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From the DoA

This deliverable will update the draft version [issued at M4] on the basis of the experience after the first hackathon cycle.

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Glossary

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<th>Definition</th>
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<tbody>
<tr>
<td>API</td>
<td>Application Programming Interface</td>
</tr>
<tr>
<td>Application</td>
<td>Any kind of meaningful use of open data. (As-of &quot;application areas of open data&quot;)</td>
</tr>
<tr>
<td>[Mobile or Web] App</td>
<td>A self-contained program or piece of software, especially designed to be downloaded by a user on a mobile device or personal computer.</td>
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<tr>
<td>Common</td>
<td>Often used in phrases such as “a new common” or a “global common”, the term refers to a new form of a common good, typically created by people through collective action and shared by the community (T de Moor, “From common pastures to global commons: a historical perspective on interdisciplinary approaches to commons”, 2011).</td>
</tr>
<tr>
<td>Challenge</td>
<td>A widespread call to action to participate in an open contest (like a Hackathon) for improving or renovating an existing situation.</td>
</tr>
<tr>
<td>Citizen</td>
<td>An inhabitant of a particular town or city.</td>
</tr>
<tr>
<td>Citizen initiative</td>
<td>An initiative proposed by a (collective of) citizen(s), which ideally is informing the challenges for the hackathon process.</td>
</tr>
<tr>
<td>Fablab</td>
<td>A physical place where anyone can make an idea concrete by transferring and fabricating those ideas through the use of 3D printers and other (complex) technological devices. The staff and peers at Fablabs empowering people to build their ideas; they support them in doing it themselves, but do not execute the work for them.</td>
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<td>Hackathon</td>
<td>Generally understood to be a collaborative event almost exclusively of software developers, that typically lasts two-three days and is intended to result in the production of one or more apps. In the Open4Citizens project, the hackathons include a range of participants with different areas of expertise and solutions being developed are not limited to apps.</td>
</tr>
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<td>Maker culture</td>
<td>A global trend of consumers becoming co-creators of new products and services (MD Gross and E Li-luen Do, in “Educating the New Makers:</td>
</tr>
<tr>
<td><strong>Mock-up</strong></td>
<td>A sample, or a low-definition, non-functional prototype of an app or a service resulting from the co-creation work in the hackathon event</td>
</tr>
<tr>
<td><strong>Non-expert user</strong></td>
<td>A person without professional or specialised knowledge in a particular subject (here, we refer to expertise in computer programming and/or data skills in the context of the Open4Citizens project); also, non-data expert user with no particular IT and programming-skills</td>
</tr>
<tr>
<td><strong>Non-IT savvy user</strong></td>
<td>A sample, or a low-definition, non-functional prototype of an app or a service resulting from the co-creation work in the hackathon event</td>
</tr>
<tr>
<td><strong>O4C approach</strong></td>
<td>A workflow based on three consecutive phases: 1) Pre-hack; 2) Hack; 3) Post-hack.</td>
</tr>
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<td><strong>O4C platform</strong></td>
<td>The online digital platform supporting the hackathon process with technological resources, methodological suggestions and data.</td>
</tr>
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<td><strong>Open Data</strong></td>
<td>Data that can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and share alike. Source: <a href="http://opendatahandbook.org/guide/en/what-is-open-data/">http://opendatahandbook.org/guide/en/what-is-open-data/</a></td>
</tr>
<tr>
<td><strong>OpenDataLab</strong></td>
<td>The physical infrastructure the Open4Citizens project intends to conceive, in order to support citizens’ participation to co-creation with open data.</td>
</tr>
<tr>
<td><strong>Public service</strong></td>
<td>A service provided by a government body to people living within its jurisdiction, either directly (through the public sector) or through financing a third party (agency or subcontractor).</td>
</tr>
<tr>
<td><strong>Social impact</strong></td>
<td>The effect induced [by a certain project or initiative] on the well-being of a community (and/or a less integrated group of people)</td>
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<td><strong>Social sustainability</strong></td>
<td>The ability of a community to develop processes and structures which not only meet the needs of its current members but also support the ability of future generations to maintain a healthy community. Source: <a href="http://www.businessdictionary.com/definition/social-sustainability.html#ixzz2y75dJTij">http://www.businessdictionary.com/definition/social-sustainability.html#ixzz2y75dJTij</a></td>
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<tr>
<td><strong>Urban services</strong></td>
<td>Services at the urban scale, aimed at creating public utility. They are not necessarily initiated by the local government.</td>
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1 Executive Summary

