets. However, the technology cannot by itself substitute or compensate for the lack of citizen participation.

However, **democratic values are often challenged by digital technologies** that can increase social control and political manipulation and in parallel challenge the power relations in a society (Howard, 2015, p. XXV). Understanding of politics of algorithms and contemporary political processes (with the appearance of filter bubbles, political bots, disinformation and deep fakes) are becoming essential, because they impact negatively democratic processes through manipulation of citizens and lead to their political cynicism and decrease further trust in political and other institutions.

The governance of big data and data clouds is challenging. Bouckaerts (2017) believes that “governments are not sure how to govern clouds, especially when they are big, open and crowd sourced” (p.47). Many scholars claim that **we live today in the mass surveillance society or surveillance capitalism** (Lupton, 2014; O'Neill, 2016; Zuboff, 2019). Through datafication, citizens' agency online gets transformed into quantified data that is

used both by public and non-public actors (Van Dijck, 2014). For example, in China, data are used to calculate social credit score (Creemers, 2018). Elsewhere, score is calculated by insurance companies for “healthy lifestyle” (based on wearable trackers) or “good driving behaviour. Also, an interesting example is given by Zuboff (2019) regarding the pokemon game that was played worldwide as how a private company can interfere and direct human behaviour.

Some of the main **concerns about the use of big data** are that they are leading to privacy intrusions, since they are used as a source of information about individuals to augment invasive personalized marketing strategies (Vesnic-Alujevic et al, 2018). For example, in the case of Cambridge Analytica, Facebook data of their users was used without authorisation for a digital political campaign targeting (Cadwalladr and Graham-Harrison, 2018). Therefore, the pleasure that online participation brings to citizens is seen as compromised by surveillance and corporate profit-making (Hesmondhalgh, 2012). Also, by profiling its users and offering them only some information while retaining the other, platforms have become gatekeepers (Zuboff, 2019) and should be thus more responsible and accountable (Colombo et al, 2017).

The use of data can also create potential inequalities and biases, either from training data or algorithm developers (Van Deursen and Mossberger, 2018). For example, the growing inequalities for skills and usage opportunities affect engagement and digital citizenship, providing more opportunities for higher socio-economic status (Van Deursen & Mossberger, 2018). Discrimination has been noticed in justice system in the USA (Chouldechova, 2017) as well as in recruitment (O’Neill, 2016). In the USA, for instance, AI has been used in judiciary system and showed many biases.

**The emerging technologies require from governments and regulation bodies the protection and respect of citizens’ rights, freedoms and values.** They need more accountability and transparency in the first place (Pasquale, 2015). Many not legally binding ethical codes have been produced lately

(in Europe, for example, the Code of Practice on Disinformation and the Ethical guidelines for trustworthy AI). Although important, ethical considerations and codes are not enough, because they do not have democratic legitimacy and cannot be enforced (Nemitz, 2018). Therefore, there is a need for a clear regulatory framework that would be enforced even against the powerful big digital companies.

## 2.7 New business models in digital economy

The governance of digital media is largely influenced by **unbalanced power relationships and control**, based on the concentration of power and profit in the hands of five digital giants and their domination (Apple, Amazon, Facebook, Google, Microsoft) (Mosco, 2017, Morozov, 2017). **The creation of large digital ecosystems has high impact on society** and especially relationships between governments and citizens and their mutual trust. Nemitz (2018) suggests that “it is this cumulation of power in the hands of a few—the power of money, the power over infrastructures for democracy and discourse, the power over individuals based on profiling and the dominance in AI innovation, which must be seen together.” (p.4)

With the raise of digital platforms, new business models have appeared. Digital platform model changed the way business is conceived and the public value is obtained (Abele and Joachimsthaler, 2018). Platform businesses disrupted traditional industries through exploration of network effects’ potential. The power of platform owners today is comparable to power of factory owners in early industrial revolution (Kenney and Zysman, 2016). Platform economy will account for a quarter of entire global economy in 2020 (Norton, 2018).

Platforms are based on algorithms, cloud computing and big data. A platform becomes more valuable if more people use it. In order to succeed, an important element are connections among consumers through interactions (Abele and Joachimsthaler, 2018), or bringing together consumers and producers who then interact and transact (Torregrossa, 2018).

When that is reached, the main task of a platform is to facilitate transactions. Business models of platforms are usually built around transaction costs (Google play, Amazon, Spotify, Uber, Airbnb etc) or through the subscription model (Netflix).

These models are based on big data and datafication of social life online, commodification and exploitation of users' free digital labour, as well as algorithmic control over their behaviour and sociality. Individuals' activities online are stimulated through the affordances of platforms, as a part of new business strategies and one of the main drivers of the digital economy (Vesnic-Alujevic et al, 2018). In other words, users' innovation and creativity is shaped in a way that brings profit (Plantin et al, 2016). Digital companies, thus, largely rely upon enormous quantities of data users leave behind them (for example, as Goodman (2015) claims, Facebook users can be seen as 'the largest unpaid workforce in history'). Users and their data, at the first place demographics and behaviour patterns, are seen as commodities to be sold to advertisers (cf. Smythe, 1981; but also, for example, Dolber, 2016, Fuchs, 2009, Andrejevic, 2009). The automation and algorithms help profiling and personalization of content (Stehling et al, 2018).

There are multiple complains about business practices of these companies by governments and municipalities in Europe. For example, there was a series of cases in the UK where it was asked if the work Uber is legal or not, taking into consideration that its drivers are not treated as employees. In Barcelona, Airbnb has been recently banned because of its impact on "affordable housing" (Sterling, 2017). Amsterdam is also questioning the work of Airbnb and Uber.

A proposal from the city of Barcelona would be to create alternative platforms from which local residents could benefit through fairer conditions, and without having transaction or subscription fee.

This section tackled some of the challenges that could impact future relationship between different actors in society as well as the advancement of the ideas of open and innovative government. They clearly mark trends that were discussed by citizens in our workshops, explained in Section 3 and are present in four scenarios that are shown in Section 4 of this report. They were monitored along the project and served to set up the debate about future government and to respond the following questions: *What is the role of government in 2030+?. as well as What is a citizen of the future?*

# 3 CITIZEN DIALOGUES

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Many authors stress the importance of dialogue, as dialogue among people stimulates learning and increases competences (Chwalisz, 2015). Also, it is important to think of how citizens, who feel their voice is often not heard, could be participate in these developments and policy making. That is why we decided to focus in this project on citizens and to explore their views and attitudes.

Deliberation can also go beyond traditional spaces of formal public participation and beyond discourse, e.g. via visualisation or storytelling (Davies et al, 2012). This is important in the context of the Future of Government project.

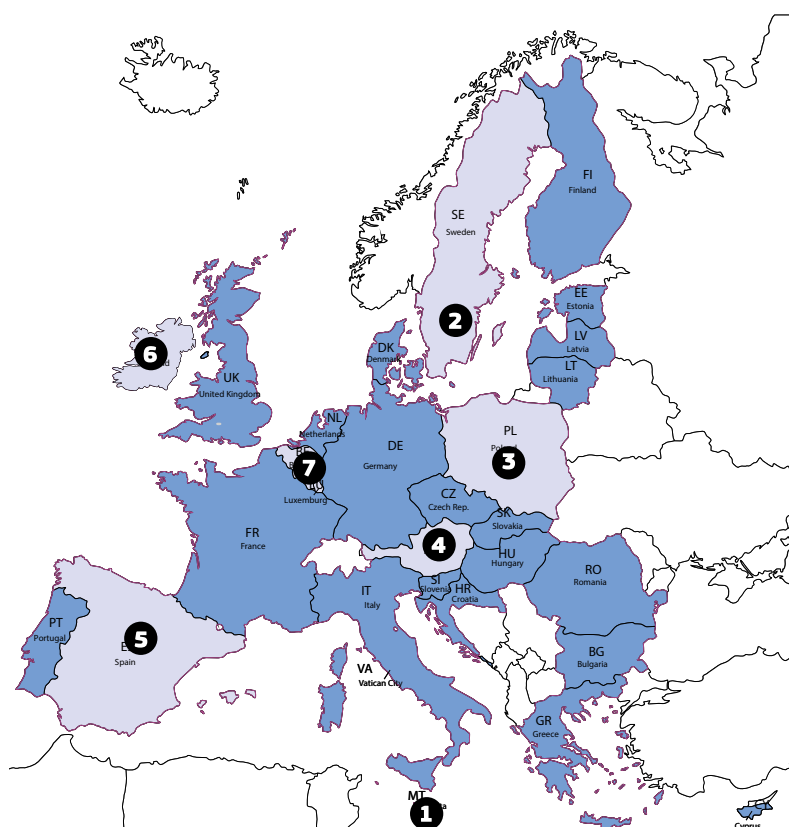
The citizen workshops were carried out in collaboration with national, regional or local policy labs in the respective Member States (see Figure 2 and Annex 1). We have decided to partner with Policy Labs as these are dedicated teams, structures, or entities focused on designing public policy through innovative methods that involve all stakeholders in the design process.”<sup>1</sup> In fact, policy labs are experienced in gathering people affected by policy

making processes – people in many instances are the so-called ‘end users’ of policies, and through a policy lab approach, they become the focus of each stage of a policymaking process. Policy Labs bring a high level of knowledge about the national and local situation and culture of governments and about government – citizen/business relationships.

The FuturGov project opened a dialogue with citizens in the six Member States to gain a bottom-up understanding of the current relationships between citizens and government. Attention was brought to citizens’ expectations, fears and visions of how the world in which they are living could look like in 2030 (and beyond) and how future relationships with government might evolve in this world. The literature review in Section 2 allowed us to identify and present a number of drivers of change which served as an input to the workshop. These drivers helped the participants to think about possible developments over the next 10 to 15 years. We did not focus on one level of governance only, but tried to keep an open perspective and take into consideration local, regional, national and EU level.

1 M Fuller, A Lochar; Public policy labs in European Union Member States; EUR 28044 EN; doi:10.2788/799175

The approach was based on a combination of participatory design and foresight methods.



- 1 Department of Public Policy, University of Malta:**
- 2 eGovlab, Stockholm University, Sweden**
- 3 Engage Warsaw, a service design initiative:**
- 4 GovLab Austria, Austrian Federal Ministry for the Civil Service and Danube University Krems: Austria**
- 5 Medialab Prado, Madrid City Council, Spain**
- 6 Service rePublic, Cork County Council, Ireland**
- 7 EU Policy Lab, Joint Research Centre, Brussels, Belgium**

Emphasis was put on the visualisation exercises and prompts that were used to help participants make sense of the present in order to imagine the future. A detailed description can be found in Annex 1.

The workshops took place between November 2017 and March 2018. They all lasted for half a day. In total, more than 150 participants were selected based on their socio-demographic background, age, gender and various degree of engagement in politics. In every session, we aimed at having at least one representative of government and one of business sector. The countries were selected on the basis of several criteria to have a well-balanced mix of citizens from Member States with different governance culture, size and geography (see Annex 1). The approach was first tested in a workshop with representatives of international civil society organisations, think tanks and academia in Brussels. Local policy labs and other partners had the task of recruiting a group of citizens, and adapting the approach<sup>2</sup> to make it fit the local context. They were responsible for acting as main facilitators of the workshops and to document the results. In all the workshops, except one (because of language constraints), we have been present and have acted as co-facilitators.

In total, all workshops brought together 20 groups<sup>3</sup>, more than 20 future stories were described and more than 20 future “personas”<sup>4</sup> were generated through sketching storyboards to narrate interactions with government. This is a common technique used in design, which bringing the situated worlds of individuals into view in exploring futures. Some of the work produced during the workshops can be seen in the photos below (Figure 2, 3, 4). Detailed reports can be shared with interested parties upon request at the EU Policy Lab.

### 3.1 From citizen dialogues to scenarios

Future narratives produced during the workshops became the basis to develop alternative pictures of how the future world, in which citizens live and governments operate, might look. Narratives do not claim to be unique truths, they are considered as frames that facilitate making sense of the world, frames that usually combine past and future, fact and fiction. Made of hopes, desires and fears, narratives frame people’s understanding of the past, perception of the present and imagination of the future. We took into account assumptions about the situation in 2030+ that related to the following categories:

- society,
- technology,
- economy,
- policy/legislation/role of the state,
- relationships between citizens and the state,
- new actors in citizen-government relationships,
- role of corporations.

In the second step, similar assumptions were clustered to identify the stories that are based on related future developments.

In a third step, we reconstructed the future stories with strong similarities and plausible connections among each other. Based on this reconstruction process of alternative raw scenarios, the respective stories from the workshops were taken as argumentative material to enrich the scenarios. This led to the scenario descriptions and narrations that are presented in the next section of this report<sup>5</sup>.

# 3

2 Examples of templates can be found in Annex 1

3 In each workshop participants were split into groups who worked in parallel to allow more in-depth discussions

4 In speculative design and foresight, personas are fictional characters developed in order to represent different types of people and understand their daily life routines with respect to the research question.

5 The first version of the scenario ideas were discussed with the projects advisory board and refined on the respective feedback. In a second loop of reflection, a workshop with foresight and eGovernment experts from the EU Policy Lab and DG CNECT analysed the scenarios in detail, enriched the scenarios to make them more plausible and stronger. The final draft was discussed with a group of foresight experts from DG RTD, DG CNECT and the European Parliament’s Research Service.






Figure 4 Picture from citizen workshop



Figure 5 Picture from citizen workshop

# 4 FOUR SCENARIOS

# OF THE FUTURE OF GOVERNMENT



The set of scenarios presented here does not cover all possible futures but covers the spectrum of plausible futures in a digitalized world. Three parameters are overarching to the four scenarios: democracy remains in one form or another, extreme disruptive events are left out, and there is an assumption that the digital will prevail in the future. The future which might play out in reality might lie somewhere in between this spectrum.

By pointing out to the current weak signals and drivers that the narratives are built on, the scenarios make visible the diversity and thickness of the present. In doing so, assumptions and linear thinking are challenged, consequently triggering debate on new forms and roles of government.

The following scenarios enable us to ask “What if...” questions. They are not an end-product, but a means to raise questions by immersing participants in future worlds, for them to think about the implications of a speculative situation. The strategic insights presented in each scenario help people anticipate and prepare for different futures. It also exercises the mind to be more attentive to emerging changes than to unpredictable futures.

The key question is “*What can we do today to make better decisions today and avoid undesirable futures?*”

# 4.1 Scenario 1: DIY Democracy

## *Imagine...*

**the societal gap increased drastically, governments are not able to provide proper public services and citizens have to look after themselves?**

## *Summary*

**The societal gap has increased; state power has diminished; public services have become very limited. However, citizens feel strong and empowered; they are engaged in the public life by co-creating DIY public services. Digitalization helps the grassroots initiatives to reach out widely, but people also consider offline physical gatherings and work important. Citizens' participation in politics is strong at the local level and only transferred indirectly to the national and supra-national governments, who have to balance between the companies' and citizens' interests.**

## *Key drivers of the scenario*

- **Increasing social gap**
- **Decreasing financial capabilities of states**
- **Rise of a sharing and caring society empowered by digital platforms**
- **Decentralisation and atomisation of government**



FOOD TRAINING



COOPERATIVE ENERGY

DIY PUBLIC SERVICES

FOOD 0  
SCHOOL  
HEALTH 11  
ELECTRICITY 4



VIRTUAL SHARING & CARING



MICRO-PHENOMENON

30



CONNECTED PEER LEARNING



DIRECTING THE GOVERNMENT



ELECTED

CITY HALL

ENGAGE

LIQUID DEMOCRACY

MINI PUBLICS



REPLACE



ISLAND OF SUPERRICH



NATIONAL GOVERNMENT



DIY PUBLIC SERVICES

## Context

### *Socio-economic development*

A small group of rich citizens have increased their financial power mainly through global deals and trading with user data and user generated content produced over the past 15 years; they managed to hide their wealth from the states on paradise islands. The financial situation of the state has become weak, as the main budget source from income tax has been continuously decreasing. Due to the specifics of the taxation system, the state cannot afford to provide high quality public services and fund social or other politics anymore. As a result, there is a general decentralisation and atomisation, from food to currency; this is based on the success of the sharing and caring economy system. Regional economies are strengthened based on mainly micropreneurs and small businesses working together in networks. Rewards for services in the sharing economy influenced the emergence of firms and initiatives that professionalize the DIY public service provision and develop new tools and approaches for better shared service delivery.

Media is in the hands of large corporations and does not provide objective information to citizens. Digital media platforms are the main form of communication and news consumption and active news produsage<sup>1</sup>. These platforms also enable grassroots engagement activities and co-creation of community services. Citizens are organized in initiatives and movements that are growing in power on local level and supralocal in the virtual space; they are trying to counter-balance the strong influence of companies in the state. Citizens resist the co-option of their data and creativity by producing alternative sources of information and DIY public services.

### *Technological development*

Digitalization and hyperconnectivity are everywhere, as well as intrusive technologies and automation. The societal group identity building is reinforced with technologies that make the perception and interpretation of the real-

1 Prodigusage is the process of active content creation by audiences (users becoming producers) in the online ecosystem (Bruns, 2008)

ity tacit: with Augmented Reality, communities and societal groups share their interpretation of subjects in the world with an information overlay; in Virtual Reality, they share their way of thinking and dreaming and the values that drive their behaviour. These technologies help to build up a shared understanding of societal and individual needs. These forms of hyperconnectivity allow for a bottom-up engagement that is widely used by citizens to enable better living. Different blockchain-based knowledge sharing platforms allow grassroots movements to engage and provide their services. Sophisticated language processors of digital platforms allow to exchange and co-create virtual services beyond language barriers.

### *Actors and interactions*



Individuals are responsible for their own development as the social system of the state is very shallow. Strong local and transnational grassroots movements have been established to create public services through community initiatives. Public services provided by the government are either of low quality or very expensive and hence not available to many. Self-help initiatives enable a better quality of life for the majority of citizens. Citizens are creating Do-It-Yourself (DIY) public services as a further development of the DIY and makers movements; these are running on ethereum<sup>2</sup>-based platforms and open-source software for online services. With the mix of face-to-face and virtual DIY activities a glocalisation<sup>3</sup> of the sharing and caring economy manifests itself. An example of DIY public services are peer-to-peer online and offline education courses. On the contrary, the public education system provides very basic qualifications that are insufficient for good perspectives on the job market. In other public services like transportation, health care etc., the situation is similar.

