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Executive Summary

This report constitutes Deliverable no. D1.11 (Updated set of citizen-centred methods and tools) of the SynchroniCity project. The report has been prepared by the WP1 lead, Jan Waeben.

This document provides an updated picture of the co-creation activities that have taken place in each of the Reference Zones, as well as provide an overview of further activities concerning co-creation within the SynchroniCity project since deliverable D1.10 in M6. This document reflects the real world co-creation experiences of the Reference Zones around Europe involved in the project: Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milan, Porto and Santander.

Abbreviations

D	Deliverable
EC	European Commission
RZs	Reference Zones
WP	Work Package
WT	Work Task

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1 Introduction

This document focuses on the co-creation activities that have taken place in the SynchroniCity project's eight Reference Zones (Antwerp, Carouge, Eindhoven, Helsinki, Manchester, Milan, Porto and Santander) since the delivery of D1.10 in M6. Whereas D1.10 delivered a handbook for the RZs to apply, the current document aims to communicate the experiences of the RZs with co-creation tools and methods. With this in mind, a survey has been performed with the RZs to understand how they evaluated both the co-creation and the tools/methods previously provided, in order for the project, as a whole, to learn from the real-world experience. The results of the survey are covered in chapter 2.

Further activities in co-creation include the "U4IoT Co-Creation Workshop for Smart Cities" in Carouge (May 2018). A report of the activities performed during this workshop, led by U4IoT, is covered in chapter 3.

Finally, chapter 4 provides recommendations for end-user engagement in the SynchroniCity project. These results are provided by U4IoT who performed an interview with the former WP1 lead (Francesca Spagnoli).

2 Results from the second survey with the reference zones

2.1 Updated version of the survey

This second survey had the aim to understand the use of co-creation tools and methods in the different reference zones from the beginning of the project. As such, the questionnaire focused on understanding the uptake of the tools and methods reported in deliverable D1.10 (First set of citizen-centred methods and tools), an evaluation of the implementation of these tools and methods and gauging interest for tools and methods not yet covered. The list of questions can be found in Annex 1.

2.2 Results from the survey

This section outlines the findings of the survey in each of the RZs. The next section provides conclusions of the results within the project as a whole.

ANTWERP

The City of Antwerp has not used the citizen-centred methodology provided by the SynchroniCity to co-create products or services. They are also not planning to use the tools for WP3, as they are not relevant to their particular user group. Whether the co-creation will be relevant for the next stages of the project, will depend on the projects proposed in WP5, and if the co-creation activities are useful for any of these projects.

The citizen-centred methodology (D1.10) was shared with the project Circular South. The Circular South project has an active community working and facilitating co-creation sessions with habitants of the 'Antwerpen Nieuw-Zuid' neighbourhood, and might employ the tools from D1.10.

Antwerp does not see a need for two different sets of methodologies (one for WP3 + another for WP5), and the city does not feel a need for more guidance on the SynchroniCity tools and methodologies.

Over the next 12 months, Antwerp expects to develop co-creation activities further in relation to WP5, such as: in Circular South, for Smart zone initiatives, in Hackathons and DigAnt meetups, and in relation to IT procurement procedures (buy from Start-ups, PCP, etc...).

CAROUGE

The city of Carouge has not used the co-creation tools developed in the SynchroniCity project. Whether it will be relevant going forward will depend on the winning solutions from the Open Call. The city thinks, it could be relevant and valuable to have two different sets of methodologies for WP3 and WP5 as they don't have the same targeted audiences.

"It would be very valuable if we could use a non-proprietary or open source system with a proven track record. We would like to see if the solutions we are working on make sense and are valuable for our citizens and our employees."

Going forward, Carouge also plans to use the co-creation to engage citizens, its employees and enterprises and to make sure projects are relevant and fully used by the local communities and bring value for the users:

"The idea is to involve from the start the citizens' inputs. The more they are engaged, the more successful it could be. We may use more time at the start, but we may gain time at the end."