This Deliverable appears one year after the release of D1.3 – Concept Definition Report – which highlighted the building blocks that define the Open4Citizens project on a conceptual level, mostly elaborating upon the contractual Description of the Action previously agreed with the European Commission.

Now that we are in the aftermath of five mostly successful hackathon events, the time has come to further shape and scope the concepts used in the O4C project. In the current deliverable, these concepts are refined and updated. This has been done not just to update the key definitions of concepts used in the project, but also to narrow the focus on the most important outcome of the Open4Citizens work plan, which is the establishment of five OpenDataLabs in Barcelona, Copenhagen, Karlstad, Milan and Rotterdam. However, the overall ambition is to have these five OpenDataLabs self-sustainable and act as catalyst for the activation of an EU wide (possibly global) network of OpenDataLabs. The guiding concepts described in the current work should allow for successful completion of the Open4Citizens’ objectives and continuation beyond the project timeline.

The structure of this document is as follows: Section 2 (Overview, Problem Framing and General Concepts) frames the discussion in the context of the Open4Citizens project vision and overarching goals. Section 3 (Rationale and Source of Inspiration) reminds us of the background and motivation for the current project, while drawing the analogy between the already established FabLab movement and the prospective network of OpenDataLabs that the project aims to realise. Section 4 (Key Characteristics) introduces a set of recommended (non-prescriptive, but highly probable) features that the members of the nascent network of OpenDataLabs should share. This set will be further discussed both internally and with the incoming prospective partners. The guiding concepts will be sharpening the ongoing debate and are consolidated in the final version of the Concept Definition report, which is due by project’s end, aiming to keep the Open4Citizens movement going. Lastly, Section 5 (Conclusions and Outlook) summarises the work done and the major challenges ahead.
2 Overview, Problem Framing and General Concepts

The Open4Citizens project aims at empowering citizens to seize the opportunities offered by the availability of open data to address needs related to social sustainability – to help citizens work with data to create new solutions based on the use of open data. Within this context, there are two fundamental gaps that frame this problem:

- Today, most public services provided by governments and local authorities are designed from a top-down perspective (focusing on organisational aspects) instead of being created with the citizens or by citizens in a bottom-up manner, focusing on the citizens’ everyday life.
- Much of the available open data is theoretically accessible by anyone, however most citizens do not have the technical knowledge and skills to access and use this data. This means that ‘normal’ citizens are not capable of comprehending and utilizing the possibilities offered by open data in a meaningful way.

The Open4Citizens project aims at closing these gaps by creating an infrastructure and by suggesting practices and tools that support citizens in making meaningful use of open data.

A key outcome of the project therefore consists of a model for a physical and virtual infrastructure that can assist citizens in improving their knowledge about open data, visualising the potential of this new resource and even supporting any initiative from citizens, interest groups or local organisations, that aims at generating new services based on open data. This infrastructure, manifested in a network of OpenDataLabs, will support innovation, entrepreneurship and local development of new urban services enabled by open data. The development of OpenDataLabs in five different locations creates the condition to put the basis for a network of OpenDataLabs, which will possibly activate a broader cultural change around the use of open data in a new generation of public services.