2 Ethereum is a decentralized platform that runs smart contracts. It is a blockchain technology.

3 The mindset of the individuals being active locally and globally in the virtual space combines the different levels. This avoids the DIY activities and political engagement to be too much focused on local issues alone.



Some groups of people are very sensitive and distrustful about the communication via digital platforms. They gather in face-to-face “mini-publics” either within social groups which share same identities or across different social groups; through these policy dialogues people empower each other to think critically and thus avoid possible computational manipulations by the state and/or corporations. They also develop strategies to be engaged and influence policy making mainly at the local level.

The majority of citizens take part in these online and offline initiatives; this is one of a few ways to participate in political decision making and sustains the development of the grassroots democracy.



The super-rich own highly automated multinational companies. With their money, they try to influence the financially weak governments to change the regulation in their favour. Also, they lobbied government for very little taxes. By financing parts of the government and basic public services, such as waste management or digital infrastructure, big companies try to increase their political leverage. As the quality of public services is low, luxury services in the fields of health, education, mobility etc. are a core business for some of the companies. They are affordable only to few.

Among the rest of population, entrepreneurship plays an important role. Many micropreneurs try to open small business. Some offer digital services like virtual object design for 3D printers to replace broken parts; many are crowdsourcing funds for open platform economy services, like DIY services in the virtual space. Craftsmen, farmers and traders are also typical micropreneurs.



The EU exists as the federation of regions, thus the role of nation states has diminished considerably. The EU is not so strong, but it helps regions set the standards.

National government does not actively shape the economy and societal conditions, as it deals with limited resources. There are many issues of resource allocation and regulation that cannot be solved in the particularism of local governments and self-organized communities. The EU and national governments try to focus on these. Its public spending is limited to social services and infrastructure provision, both at a rather low level. The government, mainly at national and supra-national level, is influenced by lobbyists of large companies that are interested in citizens’ data and a favourable regulation for their business activities; corruption scandals occur every now and then. Although the government is generally weak, it tries to resist pressures and retain a neutral role. The government has limited legitimacy; citizens are very interested in political participation but their influence is limited to the local and to a certain extent regional level.

Several years ago, the government decided to change the representative system on local level, with the intention of being closer to citizens: liquid democracy was introduced in many municipalities, where citizens either vote directly or elect delegates (instead of representatives) who are closer to them. These delegates are chosen on the principle of mutual trust and identification with their mindsets and identities. The particularity of the “liquid” delegates is that citizens can easily replace them whenever they do not trust them anymore and with every new issue that appears. Local delegates have an “open ear” to the citizens and are in close contact with them. As not all individuals on the local level share the same values, there are many conflicting interests to solve. Delegates are under high performance pressure to satisfy their interest group which leads to animated debates and high turnover of delegates. Local politicians act as transmitters and intermediaries of citizen’s needs and interest on

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regional and supranational levels. The national and supranational governments wanted to keep more continuity and stability; hence they kept the classical representative democracy system with elections held every 4 to 6 years.

### Relationship between citizens and government

While a small number of rich citizens are mainly out of the reach of governmental regulation, the majority of those less well-off cannot expect to be fully supported by national and supranational governments. The local delegates and mayors are main ways for citizens to interact with the national and supranational governments.

Through diverse initiatives and education, citizens feel empowered and “strong”, they try to push their messages to the European government and influence it via local delegates, transnational networks or protests. Over the years, the movements have obtained significant political power at local and regional levels. When they feel that their voice is not heard, they change their “delegates” and organize diverse online and offline protests. The knowledge-sharing platforms are the main way of spreading objective information and interacting with each other.

### How did it come about?

In the aftermath of the financial crisis starting in 2008, technology-driven productivity increase led to economic growth without adequate rise in employment. Young people, in particular, have been affected and continue to struggle to get access to the job market. The “gig-economy” has increasingly cannibalised the full-time employments as companies are outsourcing more and more tasks. Overall income of the population throughout Europe started to decrease.

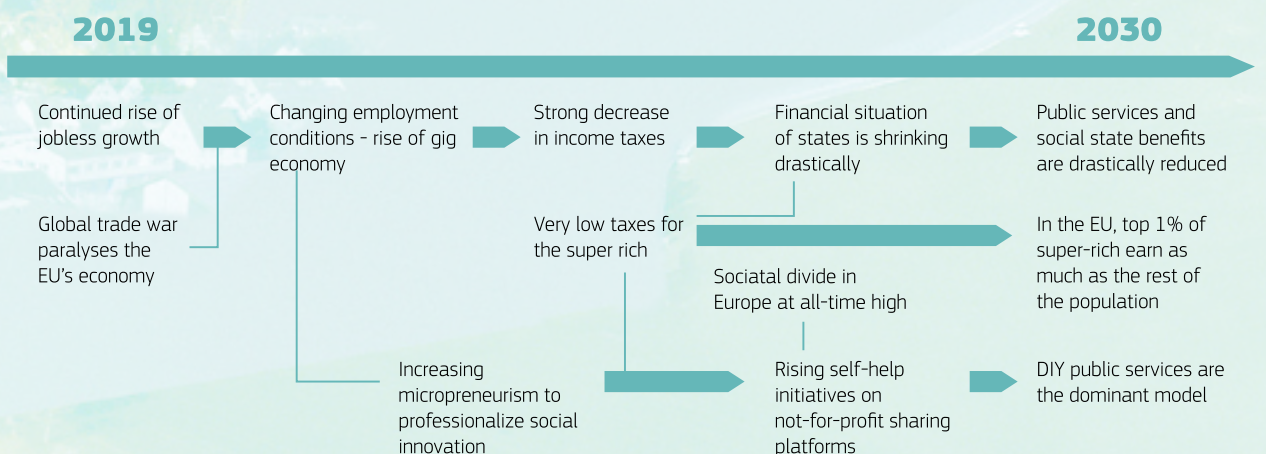
A small number of super-rich became owners of the dominating multi-national companies – from digital to financial sectors. These are no longer European based but globally active. Europe’s role in the world economy diminished relatively.

With the decrease of national revenue, the fiscal capability of nations fell. People got squeezed between precarious job conditions and shrinking social welfare and public services. As the sharing media platforms were available, people started helping themselves more and more; they built up a collaborative, sharing and caring, economy, based on strong common values. Responsibility, accountability and trust are especially important.

Citizens developed innovative solutions to increase the effectiveness and reach of DIY public services. A social start-up culture started to bloom with many micropreneurs being active.

Good and trusted digital infrastructure became a basic requirement which can also be used for the digital sharing services.

The global trade wars that were looming already in 2018 led to a closure of ranks of EU Member States who transferred several national duties to the Euro-



pean level in 2024. The local and regional governments became the main contact point for citizens who strove for better public services and more supportive regulations and infrastructure for the DIY public services. In 2028, the strong push of citizens through social movements led to a change in the election system at local level, with the introduction of liquid democracy. Local politicians are now delegates that can be delegated (instead of elected) and replaced anytime by citizens.

*Current examples that indicate the possible development of this scenario*

### **How can local government work productively with citizens to promote the wellbeing of the city? The case of synAthina<sup>4</sup>**

In the aftermath of the financial crisis, the City of Athens was left with limited resources, hampering its capacity to deliver critical services. Against this backdrop, community activities sprang up quickly across the city. A vibrant civil society emerged with large numbers of citizens working together to improve their neighbourhoods. But many activities were disconnected, restricted by outdated regulations, a lack of infrastructure and support.

Athens installed a public platform to build trust and encourage collaboration between civil society and the city. synAthina connects citizens, institutions and organizations to improve services offered by the city. A website platform allows members of the community to engage in problem solving and reform. Individuals and groups submit activities and ideas. They are then connected to the relevant local government representatives, governmental organizations and private businesses that can help make their ideas a reality.

### **How can disadvantaged children become successful at school when the public school system does not support them enough? The case of Wiener Lerntafel, a platform for free learning support**

The public school system in many countries does manage to overcome social imbalances. Social origin determines educational careers. In Vienna, Austria, about half of the pupils at school do not have German as their mother tongue. A high percentage of these children live in socially disadvantaged families. Parents are often unable to deal with tutorial requirements. These pupils have little perspectives of a decent education and reaching a higher-level education degree required for positive future development.

The “Wiener Lerntafel”<sup>5</sup> is a platform created by citizens for citizens. It is an infrastructure providing a constructive learning environment for children from socially disadvantaged families, granting them free tuition, whilst respecting their individual needs. Their programmes far exceed the time and human resources of equivalent state institutions. The tutors are all volunteers.

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4 For more information, see [www.synathina.gr](http://www.synathina.gr)

5 For more information, see [www.lerntafel.at/wienw](http://www.lerntafel.at/wienw)

## 4.2 Scenario 2: Private Algocracy

### *Imagine...*

**the power over data, data analytics and decision making are fully moved to multi-national data companies. Who is taking over the regulation?**

### *Summary*

**Individual data are collected everywhere mainly by monopolistic digital tech companies, because the implementation of GDPR<sup>1</sup> and regulations of technologies, such as AI, that followed did not bring the expected results. Surveillance by private companies is strong and there is no transparency of their work. The logic of algorithm-based political decision-making processes and deals between government and companies are opaque. Citizens' political interests are interpreted from their data profile.**

### *Key drivers of the scenario*

- **Power accumulation of global digital giants**
- **Advancements in data integration in an Internet of Everything (AI, IoT, Big Data, and new technologies)**
- **Expansion of business ecosystems of the giant digital companies into public services**
- **Decrease of democracy in public life**
- **Decreasing role of democratic institutions, World Economic Forum taking over the role of the United Nations**

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1 GDPR: the EU General Data Protection Regulation. The GDPR was designed to harmonize data privacy laws across Europe, to protect and empower all EU citizens data privacy and to reshape the way organizations across the region approach data privacy. It set in force in May 2018.



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BUY PUBLIC SERVICES

GOVERNMENT

AUTOMATION

EFFICIENCY WINS

BEHAVIORAL TRACKING

DATABASE DATABASE DATABASE

TRANSPARENT CITIZEN

eID MICROCHIPPED

TINDER POLITICS  
It's a Match!  
FREE DEMOCRACY

GAME ADDICTED

*Socio-economic development*

Big multinational digital companies have taken over the economy in an oligopolistic or even duopolistic concentration, while the social gap was increasing. Strong global competition between Silicon Valley and Chinese digital companies developed, leaving Europe mainly as a sales market. The economic power lies in the corporations with the best access to Big Data and respective data analytics tools. Many politicians are corrupted in order to protect companies' interests. Media are in the hands of the same multinational companies.

*Role of technology*

Artificial Intelligence (AI) is seen as the never failing instance. Due to strong leaps in technological developments of self- and machine learning systems and the ubiquitous diffusion of the Internet of Things, AI is used in all processes and services, leading to a fully-fledged and automated industry and the use of "symbiotic" web<sup>1</sup> and intelligent personal assistants. Technological innovations are fast due to the competition between the oligopolistic actors and the pressure they put on the related suppliers and innovators in the platform ecosystem and the sheer economic power of the oligopolists.

Social activities are predominantly organized and performed on digital platforms, leading to a tremendous amount of data about individual preferences and habits and making citizens more vulnerable than ever, e.g. when it comes to risks of cyberattacks or the abuse of their data.

1 Symbiotic web or Web 4.0 refers to the idea of interaction between human and machine in symbiosis. The access to the internet is opened to the Internet of Things. Big Data, Artificial Intelligence and Machine to Machine communication play a key role in the evolution of the symbiotic web.



Citizens live and work through virtual connections; as a consequence, everything they do is constantly monitored by governments and companies. Human and citizen rights are endangered. For example, the right to privacy does not exist anymore. Individuals are seen more as consumers and data providers rather than citizens. Through tracking and surveillance, people are disempowered.

The social capital<sup>2</sup> is low, there is no sense of community belonging. Citizens are isolated individuals, as they work and communicate mainly in virtual space: loneliness is a big issue. They feel they need more connection and communication with real people. Many carry the hidden desire to switch off and "detox" their "switched on" digital habits. But this is not happening; it is hard to escape pressures from the companies and governments to stay connected, as well as dominant habits.

Concerning the job market, most individuals work as click, cloud and crowd workers in freelance positions. Specific platforms offer task related short term contracts.



The digital multinationals provide services to citizens, through which individuals get their news, communicate and exchange opinions with others, buy their products and services, pay, etc. Step-by-step, digital tech companies have taken over the majority of the economy, including areas of public services. Personal data has been monetized, thus creating new data economy. Through the walled gardens of digital giants' business ecosystems, individuals receive all kind of products and services, including outsourced public services.

2 Social capital is meant as networks of relationship between people that enable that society in which they are living to function effectively.

The multinational companies coordinate their work in relation to global policies they want to see in place. This alignment of political interests makes them powerful in influencing the governments.

European companies are minor actors in the monopolistic platform ecosystem. These companies are under high pressure both from consumers and multinational companies and risk of being easily replaced.



The state is small and big corporations have a great influence on the government. Decision making – through the platforms of the multinational digital companies – is fully automated, based on Big Data and with the help of algorithms and robots to process the information. Governments and digital companies are working together to collect data and improve their data analytics. Politicians in traditional forms have disappeared, managers, mainly from the digital companies have taken over.

National borders are less relevant as multinational digital companies and services run the economy and the services. The role of the EU is shrinking on the global scale, as its economic and political power disappeared mostly to U.S. and Chinese digital companies.

The organization of public services is outsourced to digital platforms; even the military services are privately operated. Public services are run virtually, where possible. Individuals need to strongly support the service provided, e.g. with healthy eating and controlled exercising to be entitled to public health services. Education is highly innovated to make it as effective and efficient as possible. Efficiency of processes and services is key in the whole economy as well as in government.

Digital companies as influencers of the government are interested in keeping the financial liquidity of the individuals as consumers; this is why there are some instruments like minimum pay to keep consumption ongoing.

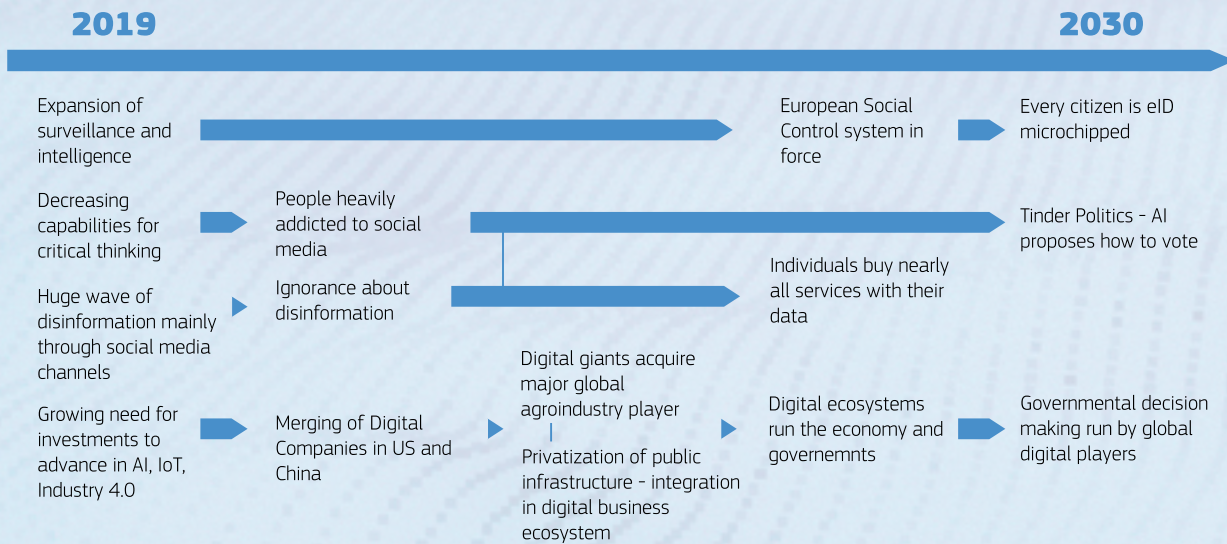
## *Relationship between citizens and government*

The government has a lot of information concerning citizens. Big multinational digital tech companies are a major intermediary in the collection and transfer of citizens' data to the government. At the same time, government work is not transparent to citizens. The borders between government and digital companies are blurred, as the latter are data providers, making managers in public services accessible and are involved in policy making. It is not clear who is in charge of the regulation and control of data collection and algorithmic technologies. In the longer-term future after 2050, the state might even no longer be needed.

Democratic participation is almost an illusion. Citizens are seen purely as consumers and not active participants in policy making. Tinder politics is present, individuals vote based on what the app suggests to them, they don't have any other choice and they don't believe they can change anything. Their opinions are mainly collected via their digital footprints, but it is not transparent how this information is processed in the Artificial Intelligence decision making systems. The level of trust in government is the lowest in the past 15 years. The government offers no possibilities for citizens to get involved in policy making. The democratic skills of the citizens have diminished. Democracy is endangered.

The majority of citizens are misled through computational propaganda tools based on profiling, coming both from big corporations and the government. Political scandals and manipulations occur, but citizens hardly hear about them.

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The development of ubiquitous surveillance started – beyond the activities of intelligence services – with the expansion of video surveillance systems and increasing wiretapping to fight terrorism in the first decade of XXI century. With the widespread use of social media even more data on personal habits and the way of thinking became available on central data platforms. In the late 2010s, China established a so-called “social credit” system, an end-to-end social control system. In 2027, this concept was transformed and transferred to Europe, as a nudging tool to incentivise good social behaviour and detect first signs of terrorism and social unrest. Consequently, three years later, every individual became microchipped with a clear eID to facilitate identification and reduce cheating the system.

A huge wave of disinformation has been noticed since 2015. But, digital companies came up with virtual games to make citizens addicted and to diminish their critical thinking skills. So, in 2020 people stopped caring about mis- and disinformation.

From the early 2020s onwards, the gigantic U.S. and China-based companies took over all kinds of promising start ups and expanded their dominance by broadening their field of activities; they built up a “walled garden” type of wide field of services for the users who were virtually unable to change to another competitor without changing all their digital instruments.

