

A Collaborative Environment to Boost Sustainable Engaged Research & Co-Production

realizing human-centric innovation around public services

From data collector to co-researcher - how to successfully collaborate with society, UNIC CityLab
10 November 2022, 10:00-12:00, <https://unic.eu/en>

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Towards more citizen-centric and sustainable public services

- The **INTERLINK H2020 project** aims to **overcome the barriers that hinder administrations to reuse and share services** with private partners (including citizens) by **combining** the advantages of **two often opposed approaches**:
 - “**top-down**” **approach** where Government holds primary responsibility for creating these services compliant with EU directives, sometimes seeking the support of citizens for specific design or delivery tasks
 - “**bottom-up**” **approach** in which citizens self-organize and deliver grassroot services where government plays no active role in day-to-day activities but may provide a facilitating framework



INTERLINK design goals

• COLLABORATION & RE-USE

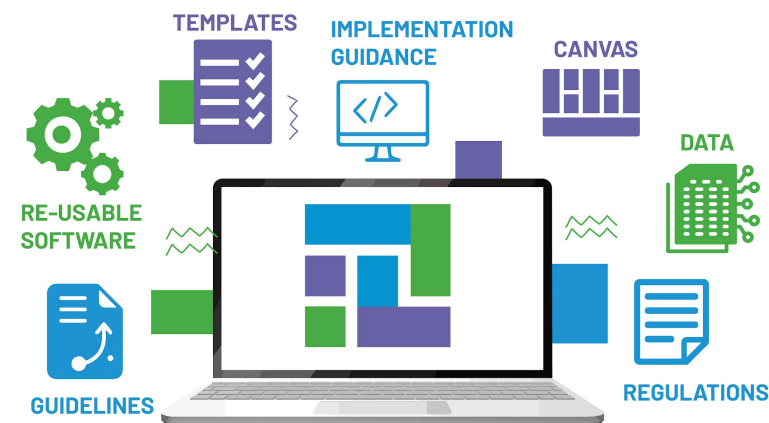
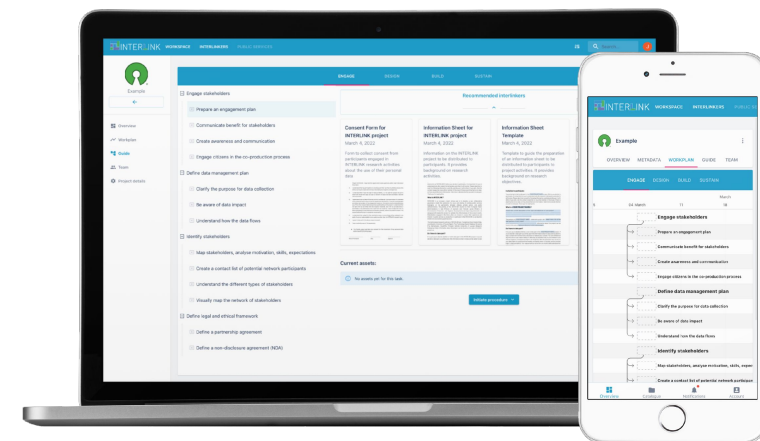
- The INTERLINK platform offers a **digital environment that facilitates co-production processes between Public Administrations, private stakeholders and citizens and promotes the re-use of software** for delivery of public services.

• CO-DESIGN & CO-DELIVERY

- INTERLINK provides a **step-by-step guidance for the co-production and co-delivery of public services** along with guidelines, tips and templates that facilitate the collaboration of different actors.