In order for it to work, however, the OpenDataLab should enable generation of knowledge, know-how and practices leading to the co-creation of urban services based on open data. The project is proposing the use of hackathons as a practice to involve citizens in co-designing the new services, supported by the OpenDataLabs. The O4C project is proposing the hackathon as a process of progressive definition of citizens’ challenges through the involvement of relevant people (public servants, data owners, small companies, interest groups) and the definition of a relevant basis of data sets. The hackathon process is therefore articulated in a pre-hack phase, a hackathon event and a post-hack phase.

Finally, the process of co-creation, as well as all the activities based in an OpenDataLab, will be supported by a toolbox, consisting of a citizens’ data toolkit and tools for citizens to analyse, visualise and work with data. All such tools will be available on the O4C platform an online resource, that will also link to any possible open data source.

To summarise, the Open4Citizens project operates at three different logical levels:
- The level of **interaction and value creation**: Supporting the co-creation process by triggering co-design skills in a common pressure-cooker exercise involving citizens, public authorities, interest groups, IT experts and other relevant actors;
- The level of **infrastructure**: Organising processes (the hackathon process), infrastructures (the OpenDataLabs) and resources (data, toolkits, online platform) to support the value co-creation process;
- The level of **governance/policy making**: Pushing a greater availability to data disclosure and suggesting a new model for public service innovation based on the use of open data and activating a network of OpenDataLabs, that support such a model.
3 Rationale and Source of Inspiration

Maker culture is a broad phenomenon combining aspects of do-it-yourself (DIY), which focuses on creation of physical artefacts, with hacker culture, which focuses on software. In maker culture, through joint and informal making activities hobbyists, experts and laymen share inspirations and skills. From these activities communities emerge that are characterised by informal style of interactions, open approach to sharing knowledge and skills, and a “playground” style and ad-hoc attitude towards making things together. On the wave of the maker culture, makerspaces, FabLabs, hackathons, meetups, start-up incubators and a variety of approaches supporting grassroots initiatives have emerged as ways to support maker activities of different kinds. The O4C project aims to take advantage of the potential that maker culture has for empowering individuals and communities, with a specific aim to stimulate the use of open data for citizen-driven generation of urban services. Within the maker culture phenomenon, the main inspiration for the O4C project are FabLabs, which provide a valuable organisational model for digital fabrication, that can be adapted for working with open data. The second important inspiration are hackathons, which are pressure-cooker events during which software solutions are rapidly developed.

To some extent FabLabs represent emerging mechanisms of social innovation in the material world. The Open4Citizens project has taken inspiration from this analogy to transfer it to the world of open data, by proposing the creation of OpenDataLabs. These OpenDataLabs are supposed to be collaborative environments actively engaging, in a co-creative manner, key actors and stakeholders of a certain community, including expert programmers, students, public authorities, and interest groups, willing to amplify the potential of open data for public service innovation, particularly at local (urban) level. This is done by changing the way citizens can appropriate and manipulate freely available (public) information, in order to develop a new generation of collaborative, open data based services, in diverse areas such as healthcare, traffic management, tourism, or social inclusion. Within the framework of OpenDataLabs, pressure cooker events inspired by software hackathons are key; these are intense moments for bringing together and growing the OpenDataLabs community, intensely share and improve skills by applying them on a joint project, and initiating development of new urban services driven by open data. The Open4Citizens project provides a toolkit and a platform that will facilitate individual, social, and organisational learning, productivity, knowledge sharing, and community building within OpenDataLabs and at and in between hackathons.
4 Key concepts

The OpenDataLabs, hackathons, and the O4C toolkit are the three main concepts that structure the work in the O4C project as indicated in the O4C ecosystem (figure 2). This section defines OpenDataLabs in more detail as physical and virtual infrastructure that supports a broader use of open data among citizens, interest groups, and public institutions; and a network structure that links the OpenDataLabs in different locations to cross-pollinate knowledge about the use of open data across different communities (4.1). It defines hackathons as a set of practices that actively support citizens’ initiatives and the creation of events that involve participants with different knowledge and competences (4.2). Finally, it provides the overview of the toolkit that supports the actual co-creation process through a “hackathon starter kit”, data tools and the O4C platform.

