TRANSCEND

Transdisciplinary methods for societal impact assessment and impact creation for security research technologies

D1.1 – State of the art in methods for citizen and societal engagement

[WP1 – Develop TRANSCEND Toolbox]

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Funded by the European Union

Funded by the European Union. UK participants in Horizon Europe Project TRANSCEND are supported by UKRI grant number 10041916 (Trilateral Research). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or UKRI. Neither the European Union nor the granting authority nor UKRI can be held responsible for them.

Due date	31.09.2023
Delivery date	28.09.2023
Type	Report
Dissemination level	PU = Public

Keywords	Societal Engagement, Citizen Engagement, Participation, Inclusion, Responsibility, Collaboration, Civil Society Organisations (CSOs), security research

Abstract

This report provides an overview of methods for enhancing societal engagement in security research and technology development, in line with responsible research and innovation (RRI) principles. It discusses various methods for involving diverse societal actors in the innovation process, and presents a 4-step approach to organize societal engagement. In addition, advantages and disadvantages of societal engagement in security research are examined, emphasising the importance of ethical considerations, stakeholder diversity, and collaboration. The report provides guidelines to involve and collaborate with stakeholders, and provides a selection of effective engagement methods, catering to the different pilots in the TRANSCEND project.

Revision Procedure

Version	Date	Description	Reason for Change	Author(s)
V1.1	16.08.2023	First Draft	First Draft	Nof Afghani, Ralf Lindner
V1.2	05.09.2023	Comments	Peer Review	Marc Steen, Richa Kumar, Elena Falomo
V1.3	14.09.2023	Comments	Scientific Coordinator Review	Leanne Cochrane
V1.4	31.09.2023	Final version	Final Version	Nof Afghani

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Executive summary

This report emphasizes the significance of societal engagement in security research for safeguarding Europe's freedom and security. It underscores its role in exploring complex issues, promoting dialogue, and enhancing stakeholder communication.

The report provides an overview of eight selected societal engagement methods, which will be applied in the TRANSCEND project's upcoming pilots. These methods were selected from the Engage 2020 catalogue, providing comprehensive coverage of methods applied in different fields, including the sensitive security field. We identified 16 methods relevant to security research from the catalogue. To make the final selection, we applied a set of criteria designed to meet the diverse needs of our pilots. These criteria aimed to ensure effective engagement with stakeholders from various backgrounds, adaptability to European contexts, and inclusivity of vulnerable groups. The chosen methods also had to facilitate discussions on intricate security topics, cater to targeted audiences, and prioritize dialogue and communication. Consequently, eight methods met all criteria, and the report comprehensively describes their applications, strengths, and limitations.

In addition to presenting the selected methods, this report introduces a 5-step approach for involving diverse societal actors and stakeholders. These steps include starting with a shared purpose, mapping stakeholders, involving civilians and civil society organizations, promoting engagement and diversity, and planning and executing engagement activities. The report emphasizes the importance of managing expectations and avoiding potential pitfalls and highlights the benefits of societal engagement, such as improved problem-solving and legitimacy. Those guidelines draw inspiration from various sources, including a study by Jansen et al. (2021) conducted under the EU project SIENNA.

These methods and guidelines will be integral components of the TRANSCEND toolbox (Deliverable 1.3) and will undergo further testing in the project's pilots. As societal engagement continues to gain prominence in research and innovation, this deliverable is a valuable resource, offering practical insights and guidance to researchers, practitioners, and organizations striving for responsible and impactful advancements in the security field.

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List of acronyms/abbreviations

Abbreviation	Explanation
RRI	Responsible Research and Innovation
SE	Societal Engagement
CSOs	Civil Society Organizations
HCD	Human-Centred Design
VSD	Value Sensitive Design
EU	European Union

Table 1 List of acronyms/abbreviations

Glossary of terms

Term	Explanation
Citizen involvement	Refers to involvement further than Civil Society Organisations or the concept of citizen science.
Civilian	Members of the general public, e.g., people who live in a specific area, e.g., in a city or in a nation; we use this term, rather than, e.g., citizen, to include also people

	without citizenship. It is understood here with no relevance to conflict or military presence.
Cybersecurity	A thematic term used in European security research programming. It refers to the practice of securing electronic data and systems against attack. It is one of the pilot domains within which the TRANSCEND Toolbox will be tested.
Disaster Resilience (Society)	A thematic term used in European security research programming. It refers to disaster risk management and governance through improved capacities for first responders and societal resilience. It is one of the pilot domains within which the TRANSCEND Toolbox will be tested.
Ethical aspects	Refers to moral concerns or questions that one can raise, both during development and deployment of a technology or application (Steen, 2022; van Veenstra, van Zoonen and Helberger, 2021).
Human rights aspects	Refers to concerns or questions one can raise about human rights both during development and deployment of a technology or application—less broad than 'legal aspects' (Van Veenstra, Van Zoonen, and Helberger 2021).
Method	We use this term to refer to methods to involve civilians or CSOs and methods to take into account ethical, human rights, and societal aspects (you can think of 'approach' or 'methodology' as synonyms).
Participatory Design	An approach to the development and deployment of technology that promotes the active and creative involvement of prospective users in development and deployment; it goes back to the 1990s (Schuler and Namioka, 1993).
Responsible Innovation	Responsible innovation means " taking collective care for the future, through stewardship of innovation in the present." (Stilgoe, Owen and Macnaghten, 2013). We structure our understanding of responsibility based on the four dimensions of Responsible Research and

	Innovation: Anticipation, Reflexivity, Inclusion and Responsiveness, and their theoretical and practical interpretations.
Security	The act of protecting people, organizations or objects from harms, including intentional threats and dangers, like cybercrimes.
Security	The act of protecting people, organizations or objects from harms, including intentional threats and dangers, like cybercrimes.
Societal aspects	Refers to aspects of technology development or deployment on the level of society; e.g., their impact on society or concerns of general public concerning technology (Van Veenstra, Van Zoonen, and Helberger 2021).
Societal engagement	Efforts to engage with actors or stakeholders in society, e.g., citizens or Civic Society Organizations (CSOs), e.g., during the development or deployment of technology or application (Steen and Nauta, 2020). It contrasts with desk-research based exercises, like 'stakeholder mapping'. Sort-of synonyms would be: public engagement or user or citizen involvement.
Stakeholder	A stakeholder is someone who is either impacted by the (outcomes of a) project or is able to influence the project (and its outcomes) (Freeman and McVea, 2001). The TRANSCEND project aims to empower them to exert influence on the project.

Table 2 Glossary of terms

1 Introduction

Current European research and innovation (R&I) and security policies aim to address challenges that threaten European societies by deploying security technologies. Security technologies are typically intended to promote public safety and security and increase societal resilience. At the same time, security technologies spur controversies and can have enormous societal, legal, ethical, economic and political impacts. Such technologies often infringe on human rights, reproduce and reinforce power imbalances and social injustice. Civil society is rarely or restrictively involved during research and development of security technologies, and thus, societal concerns might not be well addressed in this process. Security technologies and R&I should not create societal mistrust or missed opportunities to jointly build societal resilience.

TRANSCEND aims to improve practices of citizen and societal engagement in security R&I to enable individuals and organisations that speak on their behalf to participate actively and creatively in iterative processes of design and deployment. Additionally, TRANSCEND aims to contribute to the uptake of effective methods for citizen and societal engagement throughout the EU so that civil society is given a louder voice, a place at the right tables and security practitioners are motivated and equipped to enhance such participation.

1.1 Background on Societal Engagement

Enhancing societal engagement in applied research, technology development, and deployment plays a crucial role in achieving the broader goal of responsible research and innovation (RRI). Stilgoe, Owen and Macnaghten (2013) mention the following as key dimensions of Responsible Innovation: anticipation, reflexivity, inclusion and responsiveness. 'Anticipation' refers to the act of asking 'what if?' questions, considering different scenarios, and thinking systematically to increase resilience, identifying innovation opportunities, and addressing societal risks effectively. 'Reflexivity' refers to self-awareness, acknowledging knowledge limits, and integrating moral considerations into science, encouraging openness and leadership. 'Inclusion' refers to integrating perspectives from relevant societal actors (also non-organised and non-institutionalised citizens and community groups). Finally, 'responsiveness' refers to the act of adapting and reacting to newly emerging knowledge, perspectives, views, and norms as they evolve over time.

The concept of societal engagement is underpinned by three distinct ration-ales, as explained by Fiorino (1990) and Stirling (2008). These normative, instrumental, and substantive rationales offer different perspectives on why citizens should be actively involved. The normative rationale sees citizen engagement as a fundamental democratic right and is based on principles such as inclusiveness, equity and equality, aiming to empower individuals to participate in decisions that affect their lives. In contrast, the instrumental rationale views engagement as a means endorse specific favoured decisions to achieve specific outcomes such as fostering trust, consent, and compliance with certain actions. Lastly, the substantive rationale emphasizes the engagement role in achieving better decision-making by incorporating diverse knowledge, belief systems, and values, ultimately striving to enhance the quality of choices by shedding light on long-term effects, underlying interests, and potential costs and benefits.

Societal engagement is directly related to the key RRI dimensions of inclusion, anticipation and responsiveness: engaging with civil society (i.e., civilians/CSOs, etc.) represents 'inclusion' and enables the people involved to improve 'anticipation' by exploring potential risks and opportunities, or desirable and undesirable outcomes. It improves 'responsiveness' by enabling stakeholders to articulate appropriate measures to mitigate risks or to better align the project with civil society concerns. Lastly, societal engagement serves as a valuable source of 'reflexivity' by challenging existing assumptions and biases through interactions with a diverse range of stakeholders. A stakeholder is any organisation, community, group of people or individuals who may be affected by the project and its outcomes or one with an interest or stake in the project. This goes in both directions: they are influenced by the project, and we want to give them (some) influence on the project. Stakeholders can have a range of interests, from financial and economic to social and environmental. Depending on their resources, expertise, and networks, they can have very different levels of power and influence (Jansen, P., Dainow, B. et al., 2021).

The core objective of societal engagement is to align research and innovation with society's values, needs, and expectations (Steen and Nauta, 2020). Societal Engagement (SE), therefore, stands as one of the pivotal components within the concept of responsible innovation, referring to the active involvement of diverse **societal actors, not only civil society, throughout the innovation process, e.g. large and small companies, government bodies and agencies, universities and research institutes, and Civil Society Organizations (CSOs).** The essence of this engagement lies in fostering a transparent, interactive process wherein societal actors and innovators collaboratively respond to each other with a profound consideration for the ethical acceptability, sustainability, and societal desirability of the innovation process and its resulting products(Schomberg, 2013).

Steen and Nauta have listed several approaches that have emerged to organize and facilitate citizen and societal engagement in technology development and deployment (Steen and Nauta, 2020), which all require participatory methods and forms of engagement to varying degrees, depending on the context and issues in hand:

- **Human-Centred Design (HCD):** Prioritises people's experiences and aspirations during product and service design. It fosters collaboration, creativity, and shorter lead times but may introduce complexity and reduce control.
- **Value Sensitive Design (VSD):** Considers stakeholders' values and interests in the design process through conceptual, empirical, and technical investigations. It offers a comprehensive and principled approach to developing technologies that account for human values. However, similar to HCD, it may introduce complexity in the design or innovation process.
- **Collaborating with Lead Users:** Engages with individuals who are the main technology users, able to identify future market needs, leading to diverse ideas and improved decision-making. Challenges include reluctance to adopt user ideas and balancing costs.
- **Social Innovation:** Focuses on societal needs, promoting partnerships and social entrepreneurship. Benefits include new relationships and synergies, while challenges include crossing organisational boundaries and managing expectations.

1.2 Societal Engagement in Security Research

Societal engagement in security research and technology development is critically needed because of the potentially transformative impact of new security technologies on society, affecting various aspects of life, work, and institutions. As these technologies can influence society, it becomes increasingly critical to understand the ethical implications and potential moral challenges associated with emerging technologies. Proactively engaging with members of society early in the innovation cycle enables the people involved to identify ethical and societal issues, dilemmas, and opportunities. In TRANSCEND we aim to identify "what is a good representation of a society", and we will be engaging with those representatives. Doing so allows for better planning and informed decision-making to address these concerns, leading to more responsible and beneficial technological advancements (Steen, 2011).

