

# Market Place

of the European Innovation Partnership on

## Smart Cities and Communities



## Co-Creating Smart Cities

---

Citizen City Initiative

DATE	22/09/2016
DOCUMENT	DRAFT
CONTRIBUTORS	Camino Correia & Ainhoa Quina (Zabala Innovation Consulting) Richard Tuffs (ERRIN) John Zib (Getmemo.com)



## TABLE OF CONTENTS

<b>1. INTRODUCTION</b> .....	<b>3</b>
<b>2. DEFINITIONS</b> .....	<b>3</b>
2.1 CO-CREATION .....	3
2.1.1 CO-DESIGN .....	3
2.1.2 CO-PRODUCTION .....	3
<b>3. GENERAL PRINCIPLES</b> .....	<b>4</b>
3.1 NEW ROLES .....	4
3.2 NEW RELATIONS AMONG STAKEHOLDERS .....	4
3.3 NEW PROCESS .....	5
3.4 NEW RULES .....	5
<b>4. CO-CREATION PROCESS</b> .....	<b>5</b>
4.1 STEP 1: DEFINITION .....	6
4.2 STEP 2: ENGAGE THE CITIZEN .....	7
4.3 STEP 3: CLARIFY ROLES AND RESPONSIBILITIES .....	7
4.4 STEP 4: THINK THINGS THROUGH TOGETHER .....	8
4.5 STEP 5: CO-PRODUCTION .....	9
<b>5. FUNDING TOOLS</b> .....	<b>10</b>



## 1. INTRODUCTION

In this “Co-Creating Smart Cities” report, elaborated by the Citizen City Initiative of the European Innovation Partnership on Smart Cities and Communities, you will find a brief description about how co-creation and co-design as tools help to better understand the role of the citizen in building future smart cities. It will **focus on the co-creation process** as this is where citizens are able to contribute towards a solution.

The document will explain the process to engage citizens in this activity and will also identify funding opportunities to outline a pathway for those who would like to immerse themselves in this rewarding process.

## 2. DEFINITIONS

Both co-creation and co-design will be defined to better understand the definition of each one and the difference between both concepts.

*‘CO-CREATION CHANGES THE GAME OF INNOVATION FROM  
DESIGNING FOR PEOPLE TO DESIGNING WITH PEOPLE’*

### 2.1 CO-CREATION

**CO-CREATION** refers to any act of collective creativity which means that creativity is shared by two or more people. Indeed, it is an approach that enables a wide range of people to have a creative contribution in the formulation and solution of a problem.

Ultimately, co-creation helps to enhance organizational knowledge processes by involving the customer in the creation of meaning and value by co-creating and co-producing.

#### 2.1.1 CO-DESIGN

**CO-DESIGN** is a specific instance of co-creation. Co-design refers to the collaborative creativity of experts and non-experts in design working together in the design development process.

#### 2.1.2 CO-PRODUCTION

**CO-PRODUCTION** occurs when more than one person is involved in making something happen after the designing process. Working out what to do is design work; doing it, is production.



### 3. GENERAL PRINCIPLES

Taking into account that co-creation is an emerging process, it is necessary to understand some general principles that have been developed with the use of co-creation that will contribute to the successful carrying out of this process.

#### 3.1 NEW ROLES

New processes encourage new behaviors in this value and meaning creation process:

- ▶ **From passive buyers to active agents:** the citizen is no longer a passive buyer, he or she is one of the most important participants of the creation process and they participate as active members of the process providing interesting inputs.
- ▶ **From consumers as buyers to consumers as resources:** citizens have increased in value due to their collaboration as value creators and good idea providers.
- ▶ **From reliance on experts to consumer knowledge:** citizens have become a very valuable information source as they can contribute a final user perspective.
- ▶ **From interactions between consumers and products to interactions between people:** the real value and meaning creation comes when people share their interests, concerns and opinions around a matter, not just when they share their time with a product or service.

