IcARUS

INNOVATIVE APPROACHES TO URBAN SECURITY

www.icarus-innovation.eu
info@icarus-innovation.eu

Deliverable 1.2

Guidelines to the Design Thinking implementation in IcARUS task

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

www.icarus-innovation.eu
info@icarus-innovation.eu

Deliverable 1.2

Guidelines to the Design Thinking implementation in IcARUS task

DELIVERABLE TYPE	MONTH AND DATE OF DELIVERY
Report	January 29, 2021
WORK PACKAGE	**LEADER**
WP 1	**EUR**
DISSEMINATION LEVEL	**AUTHORS**
Public	**Massimo Fattori (EUR)**

Programme	Contract Number	Duration	Start
H2020	882749	48 Months	September 2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

Contributors

NAME	ORGANISATION
Pilar de la Torre	Efus
Julia Rettig	Efus

Peer Reviews

NAME	ORGANISATION
Daniel Trottier	EUR
Maud Ridoux	Makesense
Genny Dimitrakopoulou	KEMEA
Sarah Diemu-Trémolières	Efus
Carla Napolano	Efus

Revision History

VERSION	DATE	REVIEWER	MODIFICATIONS
01	11 January 2021	Daniel Trottier (EUR)	1st revision and proofreading
02	14 January 2021	Maud Ridoux (Makesense)	2nd revision and relevant content suggestions
03	20 January 2021	Julia Rettig, Pilar de la Torre, Sarah Diemu-Trémolières (Efus)	3rd revision and modifications

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

04	25 January 2021	Genny Dimitrakopoulou (KEMEA)	4th revision and proofreading
04	27 January 2021	Sarah Diemu-Trémolières (Efus)	5th revision
05	28 January 2021	Carla Napolano (Efus)	6th revision
06	29 January 2021	-	Final version

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.

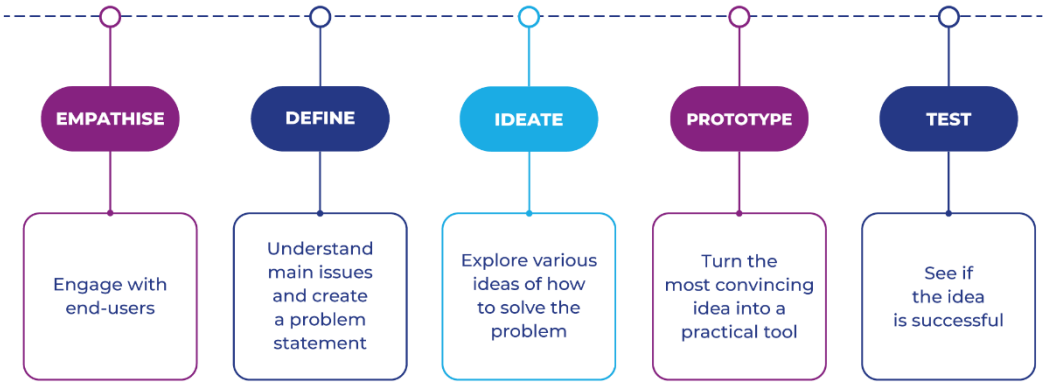
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

Index of Contents

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

1. Introduction

The Design Thinking method can be a valid approach for the achievement of innovative solutions, not only within the private sector but also in challenges related to public policy. Design Thinking envisions five main steps, or phases, that designers – or anybody using this method – should follow bearing in mind a concept of reiteration. Designers can follow step by step the process while feeling free to come back to a previous phase, should the result not satisfy needs or visions. The process of Design Thinking is the following:



Design Thinking, as manifest in the first step of the process, stresses the contact with end-users. It is paramount to maintain a close communication and constant interaction with those who will eventually make use of the final product or tool the process will give birth to. On the one hand, innovation is key and on the other, appropriation is even more essential to make sure the product created will be used by end-users.

This document follows the previous Deliverable (D1.1) that gives an introductory overview of the approach and sets the main principles public policy makers and local authorities can rely upon when engaging in Design Thinking method. This present Deliverable aims at providing concrete guidelines for the integration and implementation of the Design Thinking approach within IcARUS tasks that involve end-users. In particular, these guidelines shall inform the organisation and setting of the subsequent workshops and training sessions the IcARUS project envisions.

The following guidelines, mainly divided into three categories, aim at providing assistance to the shaping, and to the construction of IcARUS training sessions by giving specific advice and concrete examples of how to integrate Design Thinking. It is hereby reminded to the consortium

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

that the specifics and the layout of each session are left to the organisers: details such as duration, location, or content can be defined by the lead partners in charge of each workshop.

Other than being of assistance to the entire consortium, these guidelines can be considered of even more relevance for those partners in charge of organising and building workshops and training sessions. These guidelines are issued five months after the start of the project and aim at informing workshops that will take place further in time. Hence, it is important to understand that this is a living document that will try to adapt to future changes and needs and that will benefit from feedback of organised sessions. This does not mean new guidelines will be issued: partners will be instead accompanied throughout the organisation of workshops whenever doubts arise, or support is needed. Analysing hurdles partners will encounter and responding to positive or negative reactions after each workshop, guidelines can be interpreted differently, made even more specific, or channelled to address peculiar aspects of the methodology.