They found the tools presented by U4IoT very interesting, but were disappointed to find that some of them were limited to the duration of the project, and proprietary after. The city has chosen not to engage with these tools because of this reason.

EINDHOVEN

The city of Eindhoven has not used the co-creation tools developed in SynchroniCity. Whether it will be relevant for the Open Call will depend on the winning solutions.

It is not relevant for Eindhoven to use the co-creation in WP3. For WP5 it depends on the particular solution(s) that will be selected.

The city rates the effectiveness of using the co-creation methodology provided by the SynchroniCity project as low, but do expect to continue working with co-creation in the months and years to come.

HELSINKI

The city of Helsinki has not used the citizen-centred methodology provided by SynchroniCity to co-create products or services. The city is not planning to use it in the context of WP3. It would be beneficial for Helsinki to have two different methodologies. In WP3 for co-creating with users taking into account the different processes (use case development) and in WP5 the development of services in different themes and challenges with a focus of collaboration with SMEs.

The city of Helsinki uses the co-creation

- 1) to provide comments on services/products,
- 2) in governance: making sure the eco-system is reliable, trustworthy and protects citizens,
- 3) to identify new processes in the service/product development phase,
- 4) to identify new organisational practices.

Within the SynchroniCity project, the city plans to use the co-creation to evaluate and select concepts for implementation. Helsinki does not need more guidance on tools. The future co-creation activities will depend on the cases and applications from the Open Call.

MANCHESTER

Manchester started co-creation activities in August-September 2017, based on their history with user involvement. The city will make use of co-creation methodologies in WP3 to validate the Community

Policy Suite with its stakeholders. For the open call pilots these may be used as well, if suitable for the pilot.

Within the context of the SynchroniCity project, the city of Manchester involves citizens through co-creation activities for numerous goals: gathering comments, identifying new processes and practices, other brainstorming activities, evaluation and selection of concepts and implementations, establishing evaluation criteria and knowledge transfer.

Whilst the city already has an existing approach to co-creation, they would be interested in receiving further support on how to incorporate 'strengths-based conversations', as mandated in the 'Our Manchester' approach of the city. The city also intends to further improve their work on co-creation on an ongoing basis, and hopes to see workshops from SynchroniCity on the co-creation tools and methods presented. The city feels that this aspect has been lacking in favour of a focus on technology:

"The project has tended to have too much emphasis on technical issues and not enough on engaging cities and citizens, so we would like to ensure that future projects make this more central."

Manchester would have liked to see co-creation as a part of the regular meetings on how to implement these tools and methods locally.

MILAN

The city of Milan has recently applied design thinking techniques in three different contexts:

- 1) the development of the web app for the citizen registry with different Municipality Directions and with external stakeholders;
- 2) a web portal for city users;
- 3) a bike registration service with stakeholders of the third sector.

In the following months, Milan plans to use the co-creation with the Mobility Agency (accessible transport) and with the Department involved with accessibility. However, the activities will depend on the end users, and if they will require internal resources:

"It will depend on the winning solutions from then Open Call, whether the co-creation is appropriate, who is the target of the solutions, and finally the budget and time constraints."

Milan mainly relies on co-creation to:

- gather comments on services/products,
- governance: making sure the eco-system is reliable, trustworthy, and protects citizens
- Generating ideas on novel practices and services

The main factor to consider between WP3 and WP5 is time. There is more time for the internal services, less so for the open call. Different methodologies might be appropriate to align with these different timelines.

The emphasis to date has not been on the citizens, however with internal stakeholders within other municipality departments (e.g. mobility, environment). The goals were to provide comments and ideas on the services that they were developing and to assure the correct governance. The city plans to use the co-creation for evaluation and selection of concepts within the SynchroniCity to verify the interest and the feasibility of the proposals of the Open Call.