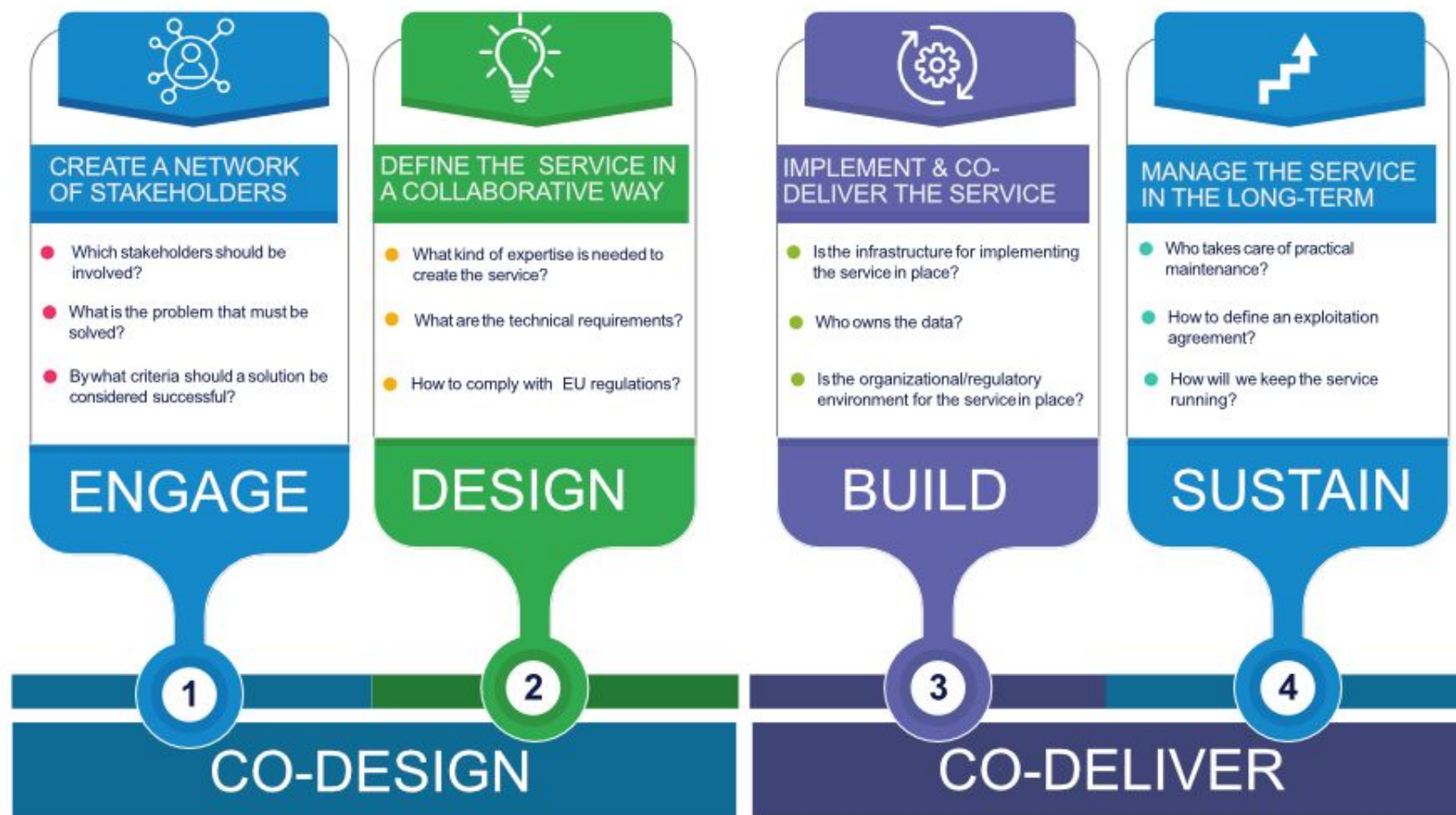
• INTERLINKERS

- **Pieces of knowledge or software that your team can re-use and customize** to deliver services.

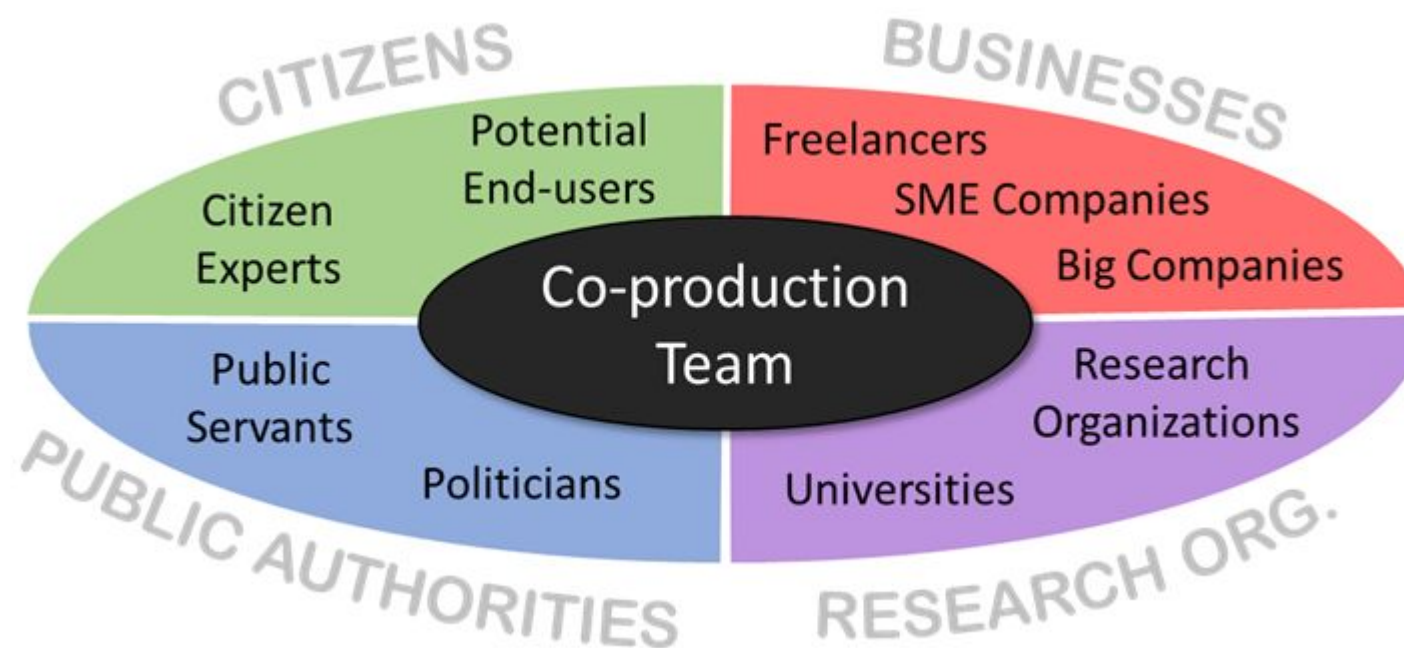


INTERLINKERS enable the **co-design** and **co-delivery** of services that put the user at the center

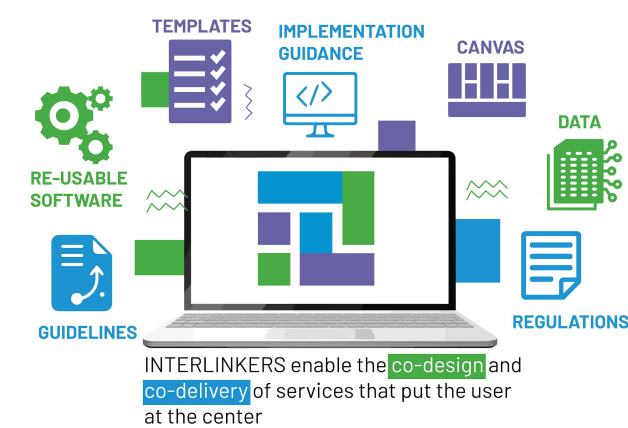
INTERLINK co-production methodology



Teaming up co-producers: quadruple helix



INTERLINKERs: coproduction enablers



- **Common building blocks**, provided as *software tools* or in the form of *knowledge offered digitally*, that offer interoperable, re-usable, EU-compliant, standardized functionality for public service co-production
 - Devised to **support the co-production of effective, participatory, and sustainable public services**
- Applicable to the **following purposes**:
 - **To guide co-production**: Co-production enablers that guide and support teams in the collaborative execution of the co-production initiatives.
 - **To build capacity**: Partnership tools and knowledge resources, which tackle the legal, social, & business aspects to make co-delivered public services viable and feasible
 - **To aid service development**: Technical enablers for co-delivered services, aligned with other existing EU-wide initiatives to foster interoperable and sustainable public services.