In 2023, the concentration wave in the market was enormous: Alphabeth/Google, Amazon, Yahoo, Facebook, and Ebay merged in the U.S.; the dominant Chinese players, such as Baidu, Alibaba, and Tencent merged a little later. All other regions, mainly Europe, became market battlefields of the remaining two digital giants. It took only a few years for formerly big corporations like Siemens or GE to become mere nodes in the digital ecosystem of the platform economy. The neo-liberal tension of privatizations of infrastructure expended, in particular as the building up of digital infrastructure could not be carried out by the governments.



*Current examples that indicate the possible development of this scenario*

### **How can the state discipline its citizens by surveillance? The social credit system in China**

The system was introduced in 2014 as a tool to promote “sincerity culture” and encourage trustworthiness through rewards and punishments based on an individual’s behaviour (Creemers, 2018). Each individual is scored based on their political, social (eg. what content is posted on social media; who are friends of an individual; how much time you play a videogame) and economical (eg. online purchases) conduct. All the data obtained through the monitoring of individuals’ movements and actions are analysed and processed into a score. Data points are gained or deducted depending on the behaviour. It shows to what extent a citizen can be trustful. This impacts to a great extent one’s access to jobs, freedom to travel, education and other public but also private services (eg. insurance). The SCS has been criticized by many as a mass surveillance system and the ultimate Orwellian Big Brother. For the moment, the participation in SCS is voluntary but it will become compulsory in 2020 (Botsman, 2017).

### **How can Big Data be utilized to track citizen’s activities and networks for security reasons: The case of Palantir in Public Security institutions**

In Silicon Valley, one of the most richly valued start-ups is an intelligence platform designed for the global war on terror. The Palantir software is an intelligence platform that collects, matches and analyses information. Disparate data sources from financial documents, airline reservations, cell phone records, social media postings, etc. are examined to find patterns and connections. The AI analytics go far beyond the capabilities and speed of humans- The first application field was the work of the Pentagon and the CIA in Afghanistan and Iraq. The military success led to the spread of federal contracts among civilians in the U.S.

Palantir is also used by European governments, such as in UK and Denmark. The police of the German federal state Hesse has been testing Palantir Gotham software to track Salafis since 2017. Critiques see issues in the connection of database silos in which personal data is stored; for privacy reasons and data security regulation the information must be separated. Others see the risk that via the software secret police database information might be opened up for U.S. intelligence services which are working with the same software.

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# 4.3 Scenario 3:

## Super Collaborative Government

### *Imagine...*

**all the promises of open governance, digital government and public sector innovation come true**

### *Summary*

**The rise of AI in government and the concept of citizen centism brought a government design. Open governments have a real-time understanding of socio-economic problems; public services can be offered predictively and individualized to citizens. Government is enabling seamless participation in decision making via virtual platforms. Citizens are sovereign over their data, privacy is key.**

### *Key drivers of the scenario*

- **Technical advancements in AI and real-time Data Analytics**
- **Push for open and innovative government**
- **Push for Data protection and privacy**
- **Increasing valuation of non-remunerated work**
- **Increasing inclusion of citizens in governmental decision making**



UPSKILLING

HEALTHY PARTICIPATION

PARLIAMENT OF MAYORS

EUROPEAN PARLIAMENT

PUBLIC SERVICES CONFIGURATOR  
INDIVIDUALISED

CIVICTECH STARTUPS

INVESTIGATIVE JOURNALISM

HOW CAN I HELP YOU?

I'M YOUR PERSONAL DEMOCRACY ASSISTANT. HOW CAN I HELP YOU?

FULLY TRANSPARENT

AI TO GOVERN

WELL-

-OFF

YOUR TAX RETURN IS SUBMITTED

PRIVACY  
GDPR

SOLIDARITY

SEAMLESS ACCESS

PREDICTIVE PUBLIC ADMINISTRATION

## Context

### Socio-economic development

A positive economic development with a moderate, but continuous growth and a strong social state led to a good economic situation for nearly everybody. Investments in research and developments improved the competitive advantage of the tech industry. The entrepreneurial spirit is high among citizens and there are many start-ups created by young people. The developments in the future of work allow employees to work in a more flexible way, depending on their individual needs and interests. Economically businesses are well-off, many rely on data driven business models.

Governmental regulation is clear and simple, but irrevocable. With respect to data streams, there is an end-to-end encryption, the ownership of the data is with the individuals; companies comply with ethics and regulation. Following the regulatory and policy defence against disinformation in the past, Europe started to invest in quality journalism, which led to having more objective and better quality (digital) media that citizens can trust.

### Role of technology

Further advancements in digitalization and AI lead to a hyperconnectivity that allows better information about current issues in real time. AI data analytics generate predictive insights; they are used for better, anticipatory and evidence based decision making and scientific research purposes. Enormous computing capacities allow simulation and modelling impacts of alternative decisions.

Data handling is made transparent and privacy is ensured; the use of the data is strongly regulated and controlled against abuses. The General Data Protection Regulation from 2018 provides a good basis for the protection of citizens. Follow-up regulations of the use of AI, blockchain and other technologies further strengthened the rights of the individuals. Government is continuously working with start-ups to improve their way of working and innovating public services. Technology is an enabler to fulfil the needs of society, not a driver of the societal change.

## Actors and interactions



Citizens place a higher value on personal and community wellbeing. They can easily achieve a balance between work and life and adjust it depending on their situation in life. Society is diverse. Individuals follow their own desires, but they have a strong sense of solidarity, social responsibility and usefulness. The sharing culture and environmental awareness is high.

The work mode has clearly changed with the digitalization of business. Employees need continuously need strong upskilling. Gainful employment is still very important, but social work and any forms of engagement are rewarded more and more. This led to a push in co-production of public services with public institutions.

Citizens are well informed about political developments. Digital media allow for balanced information. There is a vibrant online public sphere, with high participation of all stakeholders and citizens. Technologies are enabling citizens to participate seamlessly in policy making and shaping the society in which they are living.

Each citizen is the owner of their data. Each defines which information can be transferred or kept privately. Privacy is a central value. People have a right to their digital individuality. People who are more open with sharing their data get benefits in return, e.g. getting a free ride on a bus. Blockchain technology is a backbone for the controlled process of this data sharing.



There is a rich ecosystem of businesses without monopoly. Automation at work is present and very advanced. Most jobs are in creative and research areas. Start-up culture is flourishing. Digital business models are very dynamical. Companies lobby governments for better environment and education, ie. better work force. High transparency prevents hidden interference and limits their reach.



The continuous strive for innovation reshaped the interaction between government and citizens and replaced the administrative role of government to a large extent. Government uses the latest digital govtech<sup>1</sup> solutions to scan the societal problems and providing solutions for the citizens; AI algorithms and robots help govern, especially in crisis situations. Corruption is eradicated. The AI driven analytics is always combined with human judgement and decision-making to avoid bias and misperceptions obtained through algorithms. Human rights are well respected. With strong participation and open innovation culture, the accountability of government is ensured and the variety of possible governmental solutions is increasing. Through digital technology governments enable citizens to participate in decision making. As there is an intense interaction with the majority of citizens in policy making, there is less discomfort with the decisions; these can be applied and adapted to the local needs as the local interests are already taken up. Government is the emanation of the people as the interests of the citizens are well expressed.

With the hyperconnectivity and the established patterns of everyday life routines, individual needs for public services can be predicted and automatically provided in a personalized approach. The whole public service sector has been designed to serve citizen needs and improve societal wellbeing. Public services are also co-produced with citizens. These services are more efficient and citizens are very satisfied with their functionality. Consequently, this has contributed to the increased trust in government and public sector.

### *Relationship between citizens and government*

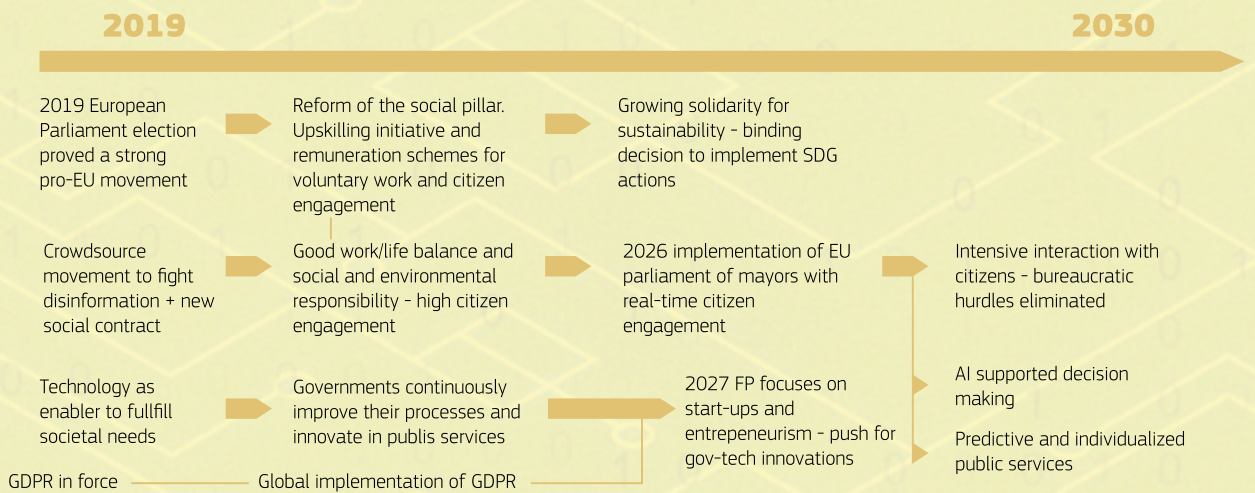
#### Government understands the needs of the citi-

1 Govtech is a particular field in entrepreneur activities that use digital and other modern technology to reinvent the processes of government to deliver new and better ways to enable citizens to engage in their communities and receive the public services they need. It is quite similar to "civictech" or civic technology.

zens and puts them at the centre of their thinking and acting. The participation of citizens in national elections is above 80%. Citizen's voices are heard and included in the decision making process. Policy makers and public servants are under scrutiny due to the full transparency of their actions. There is a strong communication between citizens and government and co-decision making.

The rise of AI brought opportunities for direct democracy at local level that works efficiently with nearly zero marginal costs. Through digital channels, the voices of many citizens can be heard and dialogue to discuss potential options is established. One example is a new European Parliament of Mayors that includes the real-time interaction of affected and interested citizens in the parliament discussions. At the same time, the role and power of local governments have increased, so they have a considerable influence on national and supranational governments.

The use of technological innovations, such as AI, makes everyday life and the use of public services easier. For example, people do not have to fill out their tax form or apply for public services, like in the past. Government knows in advance and predicts what each individual needs and provides information automatically with the help of intelligent personal assistants. Blockchain is used in voting. It assures there are no irregularities and increases the citizen's trust in politics and political institutions.



The 2018 GDPR is still in use in 2030 and has been continuously improved and enforced. Based on the European success, the UN General Assembly voted on the global introduction of the GDPR in the year 2022.

The 2019 European elections campaign and the new charismatic president of the European Commission, often called the “new Jacques Delors”, managed to gain a strong pro-European Union sentiment together with the “Pulse of Europe” movement. Recognising the importance of societal needs, the social pillar was reformed after the election. A broad upskilling programme for the citizens was set up by the EU and its Member States to help the citizens strengthen their employability in the changing nature of work. To push the citizen’s initiatives in voluntary work, a remuneration scheme was set up.

As the solidarity and environmental awareness in the population have grown significantly, the European Union agreed at its summit in 2023 to bind all Member States to develop solutions to achieve the sustainable development goal targets (SDG) by 2030.

By the beginning of 2020s, disinformation and deep fakes diminished due to the collaborative efforts of government and citizens. A strong crowdsource monitoring of issues potentially harmful for society, including potential crimes, has been established. A new social contract was set up.

Local governments raised their formal influence on the EU level in 2026, with the establishment of the European Parliament of Mayors. This allowed for a stronger engagement of citizens in European policies and in return led to a better perception of the role of European policy making.

In 2027, European research programme focussed on start-ups and entrepreneurship – with the participation of SMEs and high incentive for research that is responsible and responsive to societal needs. This pushed the development of an already strong govtech scene. Further improvements in citizen centric policy making processes and co-design and co-production of public services are realized in 2030.

*Current examples that indicate the possible development of this scenario*

### **How to improve inclusion of citizens in policy making: The case of participatory budgeting**

Participatory Budgeting is a process in which members of a community decide directly how to spend part of a public budget. In the late 1980s the first experiments with public participation in budgetary matters were conducted in Latin America. In Europe, participatory budgeting started in 2001 at municipal level in France, Spain and Italy and was extended further also to bigger cities and capitals like Paris, Madrid, Lisbon and Milan. It is calculated that by 2017 more than 3000 European cities have been tested it at least once. Besides its implementation in municipalities and cities, Portugal introduced participatory budgeting in 2017 national level. Even if the budget to be decided is a small share of the total government expenditures, it is a means to bring people closer to politics and decision making and promoting a deeper connection of regions with national project. The main reason for introducing participatory budgeting in Europe was the need to revive democratic participation, strengthen civil society, modernise public services and combat corruption.

### **How to improve participatory democracy through digital platforms**

Citizen engagement platforms focus on informing, engaging and connecting citizens with their government, as well as the citizen with each other to improve the public good.

One example is CitizenLab<sup>2</sup>, a start-up from Brussels that developed the platform that helps public agencies to engage with their citizens. They also include an end-to-end workflow of processing and analysing the civic input when possible. The platform, as several others also do, enables consultation via surveys, co-creation of ideas, discussion and voting; it also now includes a module to run participatory budgeting engagement phases online. According to CitizenLab, the use of online platforms enables the engagement of more citizens, reaches out better to younger citizens under 35 and to speed up the process of the engagement phase. Over 75 governments – mainly cities – have used this platform so far.

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2 For more information, see [www.citizenlab.co](http://www.citizenlab.co)

# 4.4 Scenario 4: Over-Regulatocracy

## Imagine...

the government is committed to the well-being of individuals and economy but processes became so complicated that even public benefits are hard to claim for?

## Summary

Leading digital platforms have been nationalized and put under the control of the democratic government. Social security is good, but difficult to get. Similarly, human rights are important but difficult to obtain. Citizens are relatively well informed, but tied up with bureaucracy. There is a constant criticism on how political institutions work and on over-regulating everything, which prevents citizens from participating in political and social life. Trust in political institutions and media as well as the level of engagement are rather low.

## Key drivers of the scenario

- Raising critique of the influence of global digital companies
- Raising use of AI in policy making
- Raising societal challenges leading to the need for strong socially protective policies
- Needs for justification of public spending and accountability – raising bureaucratic hurdles



POCKETS OF RESISTANCE

BY-TRAINING  
CRITICAL THINKING

FREE CHILD CARE  
FREE DIGITAL  
CONNECTION  
FREE EDUCATION  
FREE POWER  
FREE WATER  
FOR ALL

PUSH OF  
INNOVATION

MEDIA

DATA  
COMPANIES

NATIONALIZED AND  
HEAVY REGULATED

ACCOUNTABLE

AI  
LEGISLATION

NATIONAL  
GOVERNMENT

COMMON  
SOCIAL POLICY  
YOUR BENEFITS  
PUBLIC BROADCASTER

LOW  
TURNOUT  
15%

ACCESS TO  
GOVERNMENT  
BENEFITS

CITY HALL

AI PERSONAL  
ASSISTANT

WELFARE STATE

YOUR PERSONAL ASSISTANT  
CANNOT HELP YOU WITH  
GOVERNMENT PROCEDURES.

FEEL PATRONIZED

FEEL FRUSTRATED

WELL-OFF  
BUT...

BASIC  
INCOME



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### Socio-economic development

In answer to a considerable increase in societal challenges, driven by the growing automation of work, the growing income gap and various other developments, Europe pushed for strong policies to protect its citizens. The measures have a social pillar with improved social conditions for the poor and a strong regulative pillar to protect citizens.

Biased information mainly via social media was a huge issue and led to a strong polarisation of society. The European Union Member States decided to regulate digital platforms. The upward spiral of regulation turned into the nationalisation<sup>1</sup> of leading digital platforms. To protect citizens from fake news and the spread of disinformation, media are nationalized as well. The public media is controlled heavily by the state; moderators are employed by the government. This helped the EU and the Member States to counter information biases and overcome possible manipulations by companies, but also restricted the freedom of speech.

### Role of Technology

AI and IoT are largely used and the hyperconnectivity contributes to a safer life for all and better organized work. The level of automation is high. Algorithms are a core element to automate the bureaucratic system. As learning systems they can adapt in real time or already predictively ahead of time. The legislative system for example is fully automated and is highly efficient in producing new laws, amendments and updates for all kinds of regulations. Along with this, intelligent personal assistants help citizens make better choices. E.g. Robots are used in healthcare systems and they reduced chances of errors in diagnostics and treatments. They are also used in education, especially for children with learning difficulties.

1 Nationalization of digital companies refers means in this context a taking over of the digital platforms, media etc. by an EU-wide public service.



The majority of people live relatively well and manage to have a good work-life balance. The social conditions of the unemployed are reasonable: everyone receives a basic income; basic services are free for the less well-off. As the basic needs are met, there is no revolutionary spirit. However, there is constant criticism on how the political institutions work and on their over-regulation. The highly protective rules even prevent citizens from participating in political and social life. For example, in order to register to vote at national level, citizens need to register first with their local municipality, based on their place of residence. The registration is done via a complicated digital tool, and it is difficult for intelligent personal assistants to provide help because they are not harmonized with the other platforms. When they get the “go-ahead” light from the municipality, they need to upload their data into a national registry that uses a different digital tool that runs in a particular operating system that not everyone has installed. Unfortunately, “The Once Only Principle” of the eGovernment Action Plan – the concept that information has to be supplied to the public administrations only once to eliminate unnecessary burdens – was not able to be implemented due to the technical island solutions. Furthermore, the strict interpretation of the privacy regulations led to a hard isolation policy for data handling at the expense of user friendliness and simplification.

People are informed about politics through the official channels. As digital platforms and media are nationalized and under government control, there is no risk of potential manipulations by corporations or foreign agent intrusions. However, citizens fear that the information they receive is not always fully objective, but skewed towards the government.

Along with the feeling that their voice does not count, this leads to citizens’ disengagement, political apathy, cynicism and the feeling of detachment from the government, as well as low trust in political institutions and media.

Pockets of resistance to the dominant order are created as a countermovement by a small number of critical thinkers; DIY trainings and courses on digital literacy and critical thinking are offered for the ones with a critical spirit. These initiatives have the potential to grow into serious and powerful political and social movements.