Before the start of SynchroniCity, the Municipality used citizen-centred methods and tools in other innovation projects. Today, the co-creation is also part of the activities in a new unit called User Experience Unit in the IT Department. The User Experience Unit is working to define and implement a User Experience Standard for the digital services of the Municipality of Milan for the digital service design (User Experience Design). One of the main aim is to work on the City Users portal through

co-creation methods and tools, so moving forward, the city will use the co-creation in this context as well.

PORTO

The city of Porto has already employed a variety of different co-creation tools, including personas, body storming, appraisal interviews, strategic roadmaps and social network analysis.

Within the context of the Multimodal Transportation pilot (WP3), the city of Porto already used the following methods and tools: secondary research, co-creation workshop, personas and stakeholder map, interviews with experts and citizens, online questionnaires and service observations. They are now planning to apply prototype development and usability tests with citizens and other stakeholders. Within the context of the Community Policy Suite pilot (WP3), the city of Porto has used the following methods and tools: secondary research and co-creation workshops. The city plans to continue working with these methodologies to validate and iterate the service/product of the Open Call (WP5) winning solutions.

They would like to receive more guidance on the following methods and tools Living Lab methodology, co-creation workshop for generating IoT solutions in smart cities, KPI's (key performance indicators), usability testing and IoT business ecosystem mapping.

In relation to co-creation, they would be interested to learn more about the following methods and tools: User flow (a visual representation of the user's flow to complete tasks within the product), Heuristic analysis (a detailed analysis of a product that highlights good and bad practices, using known interaction design principles as guidelines), A/B Testing (offers alternative versions of the product to different users and comparing the results to find out which one performs better), and Eye tracking (a technology that analyses the user's eye movements across the interface).

"Yes, by adapting or iterating the base method to fit the city context and needs."

Since 2016, the city of Porto has been applying co-creation methodologies in the service development process, decision making process and policy making, and will continue to do so after the end of the SynchroniCity project. The city of Porto is investing in the application of this type of methodologies by creating an internal innovation team with multidisciplinary backgrounds (service designers, data scientists and UI&UX). An example of this investment is the re-open of the Porto Innovation Hub¹ and the Desafios Porto² (Porto Challenges) initiative.

SANTANDER

From the beginning, Santander has worked with a user-centred design approach, gathering the necessary understanding of the users and their needs, in order to formulate an initial list of requirements. In the case of SynchroniCity, it has been used for defining the challenges for the Open Call.

Going forward, Santander is not planning to use the co-creation methodology, because the city can use the work and insights from activities carried out in previous projects and other general innovation activities.

Santander considers the co-creation as an essential first step in the implementation of a solution. In the last phase of the activities, the city thinks it is very important to have feedback from all the stakeholders (citizens, municipality workers and decision makers).

Due to the different timeframes of WP3 and WP5, Santander thinks it is not feasible to find a common approach.

¹ www.portoinnovationhub.pt/en

² www.desafiosporto.pt/en

Santander already used the co-creation in different ways. Improving and increasing it is part of their current strategy. They plan to continue this strategy after the end of SynchroniCity.

2.3 Conclusions from the second survey

Whilst the above sections outline the individual responses from the survey, this section offers some tentative conclusions and summaries based on the survey results. All eight Reference Zones responded to the survey. For all further sections, consider N=8.

Use of the methods and tools in D1.10

Since the start of SynchroniCity, four RZs indicated that they have used the tools and/or methods provided in D1.10. When asked about the effectiveness of the tools and methods provided in the SynchroniCity project, those who used the tools were generally positive about them.

One RZ mentioned it could not make usage of one very powerful tool presented for further projects as it is proprietary. The RZ is very interested in using the co-creation to develop further smart city projects.

Milan, Porto and Santander use the co-creation such as design thinking, secondary research, co-creation workshops, personas and stakeholder maps, interviews with citizens and experts, online questionnaires and service observations. Their experiences are outlined in the sections above.

Future use of methods and tools

Milan, Manchester and Porto are the only RZs who want to use the co-creation methods from D1.10 to develop services in the context of WP3. Santander will be using methods designed before joining SynchroniCity for their service development in WP3.