2. Design Thinking in IcARUS

Although this approach is not faithfully used in the framework of the project, the latter has been inspired by its different phases:
Work Package 2 aims at understanding the main issues and defining challenges and barriers of urban security policies with regard to the four focus areas of the project (radicalisation, organised crime and trafficking, juvenile delinquency, public spaces). It will explore security policies, practices and tools used in the past 30 years to tackle different urban security problems. This analysis will provide insights on tools that worked and potential obstacles. The needs of end-users will inform the state-of-the-art review and all the other activities in Work Package 2.
Work Package 2 and notably the workshop "What works and needs assessment" correspond to the Design Thinking phases *empathise* and *define*, as they allow to establish a deeper understanding of the problem by involving end-users and partner cities in this problem assessment. The expected outcome of this workshop is to obtain end-users' feedback on the tools and practices that were reviewed, and to map and identify crucial stakeholders and civil society actors that the cities will involve in subsequent project phases.

An additional activity – the "Local Consultation Workshop" will be implemented in every partner city. By involving the previously identified local stakeholders and civil society actors, these workshops will provide the opportunity to further assess the needs and challenged in the local context with regard to the chosen thematic focus area. Engaging local stakeholders in the process of 'reframing the problem' provides the opportunity to identify unmet needs of citizens.

Based on the insights and outcomes of the previous stages of the project, the activities in the framework of Work Package 3 will undertake the co-creation and design of forward thinking and

innovative solutions. In the first local workshops, participants will ideate tools that will respond to the previously detected challenges and needs. The activities correlated to prototyping these

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

tools will be followed by local workshops that provide end-users' feedback on these adapted prototypes.

The testing of the co-produced and refined tools will take place in Work Package 4. The implementation or *testing* phase will be assessed in local demonstration workshops. End-users, local stakeholders and civil society actors will provide feedback on the test and implementation of tools. Learning expeditions involving experts will help extend the beneficial outcomes of the tools for other local authorities.

An infographic visually explaining the relation among Work Packages and the integration of Design Thinking in IcARUS can be found at the very end of this document.

3. Guidelines for application of DT methodology in IcARUS training sessions

The Design Thinking approach highlights the contact with end-users and places them at the centre of discussions: more than a method, it is a philosophy – a way to engage users and stakeholders along the way. In addition, this approach stresses the importance of having a diverse team of experts engaging together in the process while co-creating solutions. It is important for the organisers to be able to efficiently manage sessions and to include all participants, while making the most out of their contributions.

Hence, the following advice is divided in three main categories:

1. Guidelines for end-user engagement;
2. Guidelines for a fruitful co-creation;
3. Guidelines for an effective session management.

3.1 For end-user engagement

The Design Thinking approach places the end-user at the core of the process and envisions this as one of the main elements of the method for delivering innovative solutions.

The Design Thinking methodology derives from the world of industrial production, where the design of a product is conducted by involving end-users of that specific product. In the context of urban security policies, "end-users" of a tool can be identified as municipal actors or first-line security practitioners. The core principle of the DT methodology is the involvement of end-users. The IcARUS project– according to an integrated approach to urban security – also involves local stakeholders and in particular civil society actors. In most cases, it is unlikely that the latter will be employing the tools we expect to co-produce in the course of the project. These civil society actors will nonetheless be involved and contribute to the process of co-production of the tools. Hence, it is hereby suggested to differentiate different types of actors: "end-users", actors who will be using the tools, "participants", attendees of the workshops (co-producers) and secondary beneficiaries, citizens who will benefit from the outcomes and effects (for instance, more secure

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

and better managed public spaces) of the by then successfully implemented tools.
Understanding needs and viewpoints of end-users, citizens, local stakeholders and civil society actors is paramount for delving deep into their daily lives, challenges, hurdles, contacts and needs. Indeed, this helps for identifying the main problem faced by the end-user/ citizen and will pave the way for subsequently *defining* what issue the workshop shall find a solution to. Too establish and maintain contact with end-users, partners are advised to create a communication routine to follow before, during, and after the workshop. Listed below are the main guiding points for a successful end-user engagement:

3.1.1 Build Trust

Trust is a significant element in the Design Thinking process and bears such relevance because essential for establishing a solid connection with end-users and for creating innovative and original solutions. In addition, the development of trust within the group helps creating a comfortable environment which atmosphere eases the sharing of perspectives, working methods, practices, and the welcoming of contrasting views. At the same time, this favours the gathering of all participants' opinions.
Hence, it is herewith advised to generate a set of values – they can be around five or eight – that embody the goals and the spirit of the session in course. These can be agreed upon by the entire group of participants, for instance, with an initial brainstorming. They can also be linked to clear examples suggesting how to apply them in the process. Values, for instance, can be 'active listening', 'no judgement', or 'respect for different opinions'. Once this set of values is created, their repetition should be made regular in every prospective session of the workshop. During workshops, values can be repeated at the beginning of every session and facilitators can ask participants whether they agree with those or would like to add or remove any.

It is also important to always be sincere. This means that in order to implement the contribution process it is important to be sincerely willing to co-build, and not being afraid of losing control. Facilitators should also expect that the final result will not exactly be what they imagined in the first place.

Visualisation is an element that should never be forgotten: the shared values can be literally written on paper or using any sort of digital creative tool deemed useful. For example, if the content of a used whiteboard changes every session of the workshop, it shall in any case always maintain those values somewhere in the space. This enables organisers, and participants, to make constant reference to them when sharing ideas. Visualising concepts can practically be

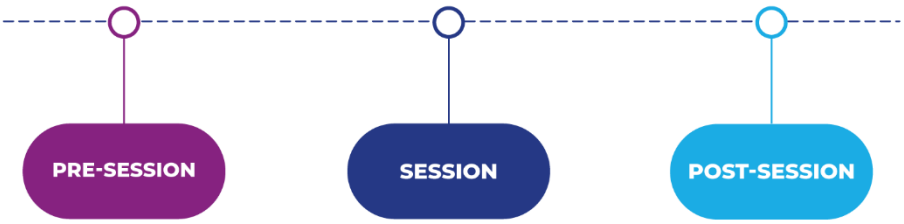
done with the use of post-its, paper sheets, or digital tools allowing for such collaborative design. Values must be accessible at all time and to all end-users (can be done through the communication material, a website, or via shared visualisation tools).