The dominant digital multinational and media companies are taken over by the government at the EU level. This system gives economic stability. At the same time, large bureaucracy and strict regulations increased constraints for businesses. The competitiveness of European companies is reduced.

The power of companies to lobby for supporting regulation is limited, as the regulative process is highly automated. The increasing productivity of the innovative companies became the basis for high governmental tax income. Work resources, the use of data, AI and robots are taxed instead of labour. It became the important source to finance the welfare state allocations.



The European Union and Member State governments provide care and support to the welfare state at a high level: infrastructure provision, e.g. digital connection, water, power, childcare, education, is considered as a basic public service and is of high quality and accessible to everybody in Europe and almost for free. But the state tends to overprotect citizens through too many regulations. To avoid fraud and ensure effectiveness of the state services, procedures and justification for the necessity of services are extremely complicated for those willing to apply for it. The procedure to include innovations, e.g. new technologies being part of the public services, is a rather long process.

Through media, the government tries to explain the necessity of protecting citizens by introducing new rules almost daily. For example, in only one year, the Parliament has passed 573 laws. In order to keep the pace, robots and AI help with the production and analysis of the legislation texts and calculate potential risks.

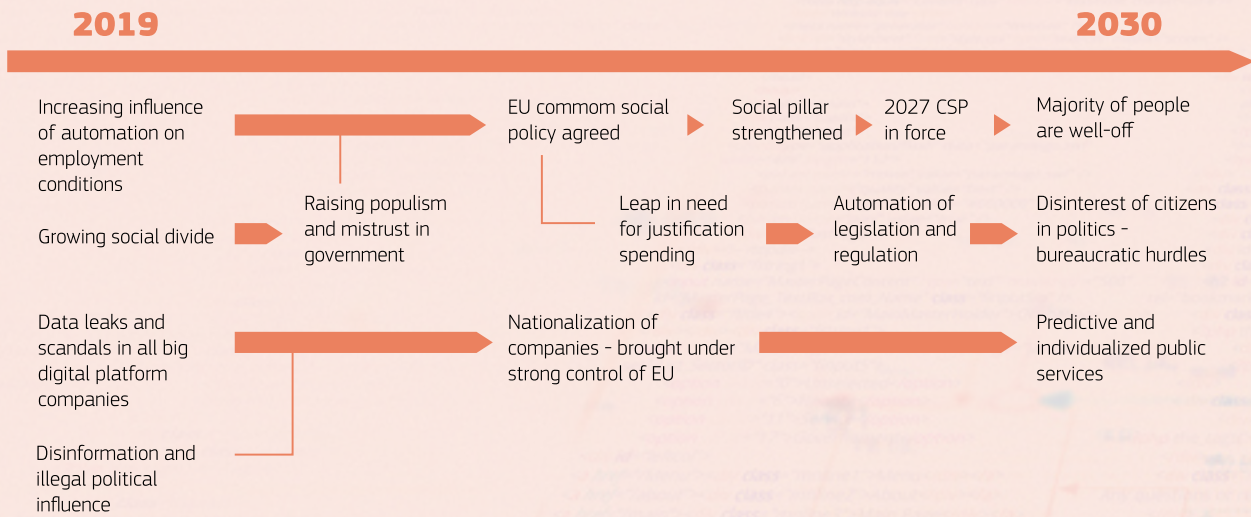
The legitimacy of the government is questionable as citizens' political engagement and participation in the elections is low and the democratic deficit is high; but nevertheless, the governmental system is functioning.

#### *Relationship between citizens and government*

When it comes to political decision-making, most citizens feel saturated and not in a revolutionary spirit. The level of participation in voting and decision making is very low, in some countries under 15%. Only some critical minds feel disregarded and therefore disengaged. They feel that new governmental regulations are less protective of citizens but more for governments. Civil protection rights became more government protection rights.

The EU government believes that the nationalization of digital platforms, such as Google and Facebook, has led to a better position of citizens in relation to digital companies. This was a reaction to the past experiences, when the government ignored digital companies' use of individual data and their impact on society; citizens had been left unprotected and the level of distrust had increased. However, citizens do not experience the benefits of the stronger governmental control on digital platforms; they even have the impression that they are patronized and less free to choose the fancy platform features that are available in the US and in China. Citizens' data is protected via GDPR and increasing European regulations and policies. Human rights are in theory protected, but the judiciary system is complicated and complex. Citizens think that courts should protect them better.

4



The diverse data breach scandals (eg. the Facebook/Cambridge Analytica scandal in 2017) showed governance deficits in the management of the data platforms and threats to democracy due to disinformation campaigns spread over social media in many electoral campaigns around the world from 2016 onwards. The European Parliament took the issue very seriously and developed a plan to nationalize the digital platforms at the EU level in 2024, in order to place them under strong regulation and control, instead of self-regulation that had existed until then.

The heavy regulation of business activities came with strong complaints from the industries and business associations; however, this pressure didn't stop a powerful innovation boost. European industry became capable of improving working conditions for employees.

The increasing societal gap and the fear and factual experience of middle classes of a social plunge led to a rise in pro-populist votes and general mistrust in governments in the late 2010s. To counter this development, European Institutions and Member State governments developed a plan to introduce the Common Social Policy, a EU wide policy system with a pillar for social benefits for the less well-off and a pillar for citizen protection rights. It was decided in 2024 and came into force in 2027. Most citizens became satisfied with a mid-level type of well-being.

Government introduced AI-driven automated legislative and regulative processes to adapt the legislation to the needs of the citizens. This led to a high-pace shift of rules and procedures.

The socially protective policies proved to be counter-productive to the interest of people in the course of the automated development of the regulation; it tended to protect the interest of the state more. In the end, the processes became very complicated and frustrating for the user. Digital solutions remained islands and did not help to overcome the hurdles in bureaucracy. This led to higher frustration and disengagement of citizens.

Current examples that indicate the possible development of this

### **How to allow for citizen engagement but make the procedure intrinsically complicated? The case of European Citizen Initiative**

European Citizen Initiative, which allows citizens to officially ask the European Commission to propose a legislative action, came into effect in 2012. The initiative needs to collect at least one million signatures from at least 7 Member States within a year. At the beginning the ECI was considered an innovative democracy instrument that could decrease the democratic deficit of the EU. However, many EU citizens are not aware of the ECI's existence. There is little evidence that ECI could influence the EU legislation.

The ECI is considered to have legal, technical and bureaucratic constraints. The system is not user-friendly and organizers of a campaign cannot keep the signatories informed because they do not have their emails. Each MS has different data requirements and signature form for the same initiative.

In the EC Communication (2018), among main shortcomings, "a complex and burdensome process for organizers of initiative to collect statements of support" is mentioned. Therefore, the opportunity exists, but its realisation is almost impossible.

### **How to make Kafkaesque administration? The case of three European countries**

There are many recent claims about the burdensome administrations of many EU Member States. Here we give two examples:

1. Several years ago Belgium and the Netherlands planned to launch a kafka.eu portal for citizens' complaints on administrative burdens of the EU regulation. This website is similar to national websites kafka.be and kafkabrigade.nl that deal with the same problem on national level – collecting complaints about national authorities' excessive bureaucracy (so-called "red tape"). Similarly, the National ombudsman of the Netherlands claims that he has seen "many cases that seem Kafkaesque and centre on the loss of autonomy experienced by the citizen who finds himself in the toils of some vast and incomprehensible bureaucratic power"

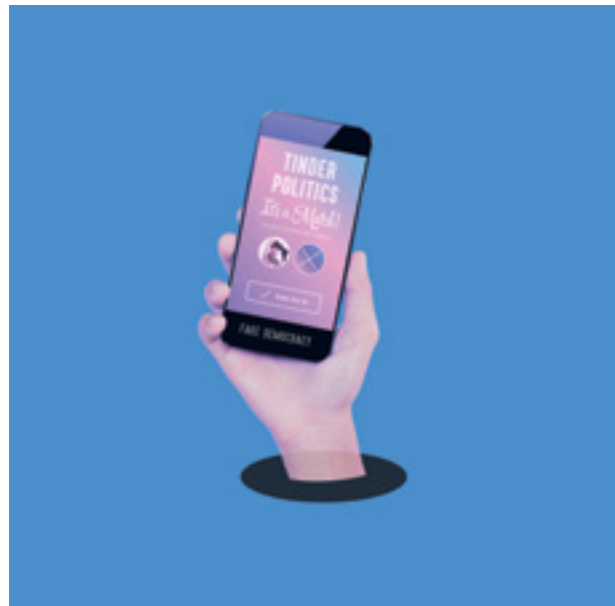
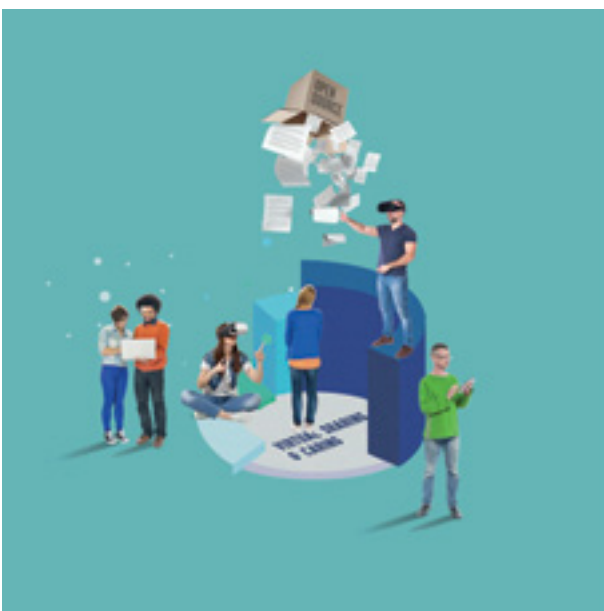
2. Cottarelli (2018) claims that the bureaucratic hurdles can be measured by the number of legislations, regulations and procedures, as well as their complexities. According to some sources there might be more than 150.000 laws currently in effect in Italy. Others claim that the number is substantially lower: eg. Clarich and Mattarella have found 21.671 laws in effect in 2007 (as cited in Cottarelli, 2018). However, if compared to other EU Member States with similar population, this number is still considerably high (e.g. it is estimated that there are less than 10.000 laws in France, and less than 5.000 in Germany).



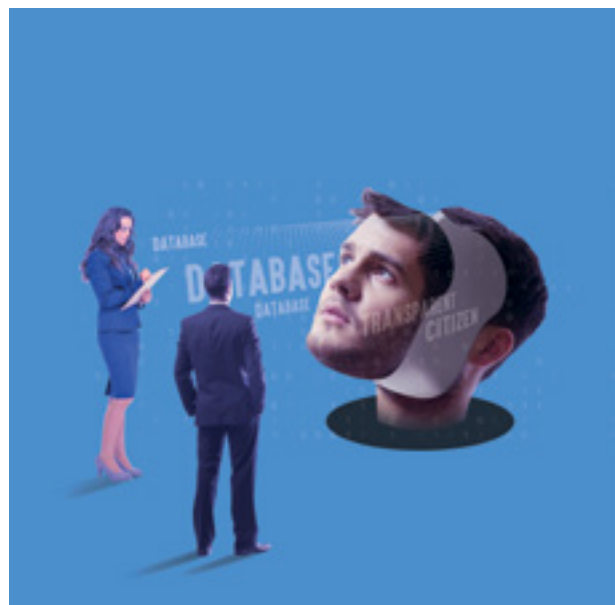
## 4.5 Scenario implications

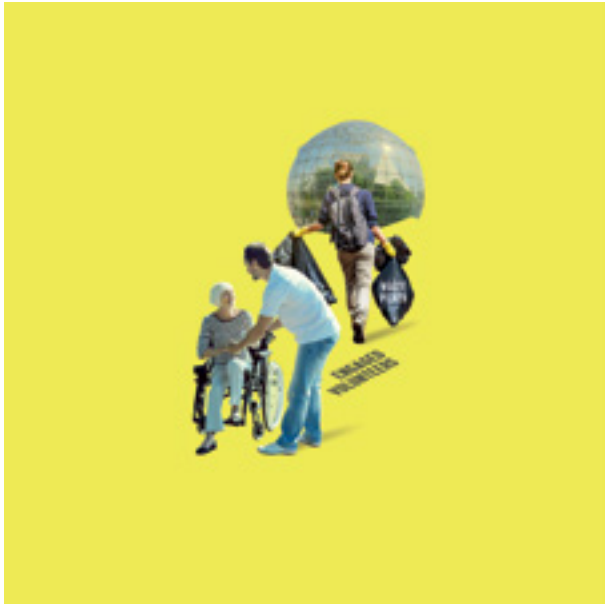
These four scenarios represent four possible and plausible, but not necessarily preferred, futures. They are characterized by different developments: strong decentralization and a diminished role of national government (DIY Democracy), the concentration of power in hands of big digital companies (Private Algoracy), a strong participatory democracy (Super Collaborative Government) and over-regulation and protection by the state (Over-regulocracy). The overview of similarities and differences and how different factors play in each scenario is presented in Table 1.

In **DIY Democracy**, weak government and low quality public services impact citizens to organize and support themselves through different DIY initiatives, creation of DIY public services and knowledge-sharing platforms. **The decentralization helps citizens** to have a bigger impact on politics through at the local level. However, this society would need to have **strong shared values**, strong societal inclusion and rich social capital. On the contrary, **lack of quality public services** could lead to **inequalities**, such as unequal education and non-harmonized skills and healthcare services that could lead to epidemics. The **societal gaps could increase**, more social fragmentations, divisions and less cohesion in society could be possible.

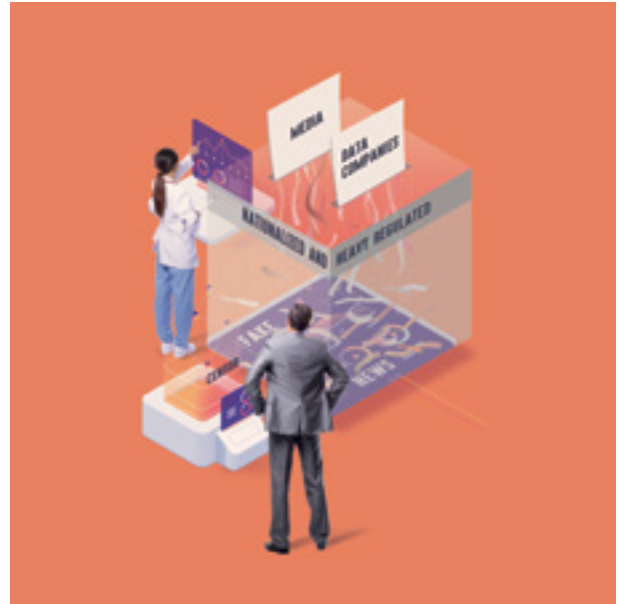
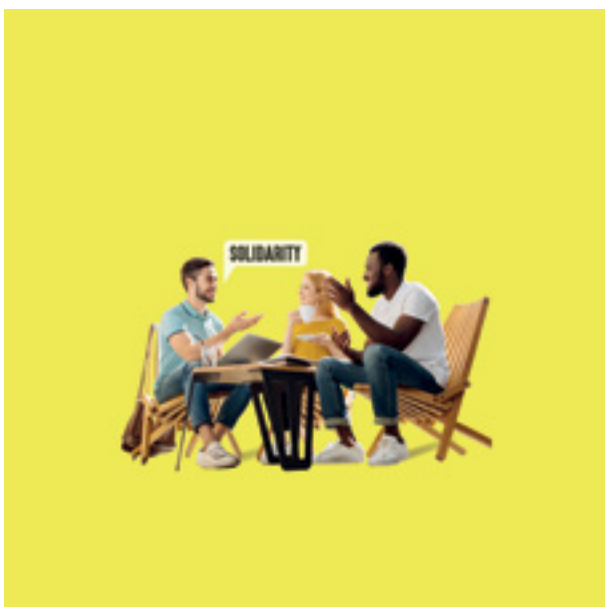


In **Private Algoracy**, technological impact would lead to decision-making based on analytical processing of big data. While the automation and increased use of digital technologies could have positive impacts on government work, **without standards, regulations and ethical use of technology set by the (democratic) government, there is a fear of declining democracy and disappearance of citizen engagement** in any kind of public life. If they are not protected, citizens might turn into pawns controlled by digital companies, through access to their digital data (from health and bank records, for example, to personal and professional use of technologies). In this type of society there would be more disinformation, serious fakes and it would be extremely difficult to make a distinction between truth and lies.





Contrary to the previous scenario, in **Super Collaborative Government**, the technological improvements would lead to **real-time governance and personalization of services** to citizens. Public services would radically improve and the decision-making, in which AI analytics is combined with human judgment, would be objective and for the public good. The key would be **trust in governments** to whom citizens would give away data, in return for knowing that their data is protected and the level of privacy is high. However, some people might not be interested in participating, even if they had all necessary conditions. Also, if the participation were very large, it could be difficult for citizens to navigate and understand all, even with the help of technology, in analysing the data. As stated in a report by Misuraca et al (2010), in such a scenario it would be impossible to aggregate the opinions of all and address collective issues.



In **Over-Regulato**cracy, technology is used strongly by the government to analyse as well as to produce new legislation. While it is good for citizens to be protected, there needs to be a **fine balance between regulating and legislating on one hand and respecting freedom and allowing for inclusions on the other**. Despite strong state and political institutions, and good living standards for citizens, this scenario makes any kind of reasonable political discussions, participation and engagement with politics challenging. This leads to a strong disconnect between the government and its citizens, weak public sphere, and difficulties for the functioning of democratic societies.