Two certainly, five if suitable, RZ's consider the use of co-creation tools and methods a valid option with the winners of the Open Call. Two RZs are quite certain that the co-creation will interact with the winners. The other RZs will consider whether co-creation is a good fit for the winning solutions.

For the activities in WP3 and WP5 (the use-case development and development of services in different themes and challenges with a focus of collaboration with SMEs) – most RZs indicated that two different methodologies would be beneficial considering the different end-users in each WP. Those who indicated this is not necessary, won't perform co-creation activities in one of the WPs.

When asked whether RZs wanted guidance on methods and tools not yet presented in D1.10, only one city requested it.

All RZs have indicated the ambition to improve their co-creation activities.

Co-creation activities with citizens

Based on both current and planned activities that include citizens in a co-creation process, the RZs provided the type of activities they employ in SynchroniCity. The most commonly form of co-creation reported is the use of co-creation methods to gather feedback or comments from citizens on either services, products, concepts or implementations. In at least half of the RZs, co-creation is used for ideation, gathering ideas or for the purpose of identifying new processes or practices.

3 Carouge co-creation workshop

The “U4IoT Co-Creation Workshop for Smart Cities”³ took place from 22 to 24 May 2018 in the city of Carouge. It was organized by the U4IoT project, in collaboration with the city of Carouge, the University of Geneva⁴, Mandat International and the SynchroniCity project⁵. The programme⁶ and a wrap-up⁷ are available at the website of the IoT European Large-Scale Pilots Programme.

Among other participants, this workshop was attended by two of the SynchroniCity’s cities: Carouge and Porto.



Figure 1. U4IoT Co-Creation Workshop for Smart Cities. More photos are available [here](#).

During the workshop, imec.livinglabs provided all (local) participants insights into their experiences about user involvement and co-creation during an interactive workshop. Starting with a short explanation about Living Labs in general and how imec.livinglabs deals with them and finishing with introducing a general flow for User Involvement & Panel Management.

Based on this general flow developed by imec over the past years, Koen Vervoort (User Involvement Evangelist @ imec.livinglabs) took the participants through specific use cases of the city of Carouge.

³ <https://european-iot-pilots.eu/u4iot-co-creation-workshop-for-smart-cities-22nd-25th-may-2018>

⁴ <http://mas-iot.unige.ch/workshop>

⁵ <https://synchronicity-iot.eu/join-u4iot-and-synchronicity-on-a-co-creation-workshop-for-smart-cities-in-geneva-and-carouge>

⁶ https://european-iot-pilots.eu/wp-content/uploads/2018/03/2018_03_16_U4IoT-Co-creation-Workshop-for-Smart-Cities_v1.1.pdf

⁷ <https://knowledge-base.u4iot.eu/synchronicity-smart-city-workshop-carouge-2018>

After a presentation about every step of the general flow of User Involvement and Panel Management, participants focused on the first two steps of this flow: setting clear goals and organisational planning.

With the first step, they started identifying all the stakeholders that need to be involved within the specific use case. Following this, these stakeholders were further refined and/or clustered. Finally, all these groups and subgroups of stakeholders were mapped on panel circles to discover the degrees of involvement for all involved stakeholders to the designed co-creation trajectory of a specific use case.

The second part of the workshop consisted of translating the defined panel circles into a workable panel matrix. Such panel matrix offers a clear overview on who needs to be involved and when, for how long and what the particular stakeholder (sub)groups get in return. Based on the matrix, a communication/rewarding-strategy can be created and furthermore it offers insights into which actions need to be taken in order to support the participants of all defined co-creation activities. Finally, the privacy-flowchart helps out the participants to see which GDPR-related steps need to be taken based on their panel matrix.



Figure 2. “End-User Engagement in Business Innovation” presentation and “Panel Management” workshop by Koen Vervoort (imec.livinglabs). More photos are available [here](#).