INTERLINK Collaborative Environment

- Designed to **support the co-production methodology of INTERLINK and facilitate its adoption** and application in the co-production of novel public services, offers the following **core functionalities**:
 - Co-producer **team and project management**;
 - **Guide** for co-production process;
 - **Recommendation of INTERLINKERs** most suitable to the problem profiles represented by the chosen co-production task;
 - **Selection and registry of use** (displaying result of using the enabler, e.g. instantiation of a Business Plan) and
 - **Access to INTERLINKER catalogue**
- **Designed to maximize extensibility, adaptation and reusability** by making use of declarative models for INTERLINKERs and co-production schemas

- [illegible]

Demonstrating co-creation

- Let's consider the **co-production of Hackathon for Good**
- We would create a **new co-production process "Bilbao Apps4Good"**
- Create a **new team within Bilbao organization "Bilbao Apps4Good Hackathon organizers"**
- **Select a suitable co-production tree** for such co-creation artefact ("**#2 Hackathon creation process**")
- Be guided by the co-production tree to make progress in the process
 - Create **rules** (DESIGN\Focus the problem collaboratively\Sketch an initial idea of the Hackathon: theme, plan, submission & evaluation process) and [design participation form](#)
 - Launch **participation form** (RUN\Service Implementation\Open Submissions)
 - [UNIC4ER Hackathon form link](#)
- You may involve different users to see different aspects (hackathon organizers & participants)

Selecting co-production schemas and using INTERLINKERs, e.g. Hackathon

Hackathon-Rules-Template-for-INTERLINK-project .DOCX

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3 2 1 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Editing

Share

Competition Rules: INTERLINK Hackathon for Co-creation of Urban Apps

1. Object of the Contest

The purpose of this contest is to involve citizens and the different city agents in the search for solutions to the social, cultural, and economic challenges that are identified and raised in Zaragoza, through the definition of new web/mobile public service apps.

Various Municipal Areas and Societies that collaborate with the INTERLINK initiative have identified and defined several specific social or economic challenges in the city. In addition, the Zaragoza City Council has made available to citizens and agents, data related to the challenges posed through the Zaragoza Open Data open data portal. The generation of ideas for this contest will be supported by [Open Data Zaragoza](#) and the [Collaboration Environment of INTERLINK](#), which offers functionality to assemble teams and specify novel public service apps ideas that provide answers to the challenges posed.

The participants in the Contest will have a certain period in each specific call to shape their proposals in the form of web/mobile app concepts, which will be evaluated before a Jury made up of experts in the technological and social field.

Among all the initiatives presented, the Jury will choose 6 apps that will be the winners for having focused in a more feasible, attractive, and impactful way, the generic challenge of this hackathon, that is, creating urban web/mobile apps that respond to the needs of agents of Zaragoza, or that have responded to previously existing challenges or refined and developed ideas already published. All initiatives will be evaluated according to the same previously defined criteria and by the jury.

Browsing and selecting INTERLINKERs (catalogue)



Project Collaborative Environment



Project Collaborative Environment Co-production Catalogue About

Search

Nature Problem profiles Minimum rating: ☆☆☆☆☆

Nature: Internal knowledge Nature: External software Nature: External knowledge Nature: Internal software

62 INTERLINKERs found



AAC - Authentication and Authorization Controller

by INTERLINK Collaborative Environment
Last update: 4 months ago

AAC is an Open Source platform for identity management, authentication, and authorization. Based on standard security protocols, such as OAuth2.0, OpenID Connect, SAML, SCIM, the tool allows...

Nature Rating
External software ☆☆☆☆☆ (0)



Doodle

by INTERLINK Collaborative Environment
Last update: 4 months ago

Online calendar tool for time management and coordinating meetings. Anytime more than two people are trying to arrange a meeting, Doodle very useful. You can use doodle to plan meetings with...

Nature Rating
External software ☆☆☆☆☆ (0)



Search Business

Nature Problem profiles Minimum rating: ☆☆☆☆☆

Search: Business Nature: Internal knowledge Nature: External software Nature: External knowledge Nature: Internal software

2 INTERLINKERs found



Business Model Canvas

by INTERLINK Collaborative Environment
Last update: 4 months ago

This canvas can be used collaboratively, for instance, during a brainstorming or a focus group, to reflect on the the most suitable business model associated to a co-produced service.

Nature

Internal knowledge

Rating

☆☆☆☆☆

Keywords

model canvas business



Business Plan Template

by INTERLINK Collaborative Environment
Last update: 3 months ago

This canvas can be edited collaboratively by the co-producing team to elaborate the business plan for a co-produced service.

Nature

Internal knowledge

Rating

☆☆☆☆☆

Keywords

template canvas business

Pilots deployments in PAs from Italy, Latvia and Spain

The screenshot displays the INTERLINK platform interface with three pilot deployments side-by-side:

- Italy (MEF):** Header includes 'MEF Ministero dell'Economia e delle Finanze' and 'SPAZIO'. It shows sections for 'I MIEI PROCESSI' (with a '+ Crea un nuovo processo' button), 'I MIEI GRUPPI' (with a '+ Crea un nuovo gruppo' button), 'MANI PROCESI' (with a '+ Izveidot jaunu procesu' button), and 'MANAS KOMANDAS' (with a '+ Izveidot jaunu komandu' button).
- Latvia (DARBAVIETA):** Header includes 'DARBAVIETA' and 'INTERLINKERI'. It shows a section 'DARBAVIETA' with the text 'Laipni lūgti, Šeit iespējams aplūko' and a large blue arrow pointing left.
- Spain (Zaragoza):** Header includes 'Zaragoza AYUNTAMIENTO', 'ESPACIO DE TRABAJO', 'INTERLINKERS', and 'SERVICIOS PUBLICOS'. It shows sections for 'MIS PROCESOS' (listing 'Apps4good' and 'Co-evaluación del entorno colaborativo' with a '+ Crear nuevo proceso' button), 'MIS EQUIPOS' (listing 'Team for Training session CE ZGZ' and 'Ciudadanos de ZGZ' with a '+ Crear nuevo equipo' button), and 'ESPACIO DE TRABAJO' (welcoming 'Diego' and stating 'Esta es la actividad reciente relacionada con tu espacio de trabajo' with a 'Sin implementar aún' message). A '+ ¿NECESITA AYUDA?' button is at the bottom right.