4



Table 1: Matrix of main characteristics and values of imagined future societies as shown in four scenarios

	<b>1) DIY Democracy</b>	<b>2) The Private AI Surveillocracy</b>
<b>Financial capacity of the state</b>	The state has a very small budget.	The state is heavily indebted and the influence of big multinational digital corporations on government is large
<b>Dominant economic model</b>	Rise of collaborative economy empowered by blockchain and similar new technologies	Hyperconnected business ecosystems based on big data and data analytics
<b>Societal equality and social capital</b>	Increasing societal gap; strong social capital	Increasing societal gap; Dispersed society, isolation dominates
<b>Power distribution in multi-level government</b>	Strong decentralization; strong local government supporting grassroot initiatives; National and supra-national levels are weak; they try to set framework conditions without public spending and strong regulation	All levels are weak; companies are steering the work of government; everything is centralized with the help of data companies
<b>Decision making process</b>	Grassroots initiatives try to influence and control the government as they took over main parts of public service provision; also multinational corporations have a high control power, as they are financially supporting the government	Multinational digital companies control the government as they have all the data in their hands and own the AI tools for decision making
<b>Public Services</b>	Public services offered by the government are of poor quality. Citizens are creating DIY services in order to have everything they need	The government has outsourced most public services to private platforms; this has led to strong surveillance of citizens by private platforms; privacy is lacking
<b>Democracy and political participation</b>	Liquid democracy has replaced representational system on local level, thus allowed for more direct participation of citizens in politics; government tries to balance the interests of citizens and multinational actors	Democratic participation is almost an illusion;  decision making is fully automated; <i>Tinder politics</i> : Voting based on AI generated suggestions
<b>Media</b>	Media in the hand of large corporations provides not very objective information; citizen journalism is important as "counterforce"	In hands of multinational digital companies
<b>Human rights</b>	Human rights are not seen as the priority for the government. Majority of citizens feel that some of their rights are not respected	There is little respect of human rights, especially in practice. Citizens feel that their rights are endangered.
<b>Trust in government</b>	Trust in government is generally low beyond the local level	There is no trust in institutions
<b>Privacy</b>	Privacy is protected but it is not an important issue	The right to privacy doesn't exist anymore
<b>Accountability</b>	Local delegates need to be highly accountable to citizens (otherwise they can be easily replaced), but national and supranational government are less accountable	There is no accountability of government to citizens. Citizens are not well informed of the policies in order to be able to hold the government accountable



3) Super Collaborative Government	4) Over-Regulocracy
The public finances are strong	The state is a rich actor in the economy, the major companies are nationalized
Innovation in and diversity of business models	Government-steered model
Balanced society, decreasing societal gap and strong social capital	Relatively balanced society, decreasing societal gap as strong social policies are in place but low social capital
All levels are strong; strong supra-national and even supra-local coordination at the EU level	Strong EU, national and local level weaker; shift of national political responsibilities to EU level to manage societal challenges; local level is weak as citizen engagement is low
Governments and citizens co-create policies together with other stakeholders via online engagement tools	Governments have the full control over decision-making processes
Public services are partly co-produced with citizens. Data analytics allow predictive provision of individualized public services	Public services are in the hands of government and of a relatively high quality, but burdened by bureaucratic procedures to guarantee accountability
Representative and direct democracy go hand in hand; direct democracy mainly on local level: Citizens voices are heard through the new virtual communication channels; People co-decide (co-create decisions) via real-time engagement; High participation in elections	The representative democracy system is failing as it is no more attractive; Voting system is very complicated; Citizen participation is low
Public investments in quality journalism	Nationalized media on EU-level, heavily under control of the state; strong control leads also to restrictions in the freedom of speech
The protection of citizens is high on the government agenda. Citizens feel that their human rights are highly respected.	Human rights are officially protected but difficult to be claimed in a court due to complex administrative procedures. Citizens feel that their rights might be endangered.
Citizens trust institutions fully	The trust is low although the government is accountable to citizens
There is full protection of citizens' privacy	The privacy is guaranteed by multiple laws and regulations
The government is fully accountable for its policies and transparent in discussing them with citizens. Citizens are holding the government accountable by being interested in policies and participating in their creations.	De facto, there is high accountability of government. citizens who are indifferent to policies, do not perceive it.

4

# 5 IDEATION OF FUTURE GOVERNMENT MODELS

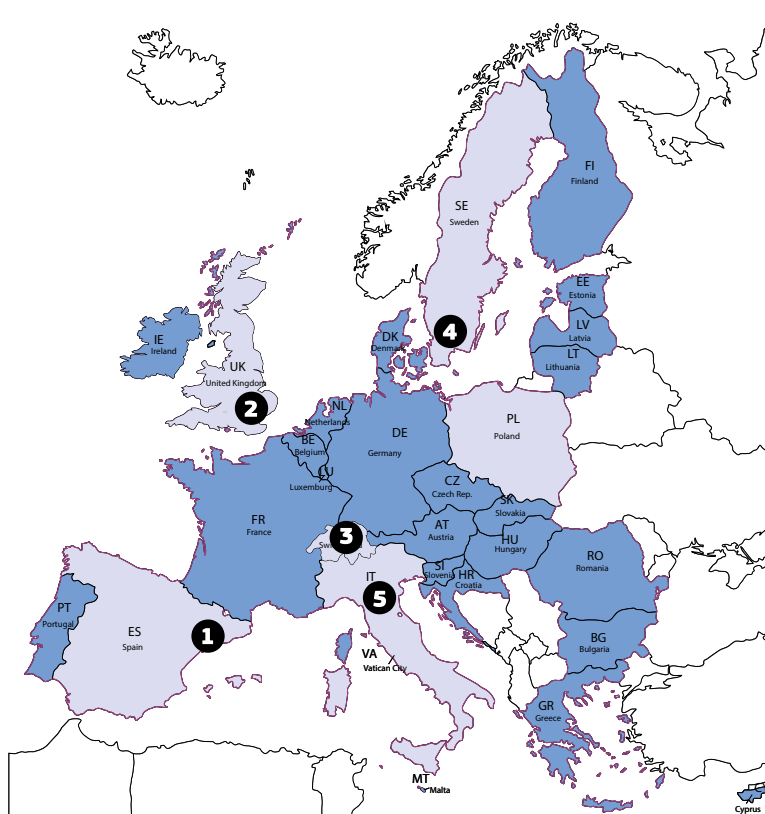
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The four scenarios produced in previous steps of the project provide general frameworks to imagine possible futures. In order to make these scenarios more tangible and to dive into more detail about what future societies might look like, we decided to work with leading design higher education institutions across Europe.

Design schools are ‘studios for society’<sup>1</sup> which enable students, staff and partners to develop experimental approaches to exploring issues and generating and assessing potential responses, and engaging a broad range of participants such as citizens and staff in so doing. Several European d-schools have developed close working relationships with local or central government and civil society (Kimbell, 2016). By partnering with d-schools, we were able to access the expertise of design educators and researchers to work effectively with students, staff and other partners to (a) explore and make sense of the future in the present, (b) focus on citizen’s experiences of interactions with government; and (c) synthesise diverse inputs and contradictions in material or digital form for people to engage with; in order to (d) open up possibilities.

Six leading design higher education institutions (‘d-schools’) across Europe were selected enabling us to engage, inspire and learn from design students, graduates, educators, researchers and the wider design community. The selected design schools represent different design disciplines (product design, communication design, interaction design, furniture design, interior architectural design, service design and design management) and reflect different cultures and values. There was quite a variety in the design backgrounds and understandings of the different schools and courses. Annex 2 gives an overview of some of the differences in the approaches used and the backgrounds to them.



- 1** Elisava Barcelona School of Design and Engineering, Barcelona, Spain
- 2** University of the Arts London, London College of Communication and Public Collaboration Lab, London, UK
- 3** Lucerne University of Applied Sciences and Art, HSLU Art and Design, Lucerne, Switzerland
- 4** Malmö University, School of Art and Communication, Collaborative Future Making, Malmö, Sweden
- 5** Politecnico di Milano, Poli.Design, Milan, Italy

1 Kimbell, L. 2016. Studios for Society – Why Design and Art Schools are Resources for Societal Innovation. Blog.

The projects took place between February and July 2018. In coordination with us, staff at the participating six d-schools ran a speculative or future-oriented design project to imagine new forms of protest, new means for distributing responsibilities, new types of services, etc. Groups varied between 8 and 30 and were supervised and supported by the academic staff. We were in regular contact with the schools and gave feedback to the students, and connected the schools with each other during the collaboration phase. Each school used a format adapted to its own courses and priorities, so it was interesting for them to get in touch during the process and learn from each other's approaches. The formats used included day-long workshops, multi-day ideation sprints to two-month courses with weekly intensive sessions. Depending on the school, the students involved were at BA, MA and/or PhD level.

Each school delivered between 5 and 10 concepts, with the initial selection made by the staff at the d-schools. The deliverable for each of these was a concept description, an artefact such as a video, illustration or a physical object and background documentation with a process description and an interpretation of the work. The outputs of the design work were presented as storyboards, short videos, and visualisations of systems or prototypes communicating future models of governance or interactions with government.

The result was a total of 40 design concepts, of which six are presented in the next section, one from each school. The selection represents a project from each d-school, and demonstrates the variety of topics covered by all of the design students. Together, these concepts form a kind of qualitative dataset that, once analysed, can tell us something about the potentialities and possible implications of new forms of government – at least through the lenses and concerns of the student participants and the staff and partners they worked with. Detailed reports can be shared with interested parties upon request to the EU Policy Lab.

# 5

# Art + Democracy

**Created by: William Doherty, student at School of Art and Communication, Malmö University, Malmö, Sweden**

*Using public art to engage citizens in public policy issue formation*

### Concept

This concept harnesses art's potential for social change by taking advantage of the new ways technology can facilitate deeper engagement with citizens, utilising the potential of public, participatory art to enhance democracy and political participation. Drawing upon the aesthetic thought of philosopher John Dewey ([1934], 1980), this concept envisions a future practice in which art functions in a communicative and activist manner within society. Expressions by citizens function as seeds to bring civic issues to conscious deliberation, and help set public policy priorities. The concept focuses on two key areas where artistic expression is used. Firstly, in the formulation and communication of issues of concern and secondly in community organising for creative participation in addressing these issues.

**What if we radically scaled up art as a political force in society?**

### Roles of different actors if this concept was taken forward

- Citizens will have more time to work on areas AI is less optimised for such as activities that involve creativity, imagination, leadership, analysis, humour, and original thought.
- All citizens receive Universal Basic Income. In order to receive payment they have to actively engage in exploring public issues.
- In the education system, "soft skills" are no longer seen as soft but central and based on emotional intelligence, cross-cultural awareness, curiosity and critical thinking. Lifelong retraining is normal. The school curriculum teaches children to communicate, ask questions, solve problems with creativity, empathy, and ethics. Students acquire the necessary combination of creative, critical, and analytical abilities.
- Government moves from problem solving to being a solution-enabler.



How can we create imaginative spaces in which citizens can construct, or enable others to construct diverse possible futures?

How can public art expand the meaning and practice of democracy?



5

# Mayor Bot

**Created by: Erika Cortese, Giulia Mangolini, Chiara Piva, Simone Piuri and Giovanni Roccabianca, former and current design students and staff at POLI.DESIGN, Politecnico di Milano, Italy.**

*Bringing new forms of evidence about policy issues into view via an AI digital agent*

## Concept

The Mayor Bot is an artificial digital agent based on big and open data. It can influence the decision-making process and suggest possible alternative scenarios making the visualization and usage of data more natural for policy-makers. The Mayor Bot becomes a data-driven voice capable of bringing new forms of evidence into discussions about the policy issues being addressed.

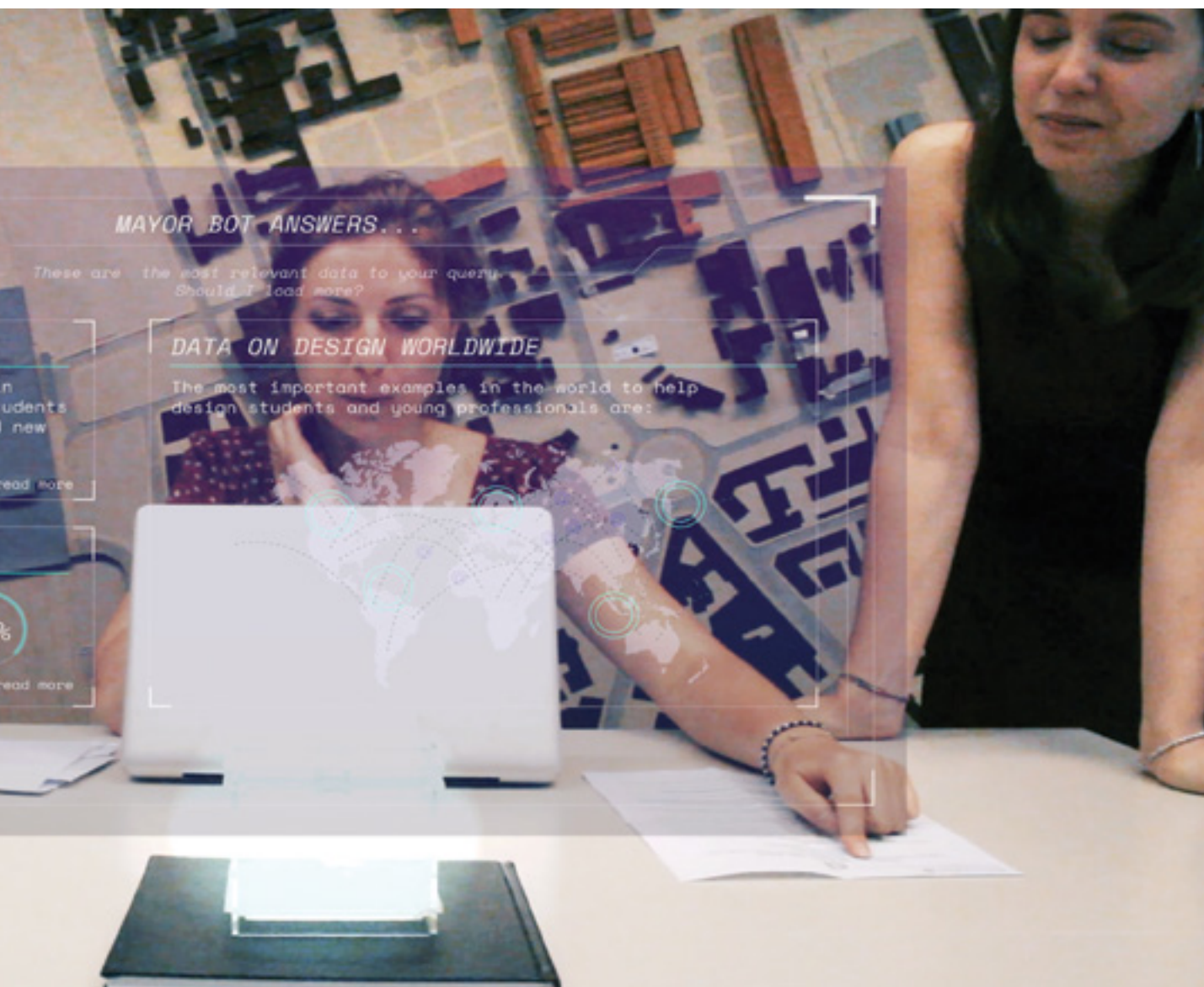
As a result, people can completely rethink their political participation, becoming actively involved. Citizens engage by co-creating public services, especially through digitization. Mayor Bot becomes the key technological tool that allows fluid communication between citizens and government, presenting to policy makers with insights into the current situation in which to intervene. The interactions with the bot allow a comparison with an artificial intelligence that advises and informs policy makers.

## Roles of different actors if this concept was taken forward

- Government perceives data not just as numbers and algorithms, but as valuable information opening up the contexts in which it has to intervene.
- The relationship between technology and government will be positively changed, opening the door to a new dialogue between government bodies, the central government and the city.
- The Mayor Bot not only allows reform of policy-making, but also revolutionizes communication between the stakeholders involved in the process.



**What if in the future  
a machine could give us  
unlimited qualitative information  
to better solve the most difficult  
policy issues?**



**5**



# Citizen as public influencer

**Created by: Clara Llamas, Jessica Venø, Tracy Gordon, Tianyuan Wei, students at London College of Communication, University of the Arts London, London, UK.**

## Concept

Citizens are an active part of local policy making. In 2030 all citizens receive a Universal Basic Income enabling them to spend time as policy makers. This was made possible by an Act of Parliament in 2020 requiring citizens to engage in regular and ongoing local policy making. This obligation and the skills required have also become an intrinsic part of the education system, with numeracy, literacy and public participation as the key pillars of the school system from Year 1 of schooling.

Inspired by the 'Camden 2025 Partner and Engagement Report'<sup>2</sup>, our model for participation is inclusive, and sees all citizens as equally valid actors in active participation and influencing. Instead of being merely informed and passive or 'outside the room' they would be engaged and participate directly as problem solvers and key actors. It makes the policy decision making process more transparent and collaborative, really putting it in the hands of citizens.

## How can we ensure decisions in local politics are truly representative of citizen's needs?

## Roles of different actors if this concept was taken forward

- Central government's role remains the same. It has to have set up Universal Basic Income as an enabler of the citizen involvement in policy making.
- The education system has incorporated the fundamental principles of policy making into its core curriculum from primary school on.
- Civil society plays an important role by allowing the development of civic values and skills.
- Local government is changing from a service provider to an enabler. As such, councillors are responsible for citizen-led policy making, orchestrating and deciding on the composition of expert citizen clusters. Public servants are facilitators of citizen meetings.
- Businesses support their employees by giving them the time they need on a weekly basis to be involved in policy making.

## How can we enable citizens to become active in local policy in a fair, efficient way?

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<sup>2</sup> For more information, see <https://www.camden.gov.uk/camden-2025>

# CAMDEN NEW JOURNAL

Friday 27th of April 2030

A LONDON INDEPENDENT NEWSPAPER



## Camden launches We.dC a governance model that aims to bring all citizens closer to local policy making

The launch of the Income for Policy Influencers in 2026 provided a start for the We.dC. Since late 2026, the Policy Influencer Training has been given to 1.5M citizens and been subscribed by 2,300 London based businesses. In 2027 Camden became the first Borough of London to have 100% of its businesses registered to the Income for Policy Influencers Project. Since then, hundreds of citizens have been able to swap four hours per week of paid work or paid unemployment for active remunerated policy influencing activity in various test labs.

Today's Competence Unit will discuss the strategic issue of "Helping people find better, decent work"

*"Everyone can get the jobs they need to feel financially secure"*

**What if we rewarded citizens for their service as policy makers to motivate them to contribute to open democracy?**

5

# Garbage Privacy

**Created by: Viktoriia Baran, Agnieszka Bartosz and Anna Kavouras, students at School of Form, SWPS University, Poznań, Poland.**

*Losing freedom of choice and privacy through the constant monitoring of data*

## Concept

This concept uses garbage as a metaphor to explore what might happen if we continue to give away our data so easily. People are offered two options: (1) total lack of privacy or control of their own data and the transfer of all data to digital companies in exchange for access to basic public services; (2) data privacy, but total lack of services from the government (education, healthcare, etc.) as well as not having the possibility of being a candidate in the job market. If someone is not part of the system, they are perceived as individuals without a digital identity, as there is no available data about them. They live on the margins of society.