Regarding technology development, collaborating with potential users can avoid creating products that people are unwilling or unable to use. In security contexts, the concept of a "user" often diverges from the traditional notion of deploying technology. Instead, security technology users encompass individuals in civil society who receive, experience or are affected by these security technologies. Steen (2011) calls for caution to avoid potential pitfalls while collaborating with users; people may be unaware, incompetent, or unwilling to articulate their needs accurately, and overemphasising the findings from a small user group could lead to an overly customised product with limited appeal. Additionally, too much reliance on user input might undermine the essential role of designers' creativity and vision in the design process. (Steen, 2011)

In conclusion, societal engagement in security research and technology development is critical in order to ensure better aligned technologies with societal concerns, uphold ethical aspects, and contribute positively to society's well-being. By involving individuals in civil society who use, receive, experience, or are affected by security technologies, analysing ethical issues, and making informed decisions, stakeholders can navigate the complexities of technological innovation responsibly and ethically (Jansen *et al.*, 2021).

1.3 Objectives

As set out in the Grant Agreement:

> *This deliverable will provide a review of the state of the art in methods for involving societal actors and stakeholders in security research and innovation. We will also (briefly) review related methods for inclusion and diversity, key dimensions of RRI, and look at other domains, e.g., energy or health care. Moreover, this deliverable aims to better understand which methods do (not) work in practice (benefits and limitation) and why, so that we can develop a TRANSCEND Toolbox (see Task 1.3), building on and learning from available methods.*

The aim of this deliverable is therefore to provide an overview of the state of the art in methods for engaging societal actors - both citizens as well as representatives of CSOs - and stakeholders in security research and innovation. It aims to better understand how these methods work in practice by carefully considering their benefits and limitations. In addition, it provides clear and easy to use implementation guidelines, so that we can develop the TRANSCEND toolbox (Task 1.3).

Accordingly, this report highlights a couple of societal engagement methods that enable citizens and CSOs to participate in the research, development and deployment of technologies and innovations in the security domain in timely and proactive ways. This deliverable also introduces a 5-step approach to help researchers and practitioners define their goals, identify relevant stakeholders, and design and implement effective societal engagement methods.

1.4 Structure of the Deliverable

This deliverable is organised into six informative sections: This opening section introduces the topic of societal engagement and its connection with responsible research and innovation. It also outlines the objectives, scope, limitations, and relation to other deliverables. Section 2 explains the data collection method used to select suitable engagement methods and describes the selection criteria for matching these methods with the pilots. Section 3 discusses advantages and disadvantages of societal engagement. Section 4 presents a 4-Step approach for involving societal actors. Section 5 summarises the selected societal engagement methods and their preferred usage. Lastly, Section 6 summarises the key findings and conclusions drawn from the deliverable.

1.5 Scope and limitations

This report focuses on a relatively limited set of eight engagement methods, in order to make sure that users are not lost or do not feel overwhelmed by the large variety of methods that are available. While we acknowledge that numerous other engagement methods do exist, we opted to delve deeper into these eight methods as we believe they align well with the requirements of our pilots, as explained in the Methodology section. It is important to note that these selected methods may not be equally suitable for all projects, and other projects might find different engagement methods more appropriate for their specific needs. Furthermore, our pilots are free to select any method beyond these eight if it better serves their needs. For references to additional methods, please consult section five of this report.

On the other hand, when it comes to good practices for involving societal actors (be it citizens, representatives of CSOs), we consider them to be more general and adaptable to various project needs. These practices can serve as valuable guidelines that can be applied to different contexts and projects for fostering effective societal engagement.

1.6 Relationship to other TRANSCEND deliverables

The TRANSCEND project promotes responsible security research and technologies through capacity building for R&I actors, including researchers and practitioners. The current deliverable is closely connected to deliverables D1.3 version 1 of the Toolbox and D1.4, version 2 of the Toolbox. Specifically, it aims to enrich and inform the societal engagement section of the Toolbox by providing insights and information on effective societal engagement methods.

This deliverable also builds on the extensive research conducted in D2.1 regarding previous EU projects and their employed engagement methods. Whereas the selection criteria for selecting effective societal engagement methods, as will be described in the following sections, overlaps with the selection criteria for the pilots [D3.1 Pilot strategy].

2 Methodology

2.1 Data collection method

To gather the necessary data, we undertook a comprehensive approach. Firstly, as part of D2.1, we reviewed previous EU projects that addressed sensitive topics and employed public engagement methods. Our search on CORDIS utilised keywords such as "security", "safety", "societal engagement" "public engagement," "complex or controversial issues," "Responsible Research and Innovation," and "citizen engagement" to identify relevant projects; ENGAGE 2020, CIMULACT, SurPRISE, DESSI, NewHoRRIzon.

With a list of relevant projects in hand as presented in D2.1[1]. We selected ENGAGE 2020 catalogue of measures and analysed the suitability of these methods concerning each method's objectives and the purpose of involving stakeholders (Engage 2020 Consortium, 2014). After careful consideration, we selected eight methods as most suitable for the pilots in the TRANSCEND project, using the selection criteria outlined in the next section (2.2). These methods have been successfully implemented in various projects focused on promoting security and freedom of citizens. We expect that these methods will enable us to effectively engage with stakeholders and achieve our project goals.

[1] D2.1: Landscape of security research CSO: Mapping, Strategies and Best Practices for Citizen and Societal Engagement.

2.2 Selection criteria for shortlisting engagement methods

We established our selection criteria to identify the most effective tools tailored to the unique needs of our pilots. We carefully selected engagement methods based on the specific characteristics and objectives of each pilot's societal engagement purpose. Accordingly, we used the following selection criteria to ensure the most effective methods were chosen:

- **Stakeholder diversity:** Methods that allow for the participation of diverse stakeholders, including policymakers, industry representatives, civil society organisations, and members of the public.
- **Geographic distribution:** Methods that can be adapted to a virtual setting. Additionally, methods that can be adapted to different cultural aspects, languages and are well accepted across geographies in EU.
- **Suitable for complex topics**: methods that could accommodate complex topics.
- **Targeted Audience:** Methods or guidelines to target specific groups and individuals.
- **Vulnerable groups**: Methods that ensure the participation of vulnerable groups.
- **Purpose of engagement:**
  - **Dialogue and Communication:** Methods that allow for open dialogue and discussion to understand public perceptions and concerns.
  - **Decision-making:** Methods facilitating decision-making processes, allowing stakeholders to provide input and feedback.

While the general selection criteria served as a framework for selecting effective societal engagement methods, we recognise that not all pilots required identical criteria to be met. Additionally, this selection criteria overlaps with the selection criteria for the pilots [D3.1 Pilot strategy]. Each pilot's distinct purpose and target audience influenced our decision for their optimal engagement method. For instance, if a pilot aimed to engage with a vulnerable group, we emphasised stakeholder diversity and targeted audience criteria. Conversely, if another pilot focused on decision-making processes, we prioritised methods encouraging dialogue and communication. The flexibility of our approach allowed us to adapt to the diverse needs of each pilot study, ultimately ensuring a robust and meaningful engagement process.

3 Navigating the Practicalities of Societal Engagement

Involving societal actors in research and development offers numerous advantages, including gaining valuable insights into users and prioritising their experiences. This approach leads to more diverse and creative ideas and facilitates better decision-making and shorter lead times by understanding users' behaviours, needs, and preferences (Steen, Manschot and Koning, 2011). However, it is essential to acknowledge potential drawbacks, such as increased design or innovation process complexity and reduced control over this process (Steen, Manschot and Koning, 2011).

While societal engagement (SE) is crucial, and although stakeholder involvement is frequently recommended, specific guidance on which stakeholders to engage and which concerns to prioritise is often lacking (Steen and Nauta, 2020). Nevertheless, the demand for SE is expected to grow, driven by various factors. One of these factors is the increasing obligation for organisations, both public and private, to engage in Responsible Innovation (RI), as exemplified in initiatives like the European Commission's Horizon Europe research program (Steen and Nauta, 2020). In addition to regulatory obligations, several other issues contribute to the rising demand for SE, such as ethical considerations with societies becoming more conscious of ethical concerns related to innovation, risk mitigation early in the innovation process to reduce setbacks, and engagement with stakeholders can lead to more innovative and sustainable solution. However, the practical implementation of SE can pose challenges, as Steen and Nauta (2020) noted. While the concept of SE is appreciated in theory, putting it into practice can disrupt existing processes and practices. There may be a gap between the potential benefits of SE in theory and the actual perceived benefits in practice (Steen and Nauta, 2020).

Steen and Nauta (2020) have summarised several advantages and disadvantages of SE based on their experience and available research as shown in Table 3, which could also apply for security research.

Table 3 Advantages and Disadvantages of Societal Engagement.

Advantages of SE	Disadvantages of SE
▪ Outside-in orientation: A better understanding of societal concerns and interests, leading	▪ Effort: SE demands significant time, budget, resources, expertise, skills, and commitment from all involved parties (Participatory Design (PD),

to improved problem-solving capabilities. ▪ Legitimacy: Enhanced organisational legitimacy, obtaining a societal license to operate, and giving citizens a voice in innovation. ▪ Alignment: Improved alignment of the organisation's strategy with different societal groups' diverse needs and concerns. ▪ Collaboration: Building relationships and collaborations to co-create future agendas, including engaging with pioneers who can advocate for the project. ▪ Clarity: Achieving clarity within the organisation or project, leading to better and faster decision-making through a clear understanding of the problem and the direction for solutions.	Human-Centered Design (HCD), Lead user, Social Innovation). ▪ Complexity: Involving multiple viewpoints may introduce more complexity, leading to reduced control over the process and potential challenges in managing intellectual property (IP) and reputation risks. ▪ Slowdown: There are risks of stifling innovation, being unable to adopt external ideas ("not invented here" syndrome), or struggling to scale up innovations. ▪ Expectations: Managing the expectations of involved parties and citizens can be difficult, and there is a risk of undermining citizen autonomy. ▪ Reputation: Controlling risks to reputation becomes challenging when sensitive information is shared with external parties or journalists.

Given these challenges, this deliverable aims to address them by focusing on a limited number of methods and describing them carefully given the complexity of societal engagement. It will provide practical guidelines for implementing these methods, which will be further tested and evaluated through project pilots. This living document will evolve using real applications to enhance its practicality and efficacy.

4 Societal engagement methods in Security Research

Societal engagement in security research is a crucial element in ensuring the protection of freedom and security for Europe and its citizens. It facilitates the exploration of complex topics, fosters dialogue, and promotes communication among stakeholders. However, finding suitable methods for engagement in this field was challenging due to the limited literature available. In this chapter, we will discuss our approach to identifying engagement methods, focusing on those applicable to addressing societal challenges related to secure societies. Our selection process, criteria, and the methods chosen for further analysis will be detailed, setting the stage for their in-depth exploration in subsequent sections.

4.1 Identifying Suitable Engagement Methods

While there are various catalogues and guidelines available, it was essential for us to filter out options that could truly address the complex and sensitive topics associated with security research. After extensive research, we discovered that the Engage 2020 catalogue of methods stood out as a valuable resource. This catalogue not only provided a comprehensive list of engagement methods but also indicated their application in sensitive security-related contexts. Additionally, our focus on Engage 2020 was driven by the need for tested and proven methods that allow participants ample space to explore intricate security-related issues. The Engage 2020 catalogue offered a reliable foundation for our research, guiding us toward methods that could meet the demands of our work in the security research domain.

4.2 Selecting Suitable Engagement Methods

From the extensive list of 57 methods in the Engage 2020 catalogue, we identified a total of 16 methods applicable to security research. To refine our selection, we carefully reviewed these methods, filtering out any that were conceptually similar. Ultimately, we arrived at a curated list of 14 methods that showed promise in addressing the unique challenges of societal engagement in the context of security research.

4.3 Analysing Methods Based on Criteria

To further narrow down our selection, we used our developed set of criteria that each method had to meet. These criteria were designed to meet our pilots' needs to ensure that the chosen methods could effectively engage stakeholders from diverse backgrounds, adapt to different European contexts, and accommodate vulnerable groups. Additionally, we sought methods that could facilitate discussions on complex topics, cater to targeted audiences with an interest in the subject matter, and prioritize enhancing dialogue and communication.

Out of the initial 14 methods, we evaluated each against these criteria. Eight methods emerged as meeting all our criteria, thus demonstrating their suitability for our research. These eight methods will be comprehensively described in Section 6, where we will delve deeper into their applications, strengths, and limitations.