**THE CITIZEN = ACTIVE AGENT + VALUE CREATOR + INFORMATION RESOURCE**

#### 3.2 NEW RELATIONS AMONG STAKEHOLDERS

As the roles have changed, the relationship between all the agents in this process has undergone changes as well:

- ▶ **From listening to dialogue:** from now on, the communication between organization and citizens will be bidirectional. The dialogue between all the stakeholders is the basis of good product/service creation.
- ▶ **From researching need to understanding experiences:** there is no more need to make exhaustive research to create a service or a product. The most important issue will be to understand how people behave in the co-creating experience.
- ▶ **From involvement to collaboration:** until now, the organization was the one who led the product/service process involving the user in some points of the process. Now, collaboration between all the agents is essential for good co-creation.

**GOOD RELATIONS = DIALOGUE + EXPERIENCES + COLLABORATION**



### 3.3 NEW PROCESS

Co-creation involves changes in which the product/service creation is made or provided. Firstly, the co-design is an attempt to define a problem and then define a solution; and then we have the co-production, which aims to implement the proposed solution. Thus co-creation is the process by which people do both.

$$\text{CO-CREATION} = \text{CO-DESIGN} + \text{CO-PRODUCTION}$$

### 3.4 NEW RULES

Like every new process, co-creation has also its own rules or guidelines to make this technique work better:

- ▶ **Don't see co-creation as a new 'total' solution**, replacing existing methodologies. It is better to see it as an additional value to existing methodologies.
- ▶ **In the process clearly express rules and expectations.** Every single participant has to know what the purpose of the study is.
- ▶ While co-creation is in itself valuable, as citizens are involved in helping the community, it is important to always remember to **measure the effectiveness of co-creation initiatives.**
- ▶ **Choose the most suitable audience and measures which has direct benefit to groups of citizens**, paying particular attention, for instance, to those who have lower education, wealth and/or come from ethnic minorities.
- ▶ **Do not look only at the expected outcomes, but also have a keen eye for unexpected positive and negative effects of co-creation.** Try always to take the most advantage of the co-creation; there are always interesting outcomes to study.
- ▶ **Guarantee that all groups benefit.** There must be an equal benefit for all the agents taking part in the process.

## 4. CO-CREATION PROCESS

This section will explain the co-creation process, including co-design and co-production will pay Special attention will be paid to the point at which the process aims **to engage citizens.**

- ▶ The engagement of citizens in the process will be achieved firstly **by giving a voice to the citizens involved**, developing processes that help them to articulate their vision and ideas in a form that is natural to them, not necessarily the way designers would articulate ideas.
- ▶ Then citizens will answer to these ideas in a creative and flexible way to **develop new solutions that are distinctive, while addressing the concerns of people involved.**



In this following part, the mentioned process will be addressed in more depth:

CO-CREATION PROCESS				
CO-DESIGN (Gathering ideas)				CO-PRODUCTION
DEFINITION	ENGAGE the citizen	CLARIFY roles and responsibilities	THINK things through together	REALISE
What do we seek to create together?  How are we going to proceed?	How can we engage the citizen?	What will my contribution be?  For the project? For the community?	What options do we have beyond easy answers?  Do our decisions match our purpose?	Bring our words, vision and requirements to reality.

#### 4.1 STEP 1: DEFINITION

The first step to perform in co-creation is to define the expectations of this activity by answering these questions: what do we seek to create together? What is the most suitable citizen profile group to take part in this process? And finally, how are we going to proceed? For this last question there are several techniques that may be used depending on the goal and the citizen group you may get:

- ▶ **Crowdsourcing:** is the practice of obtaining needed services, ideas or contact, by soliciting contributions from large group of people.
- ▶ **Mass customization:** is a process which combines the benefits of large-scale production with those of customization.
- ▶ **Peer to peer networks:** are decentralized networks whereby all people act as both suppliers and as consumers to share some resources (often information).
- ▶ **Shared resources:** is a practice where suppliers and customers share resources in order to co-create value.
- ▶ **Joint ideation:** is a practice where suppliers and customers come together to brainstorm new ideas.
- ▶ **Experience centers:** allow customers and suppliers to engage and interact with product or services in a sensory manner.