3.1.2 Collect input from stakeholders

The workshops should not be envisioned as a unitary entity where people come to participate, contribute, and then leave. Instead, it should be treated as a journey. In the specific case of

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

Design Thinking methodology, this should be envisioned as a collaborative journey for delivering innovation. Hence, it is advised to look at each workshop as a process constituted of three main timeslots:



While inside the session, it is important to welcome every perspective each of the participants has. In 'post-session' it is strongly recommended to gather and analyse feedback – something that it is discussed later on in this document. Importantly, the pre-session stage should be used by organisers to gather input from stakeholders, before engaging with them in the workshop. Hence, it is hereby advised to construct interviews or to define specific questions to ask to stakeholders in advance. This helps in mapping their perspectives and their initial ideas. If the pool of stakeholders is very large, individual pre-session interviews may not be ideal. Instead, the entire group could be divided into smaller ones with which to engage during short pre-session meetings.

Alternatively, pre-session input can be gathered via mail – this can be more effective for stakeholders may provide more details, but eventual low response-rate can be a disadvantage. Such advice on pre-session input is indicated for every workshop or training session organised in IcARUS.

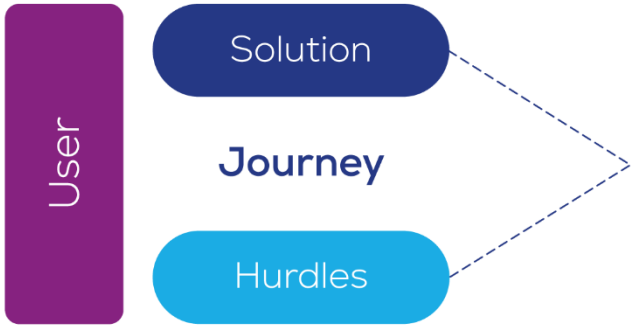
Moreover, in light of the iterative process of Design Thinking, it is advised to show those initially collected ideas and perspectives both at the beginning and at the very end of the workshop. Indeed, it will be interesting to see how those viewpoints have been held, have proven useless, have been changed, adapted or have been rejected in the course of the workshop itself.

3.1.3 Ensure a stakeholder's viewpoint

This constitutes the very heart of the Design Thinking process. Organisers and participants should always try to put themselves in stakeholders' shoes, while understanding their problems

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

and hurdles. Not to forget, stakeholders are actual persons who will get to know the created tool and use it in their daily lives. Hence, it is hereby advised to create a set of four or five personas. Practically, it is advised to define characters, as for a movie script, with needs, attributes and personalities. These will be the people you are creating the solution for. If it helps, names can be given to these characters.



Subsequently, it is advised to imagine, and possibly visualise with tools (post-its, drawings, sketches, posters, schemes), the journey of such stakeholders once the proposed solution is in their hands. In doing so, one needs to make sure to analyse this journey step by step, without skipping any – if it helps, one can follow a defined daily routine at work.

Here, the group will need to imagine the path of such actors and identify hurdles these persons will face when the tool is given to them. Having fostered trust within the group, this task can be truly helpful because comments and inputs of participants can be highly different. All this might be done when entering the *testing* phase: it is ideal to have an actual tool to put in the hands of these imaginary characters. In fact, here it is important to imagine what the journey for stakeholders entails: assumptions are made, and hypotheses are formulated (for example, 'they will encounter difficulties at social interaction level when using this tool', with hypotheses on why that could happen and how to overcome those).

It would be ideal, consequently, also to conduct interviews at the end in order to confront assumptions and mirror them with reality. This exercise could also be adopted for workshops organized by partner cities, in Work Package 4.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

3.2 For a fruitful co-creation

Design Thinking aims at designing with end-users for end-users. This approach stresses a collaborative way of understanding issues, ideating solutions and delivering innovation. Hence, it is important to have a diverse team of participants who are able to provide heterogenous input. In such a spirit of collaboration among different experts, Design Thinking does not call for creation of original solutions, instead for a *co-creation* of innovative solutions. Below are some guiding points for achieving a fruitful and successful co-creation during the workshops:

3.2.1 Be transparent

Transparency is a relevant aspect of the organisation of all IcARUS workshops. It is something participants may look at and eventually criticize if not properly addressed. It is hereby advised to document every part of the process, including pre- and post-session. In agreement with all participants, the workshop can be recorded (this holds both online and offline), and as such the registration can be shared. Being transparent also means to explain the decision process and make it clear to participants, to outline and to clarify the governance of the project and to talk openly about eventual roles within the group and about the diverse pool of participants. It is important to be transparent about outcomes and main objectives too. For instance, what is achievable and what is not, or what is negotiable and what is not. Open conversation with participants will also help in defining a set of parameters to be understood, shared and worked on together. As well, documents produced by the organiser, such as a structured gathering of inputs in pre-session, can be shared with participants and the latter should be able to edit them. This brings to a win-win situation in which participants have control on what is on file and they can enrich the documents at the same time. In case this suggestion is welcomed, it is advised to tell the entire group in advance about the sharing of inputs. Access to documents, resources and relevant content (this can be media files, videos, pictures, or also visualisation tools used in the session) should be granted to everyone through a shared online platform (e.g., Google Drive or EFUS Network Platform), or by making use of IcARUS online tools when possible.

