

The Makers in Residence at the JRC makerspace

1. The context is the Competence Centre on Participatory and Deliberative Democracy

The Competence Centre on Participatory and Deliberative Democracy aims to respond to the increasing demand from the European Commission, EU institutions, and countries for the capacity to support participatory and deliberative projects and policies at the EU level.

We can potentially overcome some of the difficulties policymaking is facing by involving citizens more, not least because it could help ensure the social robustness of those policies, in other words, answering real societal concerns and desires. Citizen engagement, from this broader perspective, is not just about exploring opinions and interests or eliciting knowledge and values. Instead, it is about openly discussing matters of concern, contention, and sometimes controversy. Engagement will enable citizens to influence and shape policy by making sure they are involved in every part and at all relevant stages of the policy cycle. Thereby, citizens are empowered to take ownership of the European Project and what matters to them. Similarly, citizen engagement contributes to a better understanding of the EU and its decision-making processes.

By establishing and maintaining citizen engagement in the whole policy cycle, the 'evidence' provided in its different steps becomes inclusive of and open to citizens' voices, concerns, expectations, knowledge, and imaginaries about EU governance.

The Competence Centre experiments with different methods. The Competence Centre runs a makerspace in the Ispra site of the Joint Research Centre. The JRC makerspace is placed within a network of more than 800 makerspaces in the EU alone and links to the broader maker movement worldwide. The maker movement is a grassroots movement, making it by design an engagement project centred on transdisciplinary approaches and co-creation with ordinary citizens. The people that build or use makerspaces are interested in problem-solving, which one can argue is core to policy design. Concerning the participatory grand project that the CC-DEMOS supports, the JRC makerspace is a central site to advance concepts and methods that seek to interact with citizens about policy topics that have been purposefully built to support the "experimentarium" pillar of the CC-DEMOS.

2. The JRC Makerspace business model is to connect to the community out there.

The JRC Makerspace is a physical space located at the Joint Research Centre's Ispra site designed to promote active participation, knowledge sharing, and collaboration among different actors. In particular, the JRC makerspace aims to:

- a) be an incubator for multiple collaborations between Commission services (including JRC) and new transdisciplinary projects;
- b) involve different communities, or possibly
- c) setting for a reflexive re-examination of existing projects under diverse and emerging methodologies and theoretical frameworks.

In addition, the JRC Makerspace supports ideas of material deliberation and material co-creation, intending to engage citizens in technoscientific innovations relevant to policymaking. In this sense, it is a space where new approaches to citizen engagement (e.g.,

material deliberation, citizen science) are explored, experimented and validated as more profound and care-oriented forms of societal participation.

A selection of machinery and equipment, from 3D printers and a laser cutter machine to electronics equipment and environmental sensors, is available to support various activities.

In the last few years, the CC-DEMOS has experimented with citizen engagement through makerspaces, demonstrating the value of co-design, tinkering, and prototyping to have conversations about the science and policy issues of concern (e.g., the future of work; connected and automated vehicles). Furthermore, in 2020 the JRC gave the first five grants to makers in (virtual) residences focusing on one of the policy files it is working on, the Pollinators Decline Initiative.

The MIR programme within the objectives of the Competence Centre and JRC Makerspace.

Makers are self-reliant, skilled individuals specializing in divergent thinking and creative problem-solving. Well-versed in navigating from ideas to the tangible, makers may be artists, software programmers, fabricators, machinists, designers, or others. The following are the main strategic reasons to run a programme with makers in residence through the JRC makerspace:

- a) Implementing the experimental angle of citizen engagement as per pillar experimentation of the CC;
- b) Complement and even underpin other citizen engagement activities that are ongoing for policy or science for policy files;
- c) Demonstration for the makers' movement on how their interventions can be made helpful for institutionalised policy design;
- d) Connecting directly to the makers' communities and strengthening the place/visibility of the JRC makerspace within the network of makerspaces.

Makers in residence programme will enhance tangible links of the Commission to EU citizens. It is part of a new strategy that views citizens as epistemic actors and not just people whose opinions need to be surveyed. Furthermore, it makes the JRC makerspace visible to the makers' community, which is a necessary legitimacy.

The Makerspace plan is to have four makers in residence each year for the next five years, i.e., 2022-2027.

Implementation of the Makers-in-Residence programme.

The JRC makers-in-residence programme is an annual, short-term research-focused residence. It is centred around specific concepts and themes directly tied to the science and technology policy topics considered in the JRC Annual Work Programme. Each year a new theme is proposed. The programme promotes capacity building, fosters partnerships with local, regional, national, and international makers, and improves the open Knowledge around the residency topics. During the duration of the residence, makers are asked to produce a tangible outcome, be it a workshop, a prototype, an artwork, or an exhibition.

The second edition is focused on the EU Missions.

The CC-DEMOS is supporting DG RTD with citizen engagement in the EU Missions. In particular, the group supports the missions: Climate Neutral Cities; Cancer; Soils and Oceans. Also, to a certain extent, the Mission on climate adaptation¹.

The dissemination plan includes:

- a) The ideas and prototypes resulting from the residences will be documented and presented to the Missions' respective secretariat;
- b) In addition, they will be shared through social media across the makers' community;
- c) Show and tell the results at the 4th Festival on Public Participation and Deliberative Democracy;
- d) Depending on the projects, some might be suitable to be offered as workshops organised by the JRC makerspace.

In Annex is the complete plan for 2022 (second) edition of makers in residence at JRC makerspace.

¹ The Climate Adaptation EU Mission is focused on a topic for which a great deal of grassroots work exists and, in the sense the JRC makerspace will not support a residence in this topic.