[ **RESULT = EXPECTATIONS DEFINED + WORKING TECHNIQUE DEFINED** ]



## 4.2 STEP 2: ENGAGE THE CITIZEN

Once we have established the main purpose of the co-creation and the techniques that will be used to carry it out we need to proceed with citizen engagement.

The first issue to bear in mind is the communication with the audience. This involves catching their attention in the first phase of the process, and then retaining their long-term engagement. That is why we require a good **community management strategy** which addresses these matters:

- ▶ Support of the recruitment process.
- ▶ Guarantee continuity in communications on project operations.
- ▶ Communicates project goals and outcomes at all times.

Then, it is crucial to envision a **creative, innovative and informal method to communicate and engage citizens** effectively. The following bullet points indicate some ideas:

- ▶ **Experiential marketing:** engage the citizen by creating new experiences. For instance, making impressive actions in places where the user would not expect such as their neighborhood, main streets, working areas, etc.
- ▶ **Environment:** creating inspirational, creative and comfortable environments to co-create together.
- ▶ **Social media:** use social networks to engage certain audience with creative content creation as videos, competitions, surveys, etc.
- ▶ **New technologies:** these can be tools where users can get and share knowledge and support.

After choosing the most effective way to communicate and engage citizens, it is very important to remember that the work does not end after engaging citizens. We should pay attention to **the way in which we are dealing with the user:** being empathic, dialoging and transmitting trust to them, and continuously sharing their knowledge and learning.

Finally, to show users how important their collaboration in the projects is, they must feel valued. For that, some **material or non-material rewards** should be given to them. In this way, we will foster the users' loyalty and they will be willing to repeat the experience and also recommend it to their family and friends.

**RESULT = CITIZENS ENGAGED IN THE PROCESS**

## 4.3 STEP 3: CLARIFY ROLES AND RESPONSIBILITIES

As mentioned before, it is very important to have a good communication with the user from the beginning of the process. Once the citizen is engaged in the co-creation group, we have to keep providing them with the most accurate information possible:



- ▶ **Expectations:** that is to say what the organization expects from citizens, and what the citizens should expect from the organization.
- ▶ **Responsibilities:** as this is a collective process, some rules should be established to check the proper use of the facilities, the environment and contacts with all the people involved.
- ▶ **Rights:** as there are some obligations for the user and the organizer, there are also some rights that protect both parties. Those rights must be notified to all parties involved in the process.

**RESULT = INFORMED CITIZENS**

#### 4.4 STEP 4: THINK THINGS THROUGH TOGETHER

Finally, in the co-design process, we have the point in which we **gather ideas and try and find a consensus**. Three main steps should be carried out to gather the most creative and suitable ideas for the project:

1. **Developing a vision.** The participants develop a shared vision on the challenge and the tools and techniques and stimulate the imagination of the participants. The result is a **picture of a great idea**. This vision **creates space for multiple solutions**, it is open, inspiring, and gives direction.
2. **Formulating questions.** Once we get the picture of the idea, we challenge the participants to analyse the problem and to explore various options by asking questions. **Participants discover the key factors that determine ultimate success**. They present pros and cons of the scenario to figure out what will be the best solution.
3. **Generating ideas.** Finally, it is important that the participants postpone their judgment, that they associate freely and let their imagination run free. This step encompasses the process of diverging: **generating as many ideas as possible around this picture**. Then, the ideas may be selected through a subsequent program or the designer sorts out the convergence. The result is a product or service idea and some initial specifications to start with the co-production process.





## 4.5 STEP 5: CO-PRODUCTION

---

The last step in the co-creation process is the co-production which is basically the concept refinement and the start-up of the service or product. After identifying the requirements, some concepts and designs must be presented for validation. Finally, when concepts are validated the development of the product or the service starts.



## 5. FUNDING TOOLS

The European Commission has launched several calls for co-creation proposals in the H2020 programme in two main knowledge areas, which are the “Co-creation for growth and inclusion” and “Information and communication technologies”.