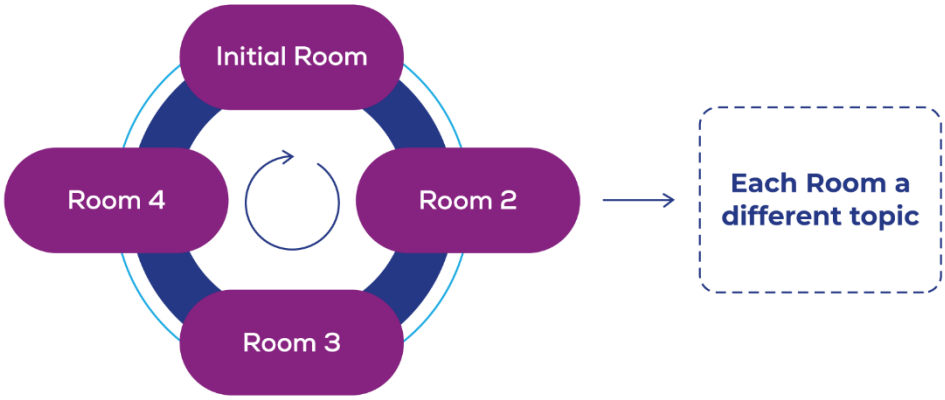
3.2.2 Co-create in all different topics

The workshop can envision discussion on several topics in different areas. Although the IcARUS project already defines four focus areas, workshops might be made even more specific by tunnelling needs of participants and end-users. Hence, it is hereby advised to categorise and divide the main topics the group will discuss when in session – as well, this is to be visualised so that participants can literally see the topics they have to debate upon. This will help rendering the workshop more organised, not just in terms of time management, but also in terms of discussions and focus.

Once defined the major topics, it might be ideal to split the entire group into smaller groups (divide randomly, or in any case try to always have a diverse inner-group). If online, be sure to use internet tools that allow for the creation of rooms or groups within the group.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

Once a different topic is assigned to a different smaller unit, participants can contribute effectively. Be reminded to rotate people among tables. Set a time, twenty minutes for example, after which participants change and swap to a different table/room. They will focus on one topic at a time. It is important for these smaller sessions in which inner groups are co-creating to be organised as well: with a canvas, sets of questions, and a path to follow. Please, bear in mind this does not undermine co-creation or the collection of input of all participants together: after participants contribute to a small group, they swap to another one with a different topic trying to inform it with the perspectives they exchanged before. Also, they shall then come back to their own initial table/room and see whether they want to change, adapt, hold, or disregard anything. Here, the aim is to get a comprehensive perspective on each of the discussed topics.



Visualisation plays an important role here. If possible, it is highly recommended to give participants tools for drawing, sketching, or writing within their inner units. Although the

visualisation might have a pre-defined structure, participants should be let free to add arrows, connections, or any shape or content they prefer. It could be beneficial to have several facilitators and/or trainers, so that the session is easier to manage and the co-creation process remains smooth. Each moderator can present the outcomes of his/her own group when inner groups are closed, so to share them with the rest of participants and allow for discussion. This exercise can also be useful in the organisation of the workshop for assessing requirements in Work Package 2, allowing for in-depth discussions and insights.

Breaking into different smaller groups can also be useful in the *prototype* phase: prototypes could be built by several different smaller groups. When each inner group will have prepared a prototype, participants can be invited to share: this means they will present, briefly, each prototype. Eventually, the entire group of participants can be asked to vote for two or three

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

favourites (the winners).

3.2.3 Make every voice count

None of the above is effectively useful if some voices are heard more than others, or if some are not heard at all, or if relevance is given to only some. Unfortunately, a drawback of the Design Thinking approach is exactly an imbalance of perspectives. Such disparity can worsen pre-existing dissent and undermine a collaborative spirit in the group. There should be no leaders and no followers. Every voice counts, equally. Such recommendation extends to each workshop in IcARUS.

This is a hurdle quite subtle to detect. However, it is strongly recommended to tackle this issue in time. Practically, organisers can engage directly with participants whose contribution seems less than others'. To prevent such problem, it is useful to make sure everybody in the circle has talked: silence surely does not help for co-creating. Should someone be quite because he or she has no opinion in that regard, or nothing to add, it would anyways be worth some minutes to ask him or her some short questions to better grasp their perspective.

3.3 For an effective session management

In order for these guidelines to provide a concrete approach to the organisation of these workshops, this document will now discuss how to efficiently construct these training sessions envisioned in the IcARUS project. Below are some guiding points that cover main aspects of the workshops' set-up:

3.3.1 Prepare your take-off tools

The very first steps in the organisation of IcARUS training sessions and workshops should be organised and defined in advance, so as to have enough time to address eventual arising issues. Among the first elements to be set before the workshop takes off, organisers should think of:
Workshop objective (what is the goal of such session? How does it relate to the bigger picture set by the IcARUS project? Who are the participants?)

- Workshop location (where to organise the session? What is practically needed? Is it online? What e-platform is best for this specific workshop?)
- Workshop agenda (What points and topics is this workshop going to touch? When to send the agenda to the participants? How much time is needed to address all the points of the agenda?)
- Workshop materials (How many and what kind of documents should be sent out to participants? Are all the eventual visualisation tools – as posters, schemes, post-its, online software – ready for use?)

These, together with other smaller arrangements, constitute specifics and layout of the training sessions, for which organisers should find the best fit.

