

D 2.1

# Framework for challenge mapping

[www.urbantech-project.eu](http://www.urbantech-project.eu)

[info@urbantech-project.eu](mailto:info@urbantech-project.eu)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101005301

@urbantechh2020



Deliverable 2.1

# Framework for challenge mapping

**DELIVERABLE TYPE**

Webpage + Document

**MONTH AND DATE OF DELIVERY**

31<sup>st</sup> January 2021

**WORK PACKAGE**

WP 2.1

**LEADER**

Turku Science Park Ltd.

**DISSEMINATION LEVEL**

Public

**AUTHORS**

Sofia Pihlava, Marko Puhtila & Sami Uusitalo

**Programme**  
H2020

**Contract Number**  
101005301

**Duration**  
36 Months

**Start**  
September 2021



## Contributors

NAME	ORGANISATION
Sofia Pihlava	Turku Science Park Ltd.
Marko Puhtila	Turku Science Park Ltd.
Sami Uusitalo	Turku Science Park Ltd.

## Peer Reviews

NAME	ORGANISATION
Christiane Egger	ESV
Pietro Rigonat	LOBA
Reesi Lepa	Civitta

## Revision History

VERSION	DATE	REVIEWER	MODIFICATIONS
1.2	21/01/2022	Kerstin Goos	Corrections
1.3	25/01/2022	Anna Zielinska	Headlines

*The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf.*

## Index of Contents

1. Terms for challenge collection: roles .....	5
1.1 Urban Tech partners .....	5
1.2 Challenge owners .....	5
1.3 Solution providers .....	5
2. Terms for challenge collection: themes .....	5
2.1 Smart City .....	5
2.2 Greentech .....	5
2.3 Health Tech .....	6
3. Challenge collection process .....	6
3.1 Quality control process .....	7
3.2 Form for challenge mapping .....	8
3.3 Milestones for challenge collection / Timetable .....	8
3.4 Virtual Library .....	8
4. Challenge criteria .....	9
4.1 The minimum criteria .....	9
5. Rules of engagement .....	9



## Framework for challenge mapping

Framework for challenge mapping has been composed in co-operation with WP2 contributors (ESV, TScP and LOBA). Framework was initially outlined by all Urban Tech partners during virtual workshop for challenge mapping on November 5<sup>th</sup>. This document defines the guidelines for Urban Tech challenge mapping and summarises all discussions regarding the process. The aim of this framework is to provide clear guidelines for challenge collection in order to receive good quality challenges to ensure successful execution of the following work packages.

### 1. Terms for challenge collection: roles

#### 1.1 Urban Tech partners

Urban Tech partners are the nine technology parks / clusters involved in the project. Their task in challenge collection phase is to collect a minimum of 300 challenges (30+ by each organisation) and fill in the mapping document regarding each of them. They are also responsible for updating the challenge owners regarding the progress of the project. Urban Tech partners are also responsible for providing experts from their own organization for the quality control of the challenges.

#### 1.2 Challenge owners

Challenge owners include the companies, public bodies, and institutions raising the challenges to be solved. They are looking for a solution related to Smart City, Greentech or Health Tech. They are expected to commit to the whole Urban Tech process.

#### 1.3 Solution providers

Solution providers include SMEs and startups. They will provide solutions via Open Calls for the challenges set by the challenge owners. The most promising ones are selected for participating in Urban Tech activities.

### 2. Terms for challenge collection: themes

#### 2.1 Smart City

Smart City is a framework, predominantly composed of Information and Communication Technologies (ICT), to develop, deploy, and promote sustainable development practices to address growing urbanization challenges.

#### 2.2 Greentech

Greentech refers to a type of technology that is considered environmentally friendly based on its production process or its supply chain. Greentech—which is an abbreviation of "green technology"—can also refer to clean energy production; clean energy production is the use of alternative fuels and technologies that are less harmful to the environment than fossil fuels.

The goal of Greentech is to protect the environment, repair damage done to the environment in the past, conserve natural resources and preserve the Earth's natural resources.