While these eight selected methods form the foundation of our approach to societal engagement in security research, we recognize the importance of continuous improvement and adaptation. In our ongoing work, we plan to experiment with these methods in pilot projects, making necessary adjustments and refinements to enhance their alignment with security-related research projects in the future. This iterative process will contribute to the development of a robust toolbox for engaging stakeholders effectively in the realm of security research, ensuring the protection of freedom and security for Europe and its citizens.

Figure 1: Cross-check of Societal engagement methods in Security Research against selection critieria.

#	Method	Criteria			Selected
		Suitable for complex topics	**Targeted audience**	**Purpose of engagement: Dialogue and communication**	
M1	Citizen compass	No	No	Yes	No
M2	Citizens' summit	Yes	Yes	Yes	**Yes**
M3	Civic dialogue[2]	Yes	Yes	Yes	No
M4	Deep democracy-the Lewis method[3]	Yes	Yes	Yes	No
M5	Deliberative poll - Deliberative polling)	Yes	No	Yes	No
M6	Delphi method	Yes	No	No	No
M7	Focus groups	Yes	Yes	Yes	**Yes**
M8	From Question of a CSO to a Research question	Yes	No	No	No
M9	Interviews	Yes	Yes	Yes	**Yes**
M10	Needs Survey among CSOs	Yes	No	No	No
M11	Neo-Socratic Dialogue	Yes	Yes	Yes	**Yes**

[2] Although this method meets all our criteria, based on our project's characteristics, we have not selected it as it needs to be conducted over a long period of time to ensure its effective due to the slow process of building relationships and trust between groups.

[3] Although this method meets all our criteria, based on our project's characteristics, we have not selected it as none of our pilots are aiming to explore 'conflict resolution'.

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M12	Participatory strategic planning	Yes	Yes	Yes	**Yes**
M13	Perspective workshop	Yes	Yes	Yes	**Yes**
M14	World café	Yes	Yes	Yes	**Yes**
M15	Deliberative workshops	Yes	Yes	Yes	**Yes**

5 Good practices for involving societal actors and stakeholders

Efforts to involve civil society, i.e. CSOs, citizens, non-citizens or other stakeholders in society, and to facilitate collaboration between them and integrate ethical, human rights, and societal aspects in development and deployment of security technologies are great ways to improve research and innovation, both in terms of process and in terms of outcomes. It may, however, also appear challenging or even intimidating to start with at first.

There are several domains of knowledge, and also domains of practice, to which we can turn to find and review (see D1.1) recommendations, from both the social domain, e.g., deliberative democracy, citizen engagement, and from the technology domain, e.g., Participatory Design (a precursor or HCD and of VSD), Constructive Technology Assessment and Participatory Technology Assessment. Our guidelines for involving different groups of people and stakeholders in our project come from a mix of important ideas from those different fields. One key source of inspiration was a study by (Jansen *et al.*, 2021). They were part of an EU project called SIENNA[4], which looked at how to make ethical decisions about new technologies that have big impacts on society and people's rights such as digital technologies in health care, biomedical technologies in healthcare, advanced materials in agriculture, or energy and environment technologies, etc. They developed a robust and tested methodology specially designed for the ethical analysis of emerging technologies, consisting of seven essential steps. Accordingly, we found their study to match well with our TRANSCEND project's focus on sensitive security technologies and we've used their approach to shape our guidelines. Below, you can find those practical guidelines and recommendations in chronological order—in practice. They are, ideally, organised as steps in an iterative process, where you sometimes need to go 'back' to a previous step to integrate new insights and recent findings.

[4] The SIENNA project - Stakeholder-informed ethics for new technologies with high socio-economic and human rights impact - has received funding under the European Union's H2020 research and innovation programme under grant agreement No 741716

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5.1 Start with a shared purpose.

The first step is to establish a shared purpose to discuss and clarify motivations and objectives. Why do you want to collaborate with civilians? Why would you want to protect human rights?

Involving and engaging with civilians, CSOs, or other societal stakeholders can bring enormous benefits to your project; e.g., improving its relevance, impact, and acceptability. When executed well, societal engagement and collaboration between different stakeholders can contribute to a project's transparency, legitimacy, and credibility.

Below are some key questions that you, and your team or consortium, and also others, e.g., experts, can help to clarify your purpose and goals, especially before starting with your planned societial engagement activities:

- Goal of the project as a whole;
- Expected benefits;
- Goal of societal engagement / involving civilians;
- Stakeholders already in the project/consortium;
- Additional stakeholders that would be needed;
- Ethical, legal, and societal aspects;
- Critical success factors;
- Measures for success;
- Potential risks, and measures;

See also the **Stakeholder Engagement Questionnaire** in the Appendix. We developed this questionnaire building upon the key questions listed above to help our pilots clarify their purpose and goals for societal engagement.

Expert professional stakeholders from outside the project who specialise in a specific security field can play a valuable role in assisting you and your team in defining the project's analysis subject and scope. These external stakeholders possess in-depth knowledge of the security domain and can comprehensively overview its various components. Moreover, they can shed light on the potential societal, environmental, or health impacts, whether positive or negative. This valuable input can be gathered through informal interviews or consultations with 2-3 experts. Additionally, these experts can guide researchers or task leaders in identifying often overlooked areas that may not receive much attention. (Jansen *et al.*, 2021)

After you identify key stakeholders who have expertise in the specific area of security research you're focusing on, thoroughly research their background and work. This will help you tailor your questions to their specific interests and expertise. Clearly define the goals of your collaboration with them and articulate the value that their participation brings to your pilot research. It would also be great if you could involve expert stakeholders in the planning process, getting their input on your research methodologies, data collection techniques, and potential areas of focus. Finally, keep them informed about the progress of your research. Regularly share updates, findings, and preliminary results. Don't forget to acknowledge the contributions of stakeholders in your research outputs, such as publications, reports, or presentations.

To put those guidelines into action, we suggest using the collective intelligence project design canvas from the Nesta Playbook. This canvas helps you quickly sketch out your pilot design with your team. Depending on what you want to achieve with your pilot – whether it's understanding issues, finding solutions, making decisions and plans, or learning and adjusting – you can choose the right canvas. You can find more information in the appendix.

By setting a shared purpose for your societal engagement activities, you can ensure that your engagement activities are aligned with your research goals and the needs of your stakeholders and that you have a clear way to measure the success of your efforts. So, let's get started and set a purpose for your engagement activities!

5.1.1 Tools to Use

We understand that developing a shared purpose for societal engagement can initially feel overwhelming – but tools are available to help along the way. One such tool is the Strategic Planning Canvas. This tool was developed, used and recommended by the GoNaNo project (Bitsch *et al.*, 2020). It can be used by you alone or with colleagues to reflect on your goals and motivations for involving stakeholders in your R&I project.

To get started, simply fill out the Strategic Planning Canvas by answering a series of questions about your project and the role of societal engagement. Some of these questions may be difficult to answer at first, but don't worry – societal engagement is an iterative process, and your answers will likely evolve and change as you work through the process (Bitsch *et al.*, 2020). For the stakeholder mapping section, please refer to the next section where you will find more relevant details and guidelines. And remember, the benefits of societal engagement are well worth the effort. So don't be afraid to dive in and develop your shared purpose today!

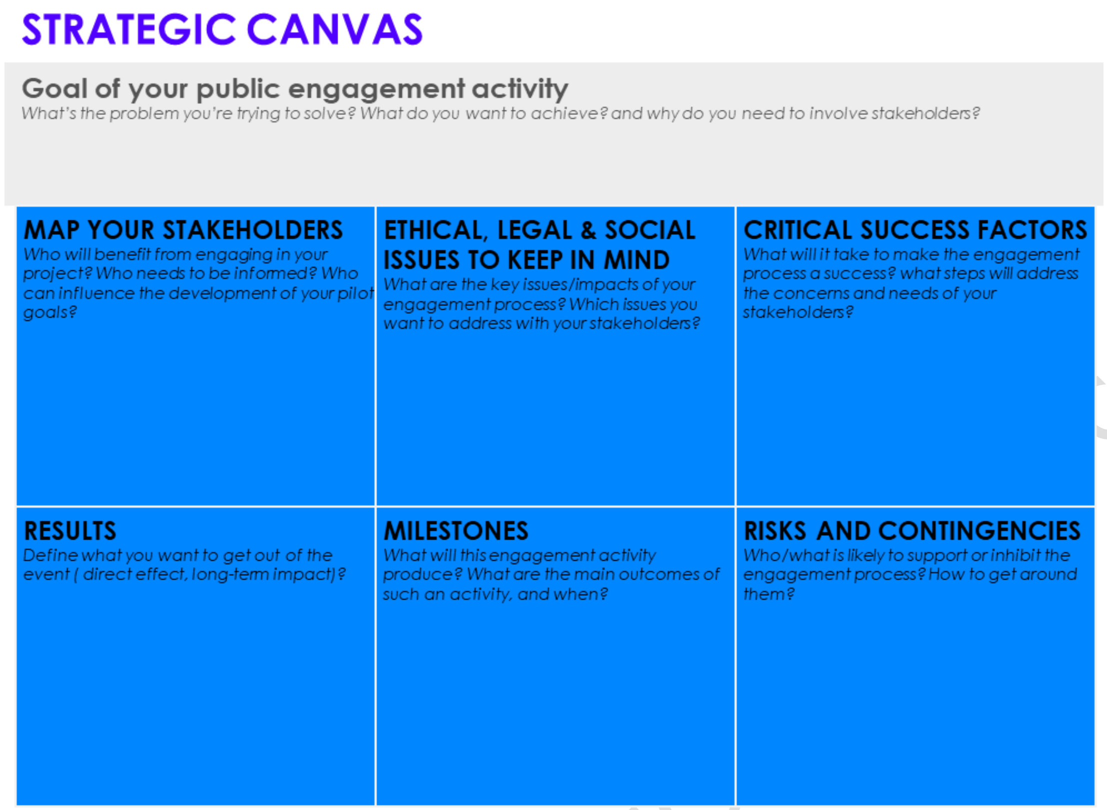


Figure 2: Strategic Mapping Tool - Adapted from (Bitsch et al., 2020)

5.2 Map stakeholders

Stakeholder mapping helps you understand different stakeholders' concerns, interests, and needs, which in turn can lead you to:

- Enhance collaboration between stakeholders and harmonise the contributions of different stakeholders to the project,
- Tailor research questions, methods, and outcomes with stakeholders' expectations and aspirations.
- Identify potential risks, conflicts, or opportunities that may arise during the research process, and develop strategies to mitigate or leverage them.

Stakeholder mapping can be done in two steps:

- Identify your internal stakeholders: These are the people who are directly involved in your pilot, such as researchers, project managers, advisors, experts, consultants, and partners. Make sure to involve all relevant internal stakeholders in the mapping process.
- Identify your external stakeholders: These are the people or groups who may be interested in your research project or may be affected by its outcomes. Examples of external stakeholders include policymakers, industry representatives, civil society organisations, and members of the public.

First, you need to work with your internal group, which consists of all the individuals assigned to collaborate on a project alongside the funding body and relevant partners. It is crucial to involve this group in discussions to establish a shared understanding of the project's purpose and objectives. These discussions can occur through informal conversations and meetings. (Jansen *et al.*, 2021). Therefore, we suggest that you collaboratively fill out the strategic Canvas with your internal group members

Once a consensus is achieved within this internal group, identifying external stakeholders can commence. To identify your external stakeholder, consider the following questions:

- Who has a stake in the research questions?
- What are the challenges that you are addressing in your research?
- Who has the potential to implement the project's results and findings?
- Who has a stated interest in the project fields?
- Who has the knowledge and expertise to propose strategies and solutions in the fields of security research?

Once you have identified your external stakeholders, it is important to analyse their interests, needs, and concerns. This can be done by conducting a stakeholder analysis, which involves gathering information about your stakeholders' power, interest, and influence, as well as their attitudes, concerns, and expectations. By analysing your stakeholders, you can determine how best to engage with them, and what their potential contribution to your research project may be.

The stakeholder analysis should be presented visually, it could be arranged graphically on on an axis grid in a stakeholder analysis format, or utilizing concentric circles for stakeholder maps, or even creating a systems map. This graphical representation serves to indicate a distinct hierarchy established and curated by the project initiator, determining factors such as as the degree of stakeholder involvement, the significance of their opinions, their level of influence, and more. This curation process is fundamental to render the stakeholder map practical and valuable, preventing it from becoming an unordered list that could confuse the reader.