Figure 1: The O4C ecosystem
4.1 The OpenDataLab

4.1.1 An ecosystem for public service co-creation

OpenDataLabs include a physical and virtual infrastructure and a service, which need to be managed by an organised group of people or by a public institution, and who will attract and aggregate a community around it. It offers the access to knowledge, educational resources, data visualisation tools and consultancy services. The main goal for an OpenDataLab is to be a space for experimenting with and building a new model of public services creation at the intersection of people and data, though it may also be a facility for developing application prototypes or building mock-ups and concepts.

The O4C ecosystem is therefore a perfect space for experimenting with how the use of open data and other forms of (big) data available as well as digital technologies can influence the development of open data-based solutions for Smart Cities and Communities. This means, ultimately, that prototypes and applications are developed within an OpenDataLab, but with a focus on the co-creation processes (and their effects) rather than on the objects to be innovated (such as the existing public service systems or community rules and institutions).

Also for this reason, it is essential to identify, in each context in which the OpenDataLab operates, the relevant actors, their needs, and the knowledge and competencies that could contribute to the development of new open data based urban services (Table 1).

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Needs</th>
<th>Knowledge/Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizens</td>
<td>Understanding the potential of Open Data, Visualising Open Data, Redesigning public services by using Open Data</td>
<td>Personal/Tacit knowledge about their own needs</td>
</tr>
<tr>
<td>Interest groups</td>
<td>Addressing emerging problems in the community by generating new solutions</td>
<td>Domain experts, issue experts, institutional dialogue abilities</td>
</tr>
<tr>
<td>IT experts/hackers/makers</td>
<td>Finding new, meaningful opportunities for innovative solutions</td>
<td>Technical knowledge</td>
</tr>
<tr>
<td>Public authorities</td>
<td>Redesigning urban services to effectively support citizens and improve cities</td>
<td>Institutional knowledge (regulations, public policies), service suppliers, data owners</td>
</tr>
<tr>
<td>Entrepreneurs</td>
<td>Identifying new business opportunities related to the use of Open Data in public services</td>
<td>Business knowledge, service suppliers, data owners</td>
</tr>
</tbody>
</table>

Table 1 Stakeholders and knowledge in the O4C ecosystem
4.1.2 Aiming for sustainability

Whether an OpenDataLab is initiated by an existing institution (be it public or private) that funds it’s functioning, or starts independently, it always brings some costs. Those costs can have a form of rents, salaries, external suppliers and partners to be paid, equipment to buy or replace, and everything has to be managed in such a way to reach break-even at least. Irrespective of whether it takes money directly or indirectly through some sponsoring institution, or is really and totally self-funded, an OpenDataLab must be financially sustainable and democratic in order to last and to be open, outreaching and not self-referential. In the end, starting from an existing institution to build another one just means having somebody who provides the funds for starting the business; it should not be thought as an inevitable requirement or a constriction. In the coming year, we continue exploring and developing more detailed and self-sustainable business models for OpenDataLabs.

4.1.3 The network of OpenDataLabs

The Open4Citizens project, through experimenting in five OpenDataLabs operating in the cities of Barcelona, Copenhagen, Karlstad, Milan, and Rotterdam, aims to establish the first nodes of the envisioned global network of OpenDataLabs, akin to the FabLabs/ maker movement. These nodes share the same set of principles, tools, and processes, centred on the O4C hackathon model, which are further improved through local experimentations. In this way O4C aims to enable any local project to be easily transferred and replicated in any other node of the network.

The O4C Platform will be supportive of this networking aspect by offering communication and interaction facilities. For instance, the FabLabs movement has a videoconferencing system available (at http://mcu.cba.mit.edu/18.85.8.46) that links all the nodes, where questions can be asked and projects and collaborations more easily get started.