4 U4IoT End-user engagement

As part of U4IoT’s task on supporting each of the IoT LSPs, the U4IoT project prepared a set of end-user engagement recommendations for SynchroniCity. These results were obtained through an interview held with Francesca Spagnoli (former WP1 lead) and a workshop held during the Open

Living Lab Days 2018 (“Optimising the learning curve – implementing end-user engagement tools in IoT large-scale pilots”⁸).

In this workshop, the working group of the SynchroniCity project⁹ was led by Francesca Spagnoli (ENoLL), and gathered five participants (two from the city of Porto). A wrap-up is available at the websites of the IoT European Large-Scale Pilots Programme¹⁰ and of the SynchroniCity project¹¹.

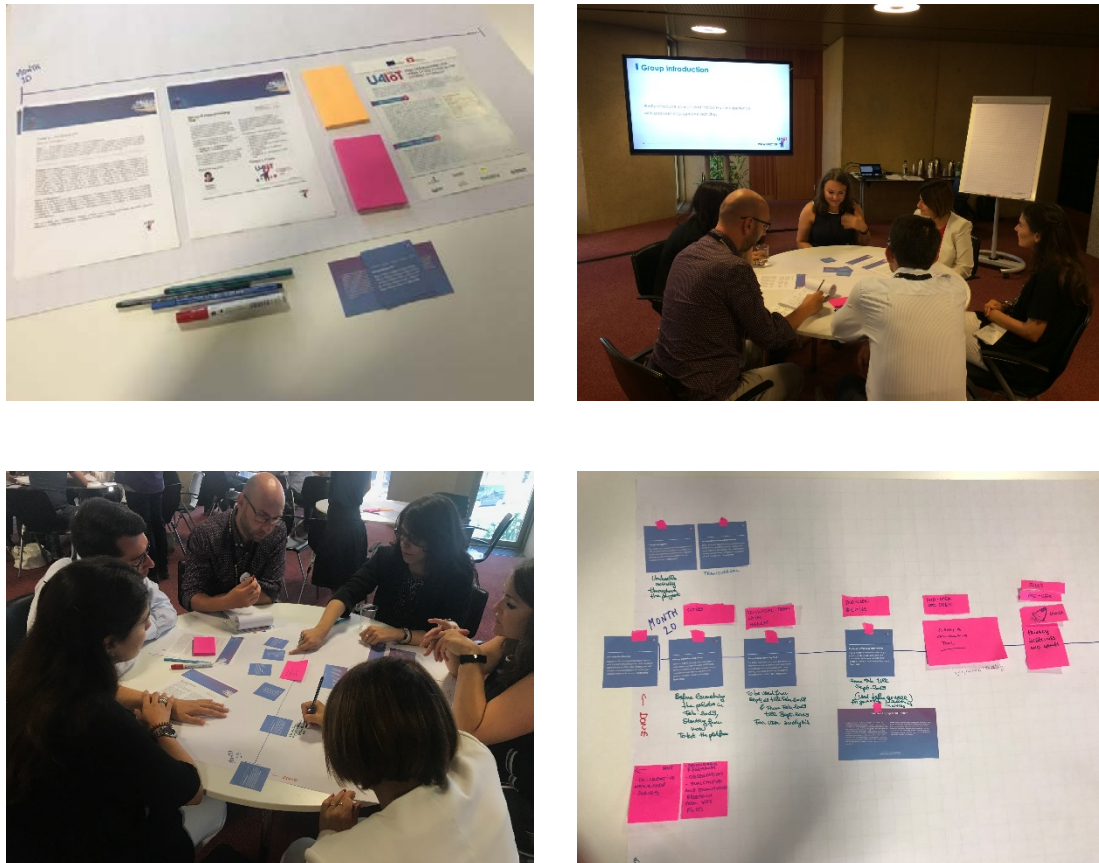


Figure 3. “Optimising the learning curve – implementing end-user engagement tools in IoT large-scale pilots” workshop at Open Living Lab Days 2018.

This resulted in a number of recommendations, which have been divided into primary (most relevant for this particular project) and secondary recommendations.