Please refer to the following literature and visualisation tools for each of the three stakeholder graphical presentation formats:

- **Stakeholder map:**
  - Giordano, F. B., Morelli, N., De Götzen, A., & Hunziker, J. (2018). The stakeholder map: A conversation tool for designing people-led public services. In *Service Design and Innovation Conference: Proof*

of Concept. Linköping University Electronic Press Available at: https://servicedesigntools.org/tools/stakeholders-map

- IBM. (n.d.). Stakeholder Map Toolkit activity - Enterprise Design Thinking. Retrieved from [https://www.ibm.com/design/thinking/page/toolkit/activity/stakeholder-map]
- NESTA Collective Intelligence Design Playbook. Retrieved from [https://media.nesta.org.uk/documents/Nesta_Playbook_001_Web.pdf]
- Service design toolkit (n.d.). Stakeholder Mapping. Retrieved from [https://www.servicedesigntoolkit.org/assets/posters/workposter_stakeholdermapping_a1.pdf]

- **System map:**

- Nicola Morelli (2007). New representation techniques for designing in a systemic perspective, paper presented at Design Inquires, Stokholm. Retrieved from [https://servicedesigntools.org/tools/system-map]
- Jones, P.H., Shakdher, S. & Singh, P. (2017). Synthesis maps: Visual knowledge translation for the CanIMPACT clinical system and patient cancer journeys. Current Oncology, 24 (2), 129–134. Retrieved from [https://slab.ocadu.ca/project/synthesis-maps-gigamaps]
- de la Rosa, J., Ruecker, S., & Nohora, C. G. (2021). Systemic mapping and design research: Towards participatory democratic engagement. She Ji: The Journal of Design, Economics, and Innovation, 7(2), 282-298. Retrieved from [**Fehler! Linkreferenz ungültig.**https://www.sciencedirect.com/science/article/pii/S2405872621000423]

- **Stakeholder Analysis**

- Mind Tools Content Team (n.d.). Stakeholder analysis. Retrieved from [https://www.mindtools.com/aol0rms/stakeholder-analysis]
- Rikke Friis Dam and Teo Yu Siang (2022). Stakeholder Mapping: The Complete Guide to Stakeholder Maps. Retrieved from https://www.interaction-design.org/literature/article/map-the-stakeholders]
- How to perform a stakeholder analysis. (n.d.). Retrieved from [https://www.lucidchart.com/blog/how-to-perform-a-stakeholder-analysis]

- Schmeer, K. (n.d.). Stakeholders Analysis Guidelines. Retrieved from [https://dev2.cnxus.org/wp-content/uploads/2022/04/Stakeholders_analysis_guidelines.pdf]

To get started with mapping your stakeholders, try the following exercise:

- Brainstorm with your team a list of external stakeholders who may have an interest in your research project, and who you may need to engage with.
- Conduct a stakeholder analysis for each external stakeholder, using the following questions:
  - What is their level of interest in your research project?
  - What is their level of power or influence?
  - What are their attitudes, concerns, and expectations regarding your research project?
  - What are their potential contributions and risks to your research project?

By mapping your stakeholders and conducting a stakeholder analysis, you can ensure that your engagement activities are tailored to the needs and expectations of your stakeholders and that you are able to effectively engage with them throughout the research process.

5.3 Involve civilians and CSOs and facilitate collaboration

The first step is to bring CSOs and civilians together and work on developing and articulating a shared purpose — a mission statement for the project. This helps the organisations and people involved to understand why and how they can contribute to this shared purpose. Inspired by the Nesta Playbook[5], we propose that you use a prompt to help you clarify the intended outcome of the shared purpose. An example would be:

Our problem is that *..............................*

We want to help *[who] to understand/solve/decide/learn [what], so that they can [what]*

[5] Nesta Playbook is a playbook developed by Nesta organisation (The National Endowment for Science, Technology and the Arts) to help innovators working on complex challenges. The playbook is a guide that provides insights and practical advice on how to innovate and drive positive change in various contexts, including government, organizations, and communities. It offers a range of tools, case studies, and strategies to help individuals and entities foster innovation, develop new ideas, and solve complex problems.

- What is the problem we are trying to solve?
- What questions or challenges do we want to explore or discover?
- What are the goals of different partners and stakeholders?

Ideally, different partners' and stakeholders' goals are slightly different — and complement each other. One partner may focus on citizen involvement, another on creating a prototype, and another on building relationships with local government. In doing so, the sum is more than the parts; only through collaborations like these, can we organise pilot projects, with a city and its residents, with a prototype.

Of course, there also needs to be room to discuss difficult topics, e.g., risks of harm to specific groups of civilians, infringing upon human rights, or distributing benefits and risks between partners. It would be unfair and unviable if one partner only gets benefits, and another partner bears all the risks. This will need to be negotiated and divided fairly.

Additionally, during the brainstorming phase, the internal team should also reflect on the following questions

- What are the potential benefits and risks of the project as a whole?
- And for the specific activity of involving stakeholders?
- How will we measure the success of the project as a whole?
- And of the societal engagement activities? Either at the start of the project, or during the discussions about purpose, about benefits and risks, and about success, it may become clear that you want to involve diverse types of actors:
    - National, regional or local government officials (preferably policy-makers)
    - Industries, both large or established, and small or start-ups
    - Knowledge institutes, e.g., universities or training centres
    - Law enforcement and other security professionals, e.g., as potential 'users'
    - Societal actors, e.g., civilians, groups of civilians, their representatives or CSOs
    - Others, e.g., experts on the content, e.g., cybersecurity
    - What other stakeholders would you need to involve and collaborate with?

This approach is sometimes called 'Quadruple helix', which refers to collaboration between four actors: government, industry, academia, and society (reference). Experts can play a valuable role in helping to clarify the topic and find an appropriate scope. Similar to how experts are needed, typically, in helping to set-up, or conduct an Impact Assessment (see Section 3). E.g., cybersecurity is a rather broad topic. It can then be helpful to focus (if only for the sake of clarity, for one or two sessions) on one aspect, e.g., cybersecurity in terms of threats to critical infrastructures and national safety, or on another aspect, e.g., cybersecurity in terms of threats to individual citizens' computers and identity theft. These topics are very different and will require selecting different actors to contribute meaningfully.

5.4 Promote inclusion and diversity

Now that you have identified your stakeholders and their potential motivations for engaging in your co-creation project, it is important to keep them engaged throughout the process. You need to consider the diversity of your stakeholders and how you can approach them in a way that meets their specific needs. (Jansen *et al.*, 2021) You need to consider the concerns of different parties, that can be challenging if they diverge, and you need to make sure to formulate and communicate your conclusions and actions appropriately (Steen and Nauta, 2020).

To do this, you need to build on your previous findings regarding who are these actors? and why do you need them in the project? Additionally, you need to reflect on the following questions such as

- What is in it for them?
- How do you approach them?
- Which reward systems could you adopt to incentivise them?
- How are you planning to lower the barriers that you might encounter?
- Which safety measures will you put in place to make sure you stakeholders can freely participate?

During the event:

To ensure a fruitful dialogue, it is crucial that participants feel respected and comfortable engaging in the discussion. This is why it is necessary to establish rules for good dialogue. Please familiarise yourself with the following rules for good dialogue, and make sure that the rules are announced and followed during the event (Bitsch *et al.*, 2020). By following these steps, you can create a positive environment for dialogue and ensure a successful societal engagement process.

- If you're there as a citizen, think as such i.e., a member of the community and not solely on personal interest;
- Treat everyone with respect;
- Listen carefully to what others have to say, and ask into details;
- Do not interrupt each other;
- Take part in the discussion;
- Focus on the subject;

- Keep comments brief and to the point;
- Take a break when you need to.
- Create a shared vocabulary?

After the event

It's also important to keep communication channels open and accessible for all stakeholders. Make sure to provide regular updates on the progress of the project and seek feedback on how to improve the engagement process. This can help build trust and foster a sense of collaboration among participants.

To ensure open and accessible communication channels for all stakeholders and facilitate their active participation, consider the following tips

- Use a mix of communication platforms to accommodate various preferences and accessibility needs, e.g. emails, project website, social media groups. So make sure to ask your participants about their preferred communication platform.
- If your stakeholders are from diverse linguistic backgrounds, consider providing updates and materials in multiple languages to ensure inclusivity.
- Ensure two-way communication to allow stakeholders provide feedback, and ask questions, if needed. This might involve setting up dedicated email addresses, discussion forums, etc.

Remember that stakeholder engagement is an ongoing and iterative process, and it's important to continuously assess and adapt your strategies as needed. Keeping your stakeholders engaged and invested in the project can create a more prosperous and impactful co-creation experience for everyone involved.

5.5. Plan and execute

Moreover, dialogues between these different types of actors can help to explore and articulate ethical, legal and societal aspects that are at stake, that are sensitive, and that will need to be taken into account carefully — for such aspects, please also look at the next chapter.

It is worthwhile to mention three concerns that can typically go wrong during planning and execution.

First, is the management of expectations and therefore, it is critical to manage the expectations of all parties and people involved. This can avoid misunderstandings, disappointments, and conflicts. One thing that happens too often, is that some group of civilians, or some CSO participates, puts efforts in collaboration, and then experiences discontent or disappointment when some of their efforts, e.g., a specific idea for a solution, do not lead to practical action or result. In such a situation, it would have been helpful if there had been a two-way communication that would have helped to manage their expectations.

Second, is the limitations of societal engagement and we therefore, need to understand the limitations of some societal engagement or citizen engagement efforts. As with any project, it will have limitations in terms of lead time and budget. Similar to the previous topic, it is critical to manage expectations about what the project can and cannot do. It is worthwhile to make this explicit, in a two-way communication. It does not necessarily constitute a problem if, for example, the results from some effort are limited — it can help enormously if that is clear to all, from the start.

A third issue to consider is post-engagement care or aftercare. From the perspective of those working on a project, it can come as a surprise if, e.g., the civilians they collaborated with in a series of workshops, have questions or expectations which remain unmet or unanswered. Here again, it is critical to put some effort into managing expectations. It is also only fair; those civilians put effort into the collaboration, and maybe they generated creative ideas. The project team members then need to spend some time answering their questions, if only out of respect for the relationship with them.

In sum, it is worthwhile to be transparent about your project with the parties and people you collaborate with.

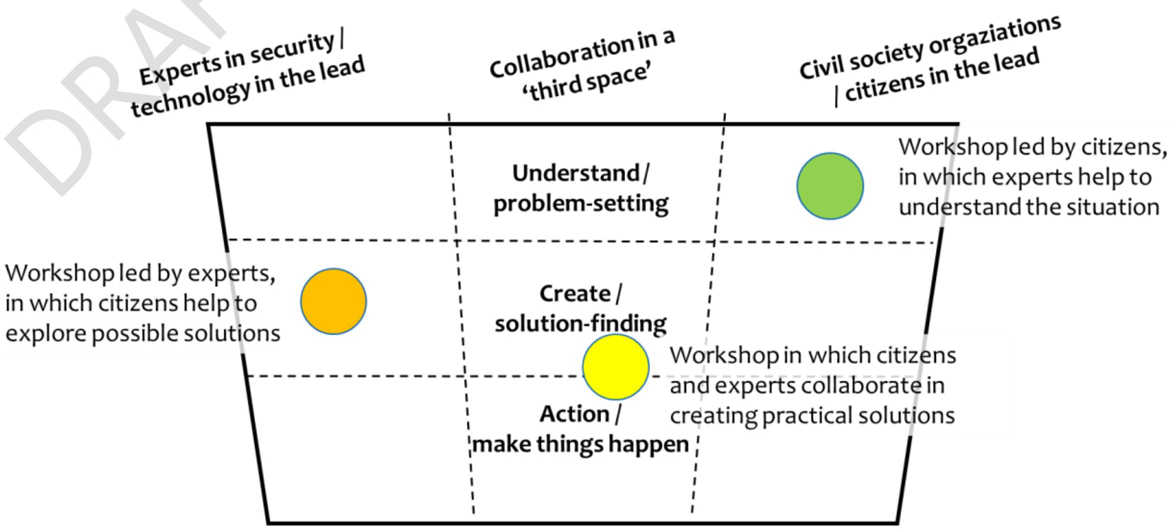
6 Summary of the most effective methods

Engaging stakeholders is crucial for the success of any project. It requires involving, including and interacting with them to gather their input and influence the project's direction, allowing it to have a greater impact. The engagement method selection depends on the engagement process's specific goals. If the aim is to share information or project results, a one-way communication approach works the best e.g., channels like newsletters, social media posts, etc. On the other hand, when the goal is to gather insights and feedback from stakeholders, a two-way communication method is more appropriate. (Jansen *et al.*, 2021). Two-way communication means that both sides involved can share and respond to what the other person is saying, e.g. interviews, focus groups, or citizen or expert panels.