4.1.4 Bridging two communities

Every OpenDataLab, possibly inside the (European or global) network of OpenDataLabs, acts as a catalyst for the (envisioned) global movement of people making meaningful use of open data. Each OpenDataLab is actually bridging two communities on the local level, where its operations are developed and finalised: Grassroots activists and local citizens aiming for social sustainability, and the hackers and open data community. On one side, the OpenDataLab leverages the extended participation of local citizens sharing its aims, although with many different goals and purposes, fostering the collaboration amongst them and between them and the people working (part/full time) in the OpenDataLab.

Like several FabLabs or maker spaces, the OpenDataLab will represent an opportunity for citizens to manage the existing open datasets as a common resource and possibly to promote the opening of new public data sets (or increase the demand for this) or even to organise the crowdsourced generation of data. Thus the OpenDataLab will become a Public Innovation Place that realises open data community building, supports local initiatives and aggregates human resources around specific problems or opportunities.
Within each existing OpenDataLab there will likely form a community, which leverages the continuous exchanges of information and collaborations amongst its members: therefore, it will be important to create opportunities to visit other OpenDataLabs, for instance, through a yearly global meeting and numbers of local meetings. By doing so, practices, tools, skills and solutions can be shared within the larger OpenDataLab-community and new ideas and solutions become more widespread and find broader take-up and implementation. The O4C platform is also envisioned to host a showcase of the local solutions developed, as well as an open repository of codes, APIs and relevant data related to each solution, in order to make it possible for other users of an OpenDataLab elsewhere to get more than just an inspiration for their own context.

4.1.5 Not a franchising, but with elements in common

The OpenDataLabs aim to be an exemplary collective awareness platform for social sustainability. It is therefore not straightforward to adopt a standard franchising blueprint. Instead a more unique business model is needed allowing for self-sustaining the OpenDataLabs in ways that fit particular contexts. The O4C project suggests that there will be no or very small fees to be paid, and the O4C hackathon model and staged workflow will be freely usable and publicly accessible.

4.2 Hackathons for construction of common practices to work with open data

Open Data is an emerging public resource, which can be considered as a new common if a community and a set of practices is created around it. Therefore, community building is part of the creation of the OpenDataLab ecosystem, whereas the set of practices is structured around the O4C hackathon process. The O4C hackathon process provides a workflow that coordinates tools, processes and knowledge for developing new and innovative public services, based on open data, with the active contribution of non-IT savvy citizens and the support of experts. The direct involvement of citizens would make the hackathon results much more likely to be taken up and will facilitate the integration and scaling up of the new services. Developing approaches for attracting citizens and other stakeholders to be involved in hackathons is one of the challenges faced by the consortium.

4.2.1 The 3-staged hackathon “funnel”

Beside sharing the same tools, methods, expertise, and knowledge, all OpenDataLabs should adopt the 3-staged hackathon “funnel” workflow, as described in D3.1.

As the Figure below shows, an initial pre-hack phase is characterised by an intense activity of dataset identification, verification and specification, running in parallel to the definition of the challenge(s) that the hackathon is addressing and is supposed to tackle. Ideally, the emergent need for specific datasets, not yet in the public domain, which would enable the proper functioning or performance of the applications under development, should affect data owners in such a way to promote faster, and more effective, policies and practices of public sector information disclosure. The pre-hack phase also includes planning, advertising, recruitment, venue preparation and logistics for the actual hackathon event.
As far as the **hack phase** is concerned, this coincides with the coding marathon. This phase will involve IT experts, the owners and producers of relevant data and the civic communities or public bodies expressing the most compelling utilisation needs. Such communities are the most likely actors to endorse the whole initiative and become owners of its outcomes, also in the perspective of sustainability and take-up.