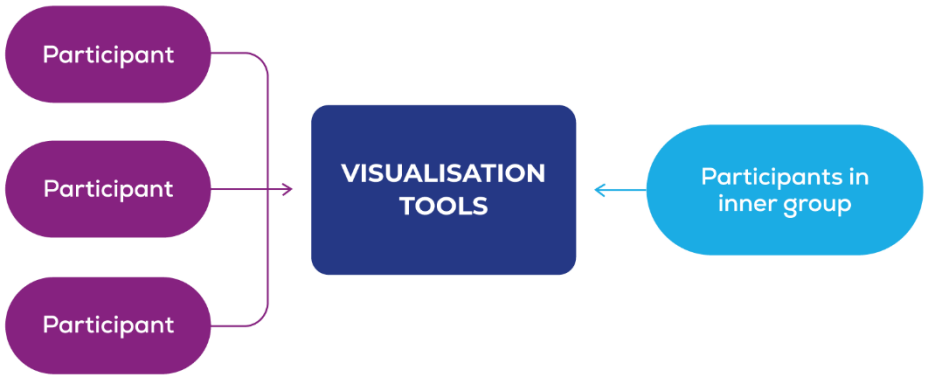
The very beginning of the session is important to get to know participants better, their expertise and also their way of approaching such workshop. An ice breaker, in fact, can be that of asking

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

the audience for their inner-self-weather. This means participants can be asked 'what weather they are coming to the workshop with' – it defines their mood, energy and disposition during the session. Someone can say to feel cloudy that day, someone else to feel sunny, or very rainy. This can be done also using a common ad-hoc chat, where participants can write and share. No judgement should arise, instead facilitators should only acknowledge the 'weather' during the session and highlight the fact that even if it is rainy, or stormy, it is fine and accepted. This sort of ice breaker can be an exercise to be repeated also at the end of the session: it will show how inner weather of participants changed or remained the same after the workshop.

Due to the ongoing Covid-19 pandemic, it is herewith acknowledged that some of those workshops, or their entirety, will be held online.

Therefore, it is advised to find and familiarise with e-tools, e-platforms, or software that assist in a good management of the session and allow for an integration of the Design Thinking approach. This means that online platforms enabling participants to break into rooms, or presenting visualization tools such as collaborative whiteboards, should be preferred over those who do not provide such options.



3.3.2 Share your information

Sharing information is relevant not only for transparency but also for ensuring constant and useful inputs from stakeholders via comments or suggestions. Hence, it is strongly advised to define a communication routine in advance: a proper calendar for exchanging information and making participants aware of developments, challenges, and results (be advised to do this via online documents sharing platforms accessible to all participants).

This calendar shall be shaped in such a way that best fits participants and that covers pre-session and post-session phases as well. Defining in advance exact dates on which to send out emails

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

and documents can be helpful for an effective and easier way of managing the session.

3.3.3 Map your challenges

As previously advised, main topics of the workshops should be identified, presented to participants, and held during the session via visualisation tools. It is hereby advised to also recognise main challenges presented by the topics, or also hurdles the co-creation process could encounter. Hence, main concepts, words, and relevant recurrent challenges in the process should be acknowledged and openly discussed.
This also means that such challenges should be visually organised. For instance, main concepts and words could be visually placed around challenges they pertain to, and that need to be solved. This type of exercise could be beneficial, for instance, during the local workshops consultations with civil society to validate and adapt defined tools, in Work Package 3.

In doing so, a further step is that of analysing paths between challenges. Therefore, it is also advised to see patterns connecting these challenges, understanding how they relate to each other. This can bring up patterns, tensions or even paradoxes. In practice, such analysis can be

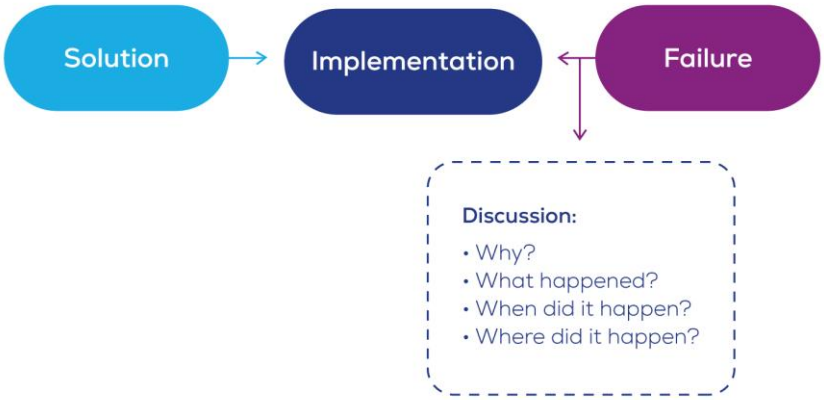
conducted by opening a discussion within the group and allowing for comments or even general inputs that will be kept in visualisation. Understanding patterns and categorising challenges (or even challenges within challenges) can greatly help in defining an ultimate solution that truly takes into account the whole end-user's journey.

3.3.4 Think of the worst

Intend this advice for use after the workshops' participants have agreed upon and co-created a solution – hence, in the *prototype* and *test* phase. Work Packages 3 and 4 could benefit from the following exercise. It is important to map the future of the product, its journey and the ways it

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

will be used, abused or unused. Hence, it is hereby advised to think of the future of the proposed solution, and to imagine that its implementation is a massive failure.



Afterwards, it is helpful to conduct a brainstorming among participants to discuss what happened, what led to the huge failure of the deployment. It is advised to ask specific questions such as 'why did the end-user not respond properly to the solution?' or 'why was the solution not effective?'. The arising debate should drive the group into a session where they prepare solutions to anticipate potential hurdles. If possible, visualisation tools should always be used in the process. As for generating parachutes for all potential flaws and side-effects, participants will think of the solution from different angles and get ready for implementation.