There are many diverse methods available to promote and organise societal engagement. Below we present several methods that are likely to be especially useful for security technologies. They range from methods for

working with larger groups, like a Citizens' Summit and World Café, to methods for working with smaller groups, like a Deliberative Workshop, Perspective Workshop or Focus group, and interviews, which can be done with individuals. Moreover, the methods differ in how they enable participants to deal with diverse viewpoints or complexity. In a Citizens' Summit or World Café, people can start in smaller groups, and then findings can be aggregated later, e.g., through rotation of participants. In a Deliberative or Perspective Workshop, the interlocutors stay together and are facilitated to come to convergence with the same group.
In order to select an appropriate method, and in order to organise things practically, the following considerations are relevant:

- Do you want to bring experts, e.g., from government or technology, in contact with civilians, with practical applications 'in the field'? Or do you want to bring civilians and people 'from the field' into your project, so they can contribute, and indeed influence, the project? This refers to the *horizontal* axis in the figure below. Of course, these objectives can, indeed, ideally go hand in hand. It is, nevertheless, useful to talk about this and choose a method that fits best.
- Do you want to better understand a certain problem? Do you want to explore potential solutions? Or do you want to move to practical action? (Kensing and Madsen, 1992). This refers to the vertical axis in the figure below. Again, these objectives can go together. And, it is probably useful to make these different partial objectives clear, e.g., if only to invite participants and to manage their expectations. Will they mainly help to clarify the problem? What will be done with findings? Can they articulate actions? Who will execute these actions?



Different methods, or specific workshops, can have different starting points, emphases or objectives; often, these can be combined—nevertheless, it can be worthwhile to discuss them.

Figure 1: Relationship between Research Leaders, Objectives and Methods

The questions above, about who initiates a collaboration, which party sets the starting points for collaboration, and questions about objectives (e.g., problem-setting, solution-finding, practical action; see above) are also questions about power and distribution of power. These can be very practical questions:

- Who decides who will be invited and included (and who is not invited and effectively excluded)
- Who sets the agenda, who determines the objectives, who is 'in charge', practically?
- Where is the meeting held? In a community centre? A government agency? A university? In a restaurant? At a neutral premises or 'third space'?

You should individuate facilitators who, with appropriate measures, can aid collaboration. Indeed, collaboration is a key critical success factor to establish a fruitful dialogue:

1. Between people who work on technology, and people with expertise in ethical, human rights and societal aspects.
2. Between experts and 'ordinary people', people from the general public, or organisations that speak on their behalf, CSOs of NGOs;
3. Between people with theoretical knowledge and people with practical, hands-on knowledge, from the field.

Accordingly, we present the following set of **possible engagement methods** we recommend for use in the TRANSCEND project. The detailed description of those methods are based on the factsheets provided by Engage 2020 project (Engage 2020 Consortium, 2014).

6.1 Citizen summits

When to use it?

Are you looking to get a generalisable understanding of the opinions and preferences of lay citizens on a topic or options? Do you want to gather citizens' opinions and preferences on political matters and different potential political courses of action? If yes, then Citizen Summit could be the right method for you!

Citizens' Summit: Everything you need to know in a nutshell

The Citizens' Summit involves a large-scale event combining large-group decision-making or consensus building and smaller-scale group discussions. It does so by presenting a topic to a large group, then splitting the participants into smaller groups for discussion before returning to the large group for voting and finalising decision-making and preferences. If the group is well-picked and representative of a target population, a Citizens' Summit can indicate how citizenship at large feels and will react to certain policies, technologies, or research items.

How to Plan Citizens' Summit in 4 Steps:

Step 1: Preparation Work

- Select a representative sample of the population you are interested in and include marginalised groups (200-5000 participants).
- Invite facilitators to lead each small group's discussion. These facilitators should be knowledgeable in the areas being discussed.
- Invite speakers/experts to present the ideas being discussed.
- Send out information on the topic or surveys beforehand. Communication and invitations to all participants should be very clear regarding the nature and goals of the event so that participants do not have any false expectations.
- In certain cases, sending out a pamphlet of basic information on the topic may be helpful so that all participants have at least a base of knowledge before the event. This can help make the event more productive. In other cases, it may be desirable to send out surveys to gain some base information on opinions and preferences before the event has started.
- Plan the event logistics, including the space, seating, technology, and food. Ensure the space can host smaller groups for discussions and a big screen for presentations and displaying results.

Step 2: The Event

- The event is broken up into roughly 45-minute segments.
- Presentation of the theme/topic/idea (roughly 10 minutes).
    - We encourage you to present a clear opinion, statement or questions to stay away from too broad discussion.
    - This should lay out whatever it is that will be discussed. If there are different possible options/courses of action being considered, these should be presented here. The presenter is normally some sort of expert in the field or a stakeholder.
- Small Group Discussion (roughly 30 minutes).

  - The summit breaks into small groups of 7 or 8 people, each led by a facilitator (who should have some expertise in the topic area). These groups discuss the topic, the options, and their preferences. Facilitators will guide discussions, ensure everyone's participation, and help summarize the group's ideas.
  - During the group discussions, encourage participants at each table to brainstorm and discuss various options related to the topic/question. Provide them with tools like sticky notes or discussion sheets to jot down their ideas.
  - Have each table's facilitator collect the generated options from their group. This could involve gathering sticky notes, written sheets, or any other format used for brainstorming.
  - Create an online master list, where all facilitators can write the options from each group. This will serve as the pool of choices for the electronic voting process.
  - Set up the electronic voting system in a way that allows participants to choose from the compiled list of options. e.g. menti.com
- Voting (roughly 5 minutes).
  - After the group discussions, the whole group will come together to vote. Each participant will cast an electronic vote (on a value statement, course of action, priority statement, etc.), and the voting results will then be displayed on the big screen.
  - After the voting, consider facilitating a brief discussion about the voting results. This can provide insights into why certain options were popular and foster a deeper understanding of participants' preferences.
  -

Step 3: Data Processing

Develop a plan for dealing with and processing the data collected during the event especially since there will be a large amount of data.

Step 4: Follow Up

This step may not be strictly necessary. However, depending on future steps and the intention in the topic area, it may prove prudent and helpful to incorporate some follow-up contact with participants to keep them involved and interested.

Roles Distribution

Person	Responsibilities

Organiser	1. The organiser is first responsible for inviting participants, facilitators, and speakers/experts. 2. The organiser also needs to book, plan, and set up the space (or potentially delegate this task to and *event planner*). 3. The organiser should ensure that all pre-summit information and work is sent out properly. 4. The organiser should be responsible for setting up data processing goals and processes. 5. It is the organiser's responsibility to also determine if follow up is beneficial and if so to establish this. *Note: Many of these tasks will be delegated, but they all fall within the responsibility of the organiser.*
Facilitators	• These individuals with expertise are responsible for leading each small group discussion and voting. • Facilitators should also be accountable for keeping some sort of notes on the discussions (or gathering notes from the participants in their group).
Participants (200-5000 people)	1. Participants are responsible for doing the prep work sent to them (likely reading background information or filling out preliminary surveys). 2. Participants should actively engage in discussion and voting.
Speakers/Experts	1. These experts should provide presentations of the topic/issue to be discussed in the following segment.

Benefits and Limitations:

Benefits:

- Citizen Summits access a large sample size in one day. The scale of these events makes results more representative, may inspire participants, and could even attract media attention to the issue at hand.
- Summits engage large groups in meaningful dialogue, and this dialogue is recorded with the consent of the participants.
- Policymakers can be directly involved in Summits.

Limitations

- Summits can be expensive in terms of monetary costs and in the amount of effort, planning, and management required.

- Summits' results are dependent upon a diverse, representative sample of participants.

6.2 World Cafe

When to use World Café?

Are you trying to facilitate a group conversation where everyone can share their thoughts and ideas in a comfortable and engaging environment? Do you want to explore complex issues that matter and encourage diverse opinions and perspectives? Do you want to generate new ideas and find new pathways to collaboration? If yes, then World Café could be the right method for you!

World Café: Everything you need to know in a nutshell

World Café is a simple and effective method for facilitating group conversations. It is based on the idea that people have the capacity to work together and propel actions forward. The method involves small group (4-5 people) discussions around a table, with participants rotating to different tables and sharing insights from previous conversations every 20 minutes. Participants can use visual representations to capture and share collective discoveries or conversations, e.g. mind maps, post-it notes, drawings, word clouds, etc.

How to Plan a World Café Workshop in 4 Steps (The World Café, 2015):

Step 1: Explore questions that matter

- Identify a set of questions that are relevant to the purpose of the workshop.
    - It is also important that the questions are highly relevant to the group of people you have brought together – it should be something they care about.
    - It is also okay to just use one question for the entirety of the Café.
    - Questions should be tested beforehand.
- Design open-ended questions that encourage diverse perspectives.

Step 2: Set the context and create an inviting atmosphere

- Choose a venue that resembles a café with round tables and chairs.
- Create a welcoming and relaxed atmosphere by giving sufficient time to participants for settling down.
- Establish clear guidelines for participation (Café Etiquette).

- The host should welcome the participants and set the the context for the Café.

Step 3: Encourage participation and mingling of ideas

- Encourage everyone to contribute to the conversation.
- It is also key to encourage people to listen acutely and intelligently, while also paying attention to that which is going unsaid.
- The timekeeper should encourage participants to rotate different tables to exchange ideas and perspectives.
- Use graphic recording to capture collective findings.
    - The exact execution of this is flexible, but it is recommended to either check back in after every round or after 3 rounds of discussion.

Step 4: Bring it all together

- Synthesise and share the key insights and discoveries from the workshop.
- Use visual representations to communicate the collective discoveries to a wider audience.
- Encourage participants to take action based on the insights and discoveries from the workshop.

Step 5: Follow Up

- This step may not be strictly necessary. However, depending on future steps and the intention in the topic area, it may prove prudent and helpful to incorporate some follow-up contact with participants to keep them involved and interested.

For more detailed description and guidance in putting on a World Café, visit www.theworldcafe.com

Roles Distribution

Person	Responsibilities
Organiser	• The organiser is responsible for selecting and preparing the World Café venue. • The organiser is responsible for preparing the questions to be discussed at the event. • The organiser will need to invite all other parties listed here (the host, timekeeper, and participants).
Host	1. The host is responsible for welcoming everybody and setting up a welcoming atmosphere.

	2. The host should provide an introduction before groups begin. 3. The host should provide prompts before each new section of the discussion.
Timekeeper	1. The timekeeper is responsible for indicating when it is time to rotate tables, and also for being attentive and encouraging proper mixing of groups.
Participants	1. The participants should participate in group discussion (one from each table will afterwards stay at the same table as the table host for the next discussion). 2. At the end, participants will need to be willing to share out results and takeaways.

Benefits and Limitations:

Benefits:

- A World Café event can stimulate discussion and bring out the genuine thoughts and beliefs of participants.

Limitations:

- It is likely not possible, or at least difficult, to impose a strict structure on the path of the discussion. Thus, this may not be the best selection method if specific results are desired.

6.3 Focus group

When to Use Focus Groups

Are you looking to learn more about the preferences and opinions of a specific group of people? Are you interested in gathering in-depth information in a relatively short amount of time? If you answered yes to any of these questions, a focus group may be a suitable method for your needs.

Focus Groups: Everything You Need to Know in a Nutshell

The focus group is a qualitative method designed to learn more about preferences or evaluate strategies and concepts (reference). Participants are selected based on shared characteristics related to the research topic and grouped into 8-10 people. The facilitator's job is to keep the group focused on the specific topic and encourage active participation from all members. Group interactions and non-verbal communication can be observed, providing more nuanced information than traditional surveys. In the end, the collected information is written and summarised in a report.

Planning a Focus Group: Clear Steps for Success

Step 1: Define the research question and select the participants.

- Clearly define the research question, key themes and issues you want to explore further.
- Identify the target group that you want to be involved in the discussion.

Step 2: Plan the focus group session

- Create a structured discussion guide outlining the topics and questions to cover during the session.
- Design the guide in a way that continuously encourages open, honest and active discussion among the participants.
- Establish ground rules for discussion.
- Decide on the data collection method according to your needs; taking notes, or recording.