Finally, the **post-hack phase** includes all the follow-up activities that should be put in place to sustain the positive momentum of the hackathon, by implementing its outcomes and further developing and testing the resulting prototype(s). During the post-hack phase, progress can be measured across three well identified areas:

- **Data disclosure.** In the aftermath of a hackathon, a proactive government body (or any other relevant data provider) is expected to continue with the process of data publication according to the emerging needs of the citizens/coders who have been involved in that event;
- **Data management.** New interfaces are possibly required for the appropriation and manipulation of those datasets in the context of the innovative apps being developed;
- **Data usage.** The hack and post-hack development process have to deliver usable and useful apps, which create value for the users and improve perceived efficiency and quality of public services.

Alongside the delivery of open data driven solutions additional benefits can be identified in the reinforcement of citizen interest and in the diffusion of domain related and thematic knowledge amongst the participants and external observers – the most likely actors to step into a subsequent edition of the hackathon itself.

The above representation expresses the essence of the OpenDataLab innovation potential both at local community level - as enabler of public service co-creation by non-IT-savvy citizens - and in perspective, at global network level - as the common and joint output of initiatives and collaborations by all the nodes of the OpenDataLab network. More specifically the output of every innovation process in the OpenDataLab is expected to generate specific solutions, but also more knowledge about open data practices and opportunities.
4.2.2 Building capacities around open data

Capacity building of OpenDataLabs participants is connatural to all planned activities. Targets of this effort can be both the people working inside them and those attracted from time to time by some of their initiatives. For instance, offering access to Open Data has a training or capacity building component. Same goes for public service co-creation via O4C hackathons, using service design tools, methodologies and processes, as well as for the support the project is meant to provide to hackathon facilitators (see section 4.3). Finally, education of digital citizenship is the ultimate long-term goal of an OpenDataLab.

All of the above eminently relates to the overarching aim of the Open4Citizens project, which is about bridging the gap between the potential offered by Open Data and the capacity of citizens to understand and exploit such potential.

For what we have learnt across the 1st project year pilots, the use that non-IT-savvy citizens can make of available data remains conditional on at least three requirements:

- An increased awareness for hackathon participants of the opportunities offered by open data;
- A broader diffusion of creative (design thinking) capabilities within hackathon participants;
- The cultivation of technical skills within the hackathon participants, to help them ideate and co-create new applications based on the datasets (that could be) made available by their owners; and
- Dissemination of obtained knowledge and skills by hackathon participants to broader ODL community and the general public.
4.3 The O4C platform and toolkit

The O4C toolkit is an important part of the OpenDataLab, containing all tools needed to support organisation of activities and community in the OpenDataLab context, to work with data, generate urban service solutions, as well as to obtain and share relevant knowledge. The platform and toolkit have been initially focused in their use on the hackathon event, but in the future, are also envisioned to be used in other activities of OpenDataLab community in a “free mode”. The three aspects of the toolkit dealt in the O4C project to date are the “hackathon starter kit”, “data tools” and further develop if needed.

![Diagram of Hackathon Process Tools](image)

**Figure 3: Tool developments and integration for the second hackathon cycle**

4.3.1 Hackathon starter kit

The Hackathon Starter Kit synthesises service design knowledge needed in the organisation of hackathons, and contains tools and methods suggested in the Hackathon Handbook. Such tools consist of cards, design process descriptions, templates and other instruments that are used to facilitate the co-design activities within stakeholders, that are otherwise not experts in collaborative design processes.
4.3.2 Data tools

Working with data requires tools to collect, analyse, communicate and embed data in envisioned urban services. There are many open-source and proprietary tools that can be used to fulfil these purposes, and new tools appear regularly. An example of a simple tool is a spreadsheet software, while more advanced tools may require expertise in programming and data analysis. Therefore, the use of tools in the OpenDataLab context highly depends on the skills and expertise of their users. At the same time, some certain proprietary web-platform to provide citizens with access to data. For the above reasons, O4C toolkit is envisioned to be open for incorporation of a variety of existing and future data tools, and will support the OpenDataLab community in finding and sharing knowledge and skills on using data tools. At the same time, the O4C platform is developed to contain the fundamental set of data tools developed especially for the ODL community.