	H2020- INCLUSIVE, INNOVATIVE AND REFLECTIVE SOCIETIES		H2020 LEIT - INFORMATION & COMMUNICATION TECHNOLOGIES
	Call - CO-CREATION FOR GROWTH AND INCLUSION 2016-17		Call - INFORMATION AND COMMUNICATION TECHNOLOGIES 2016-17
<b>Calls for Proposals</b>	CO-CREATION 6	CO-CREATION 4	ICT-11
<b>Dates</b>	04/10/2015 to 02/02/2017	04/10/2015 to 02/02/2017	14/10/2015 to 25/04/2017
<b>Types of projects</b>	Research & Innovation actions Coordination and support actions	Innovation actions	Innovation actions Coordination and support actions
<b>Participating countries</b>	EU-28 and its Overseas Countries and Territories <a href="#">List of associated countries</a> <a href="#">List of other non-EU countries</a>	EU-28 and its Overseas Countries and Territories <a href="#">List of associated countries</a> <a href="#">List of other non-EU countries</a>	EU-28 and its Overseas Countries and Territories <a href="#">List of associated countries</a> <a href="#">List of other non-EU countries</a>
<b>Number and geographical distribution of beneficiaries</b>	At least three legal entities, each located in a different country	At least three legal entities, each located in a different country	At least three legal entities, each located in a different country
<b>Focus areas</b>	Data-driven policy making	Applied co-creation to deliver public services	Collective Awareness Platforms for Sustainability and Social Innovation



CO-CREATING SMART CITIES

CITIZEN CITY INITIATIVE

<b>Related initiatives</b>	Scaling up and replication smart city plans	New mobility services, From Planning to Implementation, Positive Energy Blocks and Urban Platforms	Business Models, Small Giants and Citizen and Stakeholders Communication Platforms
<b>Recommended project size</b>	CO-CREATION 6 RIA: € 4-5 million CO-CREATION 6 CSA: € 0.5 million	CO-CREATION 4 IA: € 4-5 million	ICT-11 IA: 1-2 M€ ICT-11 CSA: 0,2-0,8 M€
<b>Co-funding rate</b>	Research & Innovation actions: 100% Coordination & Support actions: 100%	Innovation actions: 70% (non profit organization 100%)	Innovation actions: 70% (non profit organization 100%) Coordination & Support actions: 100%
<b>Further information</b>	<a href="#">Work programme inclusive, innovative and reflective Societies</a>	<a href="#">Work programme inclusive, innovative and reflective Societies</a>	<a href="#">Work programme Information and communication technologies</a>



Furthermore, some other topics in the H2020 programme that involve the co-creation process in their work programme have been detected as well:

<b>H2020 – CROSS CUTTING activities (focus areas)</b>			
	<b>Funding</b>	<b>Type</b>	<b>Deadline</b>
<b>Call - SMART AND SUSTAINABLE CITIES - H2020-SCC-2016-2017- SMART CITIES AND COMMUNITIES</b>			
SCC-1-2016/2017: Smart Cities and Communities lighthouse projects	12-18 M€	IA	14/02/2017
<b>Call - SMART AND SUSTAINABLE CITIES - H2020-SCC-2016-2017- SUSTAINABLE CITIES THROUGH NATURE-BASED SOLUTIONS</b>			
SCC-02-2016-2017: Demonstrating innovative nature-based solutions in cities - Inclusive urban regeneration	10 M€	IA	07/03/2017
<b>Call - INTERNET OF THINGS - H2020-IOT-2016-2017</b>			
IoT-01-2016: Large Scale Pilots - Smart living environments for ageing well	20 M€	IA	12/04/2016
IoT-01-2016: Large Scale Pilots - Reference zones in EU cities	15 M€	IA	12/04/2016
IoT-01-2016: Large Scale Pilots - Autonomous vehicles in a connected environment	20 M€	IA	12/04/2016
<b>Call – INDUSTRY 2020 IN THE CIRCULAR ECONOMY - H2020-IND-CE-2016-17</b>			
CIRC-02-2016-2017: Water in the context of the circular economy - Next generation of water systems	10 M€	IA	07/03/2017