Step 3: Conduct the focus group session

- The facilitator should introduce themselves, clearly communicate the purpose of the focus group to participants and make sure they understand what's expected of them.
- The facilitator should explain the ground rules for the discussion before starting to ask questions to participants.
- The facilitator should allow enough time for each participant to express their views and avoid letting one person dominate the discussion.
- The facilitator should use open-ended questions that encourage discussion and avoid leading questions that could bias the results .
- The facilitator should also encourage participants to respond to each other's comments and ask follow-up questions to gain deeper insights.
- Whenever possible, record the session so you can refer back to it later.

Step 4: Analyse the data, and prepare a report that summarises the findings.

- Review the session recordings, notes, and transcripts to identify key themes and patterns in the data.
- Use data analysis software to categorise and code the data can be helpful.

- Once the data has been analysed, the findings can be summarised in a report or presentation. Make sure to share your report with the participants.

Roles Distribution

Person	Responsibilities
Organiser	1. The organiser needs to first define the research topic/question clearly and identify the target group for the discussions. 2. The organiser is responsible for finding and inviting the facilitator and participants. 3. The organiser (possibly together with the facilitator) will create the discussion guide. 4. The organiser is responsible for post-event work in terms of looking back at and summarizing the event into a report.
Facilitator (may be the same person as the Organiser)	1. The facilitator conducts the actual focus group session and possibly also takes notes on the discussion.
Participants (8-10)	1. Participants are responsible for actively participating and sharing their perspective with the group

Benefits and Limitations:

Benefits:

- The interactive environment of a focus group may lead to a more natural flow of ideas.
- In addition to specific and more in-depth perspectives from the participants, the participants can also be closely observed for reactions and non-verbal cues as the discussions take place.

Limitations

- Since the group is small in number, the results of a focus group are not representative of a broader target population.

6.4 Deliberative workshops

When to use it?

Are you looking for a workshop method that can help you gather opinions on a complex or controversial issue to inform policy or regulation? Are you interested in exploring how new policies or activities will impact communities? Do you want to stimulate interest in a specific societal issue among participants? Do you want to provide valuable insights to the wider public about an emerging or controversial research agenda or technology? If you answered yes to any of these questions, then Deliberative Workshops may be a great fit for you!

Deliberative workshop: Everything you need to know in a nutshell

Deliberative workshops are facilitated group discussions that provide participants with the chance to delve deeper into an issue, challenge each other's opinions, and develop views and arguments to reach an informed position. Depending on the issue at stake, these kinds of workshops involve recruiting people that broadly reflect a wider population, often referred to as "mini-publics", typically around 8-16 participants (it can also be larger). The format involves presentations of information from experts, followed by discussions. The majority of time is allocated to participants' discussions, which may take the form of plenary or small group discussions.

How to Plan a Deliberative Workshop in 3 Easy Steps

Expert facilitators ensure that there is enough time for everyone to express their views and that all views are valued equally. Discussions are carefully recorded, and various tools and techniques are used to vary the ways in which participants can express their views throughout the process.

Step 1: Preparing for the Workshop

- Have a clear understanding of the purpose of the workshop and its objectives.
- Select and recruit participants.
- Choose and brief the experts to provide adequate information and insights to the participants.

Step 2: Conducting the Workshop

- Introduce the participants to the topic and the process, you can also invite experts to do presentations.
- Provide the participants with information.
- Facilitate the discussions and ensure that everyone has a chance to express their views and that all views are valued equally. The

following list indicate behaviours of successful facilitators as presented by Quick and Sandfort (2014):

- Selecting the processes best suited for accomplishing the task at hand, combining prior planning with improvisation to respond to emerging dynamics.
- Establishing and enforcing ground rules and group norms, particularly maintaining a respectful, open and inclusive environment.
- Supporting diverse participation and manage potential problems of exclusion, power and associated conflict.
- Helping the group work toward its objectives, in part by focusing on relevant topics and managing time.
- Enhancing the development of mutual understanding, for example, through asking clarifying questions, rephrasing statements and supporting diverse perspectives.
- The best facilitators tend to be those with experience, so it is ideal if your facilitator has previous facilitating or hosting experience.

- Use a variety of tools and techniques to encourage participation, such as voting, postcards, flipcharts, and post-it notes.
- Record the discussions with the consent of the participants.
- Summarise the results.

Step 3: Evaluating and Reporting

- Evaluate the workshop and the results through surveys or interviews with the participants, as well as through analysing the recorded discussions.
- Report the findings to stakeholders or relevant parties.
- Follow up with participants to ensure that their views have been considered and to provide feedback on the workshop's outcomes.

Roles Distribution

Person	Responsibilities
Organiser	1. The organiser is first responsible for inviting participants, facilitators, and speakers/experts. 2. The organiser will need to brief the experts and facilitators before the event. 3. The organiser should be responsible for evaluation and reporting of results.

Facilitator(s)	1. These individuals with expertise are responsible for leading discussion. 2. Facilitators should also be accountable for keeping some sort of notes on the discussions (or gathering notes from the participants in their group).
Participants (8-12 people)	1. Participants are responsible for engaging in discussion during the event.
Speakers/Experts	1. These experts should provide presentations of the topic/issue to be discussed in the following segment.

Benefits and Limitations:

Benefits:

- Participants can truly take the time and have the information to analyse the issues in depth. Additionally, they can genuinely grapple with and consider alternative perspectives and courses of action.
- Participants can be a resource even after the event, spreading the word as spokespeople.

Limitations:

- The framing of the workshop will inevitably guide it – in this, it is vulnerable to manipulation.
- The small sample size means that the results do not represent the target population. Furthermore, the workshop process may change and develop a lay citizen's stance, making their opinions at the end even less representative.

6.5 Interviews

When to use it?

- Are you looking to explore the views, experiences, beliefs, and motivations of individual participants? Are you exploring sensitive topics where participants may not want to talk about such issues in a group environment? Is the issue under investigation not well known or understood?
- Do you need detailed insights from individual participants? If you answered yes to any of the questions above, then an interview may be the right method for you.

Interviews - What you need to know in a nutshell

Interviews are a qualitative research method used to explore the views, experiences, beliefs, and motivations of individuals on specific issues. Compared to quantitative methods such as questionnaires, interviews provide a more in-depth understanding of a certain topic. There are three fundamental types of interviews: structured, semi-structured, and unstructured. Structured interviews involve a list of predetermined questions, while semi-structured interviews consist of several key questions that define the areas to be explored but also allow for follow-up questions. Unstructured interviews are the most explorative type, typically starting with an open question and developing according to the response given.

How to plan an interview in easy steps?

Step 1: Define your research questions and objectives

- What do you want to find out through the interview? What specific information are you looking for?
- What is the main focus of your research?
- How will the information gathered be used?

Step 2: Identify your target participants

- Who do you want to interview? Make sure to consider the demographics of your target population and choose participants wisely.
- How many participants will you need? Keep in mind that sample size will depend on the scope of your research and the resources available. You want to ensure that your sample size is representative of your target population, but also manageable for your research team.
- How will you recruit them?

Step 3: Choose the appropriate type of interview

- Which type of interview is best suited to your research question and objective?
- Will you use structured, semi-structured, or unstructured interviews?

Step 4: Develop the interview guide or questionnaire

- What questions will you ask? Remember to keep them clear, concise and relevant to your research questions.
- What topics will you cover?
- How will you structure the questions?

Step 5: Conduct the interview

- Schedule a time and place to conduct the interview. Be sure to provide clear instructions on how to participate in the interview (whether it

will be in person, over the phone, or online), what is it about, and how long the interview will last beforehand.
- Be prepared with your interview guide or questionnaire.
- Make the participant feel comfortable and welcome.
- Record the interview or take notes with the consent of the interviewee.

Step 6: Analyse the data

- Organise and transcribe the interview data.
- Code the interviews.
- Identify themes and patterns.
- Interpret the data in light of your research question and objective.

Step 7: Communicate your findings

- Summarise your findings in a clear, concise and accessible report to your audience. You may want to create charts, graphs, or visual aids to help present your findings.
- Explain the significance of your results.
- Discuss implications for future research.

Roles Distribution

Person	Responsibilities
Organiser/Project Leader	1. This individual is responsible for determining objectives and laying out the format for the interview (including questions if necessary). 2. This leader should make contact with interview subjects and schedule interviews. 3. This person is also ultimately responsible for the final report of findings.
Interviewer(s)	1. The interviewer is responsible for carrying out the interview and possibly also taking notes.
Interviewees	1. The interviewee's sole responsibility is to answer questions honestly and engage in the interview.
Coders	1. The coder's role is to analyse the interviews. This may take many forms, including notetaking, coding of results, and then finally analysis.

Note: The Organiser, Interviewer, and Coder roles could all be filled by the same person.

Benefits and Limitations:

Benefits:

- Interviews can help find detailed information, especially information regarding personal feelings, perceptions, or opinions which may be difficult to grasp in less personal methods or larger group settings.
- Unclear or incomplete answers can be immediately followed up on and clarified.
- There is no influence of a group upon the interviewee.

Weaknesses

- The interviewer may influence the responses of the interviewee.
- Organising face-to-face interviews may be costly.
- Different interviewers may have different interpretations of responses. Additionally, different transcription styles may lead to different understandings of responses.

6.6 Perspective Workshop

When to use it?

Are you looking for a workshop method that can help you explore commonly held beliefs or assumptions about a technology? Are you looking to develop new ways of thinking about a certain technology? Check out the Perspective Workshop!

Perspective Workshop: Everything you need to know in a nutshell

This workshop is a way to evaluate technology's impacts. You will need to involve people who are affected by the technology, meaning engaging diverse stakeholders. It usually involves 36-48 participants and lasts one and a half days, with an open-ended result.

How to Plan a Perspective Workshop in 4 Easy Steps

Step 1: Gather Your Team

As the organiser, you'll need to appoint a planning group that includes experts in the topic of the workshop. Together, you'll write 12 statements that present possible outcomes and challenges related to the topic. You'll also want to involve relevant stakeholders to ensure a broad focus on the issues at stake.

Here are some sample questions the planning group could ask themselves as they prepare the 12 statements for the perspective workshop. Please also check the impact assessment deliverable for more inspiration. You don't need to answer all of them, select the ones that are most relevant to what you would like to explore.

1. What are the potential benefits of the technology or technological development we are exploring?
2. What are the potential risks or negative consequences?
3. Who stands to gain or lose the most from this technology or development?
4. How does this technology impact different groups of people, such as marginalised communities or future generations?
5. What ethical considerations should be taken into account when considering this technology?
6. How does this technology intersect with other important issues, such as climate change or social justice?
7. What are the potential long-term implications of this technology on society, the economy, and the environment?
8. Are there any existing policies or regulations that apply to this technology, and are they sufficient?
9. What are some potential alternatives to this technology or development?
10. How can we ensure that the benefits of this technology are fairly and equitably distributed?

By asking themselves these questions, the planning group can create thought-provoking and engaging statements that will excite participants to delve into the topic further.

Step 2: Get Participants Ready

Carefully select participants and provide them with the 12 statements to read beforehand and get engaged.

Step 3: Workshop Time

The workshop is divided into four rounds [~ 2 hr each], each building on the last:

Round 1: Current Situation. Participants describe the current situation, listing both positive and negative aspects.

Round 2: Consequences. Participants discuss the possible outcomes of the technology, evaluating them against the current situation.

Round 3: Future Scenario. Based on the previous rounds' results, participants imagine positive and negative future scenarios.

Round 4: Perspectives. Participants create action-oriented perspectives for moving towards the desired future scenario.

Step 4: Follow-up

After the workshop, it's important to disseminate the results to ensure that the action proposal composed of participants' perspectives gets put into motion. So keep the conversation going and stay committed to the cause!

Roles Distribution

Person	Responsibilities
Organiser	1. Before the workshop, the organiser appoints the external planning group of people with specialist knowledge on topic during the first months of the project. 2. Before the workshop, the organiser need to hold regular meetings with the planning group, and co-write the 12 articles about possibilities and threats regarding the topic. 3. Before the workshop, the organiser need to carefully select and invite the participants. Additionally, the organiser need to send workshop material to participants (articles, home assignment and programme) 4. After the workshop ends, the organiser write report with workshop results, and then disseminate the workshop's results reported in a final report. 5. In the process of sharing the results, the organisers need to carry out different debate-generating activities such as publishing in specific magazines, or holding specific conferences with relevant stakeholder organizations.
External planning group [3-5 people]	1. Provide guidance and qualify the workshop content and process. 2. Guide in writing the 12 articles that present possibilities and threats regarding the topic.
Participants [36-48 people]	1. Participants need to read the articles and prepare a home assignment before the start of the workshop.
Facilitator	1. An external consultant is appointed to facilitate the workshop along its 4 rounds.
Notetaker	1. A notetaker need to be assigned in every group to write down participants' discussion points.