4.3.3 O4C platform

The purpose of the O4C platform is to provide a central, virtual location which can be used to a) provide a selection of starter kit tools and data tools to the ODL community in an integrated way b) enable sharing of knowledge and projects within the ODL community. We can identify two main use scenarios for the platform, one during an event (Hackathon, pre-Hack meetings, post-Hack activities) and another that we call free-mode.

During a hackathon, there is a process to follow and a set of tools to use while others are not accessible. The choice of the process is up to the facilitator (organiser) who aims for a specific result out of that event while the free-mode scenario will allow access to the whole set of tools with no specific process or workflow to comply with.

After the end of the project (June 2018), this platform will be made available to current and new OpenDataLabs in order to promote the development of the community and facilitate work and collaboration among the network nodes.

Currently, the platform allows to access and share the tools developed for the first hackathon cycle, which are described in detail in D2.4 “Preliminary Hackathon Starter Kit”. These tools are intended to guide the teams running the hackathons and the hackathon participants in creating open data-driven solutions responding to challenges in urban services. These tools are now being refined for the second hackathon cycle with two aims: to ensure that they are more fit for their purpose and that they are well integrated with the refined project platform and also with the citizen data toolkit, which is under development.

The main role of the toolkit remains to ensure that the barriers to entry in the hackathon are lowered for anyone who wants to take part, i.e. that participants do not need to have pre-existing knowledge of open data or of co-design methods in order to contribute their expertise during a hackathon. This also remains true in the second hackathon cycle.
4.3.4 Toolkit integration

The O4C toolkit plays a role of a link between the physical and virtual concept of the OpenDataLab, consisting of the space and platform, on the one hand, and the service and operational concept of OpenDataLab, consisting of the hackathon model, on the other. Among the new capacities emerging from the activities in the OpenDataLab it is worth emphasising the profile of the facilitator, that will possibly organise, support or tutor the hackathon process (in the phases of pre-hack, hackathon and post-hack) and highlight the availability of datasets, visualisation tools and design tools. In this sense, the facilitator is supposed to be a mediator between specific IT knowledge related to the use of open data and emerging needs from the local community, thus supporting the capacity building process among the communities. The facilitator will also be one of the main user of the hackathon handbook.
5 Conclusion and Future work

The OpenDataLab concept has started to emerge two years ago, when the Open4Citizens proposal was filed to the European Commission. We are now facing the challenge of creating a global network by design rather than by serendipity. When the first FabLab was started by the MIT, there wasn’t a real goal of establishing a global network, but the idea was just to democratize the access and the education of the digital fabrication technologies under development at the Center for Bits and Atoms (instead of waiting for the end of the research with the final and advanced technologies for digital fabrication, the idea was to start preparing people for what would come in the future). Therefore, things have been evolving (rather than being designed) through the years, meaning that many details are still under development, stable business models have to emerge, improved processes and tools tested, and so on. We anticipate a similar trend for OpenDataLabs. Likewise, we experiment with the Open4Citizens hackathon to have improved concepts to be shared among the network of OpenDataLabs.

5.1 The next steps

The second hackathon cycle continues validating the refined definition of the concept described in this deliverable. While defining the themes and the organisation of the second cycle, the team continues to work on shaping the OpenDataLabs in further detail. For example, by describing possible scenarios for their organisational configuration (Deliverable 4.3) and exploring possible business models for different configuration (Deliverable 4.9). These are essential to approach the key stakeholders for the construction of OpenDataLabs in each pilot location. Further, the in-depth understanding of the needs of citizens related to open data use and data literacy, mechanisms for citizens’ meaningful and sustained involvement in OpenDataLab communities and Hackathons, and the role of the O4C toolkit in that process, are subject of ongoing investigation.