All the recommended tools can be found on the [U4IoT website](https://openlivinglabdays.com/sessions/optimising-the-learning-curve/). Alongside the tools you can find online support services in the form of handbooks, materials for further reading, e-courses and expert pool for consultation.

⁸ <https://openlivinglabdays.com/sessions/optimising-the-learning-curve/>

⁹ Each IoT LSP group (ACTIVAGE, IoF2020, MONICA and SynchroniCity) worked on a different table.

¹⁰ <https://knowledge-base.u4iot.eu/olld18-workshop-optimising-the-learning-curve>

¹¹ <https://synchronicity-iot.eu/u4iot-workshop-with-synchronicity-at-olld2018>

4.1 Primary recommendation

With the launch of the Open Call (WP5), one of the main end-user engagement objectives in this stage of the SynchroniCity project is to create support within the community for the deployed solution(s) and stimulate implementation in a relatively short time span. Also, as mentioned above, the stakeholders vary in awareness and experience level, highlighting the importance of ability to customise the selection of tools.

U4IoT therefore recommends the SynchroniCity's RZs to support the selected cities, organisations and SMEs in the Open Call to use the [Interactive Flow-Diagram](#) and the [End-User Engagement Toolkit](#) from the U4IoT website:

- [The Interactive Flow-Diagram](#) assists the selected participants in the Open Call in navigating between the various tools and support services offered by U4IoT. It offers guidance by making a selection according to specific needs and assisting in deciding on an end-user engagement approach that matches the objective(s) of the city and the organisations. By answering six questions: 1) stage of development, 2) objective, 3) type of data, 4) sample size, 5) resources and 6) level of expertise, recommendations of tools and support services from the End-User Engagement Toolkit will be provided.
- [The End-User Engagement Toolkit](#) comprises over 40 different user-engagement and co-creation methods and tools. It includes links to sources with actionable materials as well as how-to instructions, templates and reference websites. The toolkit is put together in a format that follows the different phases along the innovation process: 1) exploration, 2) experimentation and 3) evaluation. Especially the last phases and their iterations are relevant for the deployment and implementation phases of the selected projects from the SynchroniCity Open Call.

Activity	Goal	People involved	Schedule
Discuss recommendations internally	To familiarize with the recommendations and see if they are fitting to the objectives of SynchroniCity	SynchroniCity WP1 lead (imec), Reference Zone Coordinator (FCC)	To be agreed
Call with U4IoT main contact for explanation to make changes if needed	Possibility for consultation and reshaping of the recommendations	SynchroniCity WP1 lead (imec) and U4IoT representative (ENoLL)	To be agreed
Internal dissemination of the recommendations	The recommendations and planned activities to be discussed with the cities	SynchroniCity WP1 lead (imec), Reference Zone Coordinator (FCC), Reference Zone Liaison Officers	Cities forum call taking place in October-December 2018
Promotion and demonstration of the primary recommended tools at Open Call event	To create awareness and guide in the usage of Interactive Flow-Diagram and End-User Engagement Toolkit	SynchroniCity WP1 lead (imec), Reference Zone Coordinator (FCC), Reference Zone Liaison Officers, new selected SMEs and cities	6-7 February 2019
Usage and application of the primary recommended tools	To benefit from the end-user engagement tools/methods in the deployment of solutions	Reference Zones, new selected SMEs and cities	March-August 2019

Gathering insights and feedback (AG05/U4IoT evaluation impact)	To analyse and document results, implement them in the evaluation	SMEs, Reference Zones, WP1 lead, Luleå University of Technology (LTU)/U4IoT	To be agreed
Exchange experiences and insights with other LSPs (AG05)	Analysing and documenting IoT-LSP Cross-domain findings	WP1 lead, LTU/U4IoT	To be agreed

Outlook

The recommended diagram and toolkit have an interactive nature and can be used intuitively. They offer the RZs and the selected participants (cities, organizations and SMEs) from the Open Call the possibility to customise the end-user engagement activities per reference zone, in terms of their phase in the project, sample size, length, resources and experience level. For less experienced RZs and Open Call participants, the SynchroniCity WP1 lead (imec) and Reference Zone Coordinator (Future Cities Catapult) can present a standardised, baseline set of tools for end-user engagement.