3.3.5 Gather feedback

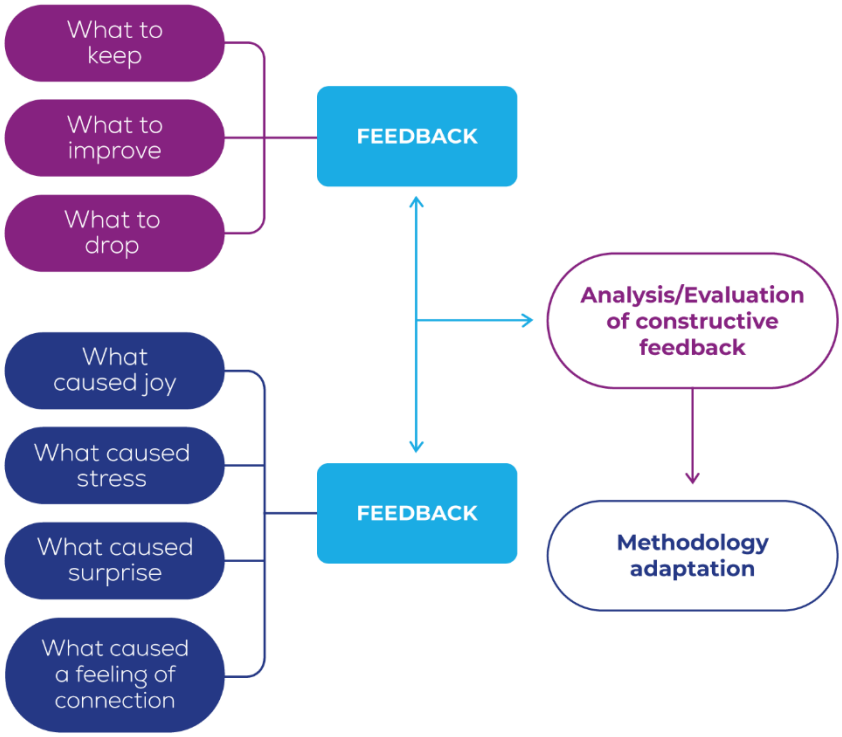
As previously explained, it is important to look at the workshop as a journey. In the last phase, the post-session, it is highly recommended to collect feedback from participants. This is paramount for assessing the success of the workshop as well as for eventually informing these present guidelines and methodology. Feedback can be gathered by just sending out an email to participants asking for suggestions, comments and observations. However, it is herewith advised to opt for more helpful approaches – always in line with the Design Thinking method – that can improve the quantity and quality of feedback.

It is advised to organise a short feedback meeting with participants. During this meeting, organisers can wrap up content and outcome of the session and then give space and time to each one of the participants (say, ten minutes) to think, to reflect on their own about what they would like to keep, to improve, and to drop from the process of co-creation they have experienced. It would be ideal for everyone to have something to add for each section. Participants will then share their views with the group for three or four minutes. No interruption shall be made when a participant is speaking, and no debate or discussion shall arise. No

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

judgement shall follow, everybody is entitled to their views and opinions. The final goal is that of merely gathering data and meaningful feedback to later analyse.

The same type of meeting can be conducted for assessing different variables such as joy, stress, surprise and a feeling of connection: what has generated these feelings during the session?



Feedback can be gathered even by sending out prepared questionnaires, that may render input more schematic and channel it to specific elements organisers may need most. Although the diversity of participants can suggest asking different questions for different stakeholders (such as some for the partner cities, and others for academic partners), it is highly encouraged to keep a uniform and homogenous set of questions for everybody. Participants will always be free to answer the questions they want to, and that best fit their expertise.

Co-creation is somehow also embedded in the feedback part: participants are still co-creating, building feedback that will be assessed and analysed. It is also encouraged to share assessment and evaluation with Erasmus University Rotterdam, in order to decide on further adaptation of the present guidelines and of methodology.

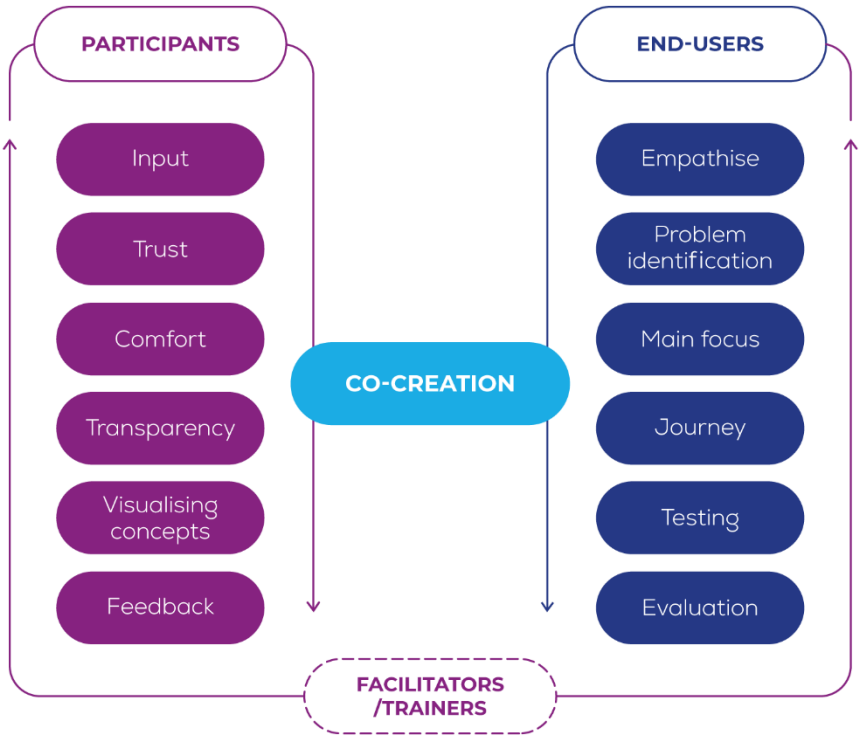
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

4. Concluding remarks

This present document contains concrete guidelines on how to integrate Design Thinking methodology into the organisation of IcARUS sessions. Specifics and layout of such sessions are left to the decision of partners in charge of the actual organisation of workshops. These guidelines are supposed to be adaptable to the evolution of consortium's needs and to theorganisation of further workshops.