- **Iteration 1 in numbers:**

- 3 deployments

- 62 INTERLINKERS in INTERLINK Catalogue

- KNOWLEDGE INTERLINKERS: 33 internal & 12 external

- SOFTWARE INTERLINKERS: 5 internal + 1 external (internally created) + 11 INTERLINKERS pointing external ones (e.g. Doodle)

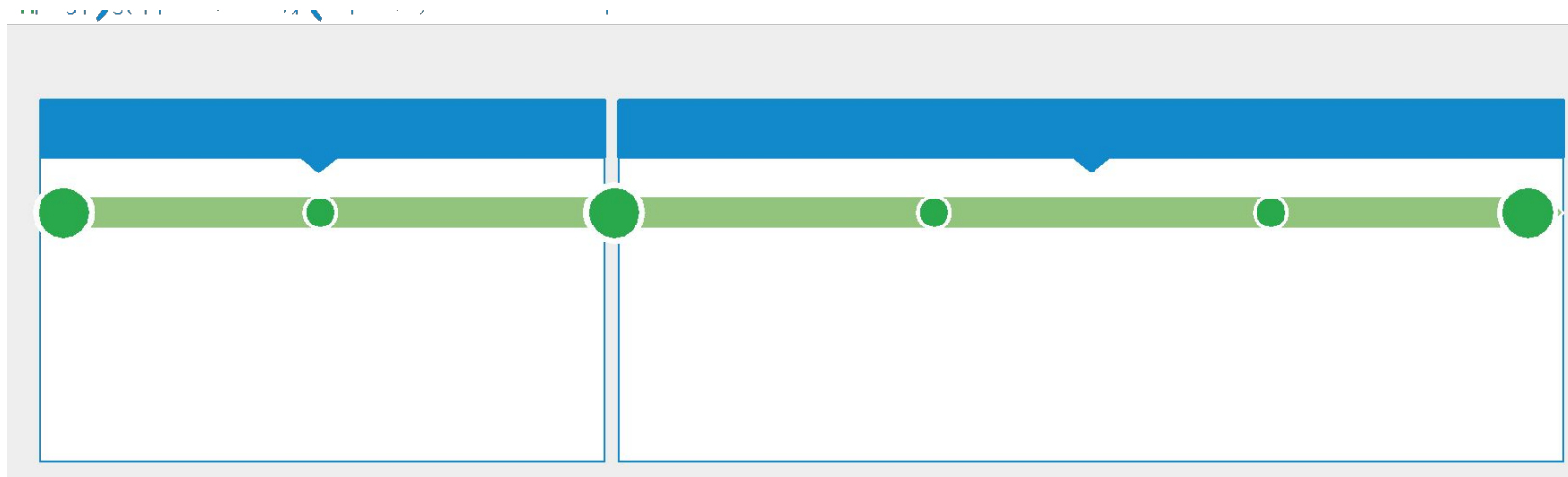
- Co-production schemas: 3

Evaluation & Assessment strategy

- 2 iterations per pilot:

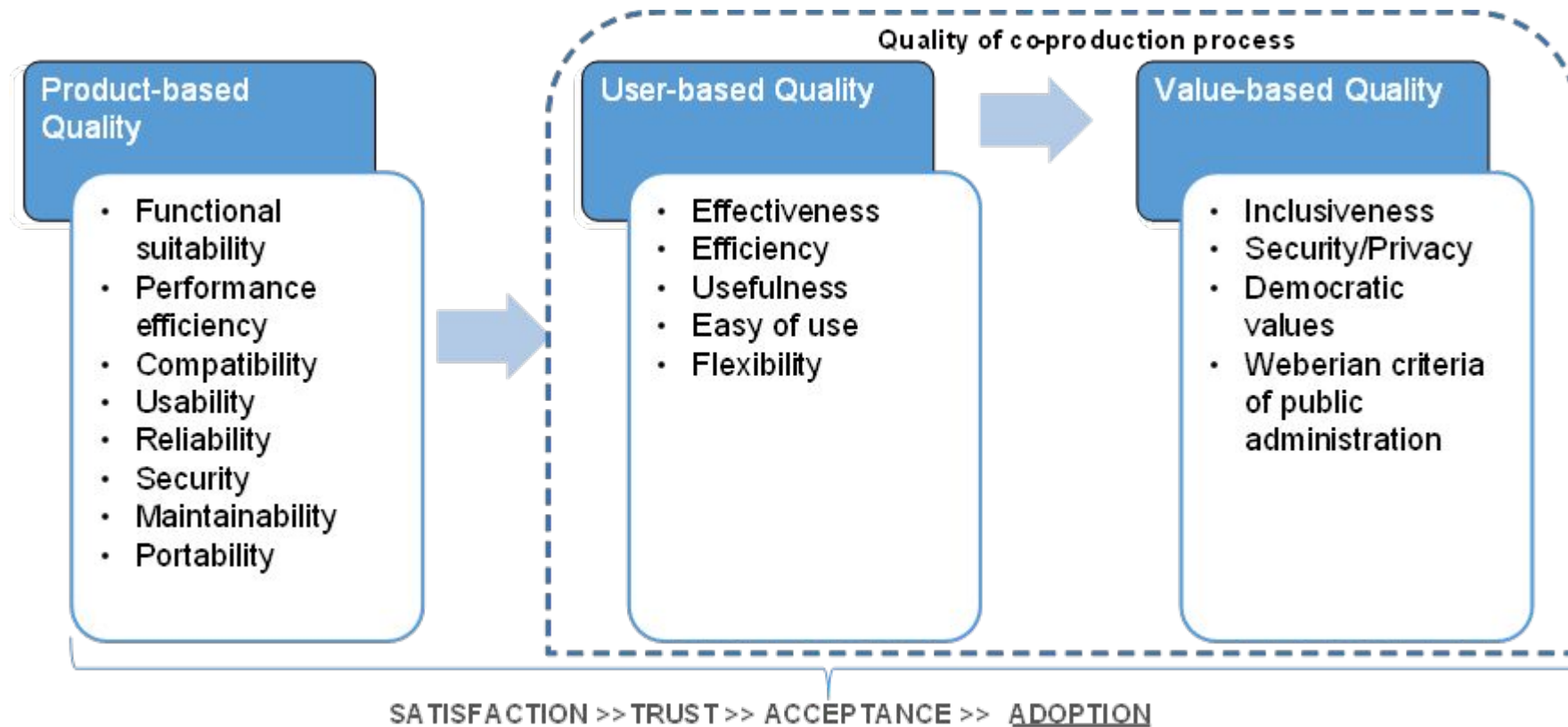


- 2 sub-phases per phase:



Pilot iteration 1's Evaluation Strategy (Dimensions)

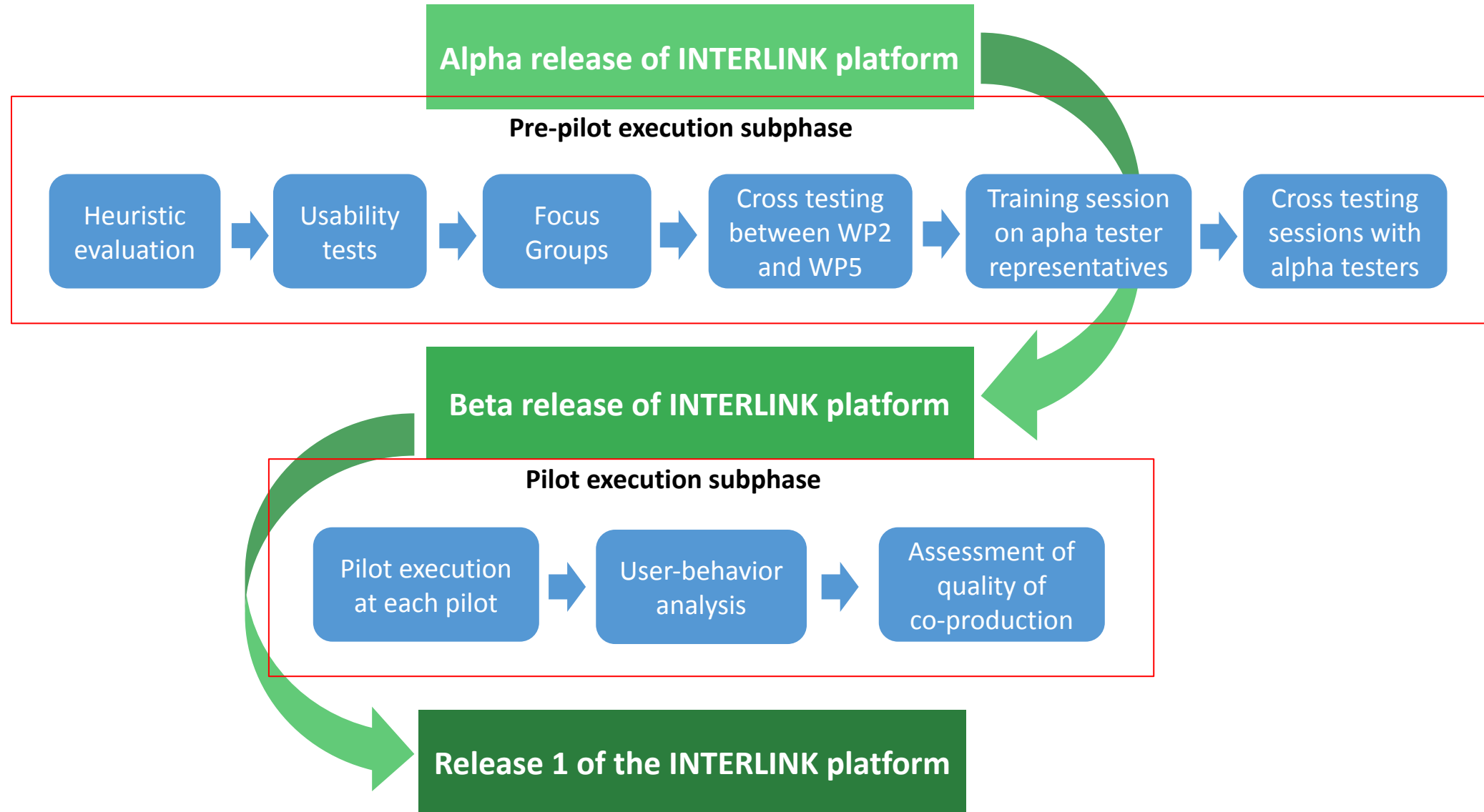
Will INTERLINK co-production model and its supporting tools and co-production enablers (INTERLINKERs) enhance the quality, quantity, and reuse of public services?