**What consequences do we face, if we continue to give away our data as easily as we do now?**

## Roles of different actors if this concept was taken forward

- Changes in data policies: temporary files are not generated; data is not stored
- The right to the data belongs to its producer



What if garbage were used as an indicator of health, political preferences, or being part of socio-cultural groups?

What would happen if the right to privacy ended?

A hand is shown holding a white rectangular sign. The sign contains the text 'YOUR TRASH BENEFIT SCORE: 300' in bold, black, sans-serif font. The number '300' is highlighted in a bright pink color. The background of the sign is white, and the hand is a light skin tone. The sign is positioned in the lower-left quadrant of the page, overlapping a dark grey rectangular area.

**YOUR  
TRASH  
BENEFIT  
SCORE:  
300**

**5**

# Tailored Taxes

**Created by Miro Peloso, Lisa Moser, Ellen Wolf and Helena Amor, students at HSLU, Lucerne University of Applied Sciences and Art, Lucerne, Switzerland**

*Giving society a voice in governmental decisions when filing taxes*

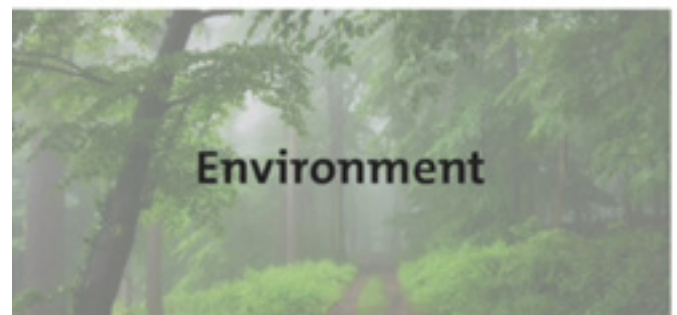
## Concept

An existing touchpoint where government and citizens connect is the tax-return system. Filing a tax return will become a pleasant and interesting experience and make people engage with government decision-making. It will directly enable citizens to decide for themselves in which public policy area 30% of their tax should be invested. Giving society a direct voice in government decisions about expenditure would increase trust and transparency. The fact that adult citizens have to fill in a tax return demands that the experience is designed for and with people.

**What if the duty of a yearly tax return suddenly became a pleasant experience?**

## Roles of different actors if this concept was taken forward

- Citizens would pay 70% of taxes to government as they do today. The other 30% would be up to the individuals to choose into which public sector it should be invested.
- Some government departments would have more income than before, whereas others may disappear completely due to lack of interest in the population.
- Citizens and businesses are forced to investigate economic and political questions.



**What if  
the tax system  
enabled citizens  
to decide directly  
where their money  
is being invested?**



**5**



**Need Assistance?**



# Extended Self

**Created by: Mateo Palazzi, student at Elisava Barcelona School of Design and Engineering, Barcelona, Spain.**

*Merging humans and their virtual mirrors to generate a world of diffuse and intertwined possibilities*

## **Concept**

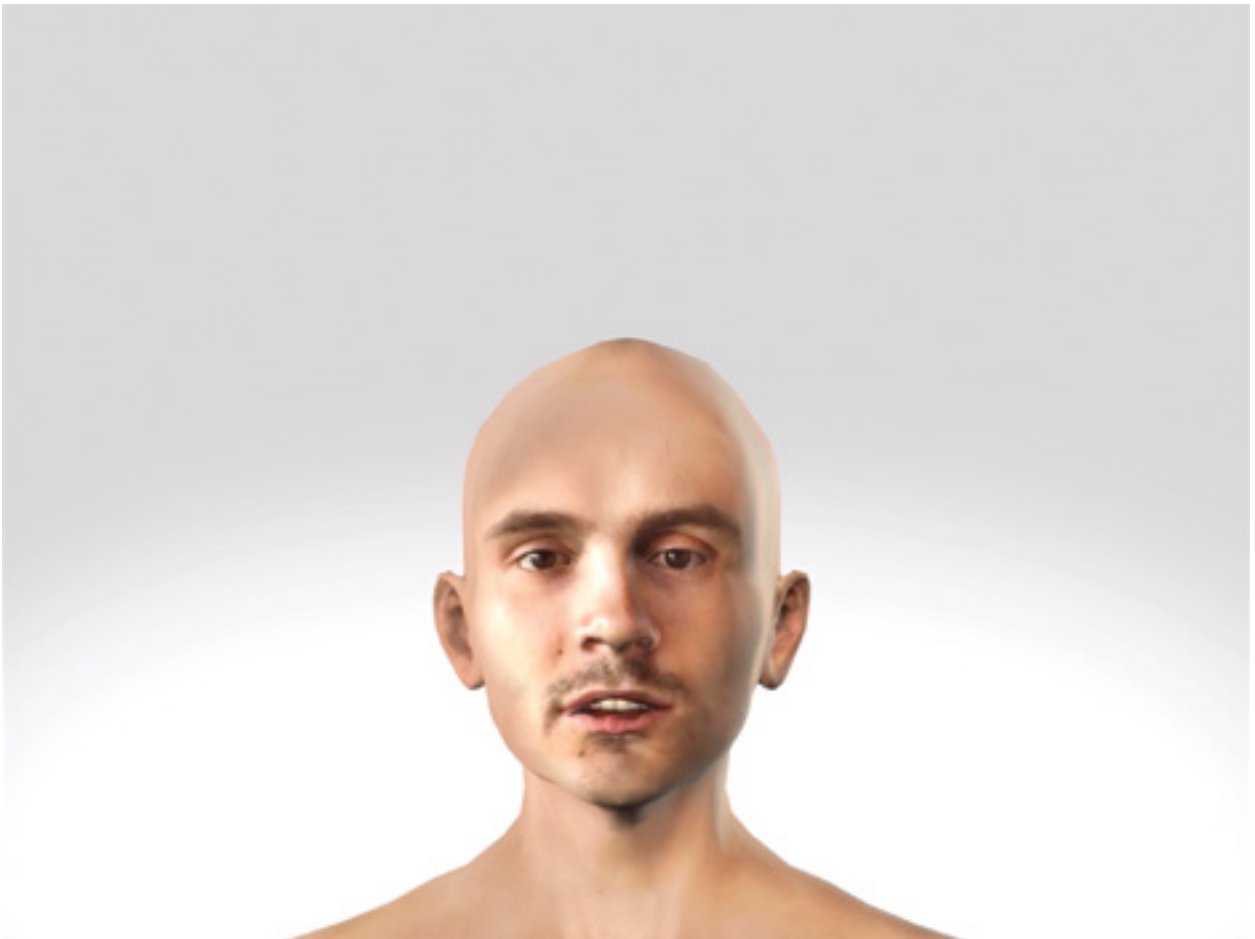
Many people consider their appearance and their reputation on social networks of utmost importance. By performing the daily virtual management of their own image, these 'curators of the self' hit an inflexion point where real life and virtual life are intertwined. Alienated by a continuous feed of excessive information, people do not distinguish between their digitized and hyper-connected selves, including those owned by social media companies and realised through social networks. As a result, people lose control of their virtual selves and thus of their reality. In this future, digitized selves, visible on screens in different sizes (computers, mobile phones, tablets etc.), become extensions of the self. Humanity and its virtual mirrors merge, generating a world of diffuse and intertwined possibilities in which digitized selves express feelings and anxieties that are all too human.

## **Roles of different actors if this concept was taken forward**

- Citizens' behaviours change as they realise that digital entities exist based on their own data which appear to have feelings
- Changes in regulation result as new definitions of human and digital non-human are negotiated

**What are  
the boundaries  
between human  
and digital  
non-humans?**

**5**





## 5.2 Analysis of results of FuturGov design concepts

By analysing the results of the projects developed by design students (sometimes produced in collaboration with research/academic staff and partners), we summarise what it brought to the exploration of the future of government.

### ***Design as a means to multiply the viewpoints on an issue***

With its focus on the tangible and experiential, viewed through the lens of design, many aspects of government have the potential to be (re)designed. Different design approaches emphasise different scales, forms and media. For example product designers are attentive to devices and objects whereas service designers look holistically at experiences across multiple touchpoints over time. design managers look for opportunities to apply design expertise across organisations and systems; and interior architects highlight spatialisation. Viewed through the perspectives of such disciplines, government offers multiple occasions for interaction with and between citizens, businesses and civil society. Therefore future government takes place in multiple, dispersed locations and moments – raising questions about to what extent these live up to the hopes of democracy. Reflecting on their students' work, the team at Malmö said the results of the project showed that “To avoid a divided state and a broken social contract, democracy work needs more resources and extensive engagement from all citizens. Democracy needs to permeate the whole society.” Every touchpoint is potentially an occasion for democratic participation – or an example of its absence.

The concepts produced by the design students resolve issues of today as well as envisaging societal problems yet unforeseen. This large array of concepts emphasized the fact that the future is an unknown. With the same starting material given to all of the design schools, students drew on their own insights, culture and values to explore and propose diverse solutions for similar topics. For example, topics that were dealt with in several schools were linked to the questions of how to handle taxes, how people's needs and perspectives can influence pol-

icy making or how to improve communication between different actors in society.

### ***Design concepts as political acts***

Several concepts looked at the nature of public space, both physical and digital, and the control and surveillance of such spaces shaping and constraining how governments, citizens, businesses and others interact with one another. Several projects explored the processes of policy making and expanded thinking about citizen participation in this, from an Erasmus-type project to new digital services and interactions. In exploring these topics through iterative cycles of learning and experimentation, some students had opportunities to critically assess the potential changes they were exploring. As the tutors in the School of Form, Poznań put it, “The project was seen as a political act itself. Expressing different ideas and stories of the future through tangible objects allows the public to challenge their imagination; to see the possible future more as a multiplicity of ideas rather than separate space and time as well as to address the present critically.” Or put another way, creating the outputs was already political.

Upon discovering and viewing the final selection of student concepts sent to us by teaching staff, it was noted that the most interesting ones, in view of the objective of the overall Future of Government 2030+ project, were the ones that raised debate amongst us. These projects question what is plausible in a subtle or provocative way. Such projects generate conversations about what the future may look like by allowing us to displace our understanding of the present.

In conclusion, the use of generative, speculative and experimental approaches used by d-schools produced new ways to explore uncertainty and to have dialogues with stakeholders about complex and dynamic issues. Even in these six short project descriptions presented above, we found that the activities and outputs produced by the d-schools were an invitation to join a dialogue and explore the topic, rather than primarily being of value as proposing ‘workable’ solutions. In short by materializing possibilities in stories or objects, the designers opened up new areas for debate.

# 6 THE ENGAGEMENT GAME

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Throughout the deployment of the previous phases of the project, the initial target of further disseminating debates on the future models of government, proved to be crucial. The richness of questions and proposals that arouse from interacting with citizens, students, researchers, policy-makers and others, confirmed the potential of creating a conversational tool in order to imagine new forms of government and spark conversations.

The engagement game synthesises the highly participatory and communicative actions set throughout the FuturGov project. Our desire, and the reason why DG CNECT came to us to begin with, was to transform the classical approach to research projects into a process exemplifying the interdisciplinary and experimental characteristics of the EU Policy Lab. Starting from the premises of the project, it was agreed to pay great care and attention to the voices of civil society and other stakeholders. Each step of the FuturGov project provides an escalating experience of future models of government; from the more generic envisioning of future scenarios that emerged from the citizen workshops to the rather specific future oriented design student's concepts, up to the active shaping of unique government models during collaborative FuturGov engagement tool sessions.

The FuturGov engagement tool not only encompasses the material created during the different phases of the project, it also reflects in one way or the other each and everyone's individual contribution. The game gives full account of the exchanges led with diverse groups of stakeholders (Civil Society Organizations, Policy Officers, Research Experts, , Policy Labs and Design Schools), while reaching out to a whole new range of interlocutors.

## *Games*

Design games (Brandt & Messeter, 2004) and foresight games (Popper, 2008) have been tested and have proven success in recent years in creating interactive experiences for people to become more critical and creative about the world around them. When searching for a definition of the term "game", there is little agreement on a common understanding. However, Salen & Zimmerman (2004) did compare and combine the many definitions found in literature, and suggest the following; "A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome." But not all games aim at producing competitive frameworks. Engaging individuals in participatory games is a means for them to produce new insights and understandings of the issue at stake. Therefore games can be developed not only for the play but with a function; "as means for creative expression, as instruments for conceptual thinking, or as tools to help examine or work through social issues." (Flanagan, 2009). The FuturGov engagement game brings participants into a new space, one where possibilities and new understandings open up. At the end of the game during the testing sessions, most players have been surprised when reflecting on the unfolding of the game. The dynamics, the interplay and the new narratives produced collaboratively open up possibilities and new understandings on how the government may look like.

In the first iterations of the game, discussions aroused between the core team on whether this "tool" would have more impact in a workshop or a game version. As the play and experience of players is not possible to anticipate, the game was developed in an iterative way. The iterations created opportunities to respond to intuitions of the core team of developers.

## Development phase

The FuturGov engagement game was developed through a design-led process that included aspects of foresight. Developed by the core team of the FuturGov project: a futurist, a political scientist and a designer, and in close collaboration with design scholar Lucy Kimbell and design researcher Danah Abdulla, and with the valuable support of the futurist Aaron Rosa. As the design of the tool relies on an iterative process of test and trial, co-design, has been applied at two levels; within the interdisciplinary group of the EU Policy Lab and through the workshops done at different stages of the development of the game with various groups of people.

The FuturGov game has gone through a six month testing phase involving various players:

- JRC and Commission colleagues
  - European project researchers
  - Networks of Futurists
  - Students from renowned schools of Design, Public Administration and Political Science
- Depending on the lead user and setting, people from very different backgrounds, experiences, knowledge about the future of government and expertise in futures literacy may use the tool.

Approximately 15 sessions took place gathering 4 to 40 participants, in five different countries: Germany, France, Croatia, Italy and Belgium. Each game was supervised and moderated by one or several of the members of the core team.

***“In summary, all participants said that it was interesting and inspiring to simulate how such a law-making process could play out. It was especially helpful to find out in a very applied manner which common ground the different interest groups could have and also to identify workable strategies to promote one’s own interests.”***

*Alexander, Hertie School of Governance,  
FuturGov game test session, 13/12/2018*

## The objectives

By designing a process through which participants immerse themselves into the future, take on roles that are not theirs, and strategize to achieve their goals, the FuturGov game generates a participatory setting in which a debate can take place.

The specific objectives for the game were to:

- Explore the future of government from 2030 onwards

**Trigger imagination and creativity. Immerse people into possible futures.** Design and Foresight through participatory approaches are interested in shaking up people’s preconceived ideas about the future. The aim is to avoid linear thinking in order to be more receptive to emergent changes.

- Disseminate the results of the JRC EU Policy Lab FutureGov project

**Share findings of a research project in a new way.** Written reports are the common means used to share, and evaluate the work undertaken during a research project. Whilst the game does not replace the report that is a rich gathering of academic references and a deepened reflexion on the topic, it complements it by proposing a conversational tool easy to spread.

- Enable people from different perspectives, levels of expertise and backgrounds to discuss the future of government

**Open up conversations, engaging with large audiences.** Play opens up conversations in a subtle way. Exchanges are mediated by the flow given by the rules. New social relationships take shape between the fictional characters and the “real” players, generating direct and indirect collaborations between the players.

Our visions has been to create an output that is easy to use, inspiring and enables people to have productive exploratory conversations about the future of government, based on leading foresight and design practices including scenario planning, speculative design and design fiction.

6

## The state of play

The current version of the game sets as an objective for players to become the most influential by amplifying ones limited power through collaboration. Each participant, or group of participants, is asked to endorse the role of a type of citizen in 2030+. Each player or group of players is given a card set with action cards and actor cards representing each of the following categories: government+, influencer+, citizen+ and business+. These four categories are the ones used throughout the Future of Government 2030+ project process. Scenario elements are used to immerse the players in the future world and provide the tangible discussion points and game objectives. The ambition of the game is to stimulate conversations, negotiations and debate between the participants.