In particular, the present document aims at being of assistance for trainers and facilitators of IcARUS's workshops. Other than following the above guidelines, the latter are advised to:

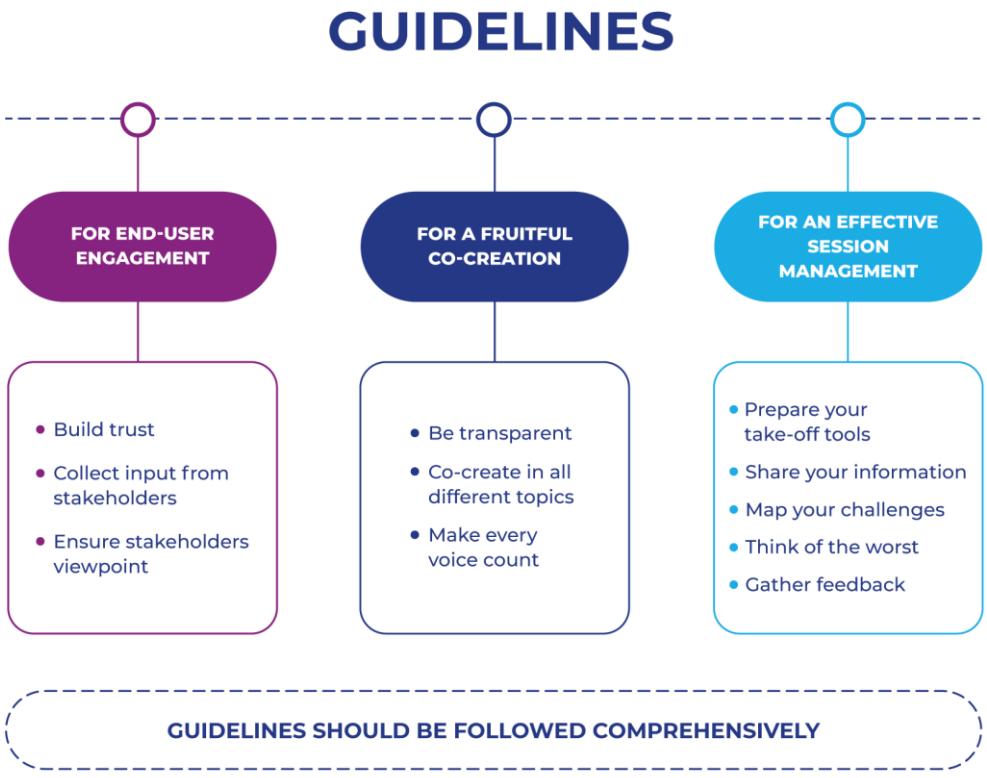
- Always bear in mind the distinction between *pre-session*, *session*, and, *post-session;*
- Highly value and use the input from participants to best inform the session;
- Ensure a comfortable environment where stakeholders and end users are free and willing to share perspectives and experiences;
- Focus on end users as well as on citizens and local stakeholders;
- Be available for participants' questions and doubts regarding management of the session and design process.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

The set of recommendations herewith included should improve the problem-solving skills of the team while creating a broader sense of community. It is highly important to generate a collaborative comfortable environment among participants, as the design team will need to be cooperative for delivering solid innovative solutions. This can prove to be harder via online tools, where actual contact among people is lost. This is, among others, the reason why the use of e-tools with collaborative visualisation boards is encouraged.