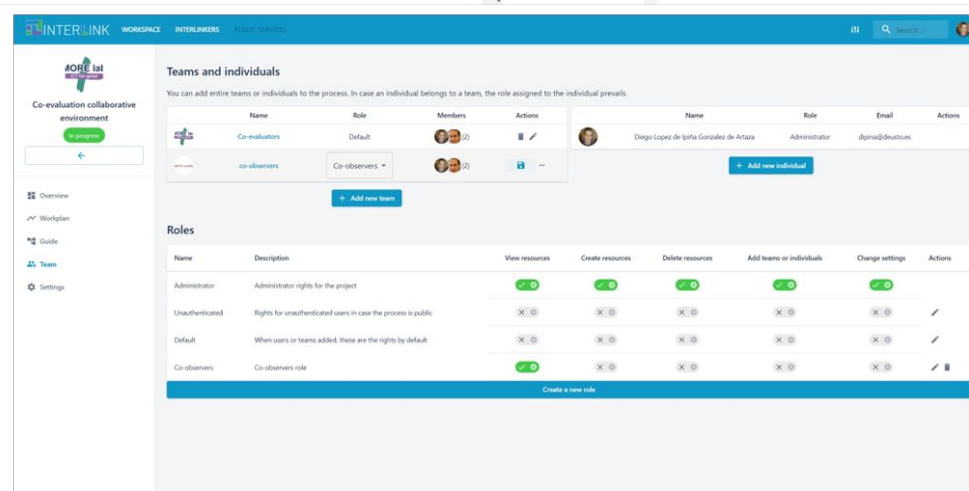
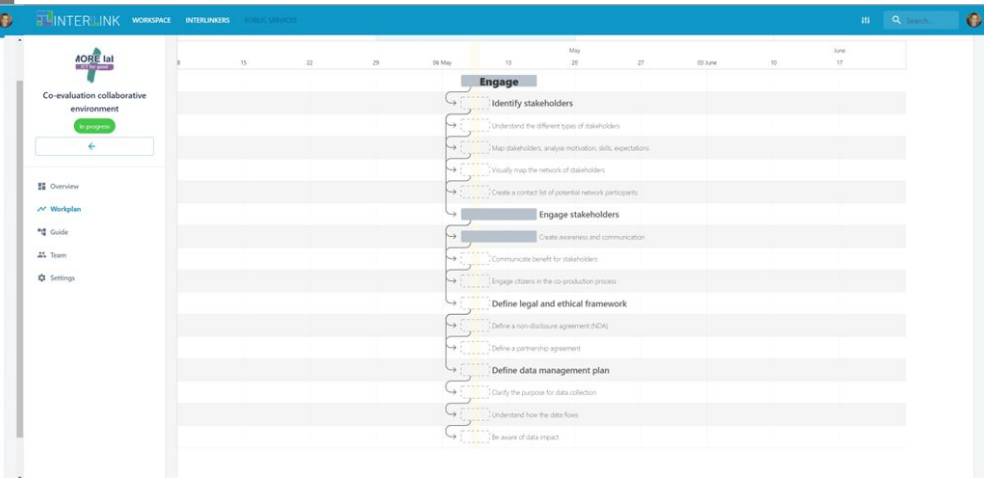
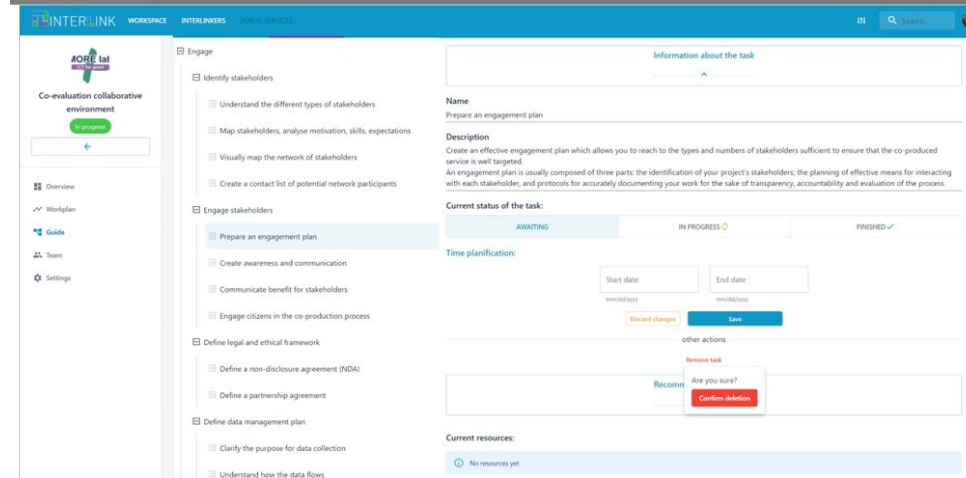
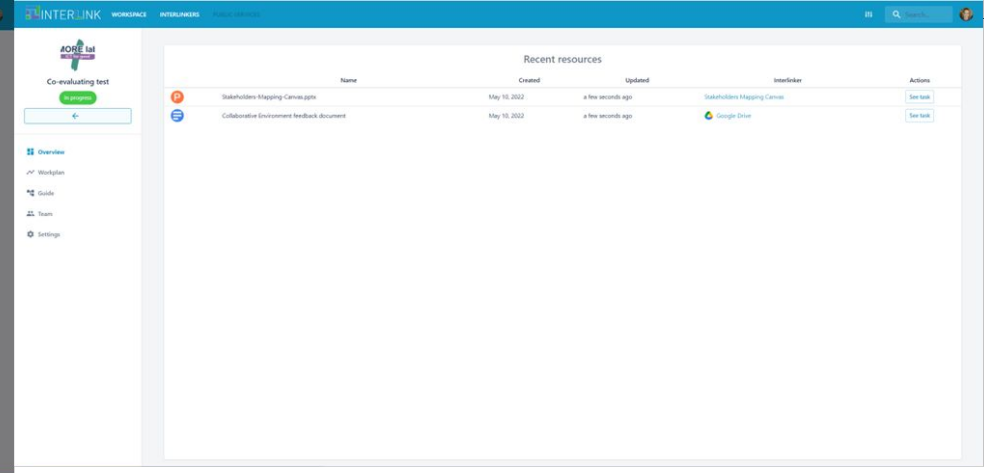
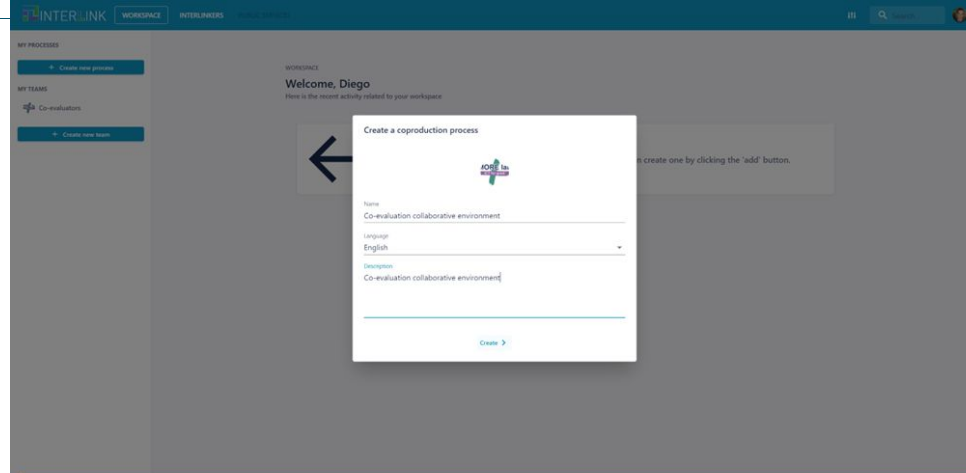


Pilot iteration 1's Evaluation Strategy (KPIs)

- **Global or pilot-agnostic goals**, including the following dimensions:
 - A. **INTERLINK USE and CO-PRODUCTION of SERVICES**. Number of INTERLINKERs in use, stakeholders involved, co-produced services enabled by INTERLINK.
 - B. **THE VALUE PROVIDED by INTERLINK**. It measures the value improvements provided by the INTERLINK solution:
 - INTERLINK **decreases the PA's** administrative and management **costs**.
 - INTERLINK **increases the number and quality** of co-produced initiatives.
 - INTERLINK **increases the participation of citizens and private entities** in the customization and co-delivery of services.
 - C. **THE USERS' PERCEPTIONS of INTERLINK**. It addresses users' perceptions of INTERLINK regarding usability, satisfaction, trust, acceptance.
- **Local or pilot-specific goals** focusing on:
 - D. **PILOT SPECIFIC KPIs**. It considers key performance indicators that are custom made at each pilot site.