## Further improvements to the game

The pillars and objectives of the “tool” have clarified themselves throughout the testing sessions into the refinement of a version that is more gamified. The FuturGov Engagement game can be further utilized beyond the project. The purpose of the game in the long term is to develop a version that enables people to customize the tool to their own context. It is foreseen that, depending on the aims set by the main user, there may be different purposes for this tool such as

- **Having a shared conversation about future uncertainties**
- **Identifying and developing strategic options**
- **Identifying factors shaping potential for innovation or improvement**
- **Consultation with citizens and stakeholders**
- **Generating qualitative evidence about citizens’ perspectives on future proposals**

In the coming weeks, our aim is to produce a version that will be a stand-alone game, that does not require a trained master of play, and that can be downloadable from the internet.<sup>1</sup>

1 For more information about the precise date when the tool will become available please check the EU Policy lab blog: <https://blogs.ec.europa.eu/eupolicylab/futurgov/>



Figure 20. FuturGov game test session

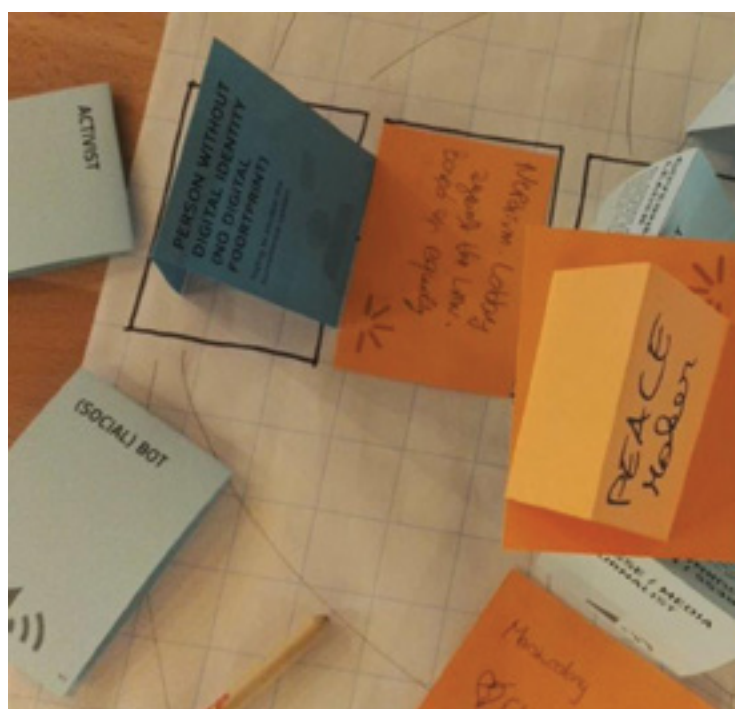
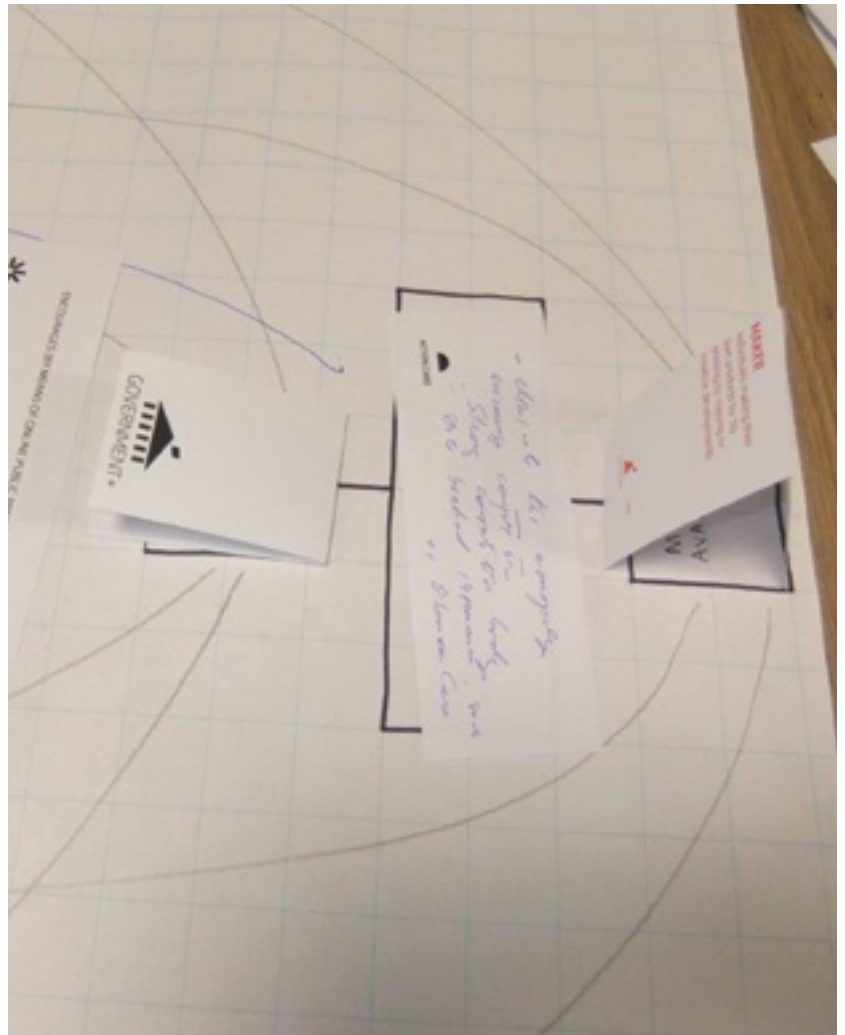
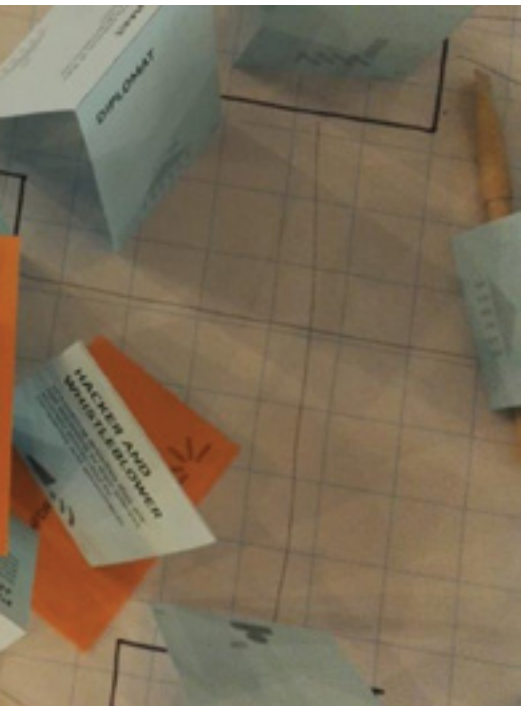


Figure 21. FuturGov game test session



6

# 7 KEY INSIGHTS FROM THE PROJECT

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The aim of the FuturGov2030+ project was to explore emerging societal challenges, analyse trends in our rapidly changing digital society, imagine and reflect on possible futures and launch an EU-wide debate on the “future role of government” looking up to 2030 and beyond.

We perceived many **benefits from using an innovative approach** that has combined foresight, design thinking and citizen engagement, in exploring this topic. The decision to include as preferred participants citizens and students was an important one and aimed at not having a biased view on public services and processes by path-dependent mindsets of experts in public administration, political science or other areas of policy making. Using material produced throughout the project, and our engagement game to spark discussion proved to be interesting, useful and insightful. By involving design academic staff and students, we were able to utilise their expertise in exploring possibilities, focussing on experiences and generating ideas through design-based creative thinking and making, which opened up discussions.

**From these discussions and interactions we have been able to assess that the distribution of power relations** between societal actors and political institutions is already perceived to be a public concern today and will most probably continue to increase. Drawing upon the research and results obtained through four different steps of this project, we are presenting here key insights we have derived.

## Rethinking governments

The evidence gathered throughout this project confirms that **contemporary society is facing many democratic challenges**. Some of them are topics raised by the participants of citizen workshop, such as the growing of populism where emotions and beliefs become more powerful than fact-based arguments; microtargeting<sup>1</sup> that harms democracy through exploitation of personal data (without consent); disinformation in the public sphere that is becoming even harder to track. This has led to growing distrust in political institutions and processes (Garland, 2018).

As the four different scenarios showed, it is important to prepare for different futures, analyse how to avoid negative outcomes and reach the desirable ones. Based on that, governance approaches and possibilities **to rebuild trust of citizens and decrease political dissatisfaction** should be considered. We should, however, not forget that there is no universal solution for every government and state – there could be many different ones, because each government should be seen as embedded in its own socio-cultural and historical context.

Traditional roles of government and public administration will need **to adjust to future societies**. Besides the already existing initiatives such as e-government and open government, this project has shown how novel approaches need to be tested and embraced. They could lead to better informed policy making with higher citizen participation and higher quality services.

## *Opportunities and challenges brought by technologies*

New disruptive technologies, such as AI, IoT and big data, brought already and will continue to bring, many challenges to traditional models of government and opportunities for potential transformations of politics and decision making. Technology was seen as a strong driver in all workshops we conducted in the first phase of the project. While some citizens are very

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1 Microtargeting is a marketing technique where datamining is used to identify interests of individuals and try to influence them



optimistic about their use, others are more cautious. For example, as seen in the Super Collaborative Government scenario or Immersive Gamification<sup>2</sup> student concept, technology could contribute to making systems more efficient or connecting and allowing deliberations between policy makers, citizens and other actors. Therefore, we can conclude that the use of digital technologies can provide many opportunities “if appropriate conditions and ‘governance models’ are developed” (Misuraca, 2010).

At the same time, there are **complex ethical and legal issues** (e.g. surveillance, biases) that need to be taken into account, in order to avoid the AI Private Algocracy scenario. An example of this is also the Garbage Privacy<sup>3</sup> concept, where citizens lose freedom of choice and privacy through constant monitoring of data. Therefore, one of the main questions for the government in connection with citizens and the **use of technologies would be if it wants to be more supportive or intrusive.**

### *Inclusion of citizens*

The evidence from this project suggests that the dialogue between citizens and institutions should become a priority that should be cultivated further, in order to understand better citizens’ concerns, as well as to improve trust of citizens in political institutions. As it is argued in the literature, diverse heterogeneous groups of people often make better decisions than homogenous groups and deliberative forums could enrich democracy and increase its legitimacy and efficiency (Chwalisz, 2015, Landemore, 2012). There is a need to look at the **engagement of citizens beyond traditional forms**, such as voting or participating in consultations, to more unconventional and active forms across their day-to-day lives.

The project showed that on the one hand the interaction with government partners and civil society, and on the other hand the exploration of policy making by citizens, supports knowl-

edge and capacity building about politics and government. In new participatory politics, citizens should be put at the forefront (Alemanno, **2018**) and **political institutions would need to engage in dialogue and co-create policy initiatives with citizens**, so that the knowledge of citizens and not only knowledge about citizens is included in policy creations (Guimaraes Pereira & Volker, 2017).

Many local governments have already embraced more collaborative approaches through participatory design of certain services and spaces (Mechant and Walravens, 2018). This idea is present also in Citizens’ voices and Sherlock concepts<sup>4</sup>, where citizens have more opportunities to deal with topics that are relevant to them. As we have seen in the Scenario Super Collaborative Government, a redesign of existing or the creation of new institutions (e.g. the Parliament of Mayors) could **bring people closer to political institutions** through deliberations, collaborations and co-creation. For the co-creation to be possible, public administrations need to create an “enabling environment” with simple procedures and possibilities for citizens to participate, so that it ensures a fair, inclusive and transparent process (Halmos et al, 2019). Through the organised workshops and dialogues with citizens, we witnessed the willingness of many to participate in diverse deliberative sessions and share their opinions. This has been also stressed in some student concepts (e.g. Immersive serious gamification, Citizen influencer act, Mayor Bot<sup>5</sup>) and also through the engagement game (e.g. with students of political science in Zagreb, Croatia or students of design in Liege, Belgium).

### *Values and citizenship*

All across the project, while engaging with citizens, students and other stakeholders, we have noticed similar perceptions of different values that have been discussed. The main discussion was around democracy and what kind of societies people want. In this context, one of the important questions raised was how to shelter

2 For more information about the concept, please visit the EU policy lab blog: <https://blogs.ec.europa.eu/eupolicy-lab/futurgov/> and Annex 4

3 For more information about the concept, please visit the EU policy lab blog <https://blogs.ec.europa.eu/eupolicy-lab/futurgov/>

4 The projects can be found on the EU Policy lab: <https://blogs.ec.europa.eu/eupolicylab/futurgov/>

5 For more information, please see EU Policy lab blog: <https://blogs.ec.europa.eu/eupolicylab/futurgov/>



democracy from diverse vested interests. Also, there is a general feeling among citizens with whom we have interacted that their voice is not heard by policy makers and that their opinion does not count, despite the fact that citizens are the ones electing policymakers. Therefore, there is a question of lack of representation that might influence or even undermine the role of common parliamentary system of representation.

It is also worth mentioning the conversations around DIY Democracy scenario and the XCertificate<sup>6</sup> concept, which showed **how increased responsibility, solidarity and social capital could act as a powerful force in a society**. This concept of responsible citizenship could lead to a new social contract.

In a world based on big data and data mining, the **respect of human rights and privacy are important values**. This was stressed in multiple student concepts (e.g. Garbage Privacy, Rebirth, Risk tax bill<sup>7</sup>) throughout design schools but also in the dialogues with citizens. In parallel, the results also showed how in this context the notion of citizenship changes. With the increased 'datafication' of every part of their lives, users of digital media start to be perceived more as commodities than as citizens. Based on this, many participants of this project expressed the **need for democratic governments and Europe to protect its citizens, minimize the risk of data abuse** (either by companies or authorities) and continue developing with the respect of human rights. Consequently, trust in the political institutions and processes could be restored.

Interesting were also students' explorations into the intertwining of real and virtual self (Extended Self) and transhumanism (Extended Self and Transpecies), where the concepts of citizenship and identity are pushed to the limits of collective involvement in society and individualism. The body is seen as an "open project" and transhumanism is used to resist hegemonic norms of a society.

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6 For more information, please see the EU Policy lab blog: <https://blogs.ec.europa.eu/eupolicylab/futurgov/>

7 For more information, please see the EU Policy lab blog: <https://blogs.ec.europa.eu/eupolicylab/futurgov/>

# 8

# SCIENCE FOR POLICY

# RECOMMENDATIONS

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Drawn upon the key insights and evidence gathered in the FuturGov project, the purpose of this section is to stress the main points emerged from the discussions that took place between October 2017 and January 2019 among different stakeholders and in the first place citizens, as a part of the project.

### **Promoting innovative strategies**

New practices and innovative strategies are needed for governments to be able to tackle the emerging challenges. It is essential that governments nurture the culture of innovation, as well as the openness and responsibility towards society. Consequently, processes could offer more efficient solutions and be easier to use; make better use of data including open data and citizen-generated data; public services could be improved, based more closely on the needs of their users in terms that are meaningful to them. The agility and effectiveness of the government, would be, thus, improved.

### **Use of design and foresight for better policy making**

Creativity and design can bring improvements in the work of governments and public services as they allow looking at issues from unexpected perspectives, including focussing on the experiences of citizens as they interact with government at different scales and over different timescales, and using 'problem-finding' to open up conversations and iterative cycles of social learning. Stories (such as scenarios) and tangible and visual concepts (such as produced by the d-school projects) allow people multiple ways into discussing government, which otherwise can be too abstract. The development of tools such as the FuturGov game create an opportunity for people to share, discuss and reframe their assumptions about what the future may look like. Thus, better informing their decisions in the present.

### **Fostering multistakeholderism and the engagement of citizens**

The democratic institutions and processes could further benefit from a greater participatory culture. Diverse actors, including citizens, should engage in the co-design of policies and co-creation in their implementation, while acknowledging different kinds of input and expertise are required. In this way, the debate would open up to a larger community. Through the burgeoning public sphere, the voices of dominant groups with vested interests would be challenged and possibly diminished, and the legitimacy and trust of the government, along with the accountability of processes, would increase.

### **Developing new literacies**

New literacies will be needed for the future. Futures literacies are needed to enable citizens to participate in anticipatory decision making, recognising the context of uncertainty and complexity and building up individual and societal resilience to work collaboratively to address these. Cyber and data literacy will be important for everyone to understand better the potential and limitations of digital platforms, their underlying business models and their governance, in order to prevent society and government from being manipulated. Critical thinking should be nurtured, through the education system and beyond in the workplace and civil society, including understanding digital media but also other aspects of people's lives. Policy literacy is also very important, both for the present and for the future: citizenship education already exists in some EU countries but not everywhere.

# ANNEXES

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## ANNEX 1: CITIZEN WORKSHOPS

Member States were selected on the basis of different political traditions and governance cultures, trust in government and political participation next to geographical position and population size. This allowed us to involve citizens with different perception of the role of government, business and citizens and their relationships, as well as different value ranks of what is important in general. The diversity of Member States together with the diversity of participants conveyed a multifaceted dialogue on the future of government.

In particular, several factors were taken into consideration when choosing participating countries: geographical position, population size, voter turnout, trust in national institutions<sup>1</sup> and citizen participation in policy making processes (as suggested by Thijs et al. 2017).

The following countries have been selected:

- Austria, a medium size (8.7 million citizens) Central European country with both voter turnout (80%) and trust (41%) (slightly) above average; weak participation in policy making processes;
- Ireland, a medium size (6.6 million citizens) West European country with the voter turnout similar to the EU average (65%), an average trust in national government (41%) and medium participation in policy making;
- Malta, a small (437 thousand citizens) South European country with a very high voter turnout (92%), high trust (58%) and strong participation in policy making;
- Poland, a large size (38 million citizens) East European country with lower voter turnout than the average (51%), very low trust in national government (33%) and weak participation in policy making;

- Spain, a large size (46.5 million citizens) South European country with slightly above average voter turnout (70%), a very low trust in national government (18%) and weak participation in policy making;
- Sweden, a medium size (10 million citizens) North European state with high voter turnout (87%), high trust in national government (57%) and strong participation in policy making.
- The number of participants present on workshops varied between 15 and 40. In all workshops, participants were divided into several smaller groups (4-6) that allowed them to work more collaboratively and more creatively.

The scope of the workshop was to understand and map today's relationships between individuals, government and other stakeholders in the area of policy making and public service provision and to explore attitudes, expectations and fears regarding the possible future relationships and interactions.

Every workshop started with the identification of main present challenges that were important to participants. Some of them were, for example, misinformation, migration, youth unemployment, data management, public transport, youth participation, quality of life, service delivery.

Based on their identified interests, the participants worked on stakeholder maps that gave broad insights into and assessment of power relationships between different actors. An example of a map can be seen on Figure 20.

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<sup>1</sup> The EU average for voter turnout on national legislative elections is 66.5% according to IDEA (<https://www.idea.int/data-tools/regional-entity-view/EU/40>) and the EU average for trust in national governments is 37% (Eurobarometer 87, 2017).

# STAKEHOLDER MAP

TEAM \_\_\_\_\_  
 GROUP/PROJECT \_\_\_\_\_

## WHO IS INVOLVED?

Who are the organisations and people involved in this issue?

List individuals and organisations with whom the person has a close connection in the middle and the others in the outermost circle.

## HOW ARE THEY INVOLVED?

How is each individual and organisation involved in the persons life/experience of the issue.

Why was this individual or organisation involved and how might they affected their experience?

What influence may they have on the service experience of people?



Figure 20. An example of stakeholder map template used in the workshop at Cork city council (Service Republic)

Based on this, they were able to map stakeholders' relations in the future and identify key drivers of change. At the end the participants presented the priorities for the future government (eg. more investment in R&D, reinventing public administration, institutional checks and balances, better educational system, sustainability, improving the environment, good governance principles), the participants also stressed the importance of values such as transparency, accountability, responsibility, social justice, trust and human dignity.

We used different prompts to immerse participants into the future, by showing them excerpts of diverse futuristic videos as well as exploring major events from 15 years ago to allow them to imagine easier what might happen in 15 years.

Through an imaginary persona and user journey participants used their creativity to explore and imagine possible futures. An example can be seen on Figure 21.