Benefits and Limitations:

Benefits:

- The pre-workshop preparation gives all the participants a shared starting point from which dialogue can be rooted.
- Results can be disseminated through the discussion paper.

Limitations:

- There is no clear or set end goal/result of these workshops, meaning that the result is mainly up to the participants and what they can contribute.
- In practice, participants often produce negative scenarios more easily than positive ones.

6.7 Neo-Socratic Dialogue

When to Use Neo-Socratic Dialogue

Are you looking to resolve ethical questions? Do you have broader value-based statements which you would like to see examined? If so, then a neo-Socratic dialogue may prove a valuable format for you.

Neo-Socratic Dialogue: Everything You Need to Know in a Nutshell

A neo-Socratic dialogue is a discussion aiming to get at underlying and systemic elements of an issue by encouraging discussion which focuses on examining judgements. Before the dialogue even begins, the participants are given a basic question for which they are to think of a relevant case study. One of the case studies is selected by the group and the dialogue then takes place, focused on examining the case study - specifically looking at the reasoning behind it.

Planning a Neo-Socratic Dialogue in 4 Steps

Step 1: Framing the topic and Selecting Participants

- Formulate a general question. It is important that this question is *general* and *fundamental* in nature.
- Plan and schedule a venue.
- Invite the participants and select a facilitator.

Step 2: Selecting a case study

- Based upon the general question, each participant comes up with a related case study (normally this is actually just a scenario from their everyday lives).
- One of the suggested case studies is selected as a focus for the dialogue.

Step 3: Conducting the dialogue

- The dialogue takes place, led by the facilitator, with a transcriber taking detailed notes. The facilitator should also be taking notes, but these should be publicly viewed during the discussion and used as a tool to guide and structure the discussion.
- The discussion should have a particular focus on interrogating judgements. The validity and reasons for judgements should be questioned, with the rationale that this will bring the discussion to a more fundamental understanding of the topic.
    - It is imperative that the facilitator introduce and describe this before the discussion commences. The facilitator is also then responsible for keeping this present and centred throughout the discussion.

Step 4: Post-Processing

- After the dialogue, the transcript can be reviewed (and edited if the meeting was also recorded) and a write up can be made or any conclusions can be passed on.
- It may prove valuable to follow-up with participants in some way to keep them involved.

Roles Distribution

Person	Responsibilities
Organiser	1. The organiser is responsible for planning the venue. 2. The organiser is responsible for inviting and coordinating with participants. 3. The organiser should set the initial guiding question. 4. The organiser is finally responsible for any post-event write up or follow up that needs to be done.
Participants (5-15)	1. Participants are first responsible for coming up with and proposing a relevant case study. 2. Participants will engage in discussion.
Facilitator	1. The facilitator is responsible for helping to guide discussion. 2. The facilitator is also responsible for writing out notes for all to see as a way of further helping guide/structure the discussion.

Transcriber	The transcriber is responsible for taking detailed notes on the discussion.

Benefits and Limitations:

Benefits:

- Anybody can engage in this and with profound reflections contribute to reaching an ethical understanding.

Limitations:

- It is not inherently representative.
- There is not a particular direct connection to political decision making.
- Outputs will be broad, and as the participants come up with the case studies, you cannot control what they will be discussing.

6.8 Participatory Strategic Planning

When to Use Participatory Strategic Planning

Are you looking to promote community/organisational change? Are you hoping to build consensus in a community? Are you looking to get solid plans for the development of a community which are coming from the community itself? If any of these ideas appeal to you, then participatory strategic planning may be a method for you.

Participatory Strategic Planning: Everything You Need to Know in a Nutshell

Participatory strategic planning is a way to build consensus within a community with the target of building a common vision or goal and then establishing direct, implementable actions or methods which can lead to that desired outcome. Concretely, this takes place in a workshop format (led by experienced facilitators), with brainstorming then evolving into group work and plenary sessions. This often all takes place over the course of 2 days.

Planning Participatory Strategic Planning

Step 1: Invitations and Preliminary Preparation

- Participants and experienced facilitators need to be invited.
- A venue needs to be selected – this is quite important, as it needs to be a space where all participants can see and hear each other and the facilitator clearly and without difficulty. There would also ideally be some sort of large, visible wall space on which ideas can be mapped out visually.

Step 2: Workshop Begins and Goal Setting

- The workshop begins with any necessary introductions and background information.
- The first step of the workshop is to brainstorm and then agree upon a *clear* vision for the future of the group in question (the participants).

Step 3: Threat Identification

- In this step, the participants are to identify potential threats which would prevent them (and their community) from reaching the vision agreed upon in step 2.

Step 4: Addressing Threats

- Now, the participants move on to discussing and agreeing upon methods that will address the potential threats identified in step 3.

Step 5: Implementation Planning

- Finally, the participants discuss implementation details of the methods they generated in step 4.
  - Implementation details can vary, but the more thorough the better. These include things like cost distributions, timeframes, and community impact.

Roles Distribution

Person	Responsibilities
Organiser	5. The organiser is responsible for inviting the participants and facilitators. 6. The organiser is responsible for finding and booking an adequate venue. 7. It is important that there is commitment from the organiser or supervisors that the group be allowed to make decisions and that those decisions will be heeded and taken forwards. If this is not the case, then this method should not be used.
Participants/Community Members (5-50)	3. The participants are responsible for actively engaging in the event – contributing their ideas and experiences.
Facilitators	2. The facilitators here should be someone with expertise, as their role is particularly in prompting the participants forward to

	agreement and then finally to an implementable plan. 3. The facilitators are of course responsible for facilitating interactions of the participants. 4. The facilitators are responsible for taking notes on behalf of the participants in a visual way and helping to illustrate the discussion to provide a visual structure.

Benefits and Limitations:

Benefits:

- This method has the ability to bring a group to a usable agreement rather quickly.
- The method is flexible and applicable in a range of settings.
- There is often a clear plan after the meeting with actionable items.

Limitations:

- It is rare that the fine details of a plan are hashed out during these planning sessions – these will often need to be planned by smaller groups of experts later.
- This method relies on conflicting members of the community being able to find common ground and agree upon a shared vision (also part of the reason why experienced facilitators are important here).

7 Conclusion

Societal engagement stands as a critical dimension of responsible innovation (Stilgoe, Owen and Macnaghten, 2013), particularly in security research and technology development. This report discusses the need to align technological advancements with societal concerns, ethical aspects, and human rights through proactive stakeholder engagement. A 5-step approach is presented as a way to involve diverse societal actors and stakeholders [Start with a shared purpose, Map stakeholders, Involve civilians and CSOs, Promote engagement and diversity, and Plan and execute]; it discusses the need to manage expectations, avoid pitfalls, and also the benefits of societal engagement such as for improved problem-solving and legitimacy. The report also presents several methods (selected from a larger set of available methods) for involving societal actors and stakeholders in security research and innovation; and suggestions for practitioners to select those methods that best fit their specific projects. Those methods and guidelines will be part of the TRANSCEND toolbox and will be further tested in the pilots. As societal engagement continues to gain importance in research and innovation, this report offers valuable insights and practical guidance for researchers, practitioners, and organisations striving for responsible and impactful advancements in the security field.

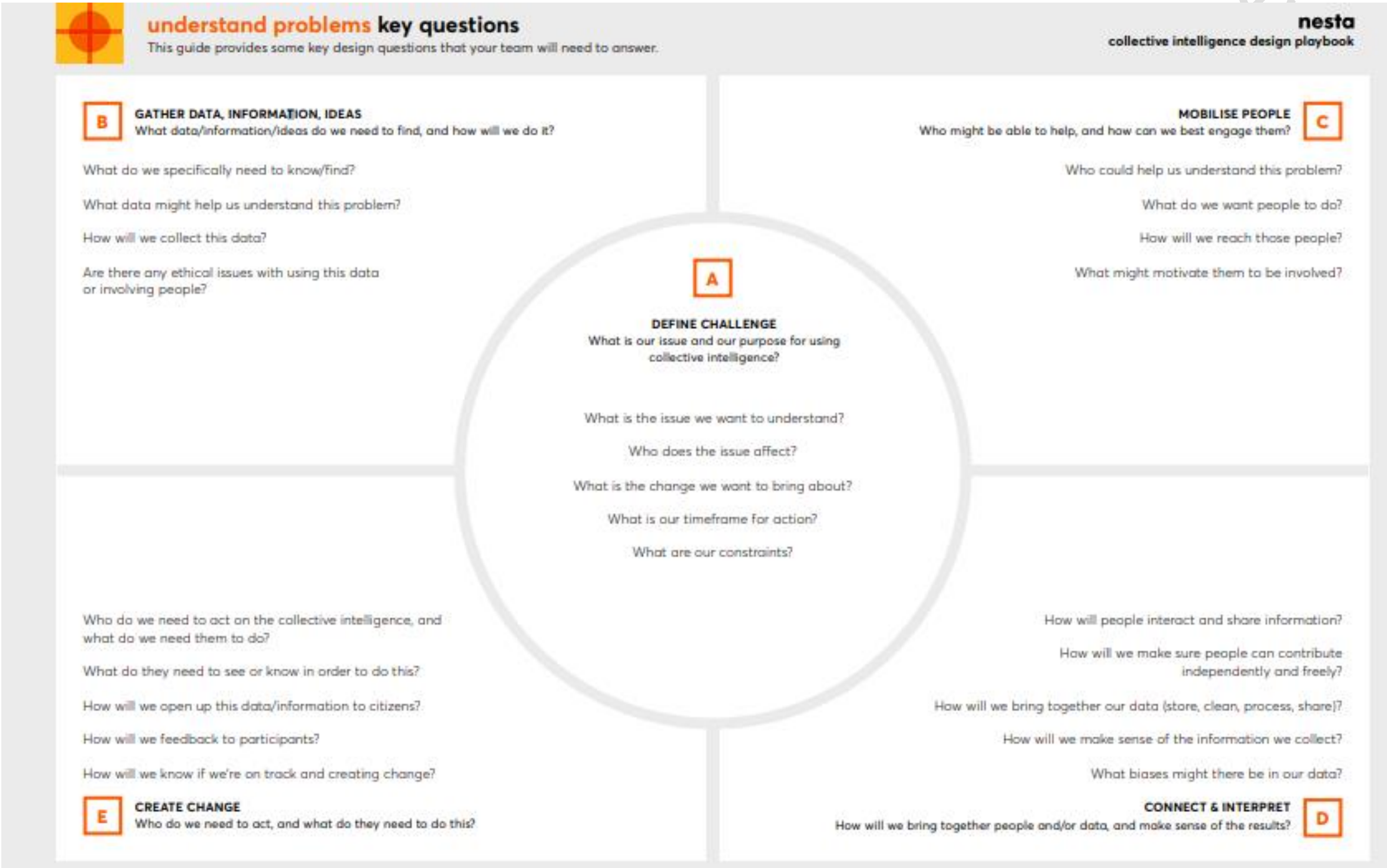
8 Appendix

8.1 Pilot Questionnaire

Pilot Study	
What is the overall objective of the pilot study?	
Who are the stakeholders involved in the pilot, and what are their communication preferences?	
Fill in Stakeholder group	*Preferred communication style (email, in-person short meetings, in-person long meetings, online platforms*
Fill in Stakeholder group	*Preferred communication style (email, in-person short meetings, in-person long meetings, online platforms*
Fill in Stakeholder group	*Preferred communication style (email, in-person short meetings, in-person long meetings, online platforms*
Fill in Stakeholder group	*Preferred communication style (email, in-person short meetings, in-person long meetings, online platforms*
Fill in Stakeholder group	*Preferred communication style (email, in-person short meetings, in-person long meetings, online platforms*
What are the potential barriers or challenges to stakeholder engagement in the pilot?	
Fill in Stakeholder group	*Potential challenges (language barriers, cultural differences, or time constraints)*
Fill in Stakeholder group	*Potential challenges (language barriers, cultural differences, or time constraints)*
Fill in Stakeholder group	*Potential challenges (language barriers, cultural differences, or time constraints)*
Fill in Stakeholder group	*Potential challenges (language barriers, cultural differences, or time constraints)*
What are the desired outcomes of stakeholder engagement in the pilot?	
Fill in Stakeholder group	*Desired outcomes (increased awareness, active participation, or feedback collection)*
Fill in Stakeholder group	*Desired outcomes (increased awareness, active participation, or feedback collection)*
Fill in Stakeholder group	*Desired outcomes (increased awareness, active participation, or feedback collection)*
Fill in Stakeholder group	*Desired outcomes (increased awareness, active participation, or feedback collection)*

Fill in Stakeholder group	*Desired outcomes (increased awareness, active participation, or feedback collection)*
What resources (e.g., budget, time, personnel) are available for implementing engagement methods in the pilot?	
What engagement methods have been used in similar projects or pilots before? if any	
Are there any specific concerns or expectations from the pilot leads regarding stakeholder engagement?	