### 2.3 Health Tech

Health Tech includes any technology-enabled healthcare products and services that are primarily delivered and/or consumed outside of the hospital or physician's office—one notable exception being hospital and practice management software. The vertical includes companies that provide mobility and other information technologies to improve healthcare delivery while decreasing costs. It also uses technology and services to optimize patient-centric healthcare through things like cloud computing, internet services and social mobility.

## 3. Challenge collection process

Challenges are collected by Urban Tech project partners. Before contacting the potential challenge owners, project partners must familiarise themselves with all the materials regarding the collection process (the challenge mapping form, rules of engagement, "sales pitch" or "elevator pitch" for presenting the Urban Tech project and other marketing materials).

Partners are also instructed to make a list of potential challenge owner organisations to contact them. It is also possible to organise challenge mapping workshops (virtual or on-site) in order to reach wider audience in one go. Spreading word on Urban Tech challenge via clusters and marketing channels is also important. Other networks (such as Enterprise Europe Network "EEN") will be contacted. Other EU countries should be addressed as well, not just the ones present in the project consortium.

Once a challenge owner has identified a suitable challenge, the responsible project partner fills the form for challenge mapping together with the challenge owner. Next, the form is reviewed by the project partners' internal experts to ensure the quality of the challenges. If complementary information is needed, the responsible project partner will gather it. After submitting the challenge, project partners are responsible to communicate towards the challenge owners (which steps are happening next and timetable etc.).

Challenge collection process is presented in the graph below:



Figure 1: Challenge collection process

### 3.1 Quality control process

The quality control process of the challenges ensures the quality of the challenges before publishing them in the Virtual Library. To receive good quality responses to the challenges sufficient amount of information of the challenges is needed. -> To ensure high quality solutions, the challenge description has to be sufficient, clear, yet concise. To achieve this, once a challenge is filled in the form for challenge mapping, basic check for the challenges is conducted by the WP2 team (TSCP, ESV, LOBA). After this stage the challenges are sent for the expert check. Experts are nominated by the project partners representing the fields of Smart City, Greentech and Health Tech and will receive challenges from their own field of expertise by email. After they have reviewed the challenge, it is either accepted or sent back to the responsible project partner to be revised with additional information. New check is done after this stage and the challenge gets accepted once the additional information is deemed sufficient.

The quality control process is presented in more detail below:

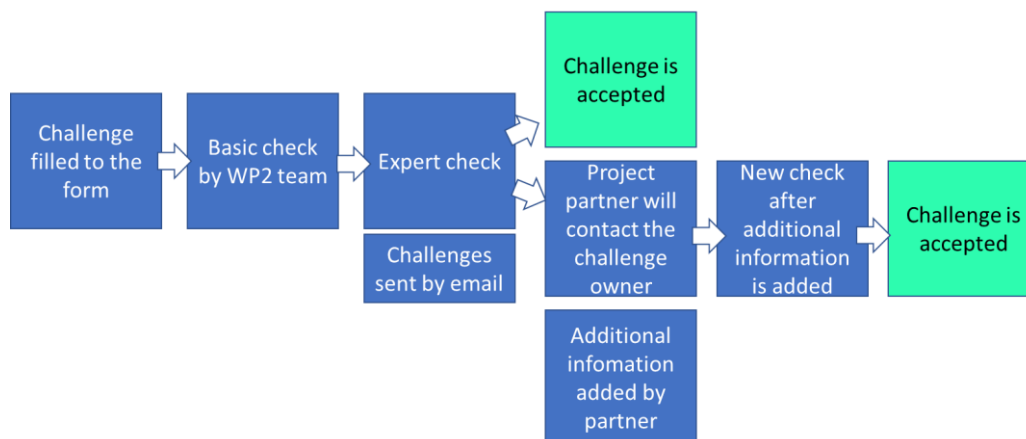


Figure 2: Quality control process for challenge collection

### 3.2 Form for challenge mapping

The form for challenge mapping is an online document created to collect the challenges. Simultaneously, it works as a guideline for the challenge mapping as every step is provided with additional information to describe what should be written and where. The forms are filled by the Urban Tech project partners.

The form can be found via this link:

[https://ec.europa.eu/eusurvey/runner/URBAN\\_TECH\\_Challenges#page0](https://ec.europa.eu/eusurvey/runner/URBAN_TECH_Challenges#page0)

The information collected forms a database for the Virtual Library. Challenges are clustered into the library by themes.