Figure 21: Storyboard



## ANNEX 2: UNDERSTANDING DIFFERENT APPROACHES TO ‘DESIGN’ (LUCY KIMBELL)

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This section gives an overview of key debates among researchers studying design and designing, especially in relation to social and public policy issues and futures. It aids understanding of the benefits and limitations of working with d-schools as undertaken in the FutureGov project.

Design is not a single discipline, field of practice or intellectual territory. Fields which lay claim to having expertise in design include architecture, engineering and computer science, as well as traditions closely associated with art schools such as product design, visual communication, fashion and textiles. Over recent decades interest in design has grown outside of manufacturing and business and in relation to new opportunities and challenges such as digitalisation and globalisation. New specialisms have emerged including interaction design (eg Zimmerman et al 2007), participatory design (eg Simonsen and Robertsen 2012) and service design (eg Sangiorgi and Prendiville 2017). Design expertise, approaches and methods have been used in many contexts outside of business, from healthcare (eg Robert et al 2015) to social innovation (eg Manzini 2015) to public policy making in government (eg Bason 2014). Additionally, there has been interest in ‘design thinking’, understood as a process that allows non-designers to use methodologies associated with design to achieve organizational goals, typically associated with innovation (Johansson Sköldberg et al 2013; Elsbach and Stigliani 2018). A brief overview of design research literature aid with understanding how to access designerly expertise and interpret the outputs of the design students engaged with FutureGov.

*Design culture.* Researchers have examined the historical, cultural and social contexts in which design expertise has developed and become visible and meaningful (eg Buchanan and Margolin 1995). Some researchers have critically examined the politics associated with, and embedded within, design expertise, pedagogy and practice such as an orientation to unsustainable futures (eg Fry 2010). Others highlight the contemporary condition of neo-liberalism and how this shapes, and is shaped by, emerging design practice and institutions (eg Julier 2017). Others (eg Schultz et al 2018) argue for ‘de-colonizing’ design practice and research, challenging Eurocentric perspectives, assumptions about the universal relevance of Western design traditions, and failures to examine inequalities resulting from designing.

*Objects of design.* New fields such as interaction design, service design and social design have presented a challenge to the traditional object-focus associated with design practice. A frequently-used distinction in the literature (Buchanan 1992) distinguishes between four types of object that result from designing: signs; objects; environments; and systems. Other researchers have drawn on social research to understand how outputs of designing are connected to social practices and institutions. For example Binder et al (2011) drew on Actor Network Theory to offer an account of designing that highlighted how individual artefacts are tied up in socio-material networks, shifting from thinking about objects to socio-material ‘design things’. New contexts for applying design expertise such as social design highlight the limitations of how some contemporary designers theorise the ‘social’ into which they intervene (eg Kimbell and Julier, 2019).



*Futures.* Design is one of few fields that claim expertise in exploring and mediating possible futures. Simon (1996) defined design as the science of the artificial exploring what could be. Within the design practices associated with d-schools, traditions of ‘speculative’ and ‘critical’ design emerged using design practices, especially the making of objects, videos and performances to explore and problematise potential futures (Malpass 2017). However alongside design are other traditions exploring or anticipating potential futures (Polli 2017). For example Selin et al (2014) summarised the similarities and differences in exploring futures in scenario planning and design practice. Drawing on anthropology, Pink et al (2018) discuss how creative and exploratory approaches associated with design enable negotiating with uncertainty and possibility.

*Materiality and aesthetics.* Designers and design practices are closely associated with materiality, visuality and aesthetics (Buchanan and Margolin 1995). For example an analysis of product designers by Michlewski (2008) found that their practices embraced ‘polysensorial’ aesthetics. Designers routinely make and use material objects to undertake research, paying close attention to aesthetics and visuality and opening up meanings (Vaughan 2017). Ehn et al (2014) provide examples of long-term projects in which communities, activists, businesses and local government work together through design projects to explore, materialise and assess potential futures, opening up participation in working with materials, objects and aesthetics.

*Experiences.* ‘User experience’ has become visible as something to be researched before starting designing, and something to design for. Contemporary accounts of design expertise often claim it is ‘human-centred’ or grounded in ‘empathy’ for users (eg Brown 2009). Contemporary design practitioners often use approaches associated with ethnography that aim to understand people’s situated practices and worlds in which they engage with products, services, devices or policies. Practitioners and researchers are exploring links between design and anthropology, recognizing people’s creativity as they engage with objects (eg Gunn and Donovan 2012).

*Design methodologies.* There is long-standing interest among practitioners and researchers in understanding and describing how designers do designing. Early efforts to describe design methods (eg Jones 1970) lead to further studies that focus on designers’ cognition (eg Cross 2011) and on the social interactions involved in designing and using the results of designing (eg Suchman 1987). Researchers emphasise how design practice is structured as a kind of research or inquiry that takes different forms in different settings (eg Buchanan 1992; Koskinen et al 2011). Discussions about ‘inventive’ social research are recognising how creative approaches to inquiry from design and the arts open up new possibilities in social life (eg Marres et al 2018).

*Participation and engagement.* A field of practice and research known as Participatory Design which developed in the 1980s foregrounds political and ethical responsibilities to involve people affected by a future product, service or system in designing it (Simonsen and Robertsen 2012). Within this tradition, there is a long-standing acceptance of the value of people making things together as a means of exploring problems, potential solutions and futures, thereby engaging productively with participants (eg Sanders and Stappers 2014). Combining this research with perspectives from the social sciences, Le Dantec and DiSalvo (2013) argued that approaches rooted in design practice aid the articulation of social or public issues, including when these are ill-defined.

*Design for publics and government.* Some design practitioners and researchers have studied the potential and limitations of design expertise and methodologies being used to address social and public challenges. By calling design approaches ‘commoning’ Hillgren et al (2016) highlight the shared endeavours through which resources are brought together agonistically and combined into new formats and arrangements. Further, Ehn et al (2014) emphasise the ‘infrastructuring’ work done and support to enable and sustain such collaborations and engagement with diverse actors. While there is an established tradition of design for social innovation and design for public services, there are as yet few studies of design methodologies being used inside government. Bason (2014) brought together accounts by researchers and public servants reflecting on using design to develop public policy. Other researchers have highlighted the potential dangers of design expertise being used to harness and shape citizen participation (eg von Busch and Palmås 2016). Researchers from public policy are exploring intersections with design research (eg Mintrom and Luetjens 2016) and vice versa, as design researchers engage with literatures in public policy and government (eg Junginger 2014).

*Design pedagogy.* Curricula and teaching and learning practices in d-schools rooted in the culture of design emphasise the characteristics identified above, including learning through making; researching through designing; and exploring people’s experiences of new socio-material things to achieve transformative learning (Tovey 2015). These vary in relation to different settings, educational policies, business needs and practitioner communities. Networks such as Elia (<http://elia-artschools.org>) bring together higher education institutions teaching art and design. Doctoral studies in design include a growing emphasis on using design practice to undertake research (Vaughan 2017).

## ANNEX 3: LIST OF PARTNERS

### 1. Citizens' workshops organizers

- **Department of Public Policy**, University of Malta: Dr Anne Marie Thake and Dr George Vital Zammit
- **eGovlab**, Department of Computer and Systems Sciences, Stockholm University: Dr Vasilis Koulolias and Oxana Casu
- **Engage Warsaw**: Marta Szymborska and Agnieszka Sikorska
- **GovLab Austria**, Austrian Federal Ministry for Civil Service and Danube University Krems: Ursula Rosenbichler, Goran Jokic, Stephan Mathes and Alexander Grünwald
- **Medialab Prado**, Madrid City Council: Saya Sauliere and Rebeca Diez
- **Service rePublic**, Cork County Council: Julianne Coughlan, Cork County Council, Simon O'Rafferty, Design Researcher EPA Ireland, Shane Waring, Dublin City Council

### 2. Design schools and lead members of staff

- **Elisava Barcelona School of Design and Engineering**, Barcelona, Spain  
Dr Arianna Mazzeo
- **University of the Arts London, London College of Communication and Public Collaboration Lab**, London, UK  
Dr Lara Salinas
- **Lucerne University of Applied Sciences and Art, HSLU Art and Design**, Lucerne, Switzerland  
Dr Sabine Junginger
- **Malmö University, School of Art and Communication, Collaborative Future Making**, Malmö, Sweden  
Dr Per Anders Hillgren
- **Politecnico di Milano**, Poli.Design, Milan, Italy  
Professor Stefano Maffei, Dr Beatrice Villari
- **SWPS University of Social Sciences and Humanities, School of Form**, Poznań, Poland  
Dr Monika Rosińska

### 3. Engagement sessions

- EU Policy Lab, Belgium, Session with Citadel researchers, 12/9/2018
- JRC Ispra, Italy, Session with JRC researchers, 18/9/2018
- EU Policy Lab, Session with CSOs, 28/9/2018
- Conjectural Futures conference, Session with futurists, 5/11/2018
- European Parliament Research Service, Session with EPRS staff, 16/11/2018
- Liege Higher School of Design, Belgium, Session with students and Liege Design Week organizers, 22/11/2018
- Erasmus Hoge School, Session with students of futurism, 23/11/2018
- CNECT University, Session with DG CNECT and EC staff, 29/11/2019
- University of Zagreb, Faculty of Political Sciences, Croatia, Session with bachelor and master students, 06/12/2018
- Ecole Nationale d'Administration, France, Session with students, 11/12/2018
- Hertie School of Governance, Germany, Session with students and alumni, 13/12/2018
- EU Policy Lab, Session with the JRC Director General, Head of Unit and colleagues, 09/01/2019
- EU Policy Lab, Session with futurists and colleagues, 31/1/2019 and 1/2/2019
- Science Meets the Parliament, Session with the audience, 6/2/2019

## **ANNEX 4: LIST OF ALL DESIGN STUDENTS WHO PARTICIPATED IN THE FUTURGOV PROJECT AND CONCEPTS THEY PRODUCED**

### **Elisava Barcelona School of Design and Engineering, Barcelona, Spain**

1. Everyday Conversations, Bots as independent beings enter into dialogue with humans, by Carlota Bimbela
2. Extended Self, Merging humans and their virtual mirrors to generate a world of diffuse and intertwined possibilities, by Mateo Palazzi
3. Countermonuments, Ensuring equal rights and the acceptance of marginal collectives, by Victor Betriu
4. Xcertificate, Self-organising citizens defending their interests, by Miquel Cardiel
5. Transpecies, Rebuilding the body via a cyborg as a response to the imposed cultural norms, by Judit Pares
6. Human Consumption, Human hair as a resource for self-sufficiency, by Èlia Bagó
7. External Security Settings, DIY adjustable system of self-defence to for women empowerment, by Claudia Aguiló
8. Cult to Copy or Mimetic Design, Reconsidering the status of originals versus copies and the social inequalities they maintain, by Elsa Casanova

### **University of the Arts London, London College of Communication and Public Collaboration Lab, London, UK**

1. AI-Driven Service Delivery, A new model of Social Care service delivery. Government acts as an insurance company, defining the tax amount by measuring the individual's risk potential, by Carlos Canali , Zhen Li, Chien Yu Lin, Chia Ying Tsai
2. Future service provision: Future Skill Skillbook, a platform provision to enhance individual skill training through the analysis of data by Aomruethai Lo-apirakkul, Banu Cuhadar, Kunwei Niu, Chenxuan Wang
3. Citizens as policy influencers, Local policy participation: all citizens receive an income to spend part of their time as policy makers by Clara Llamas, Jessica Venø, Tracy Gordon, Tianyuan Wei
4. Collaborative service innovation platform, A direct democracy platform by Martyna Bielak, Zehong Liu, Mateus Machado, Ishan Jha
5. How does Immersive serious gamification support future governance, Serious game combining super Artificial Intelligence (sAI), Virtual Reality (VR) and a detailed Immersive Interactive Experience (IIE) and Serious Gaming (SG) by Michele Cipollone, Rui Lu, Runqiong Wang, Sujin Park
6. Open-data across boroughs: Health resource sharing, Health and social care decentralised platform, by Sam Miao, Dasom Kim, Xinbei Zhao, Zikai Wei
7. Sherlock, Platform to improve democracy by giving citizens access to decision making, through a mobile application, by Amber Ruske, Chenyu Hou, Poorume Yoo, Wenxiu Yang, Yuneui Choi

## **Lucerne University of Applied Sciences and Art, HSLU Art and Design, Lucerne, Switzerland**

1. New voting processes, participating in voting by integrating digital innovations by Nora Furer, Jan Gertsch and Jonathan Grubenmann
2. Government Meets Artificial Intelligence, using AI as a personal assistant, which guides people through the day and all the government related issues by Bettina Lanz, Caroline Rüdüsühli, Tanya Gaus
3. The Government Innovation Hub, a physical space to increase and fosters interdisciplinary and cross-societal exchange and collaboration by Christodoulo Strato, Leist Flavio, Rivera Kim, Schupisser Michelle, Wills Leonie
4. Social Design, The Government must promote big cities community centers for integration, inviting both locals and foreigners by Moritz Casonati, Moritz Stoll, Michelle Schmid, Thibault Germes-White, Lara Mäusli
5. Tailored Taxes, Giving society a voice in governmental decisions when filing taxes by Helena Amor, Miro Peloso, Ellen Wolf and Lisa Moser
6. Senior Citizens, Giving retired people a second opportunity to integrate themselves in the employment environment, by Kimberly Wittmer, Lyn Luong, Lee Shmilovich

## **Malmö University, School of Art and Communication, Collaborative Future Making, Malmö, Sweden**

1. Democracy Contract, Developing a new social contract for broader citizen engagement in policy making by Per-Anders Hillgren, Erika Augustinsson, Maria Collings, Richard Gullstrand, Anna Landeborg, Johan Lidmark, Jeanette Flodqvist, Mikael Jung, Julia Magnusson, Kontie Moussa, Rozalia Weisz, Anna Åkerberg
2. The Parliament of Nature, brings forward voices and concerns from a wide array of actors on the planet: humans, animals, trees, rivers etc. and representations from different temporalities, such as simulations of the future or voices from past eras by Kristina Lindström, Per Linde, Åsa Ståhl, Per-Anders Hillgren, Ann Light, Ida Nord, Wilhelm Ast, Pille Prulman Wengefeldt
3. Fluid Parliaments, process-oriented constructions for doing politics on a specific theme that complement the traditional parliament, by Per-Anders Hillgren, Michael Strange, Alicia Smedberg, Pelle Ehn, Sofie Gillstedt, Johan Lidmark, Bjarne Stenquist
4. Tornado Democracy, A reenvisioning of democratic community and practice as a fluid system modelled as a series of intersecting tornadoes by Pelle Ehn, Michael Strange, Alicia Smedberg, Sofie Gillstedt, Per-Anders Hillgren, Johan Lidmark, Bjarne Stenquist
5. Community Commons, Decision-making is devolved to local communities who get small basic resources that they themselves can use to initiate, develop and maintain local infrastructure, by Jörgen Andersson, Asko Kaupinen, Jerker Knape, Rodolfo Zúñiga, Ann Light, Per-Anders Hillgren
6. Citizens Voices, Home voice assistants acting as touch points for citizens to interact with their governments by Himanshu Rohilla, Interaction Design
7. Art + Democracy, Expanding the meaning and practice of Democracy through Public Art by William Doherty
8. Future of Pregnancy Care, A new service to monitor by non-invasive sensors the baby and mother's baby health by Erik Cronqvist, Jolena Yao, Dusan Antic, Sebastian Thoren, Daniel Alfredsson



## **Politecnico di Milano, Poli.Design, Milan, Italy**

1. The Consumption Show, Access to public services depending on individual performance measured through data surveillance, by Akanksha Gupta, Jennifer Wieskopf, Rotem Fisch, Lisa Cagnin, Elisa Pirola
2. ReBirth, Giving citizenship in exchange for data tracking, by Akanksha Gupta, Jennifer Wieskopf, Rotem Fisch, Lisa Cagnin, Elisa Pirola
3. Biotechnology Living Labs, An aircraft carrier turned into an experimental space for EU to formulate and unify policies, to promote, review and regulate best practices and uses of biotechnology, by Karadim Theodora, Marcelo Ramirez
4. The Surveillance-Free Commune, Heteroptopia Communes spread throughout the world, uncontrollable they are used for leading practices of privacy defense and new use of data, by Karadim Theodora, Marcelo Ramirez
5. D-Union Platform: A defence body for data security that guarantees a fair commerce of data between citizens, governments and big companies, by Erika Cortese, Giulia Mangolini, Chiara Piva, Simone Piuri, Giovanni Roccabianca
6. Mayor Bot: Bringing new forms of evidence on policy issues via an AI digital agent, by Erika Cortese, Giulia Mangolini, Chiara Piva, Simone Piuri, Giovanni Roccabianca
7. Innovation Ninja Platform for Remote Areas, an open-call program conceived with the aim of renovating values to the remote areas around Europe by Davide Minighin, Davide Susca, Gianvito Fanelli, Alessandra Bari, Elena Panciroli, Sara Gabbioni
8. Erasmus 3 – The Maverick Programme, Using youth exchange programs to develop knowledge on policy systems by Davide Minighin, Davide Susca, Gianvito Fanelli, Alessandra Bari, Elena Panciroli, Sara Gabbioni

## **SWPS University of Social Sciences and Humanities, School of Form, Poznań, Poland**

1. Sharing Center 2030+, Under the agreement between self-organized citizens and local government people across all social classes are able to meet in post public school to teach and learn from one another, by Iwona Kubecka, Marcelina Komar, Natalia Tarnowska.
2. Post - Post. Future of a Post Office. A virtual platform connecting people who want to share and exchange items and a new dimension of the Post Office as a state institution by Marcelina Komar, Iwona Kubecka, Natalia Tarnowska
3. RE:URB urban repair platform. A virtual platform for urban space repair based on the cooperation between citizens and authorities, by Natalia Tarnowska, Marcelina Komar, Iwona Kubecka,
4. Garbage Privacy, Losing freedom of choice and privacy through the constant monitoring of data by Viktoriia Baran, Agnieszka Bartosz, Anna Kavouras
5. WeActiv, Obtaining access to public services based on daily physical exercising by Kateryna Bielobrova, Maja Krajewska, Martyna Nawrocka
6. Sharedflat. Space for co-living for singles as part of a government program aimed at decreasing level of people's loneliness, by Kateryna Bielobrova, Maja Krajewska, Martyna Nawrocka

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