A two-day workshop is planned by SynchroniCity in February 2019 in London, with the goal to gather the selected Open Call projects together and kick-start the deployment phase. The promotion and a demonstration of the Interactive Flow-Diagram and the End-User Engagement Toolkit could take place during this event. Both can be used by more experienced RZs and Open Call participants to expand their end-user engagement activities.

To apply the different end-user engagement activities in a successful way, collaboration between the different stakeholders from the RZs and participants in the Open Calls is inevitable. During the deployment phase (March - August 2019) of the Open Call pilots, new Cities, organisations and SMEs are ideally supported by the Synchronicity WP1 lead (imec), Reference Zone Liaison Officers and Reference Zone Coordinator (Future Cities Catapult) to apply the tools, gather and analyse results, and draw conclusions.

4.2 Secondary recommendations

The following list provides a number of secondary recommendations of tools and services provided by U4IoT. Each of the tools can be used independently from each other, the purpose of each tool is briefly described underneath:

- **Living Lab support:** The “Living Lab Methodology Handbook”¹² introduces the Living Lab approach and gives theoretical background as well as practical guidance for planning, execution and evaluation of the end-user engagement projects. The support also provides SynchroniCity with other online resources such as e-courses / presentations and grants the access to experts on the Living Lab topic to the project. Within SynchroniCity, the Living Lab support is targeted primarily for the cities, who can benefit from the approach by studying the provided material, applying the provided guidance e.g. in terms of user selection and stakeholder engagement, and possibly collaborating with an existing Living Lab in the city.
- **Co-Creative Workshop Methodology:** The Co-Creative Workshop Methodology enables the LSPs to engage end-users and stakeholders within their projects and co-create IoT solutions in a couple of hours. The methodology is outlined in the “Co-Creative Workshop Handbook”¹³, which presents the guidelines for the organisation, facilitation, analysis and documentation of co-creative workshops. Also, an e-course on the organisation and preparation of a co-creative workshop can be found on the U4IoT website. SynchroniCity received several Co-

¹² http://www.u4iot.eu/pdf/U4IoT_LivingLabMethodology_Handbook.pdf

¹³ http://www.u4iot.eu/pdf/U4IoT_CoCreativeWorkshopMethodology_Handbook.pdf

Creative Workshop trainings; the knowledge gained during the trainings combined with the online information can be used by the RZs to support the Open Call participants to co-create new solutions together with stakeholders and end-users.

- [Survey & Crowdsourcing Tools](#): These crowdsourcing tools are composed of three elements: a mobile application with a strong focus on crowdsourcing and crowd-sensing; a website permitting interactions between users and IoT devices; and a survey tool. The tools can be used on Android and Apple mobile devices. Within SynchroniCity, the survey and crowdsourcing tools may allow selected Open Call participants to reach end-users, who can share their ideas and take part in innovative experiments with the research community. Furthermore, data generated by the smartphone's sensors can be shared with the RZs, of course with explicit consent of the mobile application user.
- [Privacy Guidelines and Game](#): The U4IoT team has formulated a set of Privacy and Data Protection Guidelines, in which the main actions, methodologies and safeguards for personal data protection are identified, in order to enable the LSPs to reap the potential of IoT technologies while protecting users' rights. These guidelines are available on the U4IoT website, together with a small quiz on the topic of privacy as well as access to the experts through the U4IoT expert pool. In October 2018 an e-course was made available, completing the online support on the topic. A game to raise general awareness about the privacy aspects connected to IoT is also currently being finalised. The objective of the privacy game is to support and to educate especially the people in SynchroniCity who are developing the solutions, as well as the end-users and, with a lower priority, the general public.
- [IoT Adoption Barriers](#): The aim of this tool is to develop practical recommendations for tackling IoT adoption barriers from an end-user perspective and potential consequences, including educational needs and skill-building for LSPs. The final Handbook will contain societal, ethical and ecological issues related to IoT implementations in the LSPs as well as the analysis of the end-users' needs and values related to IoT. This tool enables SynchroniCity partners to understand how to tackle the identified barriers and to understand the identified issues in more depth.
- [Participatory Sustainability Models](#): U4IoT is currently defining sustainability scenarios to assist the LSPs in their strategic planning and their strives to sustainability. These scenarios function to foster discussion and exchange not only between U4IoT and the LSPs but especially among the LSPs, with the main goal to identify cross-sectoral synergies and best practices. The primary arena for these interactions will be the action group AG01 (Sustainability).