Evaluation journey followed





Pilot evaluation subphase evaluation

- Undertook the **evaluation activities with beta testers** at pilots with the first beta release of the INTERLINK Collaborative Environment, to give place to first release of INTERLINK platform
 - **Ministry of Economy and Finance - Italy (MEF)** – a mock-up of a **Participatory Strategic Planning Module (PSPM)** which allows Public Bodies and staff to actively participate in the definition of the Strategic Plans
 - **Ministry of Environmental Protection and Regional Development of the Republic of Latvia (VARAM)** and its [Latvian State Portal](#), which provides easy access to services delivered by state and local government institutions. The goal is to **continuously update and enhance such portal descriptions** so that the public services published are increasingly adopted
 - **Zaragoza city (ZGZ) and its Center for Art and Technology (eTOPIA)**, where the aim is promoting **collaborative city-making** facilities and programs and improving the process of **Open Innovation**



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T005a-num-ACTIVE-USERS

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_Num_Assets_

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T021_num_INTERL_total

62

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org_name	team_name	num_users
"en"=>"Agenzia delle Entrate", "es"=>"Agenzia delle Entrate", "it"=>"Agen...		0
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Assessment of quality of the co-production process

- Can we quantify the associated Quality to a co-production process and its resulting artefacts?

QoS co-production = average(user-based quality; value-based quality; satisfaction; trust; acceptance)

- where:
 - User-based quality** = AVG (Effectiveness, Efficiency, Usefulness, Ease of Use, Flexibility).
 - Value-based quality** = AVG (Inclusiveness, Security/Privacy, Democratic values, Weberian criteria)

Role	Pilot	#	User-based quality		Value-based quality		Satisfaction		Trust		Acceptance		QoS co-prod.	
			Citz.	Other	Citz.	Other	Citz.	Other	Citz.	Other	Citz.	Other	Citz.	Other
Co-producer	MEF	25	4.67	4.04	3.92	4.00	4.00	4.00	3.60	3.75	3.00	3.00	3.84	3.76
Co-producer	VARAM	22	4.03	3.97	4.12	4.20	4.00	4.09	3.00	3.50	3.47	3.47	3.72	3.85
Co-producer	ZGZ	6		3,24		3,17		3,50		4,33		2,83		3,41
AVG co-producer			4.35	4.01	4.02	4.10	4.00	4.05	3.30	3.63	3.24	3.24	3.78	3.81
AVG GLOBAL			4.17		4.06		4.02		3.46		3.24		3.79	
End-user	ZGZ	5		2,76		3,40		2,70		3,00		2,40		2,85
End-user	VARAM	30	3.90	3.65	3.91	3.75	3.71	3.50	3.53	3.45	3.50	3.40	3.71	3.55
User-user														
AVG end-user			3.90	3.65	3.91	3.75	3.71	3.50	3.53	3.45	3.50	3.40	3.71	3.55
AVG GLOBAL			3.77		3.83		3.60		3.49		3.45		3.63	
AVG TOTAL			3.97		3.94		3.81		3.47		3.34		3.71	

- Automatized calculation** of KPIs and analysis of questionnaires
- QoS values** per pilot are very encouraging, not conclusive, overall **3.79/5,0** (among co-producers)
- Moderate acceptance level** perception, **3.24/5** (among co-producers)

WORKSPACE

ORGANIZATIONS

CATALOGUE

Workspace

Welcome, Ruben

Here is the recent activity related to your workspace

Search

Name	Created	Status	Teams	Your participation in the process
Apps4Good	7 minutes ago	In progress		administrator

Create new process

Apps4Good

English

Overview

Guide

Workplan

Team

Settings

WORKSPACE

ORGANIZATIONS

CATALOGUE

Coproduction process overview

PROGRESS

RESOURCES (0)

Set coproduction process data

1

The co-production process data is a set of attributes that serve to define the process to be carried out.

Go to settings section

[OPTIONAL]Set coproduction process administrators

1

Administrators can update the coproduction process information, add permissions to the tree items or add new administrators

Go to settings section

Select the coproduction schema

2

The schema has been selected. Now you can access the Guide and the Workplan sections. Nevertheless, you can undo this action (clear the coproduction tree) in the settings section.

Grant permissions over process to co-producer teams and start co-producing through Guide view

2

At least a permission has been created.

[OPTIONAL]Add new resources to the coproduction process

1

Now you can add resources to the tasks in the coproduction process. For that, navigate to the Guide section and add new resources in the Resources tab available in each task

Add an resource in the guide section

WORKSPACE

ORGANIZATIONS

CATALOGUE

Engage

DESIGN

BUILD

SUSTAIN

+

Engage

INFORMATION ABOUT THE TASK

RESOURCES (0)

PERMISSIONS (1)

Objective

Identify stakeholders

Task

Understand the different types of stakeholders

Task

Map stakeholders, analyse motivation, skills, expectations

Task

Visually map the network of stakeholders

Task

Create a contact list of potential network participants

Objective

Engage stakeholders

Task

Prepare an engagement plan

Task

Create awareness and communication

Task

Communicate benefit for stakeholders

Name

Understand the different types of stakeholders

Description

Usually different actors are engaged in co-production to create a new service or customizing an already existing service: public bodies, private companies, SMEs, citizens. Each actor brings specific needs and competences in relation to the service and has different motivations to participate in a project. Learn about the different types of stakeholders and which of them can add value to your co-production process

Current status

Awaiting

Time planification:

Not set

Apps4Good

English

Overview

Guide

Workplan

Team

Settings

WORKSPACE

ORGANIZATIONS

CATALOGUE

Engage

DESIGN

BUILD

SUSTAIN

+

DAY	WEEK	MONTH	YEAR
20	04 October	18	25
27	15	01 November	08
		15	22

Engage

Identify stakeholders

Understand the different types of stakeholders

Map stakeholders, analyse motivation, skills, expectations

Visually map the network of stakeholders

Create a contact list of potential network participants

Engage stakeholders

Prepare an engagement plan

Create awareness and communication

Communicate benefit for stakeholders

Engage citizens in the co-production process

Define legal and ethical framework

Define a non-disclosure agreement (NDA)

Define a partnership agreement

Define data management plan

WORKSPACE

ORGANIZATIONS

CATALOGUE

Apps4Good

English

Overview

Guide

Workplan

Team

Settings

Apps4Good Team

For

View resources

Create resources

Delete resources

Actions

Overall process

INTERLINK

Deutske Universität

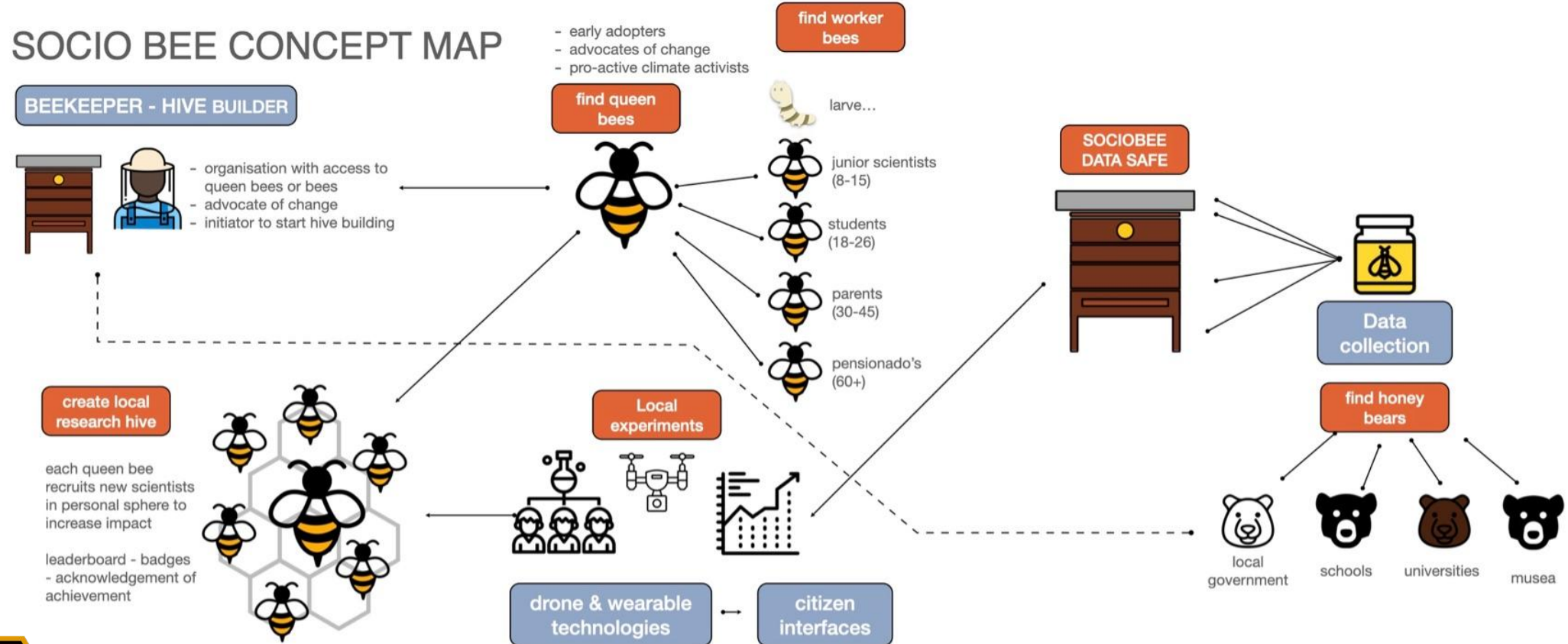
CO-DELIVERY: Incentives and Rewards

- An **incentive** is something (material or immaterial) that motivates or encourages someone to do something.
- A **reward** is something given in exchange for good behavior or good work.
- **Need for incentives and rewards** in co-production processes:
 - Stakeholders' initial engagement is critical
 - why should I partake in the initiative?
 - (PA employee) is there a recognition by my employer of the time/effort I spent?
 - (citizen) how this activity relates to my life?
 - what is the workplan and what is required from me? is it worth the effort?
 - Stakeholders' long-term motivation and commitment should be supported
 - Enthusiastic team leaders are essential
 - **Co-business models** need to measure participation and provide benefit accordingly
- Possible solutions:
 - Use game concepts (**Gamification**) to incentivize participation of the users
 - A **Social Coin** to acknowledge and reward for co-production actions (Deusto's [Social Coin](#))



SOCIO-BEE: Wearables and drones for City Socio-Environmental Observations and Behavioral Change

SOCIO BEE CONCEPT MAP



Conclusions & Further Work

- The **INTERLINK collaborative environment** has been tested in the 3 European pilots and release 1 produced
- **Pre-pilot subphase and pilot execution subphases completed** to transform ALPHA into BETA version and from BETA into RELEASE 1 of Collaborative Environment
- **Enhanced usability and integration of co-production** guide, timeline, tasks, and resources views to streamline the co-production of innovative public services applied
- **Validated that INTERLINK co-production methodology and associated tools and artefacts may contribute to a wider adoption of co-production** as a good practice to deliver more highly acceptable and usable public services.
- **Future work:**
 - Keep enriching the catalogue with **new co-production enabling INTERLINKERs**.
 - Create **new exemplary co-production schemas for different purpose co-production projects**, e.g. SOCIO-BEE
 - Add new progress and forum views and assess project again in a 2nd iteration
 - **Collaborative process** will also be empowered with **incentivization and rewarding** means through INTERLINK tokens and **co-business models** to foster CO-DELIVERY.

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