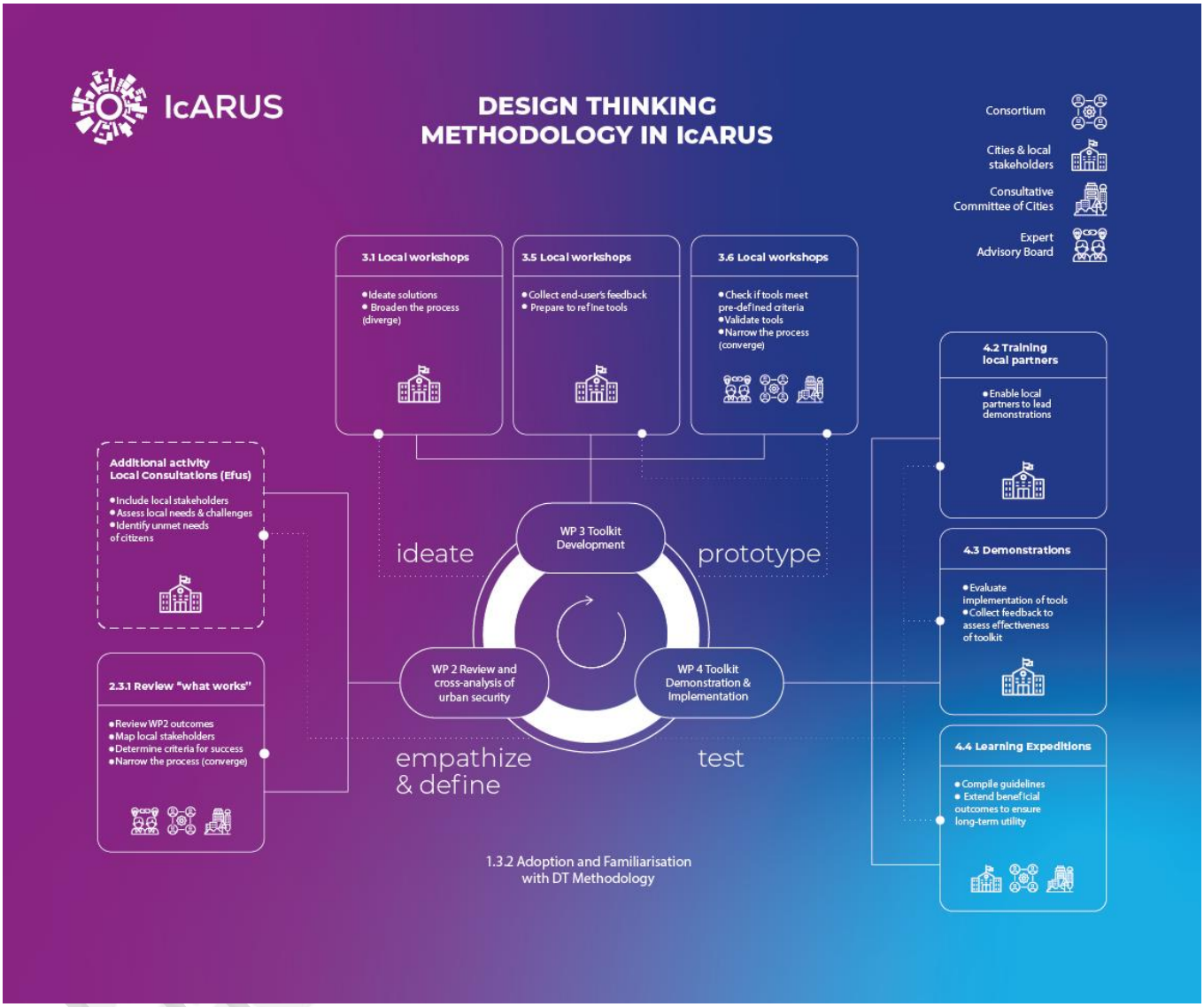
This document proposes a set of guidelines categorised in three sections and then made more tailored to specific aspects of the organisation and attendance of such workshops. Constructed below, a table summing up the main concepts and words of such framework of guidelines:



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

ANNEX

Design Thinking Methodology in IcARUS



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

BIBLIOGRAPHY

Anderson, E., Lilly, B. (2004) Visualization in the design process: introducing two and three-dimensional sketching techniques to enhance creative thinking and communication. *International Engineering and Product Design Education Conference*. https://www.designsociety.org/publication/19635/VISUALIZATION+IN+THE+DESIGN+PROCESS%3A+INTRODUCING+2D+AND+3D+SKETCHING+TECHNIQUES+TO+ENHANCE+CREATIVE+THINKING+AND+COMMUNICATION

Choudhary, S. (2019, February 16) *Design Thinking: Divergence and Convergence Cycles.* https://medium.com/@i.shubhangich/design-thinking-divergence-and-convergence-cycles-3ce7a6f27815

Dam, R. F., Siang, T. Y. (2020) *Stage 3 in the Design Thinking process: Ideate.* https://www.interaction-design.org/literature/article/stage-3-in-the-design-thinking-process-ideate

Degnegaard, S., Eggers, W. D. (2019, November 1) *Cocreation for impact: tackle wicked multistakeholder problems.* https://www2.deloitte.com/us/en/insights/industry/public-sector/design-thinking-co-creation.html

For further insights on Design thinking approach: www.designkit.org

Hyclak, A. (2020, June 14) *How to run an energizing Design Thinking Workshop (remotely).* https://uxdesign.cc/how-to-run-an-energizing-inspiring-design-thinking-workshop-remotely-48f5513c124f

Kernbach, S., Nabergoj, S. (2018). Visual Design Thinking: Understanding the Role of Knowledge Visualization in the Design Thinking Process. *22nd International Conference Information Visualization*. https://www.researchgate.net/publication/329480569_Visual_Design_Thinking_Understanding_the_Role_of_Knowledge_Visualization_in_the_Design_Thinking_Process/references#fullTextFileContent

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

Panke, S. (2018, April 2) *Inclusive Community Design: Design thinking Workshop on Local Engagement for Diverse Populations.* https://www.aace.org/review/inclusive-community-design-design-thinking-workshop-local-engagement-diverse-populations/

Vita, J. (2017, May 10) *Empowering and Engaging through co-creation.* https://uxdesign.cc/empowering-and-engaging-through-co-creation-389c41904efc

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749

IcARUS

INNOVATIVE APPROACHES TO URBAN SECURITY

CONSORTIUM

European Forum for Urban Security (Efus)

Fachhochschule Salzburg (FHS) Salzburg University of Applied Sciences

Plus Ethics

Erasmus University Rotterdam (EUR)

Laboratory of Urban Criminology / Panteion University of Social and Political Sciences (Panteion)

University of Salford

University of Leeds

Landeshauptstadt Stuttgart Municipality of Stuttgart

Riga Municipal Police (RMP)

City of Rotterdam

City of Nice

Lisbon Municipal Police / Lisbon Municipality (LMP/CML)

Local Police of Turin (PLTO)

makesense

Eurocircle

Idiap Research Institute

KEMEA

LOBA

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882749