4.3 Online support

The following online U4IoT support services provide relevant background information on end-user engagement and can be used as additional resources:

- [Expert Pool & FAQ](#): The Expert Pool provides an overview of the experts within the U4IoT consortium that can be consulted for end-user engagement advisers. A list of Frequently Asked Questions (FAQ) has also been composed to immediately answer any initial questions in terms of end-user engagement.
- [e-Courses](#): The e-courses can be used as a reference material that can be consulted at any time to provide additional background information and kick-start end-user activities within your project.
- [Knowledge Base](#): The Knowledge Base of the IoT European LSPs Programme is a "wiki-alike" online encyclopaedia of articles on vital topics related to LSPs, conclusions, lessons

learned, solutions and user feedbacks. We invite you to contribute to our knowledge base and share your experience by following the steps found [here](#).

APPENDIX 1 SURVEY TO THE REFERENCE ZONES

- 1) Have you used the citizen-centred methodology provided by SynchroniCity in your reference zone for co-creating products and services?
- 2) Are you planning to use the co-creation methodology offered by SynchroniCity to develop services within the context of WP3?
- 3) Are there any other co-creation activities that you would like to carry out in your local area with the winning solutions?
- 4) Would it be beneficial for you to have two different methodologies for co-creating with your users taking into account the different processes and end-users in WP3 (use case development) and in WP5 (development of services in different themes and challenges with a focus of collaboration with SMEs)?
- 5) In your city, in which co-creation activities do citizens take (or will take) part for developing the services within the context of the SynchroniCity project? [tick all that apply]:
 - Providing comments on services/products?
 - Governance: making sure the eco-system is reliable, trustworthy, and protects citizens
 - Identifying new processes in the service/product development phase
 - Identifying new organisational practices
 - Generating ideas on novel products/services
 - Brainstorming processes
 - Evaluation of concepts, implementations etc.
 - Selection of concepts, implementations etc.
 - Supporting communities of practice
 - Establishing performance evaluation standards
 - Transferring implicit and/or organisational knowledge
 - Other
- 6) Which co-creation **method/s** not previously mentioned in the SynchroniCity methodology would you like to receive more guidance on? (please write the name of the method and the purpose of using it within this project)
- 7) Which co-creation **tool/s** not previously mentioned in the SynchroniCity methodology would you like to receive more guidance on? (please write the name of the tool/s and the purpose of using it within this project)
- 8) What is your experience of the effectiveness of using the co-creation methodology provided by SynchroniCity? [Tick the one that applies]:
 - No effect
 - Low
 - Average
 - Good
 - Excellent

- 9) After the first exercise and having taken advantage of the first set of citizen-centred methods and tools, do you have plans or ambitions for improving the use of co-creation within your city?

a) **Before end of project...**

The User Experience Unit has the goal to define and implement User Experience Standard for the digital services of the Municipality of Milan for the digital service design (User Experience Design).

b) **In next 5+ years...**

One of the main aim is to work on the City Users portal through co-creation methods and tools.

In general, the idea is to improve the Digital Experience, in order to innovate and improve the relationship between the citizen and the Public Administration, through a simplification of the information and services provided.

- 10) Any other comments, reflections, suggestions...?