### 3.3 Milestones for challenge collection / Timetable

Challenges are collected by Urban Tech partners. Here are the milestones for challenge collection:

By the 3<sup>rd</sup> of December: Challenges 1-5 submitted by each partner using the online form (Step 1)

By the 17<sup>th</sup> of December: Challenges 6-10 submitted by each partner (Step 2)

By the 14<sup>th</sup> of January: Challenges 11-20 submitted by each partner (Step 3)

By the 28<sup>th</sup> of January: Challenges 21-30 submitted by each partner (Step 4)

If these milestones are not met, challenge collection period must be extended.

### 3.4 Virtual Library

All the collected challenges will be presented in an online Virtual Library. There the challenges are presented publicly. Also, the challenges will be grouped according to themes and key words. In the next stage (Work Package 3), Urban Tech project will search for solutions to the challenges via an Open Call that will be open to all European startups and SMEs.



## 4. Challenge criteria

To be accepted as a challenge the following minimum criteria must be fulfilled.

### 4.1 The minimum criteria

The minimum criteria for the challenges according to the project plan is:

- accelerate the competitive success of European SMEs in Health Tech, Smart City and Greentech
- potential to support SMEs and start-ups in scaling their solutions and products globally.
- potential to result in a new (or significantly improved) product and service with higher value (e.g. higher quality, increased access, ecoinnovative, resource efficient and internationally scalable) within shorter term (?)
- a committed problem owner willing to engage in the project and with potential to implement the solution
- good quality information and data to better support the understanding of the challenge

## 5. Rules of engagement

To secure fairness to all parties the project raises these Rules of Engagement when discussing with challenge owners as part of the challenge collection process.

Original version of the rules of engagement was made by StartupLab, Norway. Modified rules of engagement for use of Urban Tech project was created with Startup Lab's permission.

These Rules of Engagement are a strong recommendation.

### **1. Corporates should not engage in a process with a startup/SME if they have already decided to build a competing solution.**

A best effort should be made to check with different departments and business units within the organisation to see if they are working on similar solutions.

### **2. Corporates considering making competing solutions should disclose this before having meetings with startups/SMEs already in that market.**

A best effort should be made to check with different departments and business units, and any initiatives should be informed about in written communication up front. Then it's up to the startup/SME whether to proceed and what to share.

### **3. Both parties should set and communicate expectations clearly**

The first meeting should be a mutual introduction to see if there are business opportunities to explore further.

Any follow-up meetings should involve other decision makers within the corporation and be used to evaluate whether it is interesting to pursue a business relationship.

During the initial meetings, both parties should carefully consider the information they share. Any information shared in the meetings should be treated as confidential.

Startups/SMEs should understand that timelines and processes in a corporation world can be different to that of a startup/SME company.

**4. If representatives from the corporate become aware of a conflict of interest, inform the startup/SME in writing immediately.**

In larger corporations, it is possible that there are departments working on similar solutions and that representatives are made aware of these initiatives. If made aware of a potential conflict of interest, it is important to communicate this to the startup/SME immediately.

**5. When entering into detailed discussions, sign a mutual NDA.**

If the parties decide to have meetings that requires the sharing of confidential information or “the secret sauce”, the parties should sign a mutual NDA to protect their interests.

**6. Refrain from soliciting**

The parties should not do any recruitments initiatives towards personnel from the other party.

# urbantech

ACCELERATING INNOVATION IN  
HEALTH TECH, SMART CITY  
AND GREENTECH

[www.urbantech-project.eu](http://www.urbantech-project.eu)

[info@urbantech-project.eu](mailto:info@urbantech-project.eu)

@urbantechh2020



## Consortium

CIVITTA



TURKU  
SCIENCE  
PARK Oy Ltd



Kaunas Science and  
Technology Park

TECHNOLOGY PARK  
LJUBLJANA  
81

CyberForum  
RESEARCH-ORIENTED NETWORK



UNICORN  
START-UP &  
INNOVATION HUB



POMERANIAN  
SPECIAL ECONOMIC  
ZONE

LOBA®



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101005301