8.2 NESTA - Understand problems Canvas



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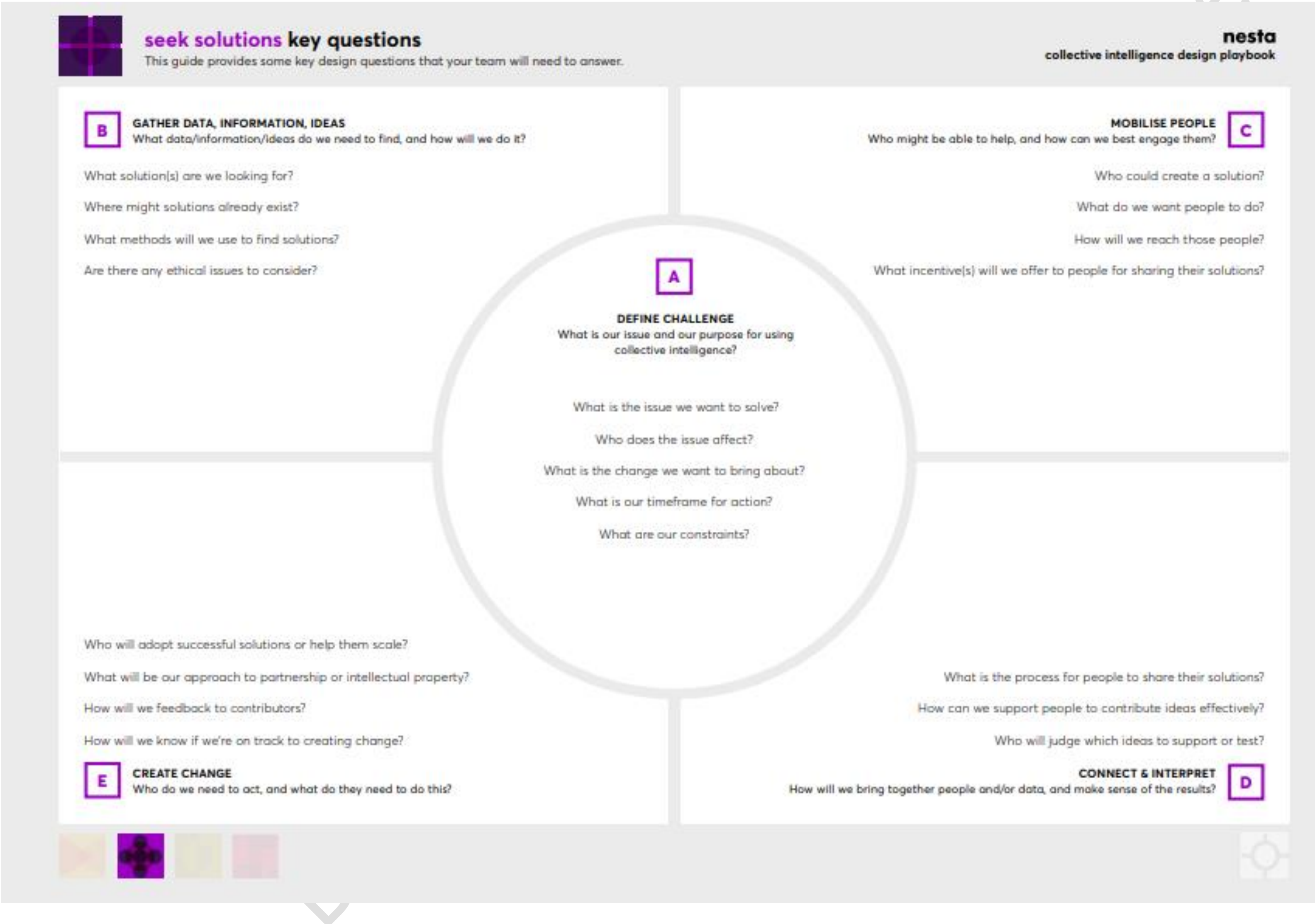
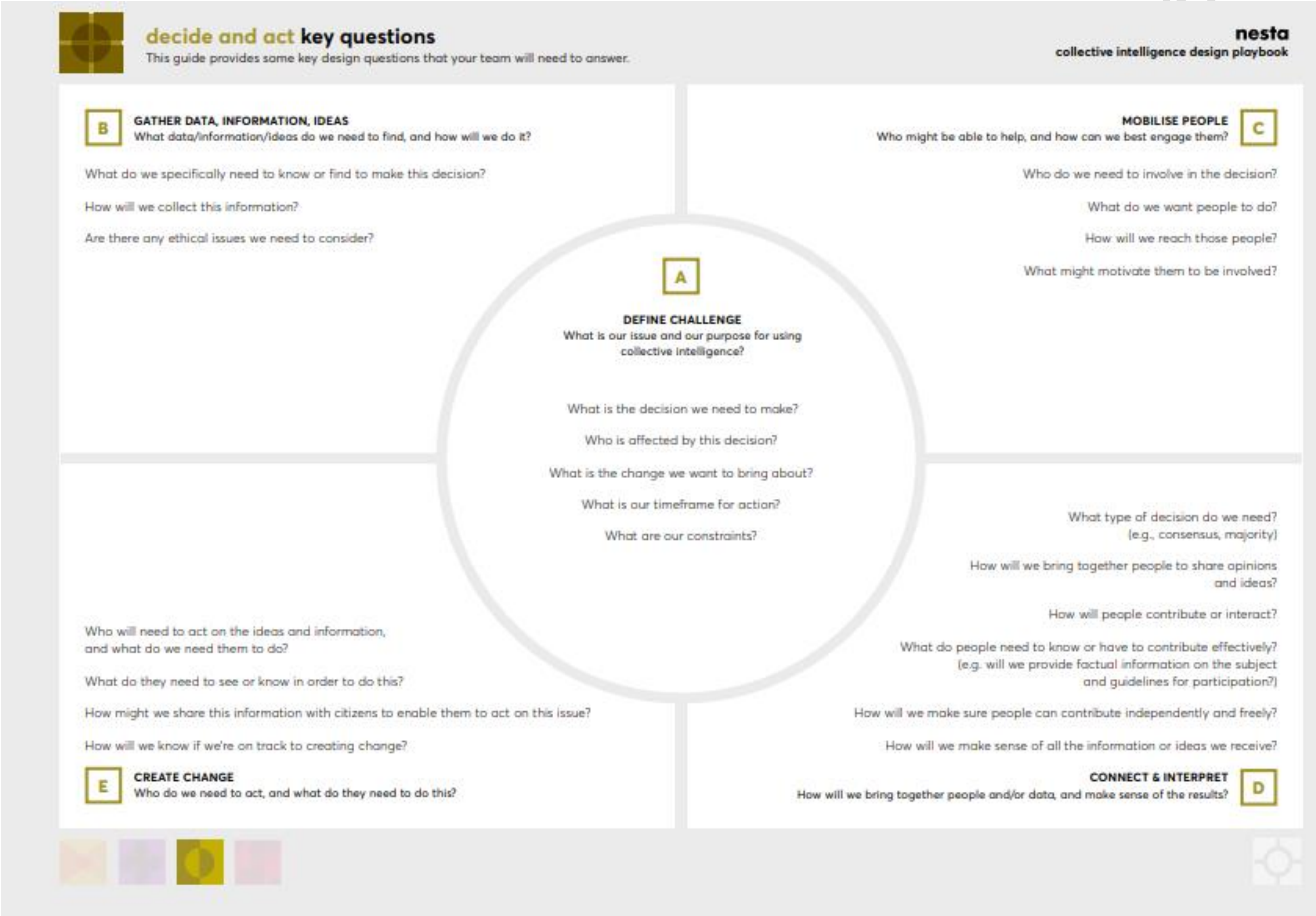
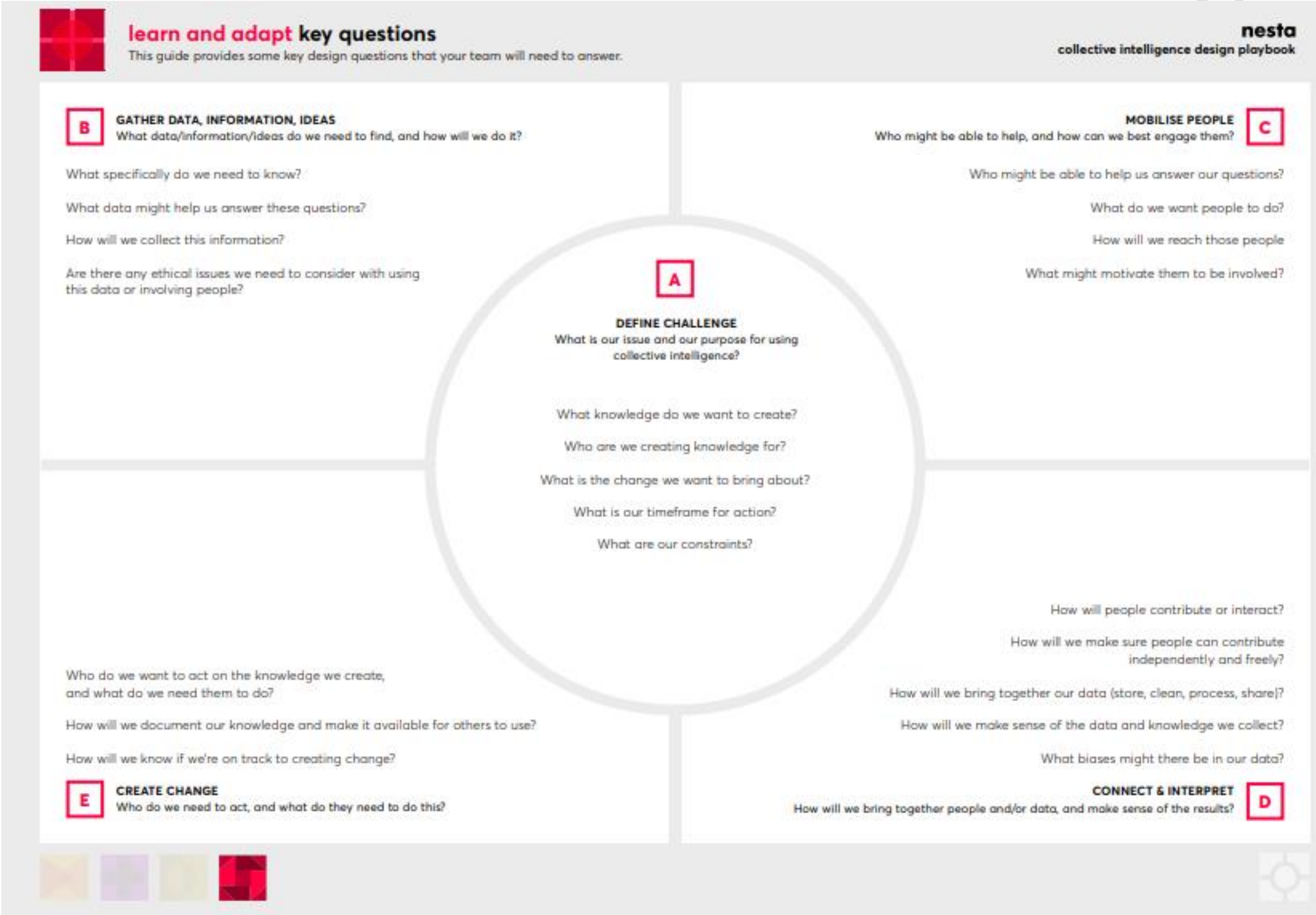
8.3 NESTA - Seek Solutions Canvas



8.4 NESTA - Make decisions and actions Canvas



8.5 NESTA - Learn and adapt Canvas



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